

Conceptualising GLAMs as commons



Funded by
the European Union



This project has received funding from the Horizon Europe Research and innovation on cultural heritage and CCIs Programme of the European Commission grant agreement No 101060774.

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EXECUTIVE SUMMARY

Over the last decades, GLAMs (Galleries, Libraries, Archives and Museums) have faced several challenges, including the limitation of public funding due to the global economic crisis of 2008, the need to keep up with digitalization trends in order to make collections accessible to larger audiences, the implications of the COVID-19 pandemic which impacted income sources such as visitor revenues, licensing, donations, endowments and sponsorships. All these challenges require GLAMs to be proactive in adopting innovative strategies, collaborating with other institutions, leveraging partnerships, and seeking sustainable funding models to address their unique and evolving needs. In this paper, we explore the potentiality of GLAMs to operate as commons, towards ensuring their vibrancy, sustainability, and resilience, while meeting broader societal needs. The commons constitute a mode of resource management (in our case cultural ones) through which a specific community (instead of a state body or actors of the market) is responsible for the exploitation and management (or, in several cases also the production) of a resource under inclusive and democratic principles. In this way, the commons constitute of i) a (set of) commons pool resource(s), including a diverse range of material and intangible resources, ii) a group/ community that appropriate, use, manage and take care of the resources, iii) a governance/ management framework established through mixes of official and informal sets of rules, decision-making processes, governance arrangements.

Towards exploring the potentials of GLAMs to operate as commons, we review the extant literature of the commons in order to elaborate on the ontology of GLAMs and heritage commons and develop a conceptual framework of 'commons-oriented' GLAMs to navigate future research for workable solutions to the sector. Our review features the 'Ostromian' understandings of the commons, insights from the autonomist school of thought and other theoretical and practical articulations of the 'new commons'. By exploring different types of commons-based ventures, such as urban commons, digital commons and cultural/heritage commons, we distinguish those elements that are mostly relevant to bring on board. Based on these we develop and present here, for the first time, a novel conceptual framework for studying GLAMs as commons, adapted to fit with the idiosyncrasies of the sector. Moreover, we explore the ways relevant commoning practices could be developed towards ensuring GLAMs' sustainability and resilience, while meeting broader societal needs.

According to Linebaugh (2008), the social process, the praxis of commoning, refers to the collective management of resources. Furthermore, the creation and reproduction of the commons is materialised through commoning practices of co-production, co-appropriation, and co-management, developed upon horizontal and democratic principles and processes (Card, 2018).

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ACRONYMS AND ABBREVIATIONS

ACRONYM	DESCRIPTION
CA	Consortium Agreement
VbA	Value-based Approach
EM	Ethics Manager
DEM	Dissemination and Exploitation Manager
EC	European Commission
GA	Grant Agreement
QE	Quality Evaluator
PMO	Project Management Office
PCT	Project Coordination Team
PMH	Project Management Handbook
QM	Quality Manager
RM	Risk Manager
SB	Supervisory Board
PSC	Project Steering Committee
WP	Work Package
WP-L	Work Package Leader

1. Introduction

1.1 Purpose and scope

The purpose of this report is to produce an extensive literature review of (a) the commons theory and conceptualisations across various disciplines and areas of scholarship, including Institutional economics, Social and Cultural Geography, Cultural Economics, Environmental Economics, Political theory, Law, Organisation studies, Social and Solidarity Economy and New Social Movements and (b) commons arrangements and applications across diverse sectors, such as digital commons, urban commons, intellectual, cognitive and cultural commons. Building on that, we identify the strengths and limitations concerning related theory, practice and management arrangements, drawing on both the commons' school of 'pragmatism', to identify the most effective ways for positioning GLAMs as commons, driving their co-creation, economic thriving and collaborative management. Overall, this report serves the purposes of i) understanding how the commons are theorized and practised across the physical and digital realms, ii) drawing on lessons from other commons-oriented social systems that could contribute to the commons' principles application to GLAMs, iii) identifying existing gaps in the current literature and state-of-the-art that deserve further examination in order to inform participatory action and policy for GLAMs as commons and iv) developing and presenting a novel conceptual framework for studying GLAMs as commons, adapted to fit with the idiosyncrasies of the sector.

1.2. Contribution to other Deliverables

This report will provide the project with the theoretical and conceptual foundations towards approaching and analysing commoning practices in the GLAM sector. Thus,

1.3. Structure of the Document

In the following section (2) we discuss recent developments and challenges in the GLAM sector with a focus in European institutions. In the following sections we explore the extant literature on cultural commons, heritage commons, urban commons and digital commons for the first time, analysing its underlying theoretical concepts and structural components (Section 3). Then, in Section 4, we attempt to synthesise elements of the variegated approaches to commons, in order to devise a comprehensive multi-layered conceptualisation of commons based GLAMs or GLAMs as commons (GLAMMONS) and identify critical gaps and limitations to inform

future empirical work on the topic. That new conceptualisation of GLAMMONS will enable us to view and assess the ways that the various challenges that the GLAMs face can be better addressed through the commons and specific commoning practices, especially concerning their governance, management, financial sustainability, and co-creation practices with their communities of commoners.

2. An introduction to GLAMs: Definitions, challenges, and participation.

Across Europe, the most prominent cultural and heritage resources are protected, preserved, and become accessible to the public through public institutions or other non-for-profit organisations that together make up the ‘GLAM’ sector; an acronym for Galleries, Libraries, Archives and Museums; an umbrella term for what is also called ‘memory institutions’ (Sanderhoff 2014:23, Per Hetland et al. 2020). This sector hosts a vibrant multi-disciplinary expert community (including, among others, museologists, archaeologists, anthropologists, conservationists, cultural managers, archivists, and art historians), their audiences and other user communities. GLAMs and their experts undertake much of the management of cultural and heritage resources through a broad range of dynamic processes that are dedicated to their identification, documentation, protection, interpretation, and attribution to society. In most EU member states, the Napoleonic model in managing culture (Mossetto and Vecco, 2001) prevails. Moreover, Mediterranean, and Balkan states follow the “Architect model” in arts management where almost all of the previously mentioned processes are organised and monitored centrally (e.g. by culture ministries), following a long tradition of state patronage that allows limited (if any) participation of other stakeholders, such as regional and local administrative bodies, civil society and citizen groups, local communities and the general public.

Historically, GLAMs have developed as institutions from common roots (Given and McTavish, 2010). According to Audunson et al. (2020), GLAMs in the 18th and 19th century were closely linked to the nation building project, which needed these kinds of institutions to document and preserve the national culture, but also to spread knowledge to the society, being institutions of popular enlightenment. Libraries and archives were especially linked to the development of the modern university. The organized management of cultural resources in the contemporary sense, further crystallised in the post WWII era¹.

Interestingly, recent years have seen, on the one hand, increasing demands for cultural participation, active citizenship, and decentralisation of decisions regarding the management of the past, and on the other hand, the evolution of a digital ‘heritage world’ where related goods are reproduced and distributed easily (Edwards & Escante 2015). The

¹ For a more detailed analysis of arts management models, as well as the role of new public management in most recent decades see indicatively (1) Chartrand, H. H., & McCaughey, C. (1989). The arm’s length principle and the arts: an international perspective—past, present and future. *Who’s to Pay for the Arts*, 43-80; (2) Madden, C. (2009). ‘Arts and cultural policy models’. Available at <https://christophermadden.wordpress.com/2009/08/30/arts-and-cultural-policy-models/>

instigation of collaborative work in the GLAM sector has inspired some researchers to adopt the commons perspective in their analyses of current and potential management arrangements (Iaione et al. 2022).

These analyses often move their attention beyond the realm of ‘authorised’ culture and heritage (Smith 2006), which is preserved in national museums and galleries, large public libraries, state archives and other prominent arm’s length bodies. They explore instead a ‘niche’ of the sector, where alternative models of culture/heritage production and governance have been nurtured, operating on a smaller scale, such as local/regional-authority entities, independent non-profits (charities, trusts, associations) and community-based organisations, including ecomuseums, community libraries and arts centres, oral-history archives, community-transferred local authority assets (see, for instance, Historic England, 2015) and community-based enterprises associated with heritage sites (see, for instance, the work of Gould, 2014 in Latin America and Iaione et al., 2022 in Italy.)

Considering the challenges for GLAMs of Europe (e.g. increasing financial resilience, growing collections, diversifying audiences, contributing to local priorities and building digital capacity), one can see why these ‘community-based’ operating models, which aim to serve collective benefits and pro-societal ends by fostering participation and autonomy, have attracted attention for their potential to function as commons (or quasi-commons) systems for the production, use, management and governance of cultural, heritage and digital resources in the sector.

In principle, the conceptualisation of cultural and heritage resources as ‘commons’ is neither new, nor recent. Although ambiguously, cultural heritage was labelled and promoted as the ‘common legacy of humankind’ as early as the 1970s, as witnessed, for instance, in UNESCO’s well-conceived convention ‘concerning the protection of world cultural and natural heritage’ (UNESCO 1972). The subsequent introduction of the World Heritage List was aimed to distinguish and safeguard the future of monuments and sites that are ‘commonly owned’ by all (Lekakis 2020b). More interestingly, the 2000s marked a social turn of the heritage agenda (Lekakis & Dragouni 2020b) international treaties and convention texts acknowledged the role of communities as central to the making of heritage and crystallised the idea of ‘values’ as plural, human-centric and dynamic elements. In Europe, reference soft-law instruments, such as the Florence Convention and the Faro Convention, promoted the notion of common heritage (as a common resource) and participation further, laying the ground for conceptualising alternative and more inclusive management models (Iaione et al. 2022) or even heritage commons (in plural).

The GLAM sector was directly impacted by these changes both ethically and professionally. This is reflected, for instance, in the new ICOM museum

definition² which states explicitly the societal mission of museums and galleries and their operation through communities' participation, as well as the burgeoning literature on the topic (Hooper-Greenhill 1999; Tomka 2013 and Simon 2010; 2016) canonising the idea that cultural institutions are founded "on the principle that knowledge and culture belong to everyone" (Edson 2014: 15). On this premise, it has been proposed that GLAMs are assigned with the mission to manage and protect heritage resources (e.g. archaeological sites, modern monuments, cultural landscapes and practices) while widening participation; however as in practice, opportunities for meaningful participation can be limited, a new operational frame that could fall within the ambit of the new commons is need (Gould 2017: 175). In recent years, the theory of commons emerged as a hybrid academic multidisciplinary discussion, engaging also with issues of culture/heritage production, access, use and organisation of related processes and institutions.

In the rest of this section, we introduce the reader to the working definitions of GLAMs we adopted for this project and the ways these memory institutions have some common characteristics. Moreover, our focus will also be on the different challenges and issues in the participation process in GLAMs. All this comprehensive overview of the challenges and issues of GLAMs will allow us first to contextualise and second to bring to the fore the discussion of the GLAMs as commons, showing that the sustainability of GLAMs can be seen in line with the sustainability and development of the communities of commoners around the GLAMs.

2.1. Definitions of GLAMs

There are multiple definitions that have been developed for the description of GLAMs. The following table highlights those that are most appropriate for informing our study.

² "A museum is a not-for-profit, permanent institution in the service of society that researches, collects, conserves, interprets and exhibits tangible and intangible heritage. Open to the public, accessible and inclusive, museums foster diversity and sustainability. They operate and communicate ethically, professionally and with the participation of communities, offering varied experiences for education, enjoyment, reflection and knowledge sharing."

Galleries	Libraries	Archives	Museums
<p>The gallery is meant as a container to hold works of art. Gallery can also be interpreted as a place to accommodate visual communication activities. in a room between collectors or artists with the public through the exhibition [Hjørland, Birger & Gnoli, Claudio (eds.) (2016). ISKO Encyclopedia of Knowledge Organization. ISKO]</p>	<p>A library is a collection of materials, books or media that are accessible for use and not just for display purposes. A library provides physical (hard copies) or digital access (soft copies) materials and may be a physical location or a virtual space, or both. A library's collection can include printed materials and other physical resources in many formats such as DVD, CD and cassette as well as access to information, music or other content held on bibliographic databases.</p>	<p>The archive are all books, papers, maps, photographs, or other documentary material, irrespective of their physical form and characteristics, created and accepted by a governmental or private agency under the legal obligations or in the relationship of its principal, to be maintained by that agency or by its legitimate successor as evidence of work or other activities or due to the value of the data information contained therein (Schellenberg, 1975)</p>	<p>A museum is a not-for-profit, permanent institution in the service of society that researches, collects, conserves, interprets and exhibits tangible and intangible heritage. Open to the public, accessible and inclusive, museums foster diversity and sustainability. They operate and communicate ethically, professionally and with the participation of communities, offering varied experiences for education, enjoyment, reflection and knowledge sharing. (ICOM, 2021)</p>
<p>Galleries can be divided into the following four groups: commercial, non for profit, artist run, and</p>	<p>A library is a collection of resources in a variety of formats that is (1) organized by information</p>	<p>Archives focus on the collection of unpublished documents, often called "records". These may be texts, pictures, written</p>	<p>A museum is a non-profit permanent establishment, not existing primarily for the purpose of conducting temporary</p>

<p>project spaces. These four categories define what is the aim of the gallery and dictate how it will work with its artists.</p>	<p>professionals or other experts who (2) provide convenient physical, digital, bibliographic, or intellectual access and (3) offer targeted services and programs (4) with the mission of educating, informing, or entertaining a variety of audiences (5) and the goal of stimulating individual learning and advancing society as a whole. [The Librarian’s Book of Lists (Chicago: ALA, 2010), George Eberhart]</p>	<p>music etc., but generally not three-dimensional objects. As a rule, each record is unique. Archival records tend to have been naturally and necessarily generated as a product of regular legal, commercial, administrative, or social activities, rather than as deliberate attempts to provide tools for learning and research. A society needs population registers, for example, for collecting taxes and recruiting soldiers, and deeds for document property rights. [Audunson, et al, (2020)]</p>	<p>exhibitions, exempt from federal and state income taxes, open to the public and administered in the public interest, for the purpose of conserving and preserving, studying, interpreting, assembling, and exhibiting to the public for its instruction and enjoyment objects and specimens of educational and cultural value, including artistic, scientific (whether animate or inanimate), historical, and technological material. Museums thus defined shall include botanical gardens, zoological parks, aquaria, planetaria, historical societies, and historic houses and sites which meet the requirements set forth in the preceding sentence [Burcaw G. 1990: 10, American Association of Museums]</p>
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Table 1: Definitions of GLAMs

As shown in Table 1, there are a number of shared characteristics between the GLAMs. One of them is that all GLAMs deal with the preservation of memory as the objects (e.g. book titles, texts, films, photographs, artifacts

etc.) that are kept and preserved are used in ways to support certain discourses that ‘matter’ in the public domain; reservoirs of knowledge and culture that are valuable to society ‘as a whole’. Another shared feature is that most of these engage in about the same processes; that is collecting, archiving, preserving, interpreting, and exhibiting (or otherwise providing access to the public).

However, as Robinson (2012) has argued, “their sweeping classification as ‘memory institutions’ in the public sector and the academy oversimplifies the concept of memory, and marginalises domain-specific approaches to the cataloguing, description, interpretation and deployment of collections that lead museums, libraries and archives to engage with history, meaning and memory in significantly different ways”.

It is thus imperative to look deeper into the different processes of preservation and exhibition of objects in GLAMs and how these are linked with wider socio-economic processes and developments. Looking specifically at the multiple relational processes of objects, techniques, tools, users, communities etc. that engage in the preservation and exhibition of memory we may find not only particular differences, but also different modes of approaching GLAMs when dealing with access, participation, ownership and various power asymmetries in content creation, community/audience engagement, etc.

Furthermore, Rasmussen and Hjørland (2021) highlight some key differences between the GLAMs. One key difference is that library documents as a rule exist in many copies, whereas artefacts and documents in museums, archives and galleries usually are unique. For that the activities of describing, indexing, and classifying documents in libraries need not be done by each library from the scratch but can for the most part be done collectively or by a central agency through universal classifications of subjects (see Nomenclature for Museum Cataloguing (Dunn and Bourcier, 2020) and the General International Standard Archival Description. On the other hand, in museums and archives there are different ways of indexing and archiving according to the specialisations upon the objects preserved in each institution, while the issue of provenance plays a major role (especially in archives)³. Moreover, libraries are the mediators between content producers and the public, where they do not own the documents they mediate to users, whereas museums, galleries and archives usually own their objects, having the exclusive rights to distribute, display and reproduce.

Other scholars have highlighted that whereas GLAMs are providers of information (information centres or machines to retrieve information),

³ Although, attempts are made to introduce a relevant classification system for museums (Art Identification Standard, <https://www.artidstandard.org>)

especially museums- and to an extent galleries- engage in more creative processes in the form of cultural exchanges and artistic activities, including performance art, where reflexive encounters take place between the works of art and the visitor (viewed as a social actor), creating experiences. According to Soares (2016) information centres are supposed to be transparent; museums are allowed to ‘play’ hide and seek with their objects, using lights, shadows, sounds, and theatre to engage their visitors in a meaningful performance. However, the role of libraries is currently redefined away from their traditional roles as mere information providers and towards a more extended vision, whereby “libraries reach audiences from all backgrounds and of all ages, and provide meeting places, maker spaces, and focal points for creative and cultural activity within local communities, in conjunction with their delivery of four national Universal Offers (reading, health and wellbeing, digital and information, and culture and creativity)” (Arts Council England, 2020: 37). As such, the importance of GLAMs in contemporary times invites multiple new functions that aim to spark engagement with their audiences in a more collaborative and participatory manner.

2.2. From the experience paradigm to the participatory one

According to Grøn and Gram (2019), GLAMs and in a general view the cultural sector has currently shifted from the experience paradigm to the participatory one⁴. Audunson et al. (2020) argue that “the development of an increasingly participatory culture is one that embraces a bottom-up approach to collection and service provision that facilitates interaction and creation of content by users rather than a top-down approach based on the provision of culture created or collected by professionals (Deodato 2014; Roued-Cunliffe and Copeland 2017)”. This has resulted in an emphasis on providing greater support for diversity of expression and the inclusion of marginalised discourses, which has been argued as necessary for achieving a comprehensive and robust public sphere (Fraser, 2010).

GLAMs, under the participatory paradigm, can play a central role in strengthening key elements of a healthy and thriving society, such as the sense of belonging and social cohesion, allowing the formation of bonds between individuals and groups which make up their audiences/users, while also dealing with social exclusion by providing opportunities and resources to the most disadvantaged (European Union, 2019). In particular, GLAMs can serve as agents for social inclusion through representation within collections, participation in processes of cultural production and

⁴ Particularly with regards to cultural heritage and archaeology, see also Merriman N. (Ed), (2004). *Public Archaeology*. London: Routledge.

access to cultural services (Sandell, 1998; Fleming, 2013). When adopting a democratic and participatory approach, they can foster processes of active knowledge-creation and exposure of diverse, often conflicting, values (e.g. driven by gender, class, ethnicity, race), leading to the development of a multivocal history and heritage that promotes respect for cultural diversity, awareness, and reflection of cultural pluralism (Labadi, 2007). Lofland (1973) and Klinenberg (2018) make similar arguments regarding the civic skills people acquire from participation in public places, including libraries and museums. These skills are essential prerequisites for a well-functioning democracy in societies characterised by social divisions and cultural diversity.

Furthermore, GLAMs can encourage communities to negotiate with trauma and appease suffering, by concentrating on personal stories, individual biographies, and diverse memories (Arnold-de Simine, 2013). At the same time, GLAMs are connected to quality of life and the economy. They contribute to the material and spiritual well-being of citizens (UNESCO, 2015) and to income-generating activities, employment, regeneration (e.g., by increasing territorial attractiveness) and tourism (KEA & EIF, 2021). Especially in deprived peripheral areas, GLAMs hold untapped potential for fostering economic revival, through their synergy with local industries. However, economic pressures and excessive appropriation of market values (e.g., by real estate, tourism) may clash with the mission and primary functions of GLAMs and fail to serve the aspirations of their user/surrounding communities.

The participatory paradigm of GLAMs is increasingly embraced by the European Commission. European Conventions and policy documents advocate for the principles of involvement, public participation, shared responsibility, and the balancing of rights with responsibilities as a way forward (see for instance, Faro Convention; Council of Europe, 2005; European Commission, 2023). Also, more concretely, requirements for audience development strategies and increasing audience engagement and participation are now included as an operational priority in the Creative Europe programme (Bollo et al, 2017; European Commission, 2021; European Commission, 2023). It seems that the participatory approach is gaining momentum in practice and in the official policy arena. The participatory governance as well as management of GLAMs is a developing scenario for supporting/facilitating the sustainability of GLAMs, given the wider spatiotemporal challenges they face (see next subsection) and the need to provide more rhizomatic relations with and within communities that can have a positive social impact.

As, however, the turn to “participation” in cultural organisations has developed in the 21st century through conflicting pressures, demands, and orientations, it would be useful to provide an account of this turn, in order to

then be able to clarify how this project's focus on commoning practices differs from the calls to participation which are currently mainstreamed in policy discourses and expert practices. Referring to museums, Simon (2010) proposes a taxonomy that distinguishes four different modes of participation: (a) the contributory, where audiences are invited to take part in an institutionally-controlled process, (b) the collaborative, where participants join the work of institutions as active partners, (c) the co-creative, where communities and professionals co-set the project's goals and work together throughout its implementation and (d) the hosted, where museums allow the programme to be controlled by participants. The following subsection will offer a critical overview of the ways in which participatory programmes and initiatives in cultural organisations have operated mostly within the first two modes of participation, whereby communities are understood as audiences invited to contribute and collaborate but rarely co-create, control the programme, or co-manage cultural institutions.

2.3. The ambiguity of participation

The institutional character of museums has been extensively analysed by Bennett (2013), who coined the term “exhibition complex” to describe the ways in which museums have historically contributed to national canons, knowledge hierarchies, and strategies of government since the 19th century, and to analyse the establishment of national museums as institutions constitutive of national identity. Bennett identified a set of disciplinary and institutional structures that form mediating mechanisms and unilaterally communicate knowledge to the public, which is treated as a mass without distinct characteristics (Bennett, 2013). In the same vein, Hooper-Greenhill (1999) argued that the museum is a colonial space, shaped by patriarchal and imperialist structures, where institutional practices conceal alternative paradigms, present the dominant ideology as truth, and legitimise specific sets of knowledge as real or authentic. Through their collection and exhibition practices, they have historically defined the norm and communicated the hegemonic national narrative to the public.

During the 1980s and 90s, the hegemonic position of museums as singular bearers of the national cannon was challenged. In this context, it was realised that audiences are made up of different social groups with different characteristics (Hooper-Greenhill, 1999). With input from poststructuralist, postcolonial, and feminist theories, artists and curators moved toward relational, dialogic, participatory, and collaborative art (Bishop, 2012). These innovative practices stimulated new ways of addressing, producing, presenting, and engaging the public in artistic

creation, aiming to deconstruct the exhibition complex and its legitimacy (Bishop, 2012).

In 1985, the journal of the International Council of Museums (ICOM) introduced the term "new museology" to identify a movement of criticism and reform that incorporated then new developments in the social sciences and humanities with the aim of changing the traditional relationship between the museum as an institution and the public (Mayrand, 2014). "New museology" developed from the voices of artists and curators, who from the 1960s onwards declared that every representation is political and criticised the traditional role of the museum through their work (Mayrand, 2014). The new museum envisaged would support academic research, care for its collections, be accessible, and provide cultural and educational programmes which target the public and attempt to attract further financial resources (O'Neill, 2010; Dufresne-Tassé, 2012). The new museum's cultural and educational programmes would aim for the involvement and empowerment of the public, through models that recognize diverse viewpoints and encourage and support the creation of meaning through constructivist methods for developing or deepening skills, knowledge, understanding, values, ideas and feelings (Hooper-Greenhill, 1999). The "new museum" rejected the traditional "exhibition complex" (Bennet, 2013), and endeavours to facilitate democratic knowledge-sharing, shared learning and participation (O'Neill & Wilson, 2010).

Contemporary museums consequently reinvented themselves as educational institutions that have, at the centre of their actions; different publics, in contrast to the museums of the past which identified, mainly, as collections of objects (Hooper-Greenhill, 2020). This shift from objects to audiences has been described as a "paradigm shift" (Hein, 2012) and is at the centre of contemporary policy, as exemplified in the previous subsection. As Bishop (2012), however, argues the ways in which the audience has been conceptualised have varied over the years. Notions of "the crowd" and "masses" of the beginnings of the 20th century were replaced with more democratic conceptualizations of audiences as "the people" in the 1960s and 1970s. The 1980s saw the rise of cultural participation as a means of alleviating social exclusion and the 1990s focus on community inclusion and development was conceptualised as a means for fiscal and social development.

Focusing upon libraries, Söderholm and Nolin identify three historical waves of community engagement. In the early twentieth century, during the first wave, the focus was upon literacy and public education, the second wave in the late 1960s and 1970s focused upon "radical" grassroots work for targeted social inclusion, while the third wave which took off around 2000,

and still lasts, focuses upon community hubs, open social space, and diversity (Söderholm and Nolin 2015, 253). (p.8).

Since 2000 we have entered the post-museum period, where the conceptualisation of the museum as a structure has been replaced by the museum as experience and process (Hooper-Greenhill, 2020). The “meta-museum” is thought to promote a more equal society and to recognize the complex relationships between culture, communication, learning and identities, with the aim of developing audiences (Hooper-Greenhill, 2020). Audience development encompasses economic, artistic, social, and educational parameters (Kawashima, 2000). It is a nexus of planning, training, and marketing, with the aim of widening, deepening and diversifying the multiple audiences of an organisation (Bollo et al., 2017) while, at the same time, maximising the inflow of income (Kawashima, 2006). The latter arises as a consequence of reduced public funding within neo-liberal cultural policy, which forces cultural organisations to look for new financial resources to ensure their sustainability (Fiaccarini, Gariboldi & Righolt, 2016).

Within audience development, the term “outreach” is used for audience development actions designed to focus specifically on reaching communities that do not often visit cultural spaces, due to economic factors, social exclusion, or educational and institutional barriers (Zipsane, 2007). The approach may involve connecting with the local community and raising awareness of existing museum services and learning opportunities. It is implemented by a) widening the access of excluded groups, through informal and participatory activities outside the museum or cultural organisation, b) organising exhibitions and educational programmes in community locations, c) developing new exhibitions and programmes that respond to the identified needs, d) supporting communities to develop their own exhibitions and, finally, e) training local people as volunteers, guides, interpreters, and public supporters (Zipsane, 2007). Community outreach is conceptualised as “social inclusion” as it is considered necessary to remove visible and invisible barriers in order to achieve rapprochement (Kawashima 2006). Public outreach requires organisational support and commitment, adequate resources for short-term and long-term actions, and appropriate staff with practical and interpersonal skills, capable of building a network of relationships (Zipsane, 2007). Glow et al. (2021) observe that cultural organisations which are most successful in community outreach are target-led rather than product-led, echoing the roots of the practice in arts marketing. Similarly, organisations that demonstrate readiness to test new approaches and challenge the status quo to develop diverse audiences are characterised as “leaders” (Glow et al., 2021).

As museums were changing and becoming more audience-oriented, so were art practices. The economic-social variations of the global financial crisis of the previous decade influenced conventions and acted as catalysts for experimentation in art worlds. Collective actions shaped innovative collaborative structures, new rules and proposed new aesthetic conventions and within this context participatory art (Finkelpearl, 2014) became more widespread and prominent. More artists appropriated to a greater or lesser degree the roles of educators, social workers, urban planners, or mediators to challenge and critique the dominant culture, and to reach out to the underrepresented. Arguably, the instrumentalisation of art or aestheticisation are not inherently problematic practices (Barok, 2009). Aestheticisation can be used as a means that facilitates the approach of a work by the public, with the ultimate aim of creating new relationships between action, taste and social structures, and connecting in innovative ways values and intentions, in order to elicit new attitudes and perceptions of reality (Ricconi, 2018). What is a problem is when neoliberal government instrumentalises art for social purposes, seeking solutions to systemic problems (Bishop, 2012). Socially participatory art often serves to fulfil government agendas for 'social inclusion' (Barok, 2009; Belfiore, 2009). Bishop (2006, 2012) has highlighted the potential for instrumentalisation of participatory art, especially in the case of New Labour (1997-2010) where the collective turn to the arts was linked in public cultural policies to tangible social impacts. Early on in Tony Blair's tenure, arts and cultural institutions were encouraged to increase 'social inclusion'. Subsequent New Labour governments emphasised the importance of the arts in developing the commercial potential of the creative economy, with the arts eventually functioning as auxiliary factors in the service of the economy, trade balance and tourism (Alexander, 2018). Mörsch (2011) in her research on education in the contemporary art museum, describes four types of approach: the affirmative, the reproductive, the deconstructive and the transformative. With the affirmative approach the museum maintains the role of "authority" and mainly targets special audiences through lectures, tours, catalogues, and interpretation by "authorised speakers". Then, the reproductive approach aims to develop an audience. The discourse of the reproductive approach is sovereign and takes care of the education of the future audience, as well as of finding ways of initiation, in the case of individuals who do not agree. Deconstructive discourse is related to practices of institutional critique, i.e. it critically analyses the functioning of the museum, art and education, and may include artist interventions or socially engaged practices that make visible the construction of truth within the institution. It may also involve the involvement of excluded groups. As far as the transformational approach is concerned, at its centre is the establishment of the museum as an agent of social change. Mörsch

(2011) considers the fourth case to be the least common, as it aims to subvert the museum as a holder of knowledge.

In "Curating and the Educational Turn" (2010), O'Neill and Wilson, refer to the 'educational turn', where various pedagogical processes have entered curation and cultural production, and emphasise that curation itself increasingly functions as an expanded educational act. Such approaches make visible the intentions and characteristics of educational practices, as they unfold in relation to the epistemological, sociocultural, and political dynamics that shape museums. Current pedagogical and participatory curating models in many museums of modern and contemporary art invite dialogic experiences and propose a space for democratic exchange of knowledge and shared learning (O'Neill & Wilson, 2010). In the context of this "educational turn" we can distinguish two modes of operation: one concerns the learning process with traditional roles and the other concerns the artistic practice where artists use pedagogical mechanisms in order to produce a work. This can be achieved through workshops with the public and possibly in collaboration with curators, where together stakeholders participate in planning and knowledge production. Learning processes occur continuously as we use our prior knowledge to negotiate the world, and in doing so learn new things and challenge, confirm, or deepen what we already know (Hooper-Greenhill, 1999). In this model, curatorial and artistic practice are decoupled from their institutional role and linked to pedagogy, without having the 'disciplinary' characteristics that formal education often has. Artists and curators become part of a social and participatory activity (Birchall, 2017). However, these practices are divisive in terms of their effectiveness and outcomes.

Simon in Participation (2010), states that collaborative projects fall into two broad categories: a) consultative projects, in which institutions hire community representatives to provide advice and guidance to staff members as they develop new exhibitions, programs or publications; and b) co-development projects, in which staff members collaborate with participants to produce new reports and programs. Beech (2010) has argued that there is a distinction between participation and collaboration: in participation the audience is subject to the parameters of the artist's work, while in collaboration the co-creator operates and makes decisions about key structural features of the work. Good collaboration does not necessarily mean good art (Barok, 2009). Co-developed collaborative projects often involve weeks or months of engagement with participants and require significant time, planning and staff coordination (Simon, 2010). Collaborative art is based on research and experimentation and focuses on the process of creating a work (process-based art), rather than on the final result (object-based art) (Rogoff, 2010). Some collaborative projects focus more on the learning and skills development of participants than on

the end products they create (Simon, 2010). Also, in these the term "work" has been replaced by that of "practice". "Practice" is radically different from "work" in terms of its organisation temporally and spatially, functionally, and aesthetically (Bishop, 2012). For this reason, it is more flexible, more focused on operations and more responsive to material and conceptual variability (Phillips, 2010). Collaborative art is more about the co-production of questions, dialogue, ambiguity, participation, questioning and generally activating the viewer (Rogoff, 2010). This is why often collaborative art, due to its social dimension, is largely free from criticism and each work is evaluated as a "model" (Bishop, 2012).

Because of their educational benefits, cooperative projects are often incorporated into internship programmes, youth employment programmes, and learning programmes for underrepresented communities (Simon, 2010). Partnerships are valuable for staff, participants, and visitors when they serve a wider audience (Simon, 2010). For participants, creating a project for a wide audience makes their work more meaningful and connects them more closely to the institution. For the public, the products of the collaboration likely present voices, experiences and design choices that differ from the institutional norm (Simon, 2010). In this case, Simon (2010) describes the institutional space as a performative platform of ideas that connects different users acting as content creators, distributors, consumers, critics, and collaborators and provides opportunities for different experiences co-produced by visitors. Collaborative projects create relationships between staff members, visitors, the community, and open new avenues for diverse people to express themselves and engage with institutional practice (Simon, 2010).

However, true inclusion or community participation still constitutes a challenge for cultural organisations (Kawashima 2006), as does reaching audiences that do not belong to the dominant normative culture (Glow et al, 2021). Additionally, as Graham (2017: 161) notes, "None of these terms - visitors, audience, nor public - imply a sense of holding something in common. Nor do they imply a thoroughgoing sense of obligation to each other (beyond the usual obligations of use of public space). Rather you can see the deployment of ideas of publics, audiences and visitors as the social imaginaries that have enabled museums to produce themselves as quasi-public goods. The collections can only be public goods if people agree to see themselves as members of the public and as visitors. This is why the turn towards "community participation" has both been so desired - many people do not want to be treated as visitors to their own cultures and heritages - but also why seeking to practise community participation has been no simple or "straight-forward political task for museums". Moreover, at the more macro-level of cultural policy, while paternalist conceptualisations of the audience as an undifferentiated mass in need of

guidance have indeed given way to more nuanced understandings of the audience as members of diverse groups or communities, the increased emphasis on cultural participation as a means for primarily achieving social and economic impacts has also been criticised as instrumentalist (Belfiore, 2012).

2.4. Challenges for the GLAMs

In recent years, GLAMs are increasingly required to tackle a variety of challenges such as changing cultural policy environments with ever-widening expectations around their social role (i.e., for participation, education, social cohesion and formation of collective identities), the global financial and economic crisis which resulted in cutbacks in public funding, as well as digitalization as a broader socio-technical development that changes the core business model of GLAMs and how GLAMs interact with audiences (Digital Agenda of Europe 2000, EC, 2014).

At the same time, GLAMs continue to grow and are increasingly seen as a catalyst and engine for local development in urban as well as rural areas (Sacco et al., 2013; Van Aalst and Boogaarts, 2002). Along with the dramatic rise in cultural tourism in recent decades, the number of museums around the world has increased from 22,000 in 1975 to 95,000 today (UNESCO, 2015), while the number of libraries and archives exceeds 2,5 million (librarymap.ifla.org, 2022).

After the financial crisis of 2008-9 (and following economic crises in Europe), many governments have shortened funding for the culture and heritage sector due to subsequent austerity policies and many GLAMs need to find additional sources of income (Romolini et al., 2020) to secure financial resilience and sustainability. Limited resources have a number of impacts on the operation of GLAMs, as their mission and operation normally require substantial funds. For instance, preserving and conserving collections (e.g. artefacts, books, photographs, and other cultural objects) require proper storage, climate control, and constant conservation treatments to prevent deterioration or damage. Moreover, GLAMs often encounter challenges related to obsolete technologies and formats (often coupled with a lack of related up-to-date skills and knowledge). Outdated hardware, software, and storage media make it difficult to access and preserve assets digitally. Regularly updating and migrating digital collections to new formats is essential but can be resource intensive.

Furthermore, the recent COVID-19 pandemic posed severe challenges to culture and the arts around the world. In some places, it threatened the very survival of local cultural infrastructures and the careers of many artists

and cultural workers. Social distancing measures, the resulting closure of art institutions and the suspension of cultural events, have impacted the sector profoundly. Alongside the tourism and the hospitality industry, the entire cultural sector is one of the fields most affected by the pandemic (Montalto et al., 2020). While GLAMs' and especially museums' income sensitivity to economic fluctuations (Lindqvist, 2012) have been previously explored, there is little systematic knowledge of museums' financial practices in general, as well as, on how the COVID-19 pandemic has specifically affected their financial planning. ICOM reported that "around 95% of institutions [were] forced to close in order to safeguard the wellbeing of staff and visitors, resulting in serious economic, social and cultural repercussions" (ICOM, 2020:4). Income sources such as visitor revenues, licensing, donations, endowments and sponsorships are clearly impacted by the pandemic, while others, such as funds allocation, grants and lottery revenue transfers (all through governmental public support), have not changed during the pandemic (NEMO, 2021).

Apart from the effects of the economic/financial crisis and the Covid-19 pandemic crisis, there is a number of challenges encountered by GLAMs especially in the process of digital transformation. Adopting and managing digital technologies can be a significant challenge for GLAMs. It involves digitising collections, creating online platforms, and developing digital preservation strategies while ensuring accessibility and usability for diverse audiences. Moreover, ensuring equal access and inclusion for diverse audiences is also a significant challenge. GLAMs are expected to make their collections and programs accessible to a broader spectrum of audiences, embracing among others, individuals with disabilities, marginalised communities, and remote users. Overcoming physical, social, and technological barriers is crucial for achieving broader inclusivity. Finally, GLAMs must navigate complex copyright laws and intellectual property issues when digitising and sharing their collections. Obtaining permissions and licenses for copyrighted materials and balancing fair use principles can be challenging, particularly for older and orphaned works⁵, or for GLAMs that do not have the adequate financial resources to support such processes.

All these challenges require GLAMs to be proactive in adopting innovative strategies, collaborating with other institutions, leveraging partnerships, and seeking sustainable funding models to address their unique and evolving needs. Our aim is to seek solutions for the above challenges through commoning practices and the commons paradigm.

⁵ The recent EU Directive 2019/790 attempted to address and regulate related issues. For more details, please see Deliverable D1.5

3. The variegated approaches to the commons

3.1. What are the commons? Definitions and different approaches

Starting from the beginning of the 1990s, the concept of the commons has re-emerged in academic, public and policy debates, as a solution towards managing natural, urban, and intangible resources in a collective, democratic, inclusive, and sustainable way and responding to contemporary social, economic and environmental challenges. This interest in the commons is also related to the withdrawal of the public sector and the focus on the ways ecological problems could be confronted through civic engagement (Parker and Schmidt, 2017). Debates around the commons focus on different aspects of their components, emergence, and operation, such as the resources that are collectively managed, the relations that bring together and reproduce the communities of commoners, attempts to institutionalise the commons and their relations with a variety of actors.

Bauwens and Niaros (2017) identify five ‘waves’ of commoning, from their initial development around the management of natural resources to digital, urban, and productive commons:

The natural resource commons	In indigenous, traditional, and pre- or non-capitalist societies, natural resources are collectively managed for long-term use and preservation.
The “Social” Commons of the Workers	Mutualities, Cooperatives and Unions: Without direct access to natural resources, workers pool risk and solidarity, before it was nationalised in the welfare state.
The Digital Commons	Many-to-many digital networks enable global knowledge commons of shared knowledge, software and design. Open and global productive communities emerge and create supportive entrepreneurial coalitions and global for-benefit associations that manage the global infrastructure
The Urban / Territorial Commons	Networked citizens and inhabitants create alternative provisioning systems based on commons models (SLOC: “Small, Local, Open and Connected”)

The Productive Commons [Cosmo-Local]	The people of the world start producing in ways that are compatible with the carrying capacity of the planet. Productive knowledge is mutualized on a global scale, but physical production is re-localized through distributed manufacturing and cooperatives.
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Table 2: The five waves of commoning (Source: Bauwens and Niaros, 2017: 17)

3.1.1. The tragedy of the commons and the Ostromian approach

The commons, as a notion, idea and practice has a prolonged history, covering different time periods, continents and contexts. According to Huron (2015), following Marx (1973), Thompson (1963), Handlin and Handlin (1969) and Neeson (1993), practices of collective ownership and management of resources by community members, governmental bodies and associations can be traced in English rural areas during the 18th century, as well as in US towns that developed modes of governance towards the regulation of the commons. Following Eidelman and Safransky (2020), the first institutional regulation of the commons appeared in mediaeval England and its Charter of the Forest (1217) which building on the Magna Carta (1215), established forests and fisheries as commons, open to all for grazing, hunting, growing food etc. However, in the following centuries, a series of laws and regulations - including the Modern English Games Laws (1671), the English Act of Settlement (1662) and the English Reform Bill (1832) - enabled the enclosure of the commons and signified primitive processes of accumulation.

It was not until 1968, when Hardin, based on the 1883 conceptualisation by the British writer William Forster Lloyd, published a paper titled “The tragedy of the commons” in Science journal, that the concept of the commons re-emerged and attracted massive interest. Hardin, through the example of a group of herdsman sharing a grassland under an open access status, argued that this mode of collective exploitation would lead to the depletion of the resource. Thus, according to Hardin, individual property rights or state control over the resource, instead of free access, constitutes a more viable and sustainable way of managing the grassland towards preventing its overuse and depletion.

In the following decades, Hardin’s hypothesis faced substantial criticism. Most notably in 1990, Elinor Ostrom’s work both challenged Hardin’s hypothesis and led to a major shift in the ways we understand and conceptualise the commons. Ostrom (1990) made clear that in Hardin’s example, the depletion of the resource was not related to its use in common

but, instead, to the open access character of its appropriation. According to Ostrom (1990), if the grassland was to constitute a commons, a mode of governance established by the community would prevent its depletion. In this proposition, lies the second contribution of Ostrom which led to a novel conceptualization of the commons, namely their conceptualisation as social systems in which resources are just a component. Ostrom's work recognized that the commons are grounded in social systems, while a variety of governance structures define related rules of access and their property status (Arvidsson, 2019). Thus, resources become elements of the commons (as social systems), through collective social practices. Responding to Hardin's dilemma between privatisation and state control, the Ostromian approach proposes a third alternative, namely the commons, as a mode of governance that enables a community to appropriate a resource through regulations (rules, principles, practices) that define and distribute rights and obligations among engaging actors and formulate mechanisms of monitoring and resolving conflicts (Arvanitidis, 2017). More specifically, Ostrom (1990: 90) developed eight design principles that can lead to successful commons arrangements:

1. Clearly defined boundaries: Individuals or households who have rights to withdraw resource units from the Common Pool Resource (CPR) must be clearly defined, as must the boundaries of the CPR itself.
2. Congruence between appropriation and provision rules and local conditions: Appropriation rules restricting time, place, technology, and/or quantity of resource units are related to local conditions and to provision rules requiring labour, material, and/or money.
3. Collective-choice arrangements: Most individuals affected by the operational rules can participate in modifying the operational rules.
4. Monitoring: Monitors, who actively audit CPR conditions and appropriator behaviour, are accountable to the appropriators or are the appropriators.
5. Graduated sanctions: Appropriators who violate operational rules are likely to be assessed graduated sanctions (depending on the seriousness and context of the offence) by other appropriators, by officials accountable to these appropriators, or by both.
6. Conflict-resolution mechanisms: Appropriators and their officials have rapid access to low-cost local arenas to resolve conflicts among appropriators or between appropriators and officials.
7. Minimal recognition of rights to organise: The rights of appropriators to devise their own institutions are not challenged by external governmental authorities.
8. Nested enterprises: Appropriation, provision, monitoring, enforcement, conflict resolution, and governance activities are organised in multiple layers of nested enterprises.

One crucial parameter highlighted by Ostrom is that the viability, sustainability, and efficient management of the commons do not presuppose specific property regimes: community-owned, public, private, semi-private or mixed regimes can all support the longevity of common social systems (Gibson-Graham et al., 2013). For Williams (2018: 18), there is no particular property regime that can be considered as the most appropriate for creating or maintaining the commons. Instead, he argues that “a helpful way to conceptualise the relationship between commons and property is to understand property as a common good that shapes and is shaped by relational practices of commoning”. Huron (2015) underlines this shift of focus from property to management through the transition from “common property regimes” to “common pool resources” and, recently, the “commons”. Bruun (2015) further broadens the understanding of ownership over the commons, arguing that - beyond conventional notions of property - commons’ ownership lies in broader social relationships that include all cities’ residents through the creation of social values that bring out the commons as “everyone’s property”. For Azzelini (2016), the commons constitute sets of social relations developed beyond the dualism between the state and the market, highlighting the role of communities. According to De Angelis (2017), a plurality of commoners can take control over the reproduction of the commons through collective claims of ownership that (re)define and lead to the emergence of new use values in common goods. In this case, a common or public good, regardless of its (legal) ownership status, can become part of a common system.

At this point, a distinction between the commons and common or public goods is crucial. According to Eidelman and Safransky (2015), while the commons can be developed around public goods, the former cannot be reduced to a category of the latter. In addition, commons must not be approached as public goods, even in the case that ‘open’ or ‘public’ access to them is secured, since public goods are both owned and managed by government authorities (Bruun, 2015). Instead, the commons are constituted through the collective management by specific groups. For example, a public space is not part of a commons per se, independently from its ownership status. Rather, it represents a collective political action, a collective claim of control that turns it into part of a commons system. Additionally, public goods (such as transportation infrastructure, social services etc.), unlike traditional commons, are non-subtractive, as, on the one hand, one’s consumption is not rival to that of another and, on the other hand, the state is responsible for the maintenance and sufficient capacity of public goods (Foster and Iaione, 2016). Moreover, other types of goods are transformed when entering commons social systems. Goods can be decoded and re-coded, obtaining value as either commodities or elements of the commons, depending on the sets of social relations they partake.

Thus, even goods that are largely perceived as commodities (e.g., a PC), can be re-coded through their introduction in a common social system (e.g., in a collectively run community center the PC would serve as a common pool resource).

Overall, we consider Ostrom's greatest contribution to lie in the conceptualization of the commons as complex socio-economic systems, in which resources are just a constituting component. Their sustainable and effective management lies in the formulation of regulations and rules by the community of commoners that define the principles of their function, management, access, exploitation, as well as subsequent rights and obligations. In Ostrom's 'third way', the resources are not necessarily user-owned but, instead, user-managed. Following Kioupkiolis (2020), the Ostromian approach introduces a way of exercising politics that is consistent with contemporary radical claims, however it often overlooks the role of political antagonism, power relations and political conflicts. For Bianchi (2022), Ostrom did not conceptualise the commons as transformative arrangements towards overcoming capitalism but, instead, as an additional governing model to the state and the market that does not operate in tension with the latter.

3.1.2. The autonomist lens of the commons

The autonomist lens of the commons that emerged in the early 2000s (see *inter alia*, De Angelis 2007, 2017; Hardt and Negri, 2000, 2004, 2009; Holloway, 2010; Stavridis, 2016), while building on the Ostromian conceptualisation of the commons as social systems, focuses on the prefigurative and transformative political potentials of the commons. It constitutes a substantial part of what Huron (2015) refers to as "the second stream of commons thought", shifting the focus from empirical studies concerned merely with commons' management to their political and transformative aspects, intertwined with a critique of capitalism. For instance, autonomist commons scholars such as Azzellini (2016), understand the commons as social systems, materialised and reproduced through the social practice of commoning, highlighting their potential contribution to social transformation. According to DeAngelis (2017: 64-65):

"The view of commons as 'goods' does not frame the analysis of commons in an analysis of power. It does not tell us, and does not frame, the question of how reproduction of the commons occurs in spite of and through struggle, through the problematisation of gender roles, through racist and xenophobic discourses or through their overcoming, through the challenge to capital's dominated circuit of praxis, and through ecologically sound paths. The problematising of commons within a project of emancipation

thus must not simply rely on lists of isolated objects but must open up to the internal relations among the components of these lists and the respective commoning pluralities, as well as the relations that commons have to their plural environments.”

Autonomist thinking understands the commons primarily as a social relation and practice closely linked to the need for re-appropriating the means of production and reproduction and the need for collective action and redistribution of wealth, while also focusing on issues of horizontality, thus further diverging from the Ostromian approach. In this way, the concept of the commons is redefined as a political claim, as a means to overcome capitalism and construct a new alternative paradigm that is based on self-management, equality and inclusion. This conflictual relation of the commons with capitalism highlights the latter’s incessant tendency to enclose and appropriate the commons by constantly constructing new mechanisms of ‘accumulation through dispossession’ (Harvey, 2005: 159). Autonomists are thus imbued with a vision of emancipation from capitalism through the emergence of new collective subjectivities and forms of life (Hardt and Negri, 2009) that produce alternative ‘institutions’ that are distinct from the state and the market (De Angelis, 2003; Harvey, 2010, 2012; Federici and Caffentzis, 2013). Furthermore, the autonomist approach emphasises issues of strategy and the formation of counter-hegemonic alliances for the commons and elaborates a ‘shared project’ that challenges dominant power relations, which can serve towards creating spaces for autonomous practices and for the transformation of dominant institutions (Hardt and Negri, 2012, 2017).

Building on the works of Hardt and Negri (2009) and Dardot and Laval (2015), Bianchi (2018) argues that approaches that understand the commons as a political project and claim promote the commons as prototypes of a new society of self-government, whereas the transformative potential of the commons that lies in the autonomous labour, when combined with political organisation and activity, can constitute a revolutionary force. In this vein, Chatterton (2016, 2) suggests the urban commons exemplify an “emerging geography of post-capitalist transitions”, incorporating practices that challenge existing power relations, corporate control, socio-spatial inequalities while moving beyond “the status quo of intense individualism, corrosive consumerism and financial austerity”. This prefigurative dimension of the commons is further underlined by Łapniewska (2017, 55), arguing that the commons are created by citizens who organise themselves towards altering their living conditions and their environment “by simulating imaginary cities they would like to inhabit”.

For Holloway (2010), the commons constitute ‘cracks’ in capitalism, as they materialise social forms and relations beyond capitalist relations.

According to Bianchi (2022), such cracks can be caused by three “institutionalities” that bring together different sets of institutions: i) economic, where resources are used and exchanged outside logics of commodification and profit-making, ii) government, where power is distributed among participant members who participate in horizontal decision-making processes, iii) property, which challenge the predominance of human being over resources and, instead, promote “a relationship of use between human beings and resources”. For De Angelis (2017:102), “the commons exist simultaneously inside and outside capital and the state and, to the extent that capital and the state affect the subjectification of the people who reproduce them, capital and the state are within the commons even if the logics that govern them are outside them”. Finally, from a geographical perspective, Stavridis (2016) conceives the commons as ‘thresholds’, which on the one hand are not entirely absorbed by capitalism and, on the other hand, are not entirely resistant to it.

3.1.3. The new commons

While debates concerning the commons initially developed around “traditional commons” (Parker and Johansson, 2011), namely natural resources, such as fisheries, forests and watersheds, recently, a growing body of literature (e.g. Benkler, 2017; Dolšak and Ostrom 2003; Foster and Iaione, 2016; Lessig, 2003; Parker and Johansson, 2011) has focused on the “new commons”, namely commons social systems developing around material and intangible resources beyond natural ones, including ‘conventional’ (streets, transportation and energy infrastructure etc.) and digital infrastructure, services, public spaces, knowledge, culture etc. A key divergence between “traditional” commons, especially natural resources, and the new commons concerns the fact that the former are characterised by subtractability and excludability (Bendkowski, 2019; Kornberger and Borch, 2015), meaning that their use is diminished by increasing users, calling for the imposition of limitations to overuse. On the other hand, new commons such as knowledge or digital commons, are both non-subtractive and non-excludable (Benkler, 2017), while in urban commons, usage and consumption are intertwined with their production and reproduction and, according to Kornberger and Borch (2015: 7-8), “consuming the city is nothing but the most subtle form of its production”.

Moreover, the new commons are increasingly influenced by processes of digital transformation, as digital means and tools are increasingly being introduced in the former, while peer-to-peer logics that derive from prefigurative IT initiatives and groups are penetrating the management of the commons. According to Bradley (2015: 92), open-source urban commons develop spatial practices that adopt tactics from open-source

programmers, namely “constructing practice manuals to be freely copied, used, developed in peer-to-peer relationships and shared by everyone, the results of which are not private entities but self-managed commons”. Additionally, debates around digital commons concern not only the open access and distribution of digital resources but also their production through collaboration under a “hacker ethic” (Himanen, 2001).

3.1.4. Defining the commons

While Ostrom (1990), moving beyond the matching of the commons with a specific resource, provided an ontological understanding of the commons as social systems developed around a shared resource, other commentators (e.g. DeAngelis, 2017; Bianchi, 2018; Hardt and Negri, 2009; Harvey, 2012) further evolved this conceptualisation towards understandings of the commons as both i) social practices that are collective and relational and ii) materialised political projects of emancipation, related to specific groups’ claims over decent life and the right to control production, consumption and the terms of their social reproduction. As for the former, according to Linebaugh (2008), the social process, the praxis of commoning, refers to the collective management of resources. Furthermore, the creation and reproduction of the commons is materialised through commoning practices of co-production, co-appropriation, and co-management, developed upon horizontal and democratic principles and processes (Card, 2018). For Harvey (2012: 73), the commons involve “a social relation between a particular self-defined social group and those aspects of its actually existing or yet-to-be-created social and/or physical environment deemed crucial to its life and livelihood”.

Finally, both the Ostromian and the autonomist approach commonly critique Hardin’s arguments, suggesting that the commons i) are not developed around open-access resources, but, instead, around resources that are managed by specific groups of people and ii) are not static things but, instead, a social process (Huron, 2015).

Moreover, independent of the political and transformative potentials attributed to the commons, three core elements are broadly recognised as constituting parts of commons social systems (see Arvanitidis and Papagiannitsis, 2020; Avdikos and Pettas, 2021; Barnes, 2006; Bauwens and Niaros, 2017; De Angelis, 2007; Hardt & Negri, 2009; Linebaugh, 2008; Ostrom, 1990):

i) a (set of) commons pool resource(s), including a diverse range of material and intangible resources (e.g., natural resources, urban spaces and public infrastructure, services, labour, digital resources and infrastructure);

- ii) a group/ community that appropriate, use, manage and take care of the resources;
- iii) a governance/ management framework established through mixes of official and informal sets of rules, decision-making processes, governance arrangements that, in total, contribute to the sustainability and reproduction of the commons.

3.2. The urban commons

As described earlier, the urban commons are developed around a diverse range of material and intangible resources. Relevant literature has focused on the potentialities of urban public spaces – including public infrastructure (e.g., gas and electric distribution systems) – to operate as commons (Brain, 2019; Garnett, 2012; Łapniewska, 2017; Lee and Webster, 2006; Löfgren, 2015; Newman, 2013), housing, modes of production, consumption and social reproduction, including social services, community gardens, food networks, transportation (Borgström et al., 2006; Bruun, 2015; Federici, 2010; Parr, 2015; Sardeshpande et al., 2020; Susser and Tonnelat, 2013) and urban waste (Zapata and Zapata, 2015).

According to Card (2018), the urban commons emerge and operate in opposition and tension with capitalism, often building on the de-commodification and non-commodification of urban resources and social relations and more lately are also associated with degrowth approaches (Kallis, 2018). For Bauwens and Niaros (2017), the urban commons create new sets of challenges within the urban environment. These include among others a claim on behalf of citizens to manage resources outside the public-private dichotomy and a shift from representative to contributory democracy and, ii) the challenging of market power, through the emergence of a generative economy that is not extractive towards nature and humans. Moreover, as the commons allocate groups of citizens with the power and the resources to collectively address problems, they challenge ‘traditional’ civil society organisations, such as NGOs and nonprofits. For Huron (2015), the urban commons are characterised by two unique attributes. Firstly, they emerge and operate in a saturated space, namely spatial units which are “already densely packed with people, competing uses, and capitalist investment”. Secondly, they are created and enabled by groups of strangers that come together. Finally, the increasing interest in the urban commons has also been critiqued, both for the limits to the types of resources that can be part of commons social systems in urban contexts, and for urban commons’ exclusionary dimensions; of the urban commons, as, “a commons also encloses and excludes” since a specific group of commoners is responsible for regulating access to its resources (Parker and Schmidt, 2017: 205).

Chatterton (2016: 407) refers to urban commons as “complex organisms and webs of connections that combine to articulate particular spatial practices, social relationships and forms of governance that produce and reproduce them”. Building on the conceptualisation of the commons as social systems, Foster and Iaione (2016), argue that the commons is rather a claim to a resource than a description of the latter. Such claims bring out the broader social value or utility that a specific resource can generate for urban communities through the granting of rights to the collective access and use and the overcoming of exclusionary conditions that could be imposed under private or public control. Moreover, they broaden up the spectrum of the urban commons by arguing that the city as a whole can be conceptualised as a shared resource. This shared resource belongs to the total of its inhabitants, relating the commons with the notion of the “right to the city” (Lefebvre, 1968), in the form of the right to make collective decisions over the use and management of urban resources and the processes that shape urban life.

This association has been further developed by Eidelman and Safransky (2020: 6), seeing urban space as urban commons through its collective management and autogestion that prioritises use over exchange values, is a political claim according to which “the right to the city thus encompasses the right to access, inhabit, and use urban space as well as the right to shape and govern it in transformational (anti-capitalist) ways”. In the same vein, Susser and Tonnelat (2013) associate the urban commons with different manifestations of the right to the city: i) the right to urban everyday life, developed around issues of production, consumption, access to public goods and services, ii) the right to simultaneity and encounters, developed around public spaces and the public sphere (streets, transportation and digital infrastructure etc.) and iii) the right to creative activity, revolving around collective visions of the cities through the activity of creative collectives and groups (see also Harvey, 2012; Narotzky, 2013).

More broadly, the urban commons are often associated with the activity of social movements, especially when taking into consideration the increasing entanglement of both the commons (Federici, 2010) and social movements (Kouki et al., 2022) with issues of social reproduction. Łapniewska (2017) argues that several struggles over the commons have transformed into social movements claiming democracy. For Pettas and Daskalaki (2021), social movements developed around broad political and economic issues, which have been territorialized in the form of urban commons around issues of social reproduction.

3.2.1. Public spaces and urban infrastructure

Social practices constituting urban public spaces as component and terrain for commoning practices largely emerged on the antipodes of processes that – often with the support of state and local authorities– promoted its militarization and commercialization, resulting in conditions of exclusion for both large parts of the urban population and subaltern groups and social movements (Atkinson 2003; Banerjee 2001; Davis 1990; Deutsche 1992; Dixon et al., 2006; Minton 2006; Mitchell 1995). According to Mitchell (1995), the character of public space is purely political and can be approached through two basic lenses: the first seeks public spaces that are characterised by no access restrictions, and where social and political movements develop, thus claiming a space in the public sphere, while tolerating the possibility of ‘disruption’ by political actions. The second seeks controlled spaces, where the right of access is granted to those who meet rules of ‘good behaviour’ and whose sense of security cannot be threatened for any reason.

Nevertheless, public spaces are not part of commons social systems per se. Harvey (2012) distinguishes public spaces and goods from the commons. He states that political action is a prerequisite for characterising any public space/good as a commons, given that the commons constitute a social relationship between urban resources and autonomous social groups. This relation will have the capacity to transform public goods into commons, if the function of its acting groups is both collective and outside the dominant logic of exchange value. Cianciotto (2019) argues that the terms ‘public’ and ‘common’, associated with public spaces entail different claims uses and visions, while defining public space as “a property-bound relationship predicated on assumed openness and accessibility to all contingent on one’s use of the space for circumscribed purposes” and common space as “brought into being through the specific commoning practices of commoners, which produce shared sites of knowledge, goods, and communal norms”. Also, for Stavrides (2022), specific sets of social practices, including the re-invention of community and the re-invention of collaboration contribute to a distinction between the ‘public’ and the ‘common’.

The aforementioned sets of practices have attributes of horizontality concerning decision-making, self-instituted forms of equality and mutuality and remain open to “newcomers”. Nevertheless, Parker and Schmidt (2016) argue that in some cases public spaces have substractable aspects of use in the form of maintenance costs, creating pressures for regulating its use. However, network effects (where one person’s use has a positive impact on another person’s use) are also of key importance and

modes of collaborative management – often facilitated by local authorities – can result in a sustainable use of public spaces as resources.

Conceptualisations of public space as commons relate to broader discussions over the public/ private dichotomy and bring out public spaces' operation as gateways to the public realm (Brain, 2019; Mithell, 1995). They often relate claims over inclusion and visibility with the “right to the city” for social movements and counterculture groups. Pettas (2019) identifies three types of associations between social movements and public space, arguing that the latter can operate both as the material basis for social movements' activity (struggles developed in public space) and as the stake of their action (struggles developed over public space). A crucial parameter concerning the development of commoning practices involving social movements and public space is the one of temporality. Public spaces' operation as part of commons social systems can be ephemeral, as for example, in the case of the Indignant Citizens movement, the Occupy movement and the Arab Spring (see among others, Fernández-Savater et al., 2017; Varvarousis et al., 2020) or more durable and consistent, as in the case of community urban gardens (Cianciotto, 2019) or Community Land Trusts (Bunce, 2013).

3.2.2. Production, consumption and social reproduction

Debates on urban commons, besides public spaces, are largely preoccupied with issues of production, consumption, and social reproduction. The autonomist school brought attention to the widely neglected issue of labour within the commons, in relation to shifts in production, exploitation and consumption in ‘late capitalism’. Feminist scholars (e.g., Dalla Costa and James, 1975; Gibson-Graham 1996, 2006, Federici, 2012) explored labour within everyday social reproduction, enriching marxist traditions through the incorporation of domestic and “shadow” labour, as well as women’s exploitation and struggles in the analysis of capitalist production. In this sense, capitalist production, and social reproduction through labour, undertaken outside “traditional” workplaces, have to be explored in parallel. The reading of the commons and “labour in common” in relation to capital is another major contribution of the autonomist lens. According to DeAngelis (2017), commoning is a process of liberation from the exploitation of capitalist relations. Moreover, it can pave the way for the emergence of markets operating outside capitalist modes of production. By conceptualising commoning as collectively organised “social labour” that is set in motion by the commoners’ needs and desires, De Angelis highlights a third significant contribution of the autonomist school: the horizontal and democratic

governance of the commons, that is also reflected in the organisation of labour.

For Bradley (2015), the urban commons, as a mode of ‘open-source urbanism’ constitute part of a broader ‘open source, commons-based peer production’ movement, aiming at a fairer distribution of power, knowledge and access to the means of production. In this way, urban commons facilitate a mode of production that challenges both market-led and state-led urban development, bringing out a post-capitalist paradigm which, however, could gain support from the public sector. Bradley (2015) distinguishes four key attributes of commons-based peer production: (a) it is based on contributions rather than equivalent exchange; (b) it is motivated by needs, innovation or a desire to work together, rather than profit; (c) it is conducted by peers in non-hierarchical networks; and (d) it is based on an ethic of sharing and common ownership rather than competition and private property”. Additionally, Bianchi (2022) argues that economic initiatives and networks of social and cooperative, non-monetary and campaign-based character constitute urban commons that exercise alternative relationships between groups of users and material/ immaterial resources.

For Susser and Tonnelat (2013), labour organising along with collective consumption and public services constitute a crucial mode of urban commons. Educational, health and transportation services operating as urban commons, are developed around collective needs, therefore they have the capacity to bring together people under common pursuits and concerns. Urban commons are commonly associated with specific “atmospheres” (Löfgren, 2015), drawing upon the – official and unofficial– sets of rules, agreements and relations that define behaviours, activities, as well as modes of inclusion and exclusion. Moreover, everyday encounters and the participation in tasks that contribute to the maintenance of the commons, including collective volunteer labour, is an essential part of the social reproduction of the commons and cultivates a broader culture of engagement and participation in the public sphere (Bruun, 2015).

3.2.3. Situating the urban commons within broader networks and circuits

The urban commons, emerging and operating in the saturated (Huron, 2015) urban space, are often partaking in broader networks and circuits, rooted in complex arrays whereby organisations of the civil society operate (e.g., social movements, community organisations), while also interacting with the private for-profit sector, the state, and the non-for-profit sector, and the social and solidarity economy in intricate and even conflictual ways. Jeffrey et al. (2012) position the commons within a

condition of “double affirmation” as “access to the city and active participation of a range of groups in the production of the city as a lived reality provides both a crucial counterpoint to assemblages of enclosure based around urban walling, and an affirmation of an ever-expanding urban commons constituted by multiplicity and difference”. For Bianchi (2022), while theoretical approaches of the commons are useful towards understanding and defining the commons as a political category and a pathway of emancipation from capitalism, empirical understandings of the ways the commons can serve this goal in contexts in which they are embedded in market and state relationships is of crucial importance. Moreover, the urban commons are characterised by different degrees of institutionalisation and partaking in official and informal schemes of urban governance. Finally, beyond specific actors, the urban commons are also considered as loosely related with the society in total.

Bruun (2015) argues that urban commons, such as housing cooperatives, are not solely shared by the members of the cooperatives but also by the total of the society, while cooperative members are undertaking the role of caretakers of the commons. In this sense, the commons do not belong to strictly bounded communities which have full control over the use and appropriation of resources while defining inclusion and exclusion statuses. Rather, different groups of citizens have diversified rights and modes of association to the commons. While Harvey (2012: 73) has argued that “a common shall be both collective and non-commodified—off limits to the logic of market exchange and market valuations”, urban commons (e.g. cooperative housing projects, recuperated productive units) – even though not adapting market logics and instruments – often develop within mainstream markets, and as such they interact and can be affected by them to a certain degree. Based on the example of modes of collectively owned housing, Bruun (2015), argues that the commons often emerge within the market environment, while depending upon state policies. Therefore, the need to explore relevant intersections is crucial, otherwise defining the commons as something that can only exist in complete separation from the market and the public sector would simply reproduce the separation between the ‘economic’ and the ‘social’ (see also Latour, 2005).

For Bianchi (2022), the autonomous and emancipatory creation and reproduction of the commons are challenging processes, especially in urban settings in which the commons often have to interact with the local governments towards securing access to resources. In this context, local states have “institutional proximity” to urban societies. Thus, states shall be considered as actors with which the urban commons can collaborate towards obtaining material means for their reproduction (e.g., financial means, access to property etc.) and ensuring their viability. Nevertheless, this relation can often lead to dependencies that undermine the

autonomous character and the capacities of the urban commons, as their survival is largely dependent upon external developments (e.g., economic, and electoral circles). Therefore, conflict and struggle should constitute a key element within collaborative arrangements between the local state and the urban commons in the pursuit of a prefigurative, autonomous and emancipatory pathway that operates in tension with both capitalism and top-down governance.

Nevertheless, empirical evidence suggests that urban commons are increasingly intertwined with local governments and relevant attempts of institutionalisation. Building on the cases of Barcelona, Bologna, Naples, and Milan, Bauwens and Niaros (2017) identify different institutional arrangements towards supporting the urban commons through the facilitation of local authorities. These institutionalisation attempts range from municipalism movement (Barcelona) and new governance public-commons partnerships (Bologna) to the integration of more radical commons arrangements, such as squats and occupied buildings (Naples), as well as more mainstream ones by enabling alternative modes of sharing and collaborative consumption (Milan). Local authorities, along with urban commons initiatives seem to experiment with a variety of collaborative arrangements and the design of relevant governance, legal and policy frameworks (see Vesco, 2020).

In this direction, Foster and Iaione (2016) formulate three design principles for the management of urban resources, namely horizontal subsidiarity, collaboration, and polycentrism. Horizontal subsidiarity refers to power sharing between the local government and allies from the civic society and citizens' collectives, groups and associations who are brought out as caretakers of the urban commons, rather than simple users. Collaboration concerns a mode of governance that is building upon partnerships in which heterogeneous citizens' groups, individuals, and institutions "co-create and co-govern the city, or parts of the city, as a common resource", through the collective management of resources and the design and implementation of public policies and local strategies. Building on collaborative governance, polycentricism refers to a mode of management of urban resources in which the latter are neither exclusively owned nor centrally regulated. Instead, decisions are taken by a diverse body of actors, while governmental bodies undertake a coordinating role, while also providing the necessary tools and facilitating the process. Löw (2015) referring to experts' (e.g. planners, architects, designers, conservators, and social workers) mediation in the management of urban commons identifies two models of public interest representation, namely the pursuit of agreement among different, heterogeneous groups and granting those groups with the rights to create and manage their own social spaces.

3.3. The digital commons

3.3.1. An introduction to the digital commons

In recent years, new information and communication technologies have served as drivers for the emergence and crystallisation of a new commons' paradigm in the digital realm. The so-called 'digital commons' feature open knowledge, software, and design (virtual) resources that 'are the fruit of the labour of communities which reside in cyberspace' (Dafermos, 2021: 10). Digital commons harness peer-to-peer (P2P) practices to create and maintain open and shared resources through communing practices (Bauwens et al., 2019). In doing so, digital commons popularise a new economic paradigm of co-operation that produces value through openness, sharing and global networks (Tapscott and Anthony, 2008). In this section, we examine the theoretical underpinnings and features of digital resources as commons that allow users to self-organise and create value collectively and for all (Kostakis et al., 2018).

Digital information represents a non-excludable and non-rival public good. As such it can either be commodified and enclosed or produced as a commons and distributed under open licensing terms (Dulong de Rosnay and Le Crosnier, 2012). Organised around virtual communities of creators and users (e.g. computer scientists, software developers, researchers, artists), digital commons promote alternative ways of organising the production and sharing of knowledge (ibid.). Digital commons feature community network and digital commons projects, free software, digital content (under non-commercial Creative Commons licences) and digital platforms (Fuchs, 2021)⁶.

Enabled by the architectural design of the Web and their non-rivalrous nature, digital commons are organised around common-property resources, such as technology, knowledge, and culture (i.e. non-depleting and reproducible with low or no marginal financial costs). The logic is that the 'harvesting' of digital commons produces further common-property resources in the form of technology, knowledge, culture and so on in a circular and sustainable manner (Papadopoulos, 2020). The free and open-source software are characteristic examples of goods circulating under an open access regime, allowing anyone to copy, use, modify and redistribute modified codes (Benkler, 2016). In this light, the digital commons promote a paradigm where no one owns the digital goods produced by the commoners. As Graeber (2001:17) has highlighted, property is a social

⁶ The architecture of the web, its protocols and technical norms can also be viewed as a digital common (Dulong de Rosnay and Le Crosnier, 2012).

relation so, for instance, when one purchases a good, what they really obtain is the right to use it or in fact, the right to prevent others from using it (emphasis added). In this sense, no one can be actively excluded from using digital commons as they are not the property of any particular individual but rather function as non-market and non-profit resources that can be accessed by everyone (Fuchs, 2021)⁷. This is facilitated greatly by the characteristics of the produced goods in question; digital commons are not simply non-competitive but even more so, they are goods where the more they are used, the more the benefits they yield for their users (Kioupkiolis, 2022).

Equally interesting is the mode of decentralised production and co-operation that is pioneered in digital commons through the P2P model. Peer production represents a socio-technical system where large groups of individuals cooperate asynchronously as producers (of information, knowledge, culture) by 'skipping' market pricing and managerial hierarchies (Benkler and Nissenbaum, 2006; Kostakis et al., 2018). Bauwens (2009: 122) defines 'peer to peer' as 'a relational dynamic' operating in 'distributed networks', where agents and nodes can take independent action through 'voluntary self-aggregation', creating value by assembling tangible and intangible capital assets which they govern in participatory mode. For Bauwens et al. (2019), peer production can be seen as a prefigurative 'prototype' that co-habits in the current economic paradigm with other modes of production. This prototype presents three distinct features: (1) raw materials are open and freely circulated, (2) they are processed participatorily and, (3) they lead to commons' output that adds to the stock of open and free raw materials in a circular manner (Bauwens 2009: 122). In doing so, peer property keeps any surplus value within the 'cycle' (Bauwens et al. 2019).

Thus, peer production does not merely describe a new technological infrastructure or mode of production but a whole new set of interactions and social relations (Papadimitropoulos, 2020). As Kioupkiolis (2022) observes, cyberspace hosts communities of commoners that are open and inclusionary but at the same time fragmented, heterogeneous, and geographically unbound. This implies that in digital commons, we do not deal with typical, fixed and geographically bounded 'communities' but rather with dynamic networks of users operating from across the globe (Ossewaarde and Reijers, 2017). Digital commoners, representing groups of few or many thousands of individuals, are mainly self-selected volunteers contributing their spare time to a commons through initiative and self-reliance (Benkler and Nissenbaum, 2006). These users operate on the basis

⁷ However, Fuchs (2021) highlights that open access is necessary but not sufficient condition for digital common as for instance, there are for-profit open access publishers that charge high fees to authors. Thus, commons licences are not always and by default antagonistic to profit-seeking production.

of ‘a shared sense of common purpose, free interaction, transparency, collective judgement, and mutual peer review’ (Kioupkiolis 2022:58). Similar to typical commons arrangements, the practice and culture of digital commoners is dictated by ‘non-monetary motivations’ (Papadopoulos 2020: 48). As Benkler and Nissenbaum (2006: 396) suggest, digital commoning efforts are maintained by a combination of ‘good will, technology, some law [...] and a good bit of self-serving participation’. The latter is driven by both ‘self-regarding virtues’ - such as creativity, liberation, and autonomy; and ‘other regarding’ social virtues, such as generosity and altruism (ibid.)⁸.

In turn, peer governance is inclusionary and allows for (self-) distribution of tasks, open input and participatory coordinated work (Kioupkiolis, 2022). Emerged and voluntary ad hoc hierarchies differ from bureaucratic or representative governance modes as leadership does not assert ‘command and control’ power over commons assets (Bauwens, 2009: 124). For instance, Wikipedia, the ‘poster child’ for digital commons success, exemplifies a large-scale long-lived project of self-governance that is designed to allow input by anyone, sustaining a liberal governance system (Benkler, 2016). Working entirely on a voluntary basis, Wikipedia welcomes thousands of edits systematically and its ‘rules’ concern primarily quality control mechanisms for defending the overall integrity of the project.

The digital commoning patterns of collaboration and collective self-government hold tremendous potential to foster the democratic values of plurality, participation, mutuality, and openness (Kioupkiolis, 2022: 52), all aligned to GLAMs’ agenda. Yet, apart from studying the commoning features of open digital resources and their communities, it is also important to consider how these new commons interact and coexist with the market and the state (Berlinguer, 2021) and what are the avenues for digital commons’ integration in current state of affairs.

In general, peer production practices in the digital realm have led to different forms of market adaptations and hybrid strategies. Bauwens (2009: 125-6) distinguishes three main models of such integration: (a) the crowdsourcing model, (b) the Web 2.0 model and (c) the model of commons-oriented peer production. More specifically;

a. The crowdsourcing ‘open-business’ model enables for-profit businesses to integrate peer-to-peer elements (e.g. co-creation, co-design) in their value chains, encouraging the development of ‘ecologies of innovation’ and channels of unpaid labour. Peer-to-peer processes within this context are normally partial (e.g. restricted to the creation stage and not spreading into

⁸ Benkler and Nissenbaum (2006) provide a detailed account of the ‘virtues’ of digital commoners, organised in four distinct clusters of features: ‘Autonomy, independence, and liberation’ (cluster 1), ‘Creativity, productivity, industry’ (cluster 2), ‘Benevolence, charity, generosity and altruism (cluster 3), and ‘Sociability, camaraderie, friendship, cooperation, civic virtue’ (cluster 4).

production and distribution) with high likelihood of exploitation phenomena and unilateral appropriation of surplus value (Bauwens 2009: 126).

b. The Web 2.0 model of the ‘sharing economy’ allows proprietary platforms (e.g., YouTube) to invite users’ participation in the form of sharing content. Individual expression through such participation is different from commons-oriented expression: users do not create a common project; they have weak links with each other, and their activity/interactions are determined by the third-party platform. The latter often enclose content under their own control/ownership and redeem users’ attention to generate income from advertising (Bauwens 2009: 125-6).

c. Commons-based peer production (henceforth, CBPP) can create secondary market value when businesses draw on a commons by combining profit-generation with ‘benefit-sharing’. Benefit-sharing is achieved by offering something back to the original common, such as a new asset or input material that can be used in future iterations freely. Commons-based peer production ecosystems are normally organised around a trinity of institutions; (i) the productive community (e.g. Linux), (ii) a for-benefit association (e.g. Linux Foundation) and (iii) an entrepreneurial coalition (e.g. Linux Professional Institute). Interestingly, Bauwens observes that such ‘dynamic business ecologies’ practising benefit sharing tend to outlive peer production projects that remain isolated and depend solely on a core of volunteers (Bauwens 2009: 128)⁹.

Based on the above, it is important to emphasise that commons-based peer production (CBPP) is different from extractive models, which are also present in ‘collaborative economy’ and tend to ‘centrally coordinate decentralised peer production downstream to disproportionately reap the benefits upstream’ (Papadopoulos, 2020: 1). Contrary to ‘platform capitalism’ (Papadopoulos, 2020), CBPP projects oppose the parasitic functioning of ‘extractive entrepreneurship’ (Bauwens et al., 2019: 18), whereby proprietary platforms (e.g., Facebook, Airbnb, Uber) generate profits without contributing directly to the common-pool or reinvesting in its productive community. CBPP proposes instead the antipode of extractive rent-seeking, the so-called ‘generative entrepreneurship’, which ‘seeks to add value to communities and commons’ (Bauwens et al., 2019: 35). Regarding the role of the state in this ecosystem, the extant literature suggests that ideally, the central government will assume a partner role in the development and growth of new CBPP arrangements. In doing so, the state would serve as ‘facilitator’, cultivating the conditions where creative autonomy could flourish and CBPP initiatives could proliferate. This would of course require devolving its centralised top-down power and

⁹ Interestingly, although CBPP is mostly concerned with open knowledge and software projects, Kostakis et al. (2018) draw attention to a second emerging wave of CBPP that focuses on open design solutions for the production of hardware and manufacturing.

redistributing the necessary resources to citizens in order to ensure their ‘contributory equipotentiality’ (Bauwens et al. 2019: 59). In turn, regional and local governments in this ideal scenario would be expected to promote commoning practices by providing infrastructure, ‘commons city labs’, legal support or pro-commons institutions (chambers, assemblies) (Bauwens and Onzia, 2017).

3.3.2. Digital commons in the GLAM sector

*‘The internet affords cultural heritage institutions a radical new opportunity to engage global audiences and make their collections more discoverable and connected than ever, allowing users... to contribute, participate and share’.*¹⁰

As our review of the digital commons literature reveals, new networking technologies are particularly useful for a transformation towards a more commons-oriented society, increasing capacities to communicate, create/distribute value and self-organise (Bauwens et al., 2019). These exciting developments had spillover effects on the cultural sector and much of the related tools have been transferred, applied, and adapted to fit with the needs and goals of GLAMs. EU projects, such as the European Commission’s ‘Europeana; portal, along with global initiatives, such as OpenGLAM and GLAM-Wiki¹¹, have inaugurated a new digital era for the GLAMs of Europe, providing access to millions of museum objects and archival documents. Although digital media have become agents of change towards more participatory and audience-engaging GLAMs (Axelsson, 2019), we need to investigate further how they can be harnessed to reform professional practice and facilitate a commoning culture in the GLAM sector.

Digital technologies open-up new spaces for curatorship, providing new infrastructure for circulating artwork which can transform the ways museum objects are interpreted and contextualised (Axelsson, 2019). For example, OpenGLAM emerged as a global grassroots movement ‘to make openness the standard for the GLAM sector and to establish shared principles for a new OpenGLAM practice based on the culture of sharing found within the social internet’ (Sanderhoff, 2014: 23-4; see also deliverable D1.7). In this context ‘openness’ has a double meaning; it refers to both access to GLAMs’ resources (e.g. artefacts, audio-visual materials, data) and contribution to GLAMs’ work by audiences, user communities and the public (e.g. crowdsourcing). Digital openness is intended to facilitate ideas

¹⁰ OpenGLAM, see <http://openglam.org/principles/>

¹¹ GLAM-Wiki encourages collaborations with cultural organisations to share digital resources on Wikipedia.

and information exchange which in turn allows the knowledge economy to thrive (Cousins, 2014).

The potential of cultural digital resources, such as Europeana, to function as ‘cultural commons’, can be untapped when ‘content providers’ (i.e. cultural institutions and end-users) organise as a community which ‘is mutually reinforcing and constantly finding innovative ways of engaging new user groups with content’ (Cousins, 2014: 133). For the Europeana Foundation, the functioning of ‘European cultural commons’ should follow five key principles, whereby (a) the respected communities act in good faith to achieve mutual benefit (mutuality), (b) access is provided to content, tools and services to be used for developing new and innovative goods, which (c) acknowledge and respect rights through proper attribution and (d) maintain consistency in terms of serving the values and principles of the sector (as mediated and understood by EU policy). This requires constant (e) engagement in the commons and commitment on behalf of community members in terms of use and contributions (Edwards, 2015: 7).

The Europeana Foundation views the creation of ‘European cultural commons’ as a means to make GLAMs’ content available to the creative industries in order to foster innovation and capacity skills; ‘the publications, apps, websites and games developed will be brand-new uses of cultural heritage content, which can be fed back to the cultural heritage domains (galleries, libraries, archives, museums), bringing in new users and generating jobs and economic growth from which we all benefit’ (Cousins, 2014: 136). Related work such as the Europeana Creative Project sought to develop the necessary digital services infrastructure (e.g. online platforms, materials, networks, pilot apps and APIs)¹² to facilitate creative exchanges between GLAMs and other sectors (creative industries, education, tourism)¹³, yet to be realised in practice. At the same time, Europeana is operating as a top-down organisation, it is fully funded and regulated by the European Union, and as such it prioritises the EU policy agenda.

¹² Europeana Services and Tools are available at <https://pro.europeana.eu/about-us/services-and-tools#services>

¹³ See indicatively ‘Europeana Creative Public Report on Year 3 of the Project’ available at https://pro.europeana.eu/files/Europeana_Professional/Projects/Project_list/Europeana_Creative/Deliverables/eCreative_Public_Report_y3_v1.0.pdf



Figure 1: Rijksstudio, hosted at the official website of Rijksmuseum, Amsterdam allows free digital access to the museum's collections of paintings and pieces of art.

Overall, museum digital practice has emerged as a term to refer to 'museum work that uses digital tools or is realised on digital platforms' (Sanderhoff, 2014: 25). Today, the integration of new technologies in GLAMs' work allows for easy access to much of their content and resources, while enabling users to appropriate them according to their needs (e.g. learning, creativity, political/artistic expression, see Von Haller Grønbaek, 2014). For instance, the Rijksstudio¹⁴, developed by the Rijksmuseum in Amsterdam, invites audiences to develop personal online collections, edit images and interact with other users, contributing to the 'open content movement' (Axelsson, 2019; figure 1).

It is also important to note that In the GLAM sector, public-private partnerships for digital projects may have ethical and practical ramifications. For instance, the participation of GLAM institutions to projects such as 'Google Arts & Culture'¹⁵ implies that publicly funded cultural institutions are transferring the rights of their (public) artworks to for-profit businesses and corporations in exchange for 'the opportunity to mass-digitise huge collections rapidly and efficiently' (Sanderhoff, 2014: 69). As explained by Sanderhoff (2014), this enables commercial partners, such as Google, to develop a 'walled garden' that restricts audiences' interaction with data and images to the company's own tools and platforms, raising serious ethical considerations. Thus, to better serve public interest and address current challenges, GLAMs need a

¹⁴ See <https://www.rijksmuseum.nl/en/rijksstudio>

¹⁵ See <https://artsandculture.google.com>

comprehensive framework that accommodates practices from the digital commons while also considering other dimensions, related to the resources, the community and the rules of commoning, in line with the general commons theory.

3.4. The cultural commons

3.4.1. Scope and definitions

As evidenced in the previous sections, commons' general theory and discussion of urban commons and digital commons are valuable for informing our conceptualisation of commons-oriented GLAMs. However, since the sector revolves around culture and knowledge, it is mostly critical to draw on the theory and empirical work in the field of cultural commons and heritage commons, starting from some working definitions. Quite interestingly, our review of the literature reveals that there is no single commonly accepted definition of 'cultural commons'. Rather, the term is assigned with different meanings, which often depend on authors' disciplinary area of departure (e.g. education, law, informatics, cultural geography). Most commonly, scholarly discussion adopts abstract or blanket definitions when framing the concept. For example, Bowers (2009) identifies cultural commons with a broad range of (mainly intangible) elements, such as knowledge, skills, and ethics (e.g. patterns of mutual support), ascribed mainly with moral/didactic values for leading one's everyday life. In a similar vein, Santagata et al. (2011) and Edwards (2015) define cultural commons as the shared culture of a particular community, such as a culture of creativity in a designers' community or a tradition practised amongst the members of an indigenous group (Edwards 2015: 5). One of the first, most comprehensive attempts to analyse culture goods and practices as commons can be found in the edited volume of Bertacchini et al. (2012). Bertacchini et al. (2012) set off from an anthropological view of culture, i.e. as a dynamic complex of values, beliefs and traditions of practice. They conceptualise cultural commons through the framework of resources, commoners and commoning arrangements (see also section 2.4.2). As they define cultural commons very widely, as 'cultures expressed and shared by a community', their volume accommodates a broad collection of (heterogeneous) case studies that range from artistic movements to crowdsourced opera projects and types of intangible heritage, such as gastronomy, as potential commons (in terms of a shared knowledge resource). Omer and Schwartz (2021) treat cultural commons in a similar all-encompassing fashion, namely as 'channels to transmit meaning', whereas Eriksen (2019) uses the term to describe commonly shared cultural practices and traits. For Eriksen, a cultural

common 'is a collectively produced, managed, modified, tweaked, and reproduced system of meanings with no clear boundaries' (Eriksen, 2019: 53).

There is also a strand of the literature that uses the term interchangeably with 'knowledge commons' and 'information commons' to distinguish them from traditional/natural commons. In these analyses, cultural commons represent a collection of ideas, research, and innovation that takes the form of an accessible (normally digital) resource, such as Wikipedia. Indicatively, for Madison et al. (2010: 657) the term 'cultural commons' signifies a wide collection of constructed (human) resources and intellectual works, from patent pools and open-source software development projects to the creative works of artistic communities. More recently, other researchers, such as Pelissier (2021: 3-4), have also analysed the cultural commons, such as libraries, in the context of information commons, where free creative practices may sustain an 'ecosystem that facilitates and democratises popular expression' (e.g. in cyberspace).

Despite the growing interest in conceptualising culture as commons, there is still relatively limited work in the organisation and management of heritage resources as commons (Gould 2017, Lekakis 2020, Lekakis & Dragouni 2020a), e.g. by memory institutions, such as GLAMs. Rather, Hess (2012) distinguishes two main trends in the extant body of literature that deals with 'heritage commons'.

The first employs commons theory to highlight the threat of privatisation and commodification interests that can lead to enclosures of heritage goods that are normally expected to be open and free (i.e. public goods). Here, the commons framework allows for revealing the susceptibility of heritage monuments and practices to enclosures (e.g. by market interests or political rhetoric), exclusion/inclusion patterns and the inefficiency of traditional policy and management patterns to fulfil the public (societal) function of related goods. Some examples of related studies include, among others, the work of Gonzalez (2013), who applied the commons framework to raise his concerns over the capturing of heritage value through gentrification mechanisms and real-estate/tourism rents, Eriksen (2019), who sees cultural commons as threatened by commercialisation and the misuse of cultural meaning by market forces and Bertacchini (2020: 33-4), who is concerned with heritage 'disneyfication', stemming from conflicting uses and patrimonialisation practices that impose restrictions on access.

The second trend in the current cultural/heritage commons' literature, as identified by Hess (2012), engages with the new possibilities opened-up by digital media to bring people together, create new resources and encourage collective action. Some examples here include the study of Carbone and Trimarchi (2012) on 'Twitter Opera' hosted by London's Royal

Opera House, Marttila and Botero (2017) on community digital tools and Dalla Chiesa (2020) on crowdsourcing/crowdfunding as bottom-up cooperation protocols. Most recently, some scholars (e.g. Lekakis, 2020b; Iaione et al., 2022) have criticised these studies as using commons theory to describe projects that are participatory but not actually ‘commons’. As Dalfovo (2020: 106) stressed, coining participatory approaches as ‘cultural commons’ risks the danger of unwillingly encouraging ‘commons-washing’ practices by ‘feeding the misleading paradigm of creative and cultural processes being the output of voluntary actions carried out for one’s own pleasure and in one’s own free time’ without the respective compensation of mutual benefits (emphasis added).

It is therefore necessary to delve deeper into the governance/management patterns and the design principles of cultural/heritage commons in order to address the ontology of these systems (i.e. resources, communities and rules of organising everyday work and strategy). This would be vital for informing our enquiry of how GLAMs could function as commons.

3.4.2. Analytical framings of cultural commons

The potential of commons to serve as a paradigm for the GLAM sector (i.e. as a new model that can make them more participatory, socially embedded, and financially sustainable) remains largely untapped and there are still gaps in addressing the ontology of cultural/heritage commons arrangements. It is thus important to examine some of the analytical frameworks (indicatively) that have been proposed so far for the conceptualisation and study of cultural/heritage commons with the view to inform our conceptual framing of commons-oriented GLAMs.

Our analysis here is organised by relevance to our enquiry of GLAMs. We start with the tripartite schema of Lekakis (2020) that follows the standard framework of commons (i.e. resources, commoners, commoning), adapted to fit with the idiosyncrasies of cultural heritage. We also discuss the more general conceptual framework of Bertachhini et al. (2012) for cultural commons that features the ‘space’ variation and the more complex ‘quintuple helix’ developed by Iaione et al. (2022) for culture and cultural heritage. Our analysis also considers the Institutional Analysis and Development (IAD) framework, proposed by Ostrom and Hess (2007) for knowledge commons and the hybrid IAD framework of Bertacchini and Gould (2021) for dealing with management dilemmas for heritage sites.



Figure 2: An analytical framework for heritage commons by Lekakis 2020:31.

Lekakis (2020) proposes a comprehensive analytical framing of cultural heritage as a commons with the view to inform the enquiry of ‘democratic and socially relevant patterns of [their] governance’. He adapts the tripartite schema of Dellenbaugh et al. (2015), which comprises three main components: (i) the resources (tangible and intangible, ranging from sites, buildings and museum collections to local practices, knowledge and oral history), (ii) the communities of ‘commoners’ (local or distant) that manage the resource, and (iii) the set of rules that these commoners use to defend their act of commoning (Figure 2). As emphasised by the author, similar to other types of commons, heritage commons are dynamic and porous systems that protect the resources at hand while catering for the common benefit of involved communities. In such systems, cultural heritage represents a resource that is compiled collectively: its synthesis is always contextual and involves constant negotiation of historic narratives, memories, identities, modern views, values, aspirations, and needs. At the same time, the preservation of heritage (movable and immovable) is a resource-intensive process, comprising a wide set of functions from research, collection and recording to conservation, restoration, presentation to the public and so on. Thus, cultural heritage is a resource, whose (re)production in the present calls for other material and intangible resources (e.g. scientific knowledge, labour, skills).

In any set context, the communities with stakes in the heritage resource (e.g. archaeologists, local residents, administrative bodies) need to be regarded as plural and geographically unbound co-creators of heritage significance. As related scholarly work has emphasised (see for instance, Waterton and Smith, 2010), ‘communities’ (geographic, virtual, or imaginative) are not always ‘community-like’ but rather incohesive

assemblages of people with divergent interests. According to the principles of the Faro Convention, heritage communities need to be regarded as ‘self-organised, self-managed groups of individuals who are interested in the progressive social transformation of relations between people, places and stories, with an inclusive approach based on an enhanced definition of heritage’ (Council of Europe 2022: 7). These imply that a self-governing commons-like apparatus, where heritage is to be managed by some homogeneous ‘indigenous community’ (as, for example, proposed by Zhang, 2012), has limited applicability to the contemporary European context. Rather, in line to the values-based model for heritage management¹⁶, the exploration and acknowledgement of the collective values invested in a heritage resource at a given time and place (Lekakis, 2020) would be probably a more suitable strategy.

Regarding the act of commoning, Lekakis’s framework defines this as both ‘a set of functions’ in the social network that surrounds the heritage resource (e.g. participatory decision-making) and ‘a prevailing ethic’ among the participant communities. Yet, formalising heritage commons management and governance patterns (e.g. producing a typology of commoning practices in the heritage realm) can be challenging due to context-dependent idiosyncrasies (Bauwens & Niaros 2017), calling for a case-by-case enquiry into heritage and neighbouring commons fields (Lekakis, 2020).

The idea of rules and norms is also emphasised by other researchers. For instance, Barrère (2018: 9) suggests that cultural heritage resources operating as cultural commons ‘have to be managed through common institutions’. Following Ostrom’s theory, ‘institutions’ can be understood as encompassing formal and informal sets of rules, from laws and regulations to unofficial agreements or shared practices/traditions, that cannot be imposed from the outside but rather emerge organically from inside the common in line to the social, cultural, and political traditions of the commoners (Gould, 2017). Thus, a cultural commons conceptual framework needs to focus on those institutions that regulate activity (i.e. production, use and management) and defend the rights of a defined group of commoners to govern the commons. Therefore, for Gould (2017: 173), a more in-depth enquiry into governance, ‘the central issue in commons scholarship’, would be critical for suggesting a way forward.

¹⁶ The values-based model was introduced by ICOMOS in *The Burra Charter* (1999), proposing a shift in the management of heritage from fabric to communities and polyphonous interpretations of significance (see also Dragouni 2022).

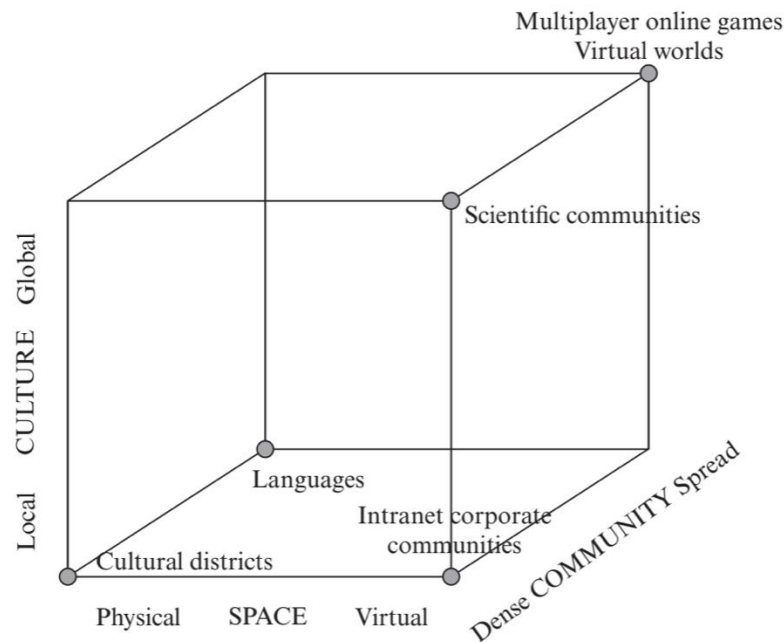


Figure 3: A three-dimensional model for framing cultural commons by Bertacchini et al (2012: 7).

Another interesting three-dimensional analytical framework has been proposed by Bertacchini et al. (2012: 6), who distinguish (a) the culture (the resource), (b) space and (c) community, as key dimensions of a cultural commons (figure X). As they explain, the cultural dimension concerns the features and traits of the resource, namely the meaning that is produced and managed commonly. They view the culture resource as assuming different meanings that are local/global dependent. This variation is reflected through the space dimension. The spatial dimension also accommodates community interactions, redirecting attention from the commoning process to the territory where these interactions take place. The community of commoners is described on the basis of its ‘density’, emphasising the level of closeness and the strength of ties amongst community members, as integral to the culture field¹⁷.

Contrary to Bertacchini et al. (2012), the work of Iaione et al. (2022) assigns critical importance to management/governance, while also highlighting the economic dimension and redistribution of benefits. In particular, the authors describe heritage commons as cases where ‘the community actors are closely engaged with the governance of the [resource] at stake, and manage to extract social, cultural and economic value out of it’ (Iaione et al. 2022: 8). They propose an operational multi-actor collaboration model - involving the state, the industry, academia, civil society, and an

¹⁷ In contrast, for instance, to digital commons where the community is open and inclusionary but fragmented, heterogeneous and geographically unbound (Kioupiolis, 2022).

'unorganised public' in a quintuple helix - that can be assessed on the basis of four key variables; (a) community access to the resource in question, (b) their participation in governance, (c) cooperation, in terms of their having defined roles, job opportunities and economic benefits, (d) control and ownership, understood as the degree to which community skills and tools are employed entrepreneurially (e.g. in the form of decentralised community cooperatives).

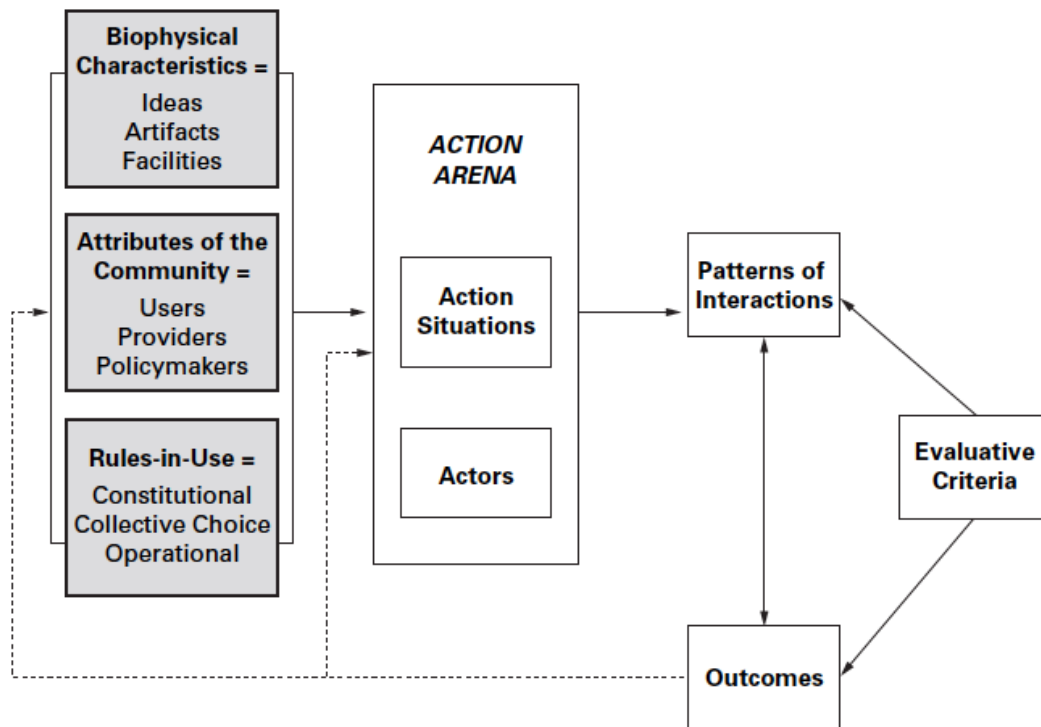


Figure 4: The Institutional Analysis & Development (IAD) framework by Ostrom and Hess (2007:46) intended for the study of knowledge commons.

In their discussion about knowledge commons, Ostrom and Hess (2007) also developed an analytical model that can be useful for informing our enquiry (figure 4). Their Institutional Analysis and Development (IAD) framework is intended to capture a 'snapshot' of the existing patterns of practice within the commons. For Hess and Ostrom, such patterns of practice and interaction are affected by three clusters of variables. The first cluster bundles all basic components of the commons as discussed earlier in this section, namely the resource ('biophysical characteristics'), community ('attributes of community') and commoning ('rules-in-use'). The resource is itself a system, containing both tangible and intangible elements, namely artefacts (e.g. books), facilities (e.g. libraries and archives where artefacts are stored) and ideas, i.e. 'nonphysical flow units contained in artefacts' (Ostrom and Hess, 2007: 48). The community embraces multiple stakeholders, including users, providers, managers and policymakers, who represent a self-governing community of insiders (e.g.

a library committee). Commoning practices are normative instructions (e.g. operational, constitutional) determining possibilities and constraints for interaction. The second cluster features the action situation, where participants ('actors') make decisions regarding interactions and outcomes. The action situation deals with how people cooperate (or not) under various conditions (e.g. the rules in place) and why they do so, such as their incentives to contribute to the commons. Finally, the third cluster is concerned with outcomes, which can be either positive (e.g. access, equity, diversity, social capital) or negative (e.g. degradation, depletion, conflict, enclosure).

Following this work, Bertacchini and Gould (2021) have recently proposed a hybrid of the IAD framework and McGinnis' Network of Adjacent Action Situations (NAAS) as a tool for diagnosing problems and dilemmas arising in the management of cultural heritage sites. Their IAD-NAAS framework analyses collective action and interactivity in governance-related action situations, where various stakeholders are assigned with different tasks. Governance tasks revolve around production (e.g. curation, visitor experience), consumption, financing, rulemaking, monitoring, and dispute resolution. Actors include state representatives and managing authorities, local government, NGOs, civil society groups, visitors, and market forces (e.g. tourism industry). Finally, outcomes in each action situation are determined by the objectives of the actors, they are interdependent with other actions/decisions and influential to the whole system (e.g. resources, payoffs, rules).

3.4.3. Commoning practices in the cultural sector: Case studies

In this section we move beyond theory to present some indicative cases of European GLAMs that have adopted practices of commoning for producing and managing their cultural resources. Given the emphasis of the related literature on governance/management mechanics and the theoretical gaps in this particular area (Gould 2017; Lekakis 2020), we are particularly interested in reviewing some examples of community-led cultural initiatives that present and experiment with features of commons' management and self-governance (instead of participatory co-creation or community engagement projects). Our intention is not to provide a comprehensive mapping of commons-like practices in the sector but mostly to identify the spectrum of commoning modes/applications, potential and challenges. The examples presented here draw on commons-oriented culture-based projects from Italy, the UK, Spain and France.

Teatro Valle, Italy

Starting from Italy, Bailey and Marcucci (2014) document the occupation of Teatro Valle in Rome in the early 2010s, and community endeavours to develop it into a cultural commons as antipode to local government privatisation plans. As the authors narrate, at that time, austerity policies in Italy pushed for public funding cuts and accelerated privatisations of formerly public cultural institutions. Against such processes, the historic theatre was occupied by a community comprising ‘citizens, students, patrons, and arts workers’ in an act of ‘reclaiming the tools of production from the hands of the private sector and putting them back into the hands of commoners who actually participate in the theatre and produce its wealth’ (p. 398). The occupants aspired to pursue a horizontal management of the theatre through an open assembly, while also gaining legitimacy through the formal establishment of a foundation of the ‘bene comune’ (common good) that provided legal recognition to this alternative mode of governance. In this particular case, the direct adoption of the commons model ‘shifted the occupation from a method of protest to a legal entity, which [was] also a site for experimentation with new forms of decision making’ (p. 400-1). As the authors witness, the statute of the emerging commons entity ‘was a collective endeavour’, inviting contributions by all those involved in the theatre’s daily management (workers and patrons) and to other members (who paid a small membership fee to participate). These participants formed the General Assembly and was assigned with the power to select the organisation’s executive body (i.e. a small group of five individuals with a rotating membership, who hold responsibility over the theatre’s administration and running) while also co-deciding (through public deliberation and consensus) on key operational issues regarding programming, conditions of participation, donation and funding policy (namely, what we might term as the ‘rules’ of the commons). The Valle case inspired a series of other theatres in Italy to follow a similar strategy of occupation, legitimisation (through the foundation status) and experimentation with new modes of cultural governance (see also Vesco and Kioupkiolis, 2022).

Community-transferred heritage, UK

In the 2010s, national policy in the UK introduced a scheme of local authority heritage assets transfer to local communities (Historic England, 2015). As a solution to ‘reductions in public spending and... increased costs of running an asset’ (p. 3), this transfer strategy hands over ownership and management control of historic buildings, monuments, sites and GLAMs to community-based organisations in order to ‘unlock community enterprise, volunteer commitment, local intelligence and level the necessary capital investment to create a thriving community hub’ while also safeguarding

heritage protection and viability (p. 11; figure x). In legal terms, the transfer takes the form of gifting/donating the asset, which is often accompanied by an endowment, freehold sale or long lease. Applied examples include, among others, the Battersea Arts Centre (London), the Brunel Museum (London), Jesmond Library (Newcastle) and the Caistor Arts and Heritage Centre (East Midlands)¹⁸.



Figure 5: Outcomes of heritage asset development projects undertaken in the UK by community organisations (English Heritage, 2015: 12).

The scheme has led to projects/initiatives that present many features of commons management and have facilitated the emergence of community organisations and enterprises by informal groups (e.g. small volunteer groups) or ‘communities’ that came into being in response to a heritage ‘at risk’ asset (e.g. campaigning groups). However, apart from enthusiasm, the management of a heritage asset demands skills, resources (e.g. knowledge, experience, labour often on a voluntary basis), organisational

¹⁸ For a complete list of community transfer projects see <https://historicengland.org.uk/advice/caring-for-heritage/take-ownership/>

development and a realistic business plan that can ‘generate more value from the asset than in the past, while containing the costs within the resources that can be raised’ (p. 16). As these schemes are assigned with the task to ‘marry up the financially viable uses with meeting community needs’ (p. 19), a key first step of the process is the identification of use options and/or ‘meanwhile’ uses (e.g. artists’ studios) until additional facilities/services, refurbishments and adaptations can take place. Other ‘tips’ for success include the formulation of a steering group of stakeholders to take the process forward, the cultivation of good relations with local government and the development of a ‘funding cocktail’ (e.g. government funds, grants, loans and community investment through the sale of shares).

Santo Adriano Ecomuseum, Spain

The recent economic crisis has also encouraged several initiatives ‘for the management of heritage commons’ in Spain, including the Ecomuseum of Santo Adriano, which is managed by a civic association of local residents and archaeologists (Gonzalez et al., 2017). Ecomuseums, developed ‘from below’ and applying horizontal structures, represent today a long-held practice in Europe and the globe (Davis, 2011; Riva, 2017). Similarly in Santo Adriano, the ecomuseum and its mother association emerged from the ground up and was organised around working groups and assemblies with the view to enable the direct participation of local people in decision-making processes. Without receiving any public subsidies, it has managed to develop some basic infrastructure to support its activity, including a visitor centre that is housed in a restored heritage building (Villanueva de Santo Adriano) and accommodates public events, workshops, exhibitions and a library. For Gonzalez et al. (2017), this community action, set at the rural Spanish periphery, emerged as a ‘practical attempt to address the unsatisfactory situation... concerning heritage and economic development’ (p. 155) in an area where government policy and over-tourism have failed to support heritage enhancement or include local communities in the distribution of economic benefits. As part of the heritage capital of the area remained dormant (the prehistoric sites and pre-Romanesque churches of Santo Adriano were closed to the public), the Ecomuseum’s outreach activities and tours have sought to raise public awareness and visitors’ interest, use community work to clean heritage sites and have contributed to the broadening of heritage conceptualisations (e.g. assigning value to previously neglected local vernacular architecture). As a non-profit entity, the Ecomuseum relies solely on the minimum revenue it generates from its heritage outreach activities (i.e. fees and tips) and has limited capacity for offering paid employment and supporting locals to earn income by working on heritage preservation and enhancement. Widening the scope and impact of such community projects in Spain (as in other EU countries) calls

(among others) for structural legal reforms, such as delegating heritage management to civic society, assigning a status of ‘heritage commons’ to cultural resources or allowing non-for-profit organisations to develop heritage-based social spin-off businesses.

Community-based economic development organisations, France

Beyond heritage management per se, we should not lose sight of the possibility of commons emerging around a cultural resource or a GLAM institution. As Gould (2017: 182) argues, ‘examples do exist of long-surviving community-based economic development organisations that are associated with heritage sites’, such as ‘community-based activities that seek to extract economic value from the flow of tourists visiting sites’. One such example is the ‘Hotel du Nord’ in Marseilles, France; a co-operative of local residents who provide accommodation and hospitality services (guest rooms, urban walks), on the basis of free/open membership, local control and autonomy, resources pooling, and a democratic voting rule exercised by all members (Council of Europe 2022: 19). Similarly, the ‘Les Oiseaux de Passage’ co-operative in Poitiers, west-central France provides a web platform for community hosts to promote their accommodation and tourism/leisure services to visitors (cultural events, local products etc.) without advertising or profiling; ‘it is an ecosystem of partners from tourism, culture and the social and solidarity economy: accommodation, sports or cultural activities, good deals, artisanal creations, etc’ (Council of Europe 2022: 37-8)¹⁹. It needs to be noted that both the aforementioned community-based organisations are affiliated with the Faro Convention network, which seeks to support the democratisation of heritage governance and related good practices in Europe²⁰.

4. Towards a conceptual framework of GLAMs as commons

4.1. The ontology of GLAMs as commons and GLAMMONS

From an ontological standpoint, positioning the GLAMs in the debates around the commons and focusing on their potentialities to operate as such, it is clear that they fall into the category of new commons, embodying characteristics primarily of the cultural and knowledge but also of the urban and digital commons.

¹⁹ Iaione et al. (2022) also provide some interesting examples of ‘commons-inspired’ case studies from Italy, mobilising partnerships of community with public and private actors.

²⁰ <https://www.coe.int/en/web/culture-and-heritage/faro-community>

As explained earlier, a key distinction between “traditional” and new commons concerns their subtractive/non-subtractive and excludable/non-excludable character. There are several cultural and heritage resources, such as cultural creations and digital goods that share characteristics with knowledge/information commons, such as abundance and anti-rivalry. Anti-rivalry describes a situation where increased consumption is enabling (instead of damaging) for the resources’ thriving (Iaione et al., 2022). These cultural goods can be treated as infinite intellectual resources that (contrary to common-pool resources) may be challenged by underproduction/under-consumption and stagnation (Bertacchini et al., 2012: 17). Under-use in the realm of GLAMs may be expressed as limited numbers of visitors to physical exhibitions, archival or book collections, low attendance at art performances, workshops and cultural events, as well as, sporadic engagement of online communities and active virtual users of digital platforms, repositories or applications. Thus, in GLAMs, resources are non-subtractive, while they are characterised by different degrees of excludability. Concerning subtractivity, the consumption of GLAMs’ resources does not lead to their depletion. Digital cultural resources can be created with open-access tools and reproduced at low or zero marginal cost (e.g. documentaries, electronic publications). In several cases, intense use can lead to the attachment of added value to the resource, may it be societal (e.g. an openly accessible scientific paper in a library’s digital repository), or economic (e.g. an artefact in a gallery) etc. Concerning excludability, the status is determined by several factors, including the character of the resource and, most importantly, the rules that define access to it. For example, an openly accessible digital resource is de facto non-excludable. On the other hand, an exhibition in the physical space of a museum, besides given restrictions concerning the spaces’ capacity, is primarily defined by the status of admission which is directly related to a series of GLAMs’ attributes (ownership and legal statuses, aims and goals, governance schemes etc.).

For Bertacchini et al. (2012), cultural resources still need to be protected from ‘erosion’, that is any change that is undesirable to its communities of users. In this light, GLAM resources could be susceptible to erosion caused by the appropriation of their symbolic value and meaning (Zhang 2012, Gonzalez 2013; Barrere 2018). Apart from potentially antagonistic values (e.g. scientific/educational vs. economic/tourism) that need to be prioritised (by the community, through management, for community benefit), it is also likely for antagonistic narratives to emerge (e.g. during processes of co-creation). Here, again, the community needs to devise rules/codes and decide which voices would be heard or marginalised.

GLAMs are potentially open terrains where various components (artefacts, archives, photographs, people, information, spaces, capital etc) come together and assemble into a self-governed community with a shared interest over the protection and dissemination of a common cultural resource. That community is assembled through a number of self-regulated codifications (rules and norms/ informal and formal practices on preserving, reproducing, exhibiting, etc.) about the ways of managing and using the common resource. Both, the community and the common resource are in a continuous state of mutual becoming when viewed as an assemblage; the community is territorialized (and its identity is consolidated) when it is starting to devise codifications over the use and management of the common resource, while the latter becomes significant and starts to hold transformative power when it is protected, reproduced and disseminated in certain ways, through codifications. At the same time these codifications define the social processes that make the cultural resource a commons; such as the degrees and levels of appropriation and access.

Our work is mostly interested in the GLAMs that are managed by small independent communities, rather than in GLAMs that are state-owned or have a major institution (private or quasi-public) that finances and manages it. The reason is that most of the current challenges that the GLAMs face (addressed in the first section), seem to be augmented in the case of small and independent community-led museums, libraries, archives, and galleries. Problems of self-financing, as well as problems on safeguarding public access, low public participation, issues of social relevance etc., seem to be more applicable to those independent GLAMs found in urban areas but also and maybe more prominently in rural and peripheral areas. Our goal is to research the ways that these commons-oriented GLAMs can find sustainable solutions to manage the common resource and at the same time sustain and widen the community itself, its interest over the resource, and the values that are associated with the use of the resource and to develop new cultural heritage. Despite our interest in the small commons-oriented GLAMs, the outcomes of such enquiry could also benefit other GLAM institutions that wish to widen and territorialise their communities through a culture of sharing.

We use the commons perspective as a priority and as an imperative solution for the further survival of the community led GLAMs. The commons approach brings to the fore a number of important social and collective values, such as inclusive democracy or solidarity, and can act as a terrain for social and political emancipation for the community of commoners. Commons-oriented GLAMs can have open processes when managing a common cultural resource, but they can also devise exclusionary codifications in order to protect the cultural resource, the interests of the

community and the various values that stem out of the use of the common cultural resource. Thus, we are interested in the ways that commons-oriented GLAMs can find sustainable solutions through commoning practices over the management, re-use and dissemination of a common cultural resource. At the same time, we are also interested in the various antitheses and clashes that stem out of these commoning processes, as well as in the production of exclusionary practices. Thus, we would like to unpack the possible ranges of these commoning practices and their potential and actual oscillations (and all the kinds of compromise in-between); from the capitalist market to the commons and alternative/diverse economies, from exclusionary to inclusionary practices, from volunteering work to paid labour, from patronage to inclusive democracy and so on.

Thus, and following commons theory, we need to conceptualise commons in the GLAM sector as social systems dedicated to the long-term stewardship of cultural/heritage resources that produce and preserve shared values and community identity (Bauwens et al., 2019). These values are diverse in character, including both personal, social, political and economic benefits associated with cultural goods (Bertacchini & Gould, 2021). Drawing on the work of Fassari (2021: 38) for cultural commons, we may suggest that commons-oriented GLAMs represent ‘an infrastructure simultaneously symbolic, material and social’.

4.2. Identifying commoning practices in GLAMs: An initial mapping

Our review of the literature revealed that similarly to new commons, cultural commons and heritage commons can be analysed through the tripartite schema of a commons resource, a self-governing community and a set of self-legislated rules and norms that tune the commoning process (e.g. access, use, management, financing, etc). In order to both understand and analyse existing practices that introduce, reproduce and empower “commons logics” in GLAMs and to explore their potentialities and capacities to further undertake transformative attributes that resemble the commons, we conceptualise GLAMs’ arrangements, everyday operation and inclusion in broader networks and flows, as articulated sets of practices, which we relate with the main components that, according to the commons scholarship, constitute the commons social systems. These include:

i) material and intangible resources, varying from collections and archives of artefacts, data, infrastructure (physical spaces, digital infrastructure etc.) to different modes of labour (waged, volunteer) and to sector-specific

(e.g. conservation practices) and content-specific (e.g. particular heritages and pasts) collective knowledge.

This complies with the resources' typology of Ostrom and Hess (2007:48), based on which we could suggest that GLAMMONS' resources would contain (a) physical and digital artefacts (e.g. collections of artworks and other museum objects, archives, books and other works of scholarship and research), (b) facilities (i.e. spaces where physical/digital artefacts are developed or conserved, maintained, stored or exhibited to the public) and (c) ideas and knowledge contained in or attached to the physical/digital artefacts and collections. To these we also add labour as another material resource.

ii) groupings of communities, professionals, individuals and interest groups/ community of commoners, upon which their reproduction is built with a varying degree of engagement (from managers, directors and curators to volunteers and supporters),

iii) governance/management arrangements that are developed in order to ensure their viability and play a crucial role in the formulation and implementation of GLAMs' mission and development.

Figure 6 provides a conceptual schema of 'GLAMMONS'. In a relational perspective, communities of commoners use and synthesise various tangible and intangible resources to collectively preserve, re-produce and exhibit a particular past. The ways the community takes decisions over these processes is of particular importance and thus the management and governance of the common cultural resource is central in the figure. Usually GLAMs institutions have a central body (often in the form of a board or council) that takes the major decisions over the preservation and exhibition processes. Researching the composition of that management body in GLAMs, their codes of conduct and the ways decisions are taken are imperative in order to understand the management structure of an institution and issues of power, ownership and control over the community and the common resource, as well as in the processes of using and accessing it. Moreover, legal issues are also important as the legal forms and ownership statuses of commons-oriented GLAMs can enable (or disable) certain transactions and relations in the internal environment of GLAMs as well in their relations with other components such as other institutions, networks, community groups, the market, etc.

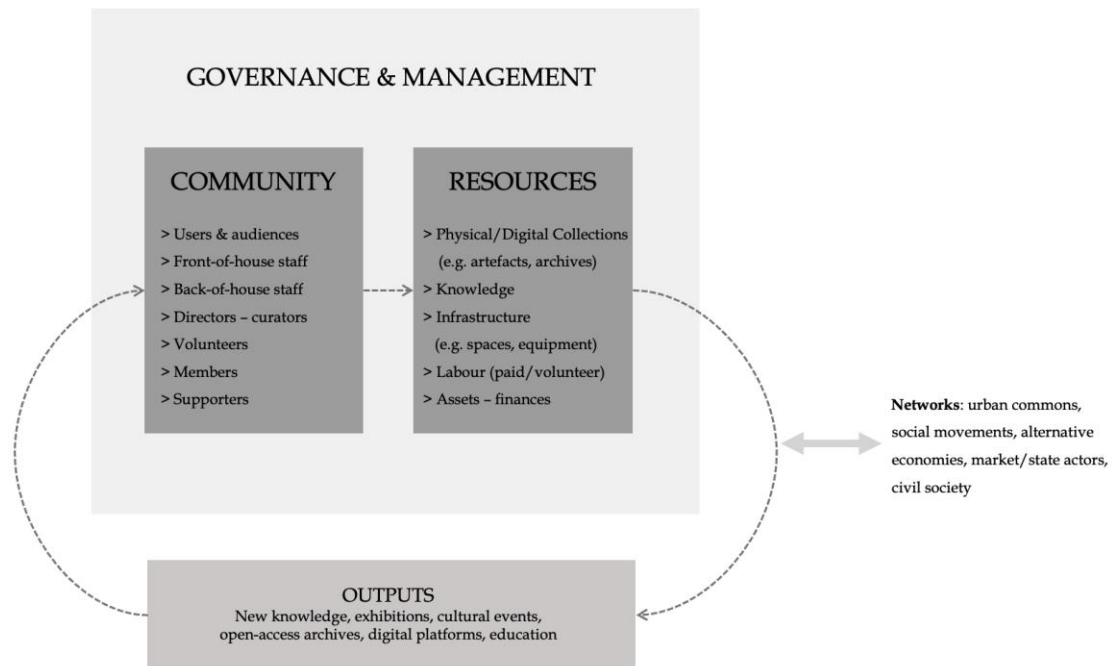


Figure 6: The porous 'circuit' of a commons-oriented GLAM

This conceptual schema does not regard GLAMs as bounded entities; on the contrary, GLAMs are transformed and their boundaries are challenged continuously through their relations with the society. Thus, we consider their boundaries as porous, and we are interested in understanding the degrees of porousness. As discussed earlier, debates around the commons largely develop around issues of institutionalisation, ranging from approaches that claim that for the commons to be transformative they need to emerge and operate in complete autonomy and - often - contraposition with state and market actors to theoretical and empirical studies that bring out the benefits deriving from the institutionalisation of the commons, especially through processes that are facilitated by local governments that provide essential resources (e.g. buildings, finance, access to networks etc.). Alongside these arguments, we also need to explore 'informal' and 'loose' modes of institutionalisation, focusing on the ways GLAMs and other cultural institutions interrelate with 'external' actors, flows and circuits, both from the cultural field and beyond. It is important to place emphasis on their associations with urban and rural (cultural) commons, the third sector, civil society and social movements, towards building broader assemblages where humans, cultural products, materials, innovations, skills and ideas circulate. This will allow us to look into modes of collaboration both within the cultural sector and among cultural and external actors and stakeholders, towards designing solutions that ensure the vibrancy, sustainability and resilience of cultural institutions, while meeting broader societal needs.

In most cases, existing GLAM arrangements fall short in emerging or developing in ways that would allow their classification as commons. Nevertheless, relevant practices, even though fragmentary, are not overall absent: among others, the increasing participation of the audience in content creation, the focus on the delivery of openly accessible archives, the employment of volunteer labour, the incorporation of horizontal logics in governance and decision making are indicative practices that “push” towards this direction.

These sets of practices are evident in various GLAM arrangements, independent of their orientation (from grassroots and community-led to top-down institutions). Nevertheless, each set can emerge in ways that “push” the GLAMs towards different directions. Moreover, besides practices, there are specific properties that create conditions that either enable or pose obstacles to the operation of GLAMS as commons, including the legal form and the ownership status of the entities:

α. Governance and decision-making

Legal and ownership status: We anticipate that properties and capacities deriving from the legal form and the ownership status of GLAMs, can either enable and support or prevent commoning practices to emerge. The first include legal forms such as cooperatives, SSE initiatives, non-profit entities etc. while the latter include for-profit and market-driven entities, along with entities that have high dependencies upon state actors. Legal and ownership statuses that fall under the first categories (in the GLAM sector these may take the form of community-based museums, libraries, archives as associations, foundations, or charity organisations; local firms organised as tourism, recreation and education/training co-operatives linked to a GLAM institution; or informal grassroots movements of citizens/neighbours etc.) trigger further commoning practices due to both their association with pre-fixed, horizontal decision-making processes (such as one member - one vote in the case of SSE initiatives and cooperatives) and the focus on openness and wide accessibility due to the non-profit status that prevents them from treating their outputs and products as commodities or trying to generate profit from practices that reduce accessibility, e.g. high-prices membership statuses and tickets.

Decision-making bodies and processes: Commons-oriented GLAMs adapt governance arrangements and bodies that are inclusive and horizontal, while this condition also reflects upon decision-making mechanisms. In this direction, favourable arrangements include general assemblies, extended boards which operate through open processes and in their composition diverse sets of actors involved (including for example workers, volunteers, artists, broader communities etc.) are represented.

b. Community

Accessibility and community engagement: GLAMs that operate as commons should develop practices that ensure that they are accessible to their audience and broader communities, e.g. through non-existent or low-priced tickets, concessions for underprivileged groups etc. At the same time, towards serving broader societal goals, GLAMs can be accessible to local communities and groups. This could include practices such as offering infrastructure and spaces to residents' groups to organise events, the organisation of common projects with local actors, the support of local artists from under-privileged backgrounds, the organisation of thematic exhibitions and events that bring out neglected or conflictual aspects of urban history etc. At the same time, visitors can engage through different degrees of participation in several aspects of the entities' governance and/or operation, e.g. through diverse participatory practices, representation to the management and decision making etc. All in all, it is crucial for GLAMs to be re-assembled in ways that will enable increased possibilities for communities (e.g. 'non-expert' users, audiences, citizens) to acquire control over the production and management of relevant resources.

Employment of alternative modes of labour (volunteer, reciprocal, communal):

Mobilised by and articulated around broader societal and political objectives, members of commons-oriented GLAMs contribute to their everyday operation and reproduction and, subsequently, to their financial autonomy and sustainability and the creation of stable community relations through modes of labour (volunteer, reciprocal, communal) beyond the mainstream ones (i.e. waged labour, service provider contracts etc.). Such alternative modes of labour are key components of the commoning praxis, framed by DeAngelis (2017:205) as a "social labour flow pushed by needs, attracted by desires and oriented by sense horizon and aspirations".

c. Resources

Finance: GLAMs' operation and reproduction is partly (alongside with labour) building on a variety of financing mechanisms and streams of income (membership fees, public funding, private funding, entrance fees, services, education offers, crowdfunding etc.). Among those, specific funding streams could operate as obstacles to the emergence of commoning practices, through undermining the autonomy of GLAMs, as in the case of dependencies from public and private funding that often "translates" into an increased agency of the aforementioned actors over the governance and decision-making of GLAMs. Furthermore,

dependencies upon income generated by entrance and membership fees, especially concerning for-profit entities can result in the limitation of those entities' openness and accessibility. All in all, even though the aforementioned dependencies have the capacity to undermine GLAMs' potentialities to operate as commons, these capacities are realised as long as the generated income is not mobilised as a common pool resource but, instead, as an input that is accompanied by top-down hierarchies and specific modes of agency.

Moreover, and as Gould (2017) has also suggested, GLAMs produce goods and services with market value, thus a commons-oriented operation calls for mechanisms to prevent enclosures and assure commoners' benefit (social/economic). For example, culture/heritage-related services provided (e.g. education, guided tours) could follow the principles of Social and Solidarity Economy, forming a line of defence against expansionist co-optation attempts by market forces.

Content creation: As mentioned earlier, Simon (2010) defines 'co-creation' in GLAMs as a process whereby communities and professionals co-set the project's goals and work together throughout its implementation. Co-creation processes can be linked to several key functions of GLAMs, including research, inventorying, interpretation, cataloguing, communication, and presentation to the public, in turn leading to the production of free and open-access goods and services, including exhibitions, guided tours, outreach programmes and education materials. GLAMs can further harness the new possibilities that are opened-up by digital commons to "peer-produce" content (Bauwens, 2009) through digital means and technologies at hand (e.g. interpretation of artefacts, anecdotal information, artistic work). As proposed by Manacorda (2016: 6-7), treating the public as 'a collaborator in an equal exchange' during the curatorial process can cultivate a dynamic pedagogical habitat where 'questions are asked, and answers are constantly negotiated' allowing for knowledge not merely to be gathered but to be actively produced. After all, to design 'a museum of commons', culture professionals shall not 'design it to involve the public [but] to design it with the public' (ibid 2016: 7, emphasis added). By incorporating users' perspectives/needs in GLAMs programme and encouraging creativity and active participation, GLAMs as commons can broaden the idea of openness beyond 'open access' towards an open culture that invites community contribution to the 'core' of GLAMs' work (Sanderhoff, 2014), such as curatorial and archivist.

Knowledge sharing and distribution of outputs: As highlighted earlier, the main output of cultural/heritage commons is non-rival and shareable knowledge, both scientific and social. Science and arts knowledge can

become open and accessible by harnessing new digital means, such as digital repositories of digitised objects and metadata, cloud-based infrastructure, or open licensing (Cousins 2014; Edwards 2015). This shared knowledge can form the basis for inviting current and future commoners to contribute to a polyphonic interpretation and significance of monuments, artworks, and other collections of GLAMs. In this light, knowledge ‘can be considered part of the resources, but also part of commoning, a product of social interaction and production by the various communities mobilised around the cultural resources, providing new meanings in their biography’ (Lekakis 2020b: 34). Parallel with this, the production of social knowledge, as a product of social interaction in a commons’ context, can be fed back and inform governance processes. The ways people interact with the resource and with each other is thus, output inextricably linked with the commons (Madison et al. 2020: 682).

While ‘internal’ processes of the GLAMs, namely the ways different components come together, enabling or posing barriers to the emergence of commoning practices is of key importance, it is also crucial to investigate the potentialities of the GLAMs to emerge as commons in the cultural sector, referring to both fulfilling broader societal goals and processes of institutionalisation involving commons-oriented GLAMs and other urban actors (e.g. local and regional governments, the civic society, the third sector, social movements, other modes of urban commons etc.). For example, the knowledge produced by GLAMs operating as commons can have positive spillover effects on the broader heritage and culture sector by informing professional practice for sharing, co-creating and co-curating the past, thus helping fulfil the ‘paradigm shift’ towards greater participation. In this vein, the ways outputs are shared and distributed should enable the maximum of positive spillover effects (e.g. cultural vibrancy, social cohesion, economic well-being) in the settings in which GLAMs are nested, but also to more remote audiences and communities through the employment of digital means.

Open access and IPR: The commons’ premise necessitates wide and open access to resources at hand and assumes a feedback loop where a portion of the system’s output is used as future input. Open access can lead to win-win outcomes for cultural institutions and their audiences as already attested by sectorial experience. For instance, photographic collections and artwork can immediately gain more exposure and visibility when harnessing digital distribution methods, such as Wikipedia and the ‘Flickr Commons’. This may not only apply for cultural heritage but also for contemporary art, as witnessed for several cultural industry goods (e.g. books, music albums), where open-access licences and channels often work in the artists’ best interest (Tapscott & Williams 2008). Creative

Commons (CC) is the most popular open licence system that allows different levels of flexibility in terms of access, sharing and use, whereas CC licences are already used by the EU and countless cultural institutions (Von Haller Grønbaek 2014).

Relations with external actors: GLAMs do not operate in the void but, instead, partake in networks and flows, which also extend beyond the cultural landscape. These ties and connections, along with their impact on GLAMs is of crucial importance, as they enable the emergence of both informal and formal streams of support that extend from the financing and the sharing of tangible and intangible resources to the establishment of relations that attribute legitimacy or enforce the scaling up of commoning practices, along with their institutionalisation. In this vein, the associations between GLAMs and actors/ networks that are driven by commons-oriented aspirations, motivations and logics is pushing them towards further enforcing commoning practices while, and most importantly, provides them with access to a diverse and extended pool of resources and support that, overall, can contribute to the augmentation of their collective capacities to be sustainable, resilient and, through the extended outreach, transformative. In this way, commons-oriented GLAMs can enhance broader societal benefits through the spread of democratic values, the empowerment of place-attachment and social cohesion and, ultimately, the enrichment of vibrant cultural environments.

Area of interest	Commons-oriented practices
Legal and ownership status	Non-profit entities (associations, charities); Local co-operatives, SSE initiatives; Informal grassroots/citizen movements
Decision-making bodies and processes	General assembly, extended boards, working/operating groups, pop-up project-based teams; Inclusive, horizontal, representational, porous - rotated
Accessibility and community engagement	No or low tickets, concessions; Granting spaces/facilities/equipment (no charges); Diverse/representative programme and content; Support/inclusion of local and under-privileged artists/GLAMs professionals;

	Broad participation in management/governance by local communities/groups, ‘non-experts’, audiences, users
Labour	Waged and alternative modes (volunteer, reciprocal, communal)
Relations with external actors	Actors/networks driven by commons-oriented principles/mentality, within the GLAM sector and beyond (e.g. urban commons, SSE, social movements)
Finance	Low dependence on corporate and state funding; Co-funding mechanisms (e.g. memberships, voluntary contributions)
Content creation	Co-set project goals and implementation; Participatory mechanisms for most aspects of GLAMs work (e.g. research, inventorying, interpretation, cataloguing/archiving, curation, communication, outreach, education etc.); Digital tools for peer-production
Knowledge sharing - distribution of outputs	Open and accessible knowledge across liberal arts (history, literature, creative arts etc.), through open-access physical archives and digital repositories, cloud-based infrastructure, open licensing etc.; Shareable social and professional knowledge
Open access and IPR	Resources create a feedback loop where a portion of the system’s output is used as future input; Open licence systems, such as Creative Commons

Table 3: Commons-oriented practices in GLAMs

4.3. A relational conceptualization of GLAMs as commons: Bringing the practices together

The aforementioned sets of practices and principles are not articulated in pre-fixed, but rather in relational ways which provide GLAMs with differentiated capacities and potentialities to operate as commons. By relational, we mean that each set of practices does not have a pre-defined “contribution” to creating commons-oriented GLAMS but, instead, it is the ways these practices articulate, relate and emerge in mutually empowering sets of relations that overall create the conditions for GLAMS

to operate as commons. Additionally, it is crucial to bring these practices and relations into a hierarchy, as part of them are placed in the core of commons-oriented GLAMS, paving the way for more “peripheral” and “ancillary”, yet crucial, practices to emerge.

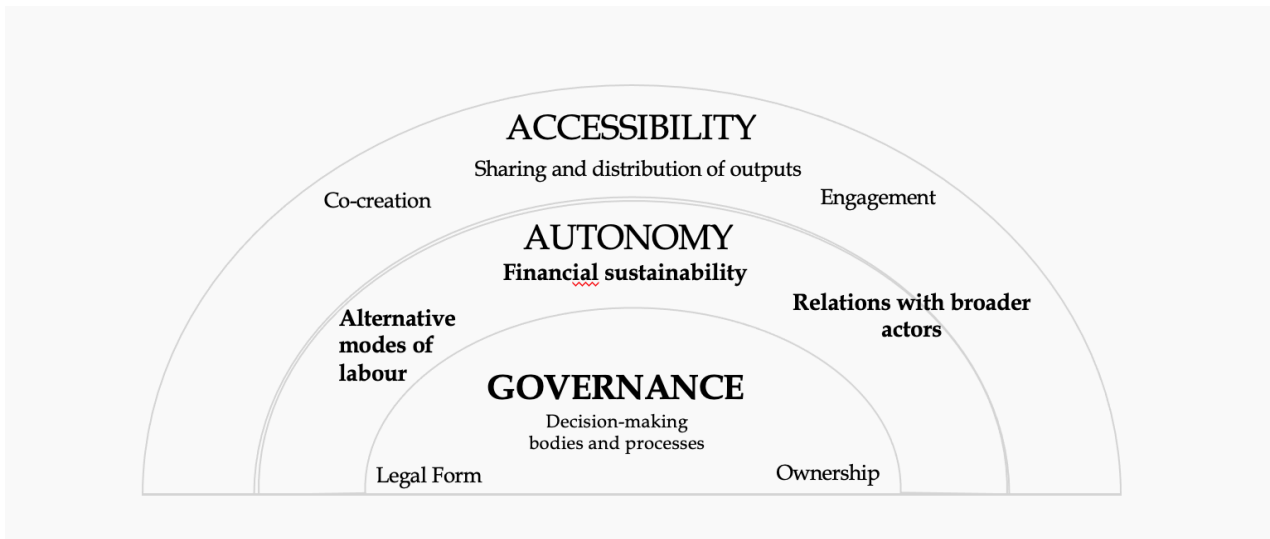


Figure 7: The principles of commons-oriented GLAMS

Overall, in an attempt to provide an initial framework for analysing GLAMs as commons or, as an aggregation of both commoning and mainstream practices, we organise these practices around specific principles that define GLAMs’ potentials to operate as commons, namely governance, autonomy and accessibility. The proposed hierarchy prevents us from understanding the previously analysed commoning practices as a “checklist”, comprising equally influential, independent sets of practices but, instead, as intercommunicating practices that, through their interactions are mutually enforced and contribute towards the realisation of each principle. While certain practices directly relate to each of the aforementioned principles (e.g., decision making practices to governance), others have a more fluid character, playing a key role in serving different principles. An outstanding example is labour, which is involved in the total of the sets of practices described here.

On principle, GLAMs operating as commons (GLAMMONS) shall feature cultural goods which are collectively produced, shared and used (Kioupkiolis 2022: 54). What would mark off cultural/heritage goods as ‘commons’ would be their ‘near-egalitarian mode of self-organising their production, management and distribution’ (ibid: 54-55). Similar to commons in other sectors, GLAMMONS may draw on and develop resources and goods that are diverse and heterogeneous (e.g. repositories, registries, collections, exhibitions, works of art) but ‘their common denominator is precisely that they involve shared resources which are governed,

produced and distributed through collective participation’ (Kioupkiolis 2022:55).

Following that, we anticipate commons-driven governance arrangements to be situated in the “core” of commons-oriented GLAMs, while their development and establishment is a prerequisite for the enabling and emergence of more “peripheral”, relevant practices. Thus, in the absence of relevant governance arrangements, ideally accompanied by a supportive legal and ownership status (or an absence of the latter), GLAM entities cannot be considered as either commons or commons-oriented. A second crucial set of practices includes those that build towards the principle of autonomy from state and market actors, through both the limitation of dependencies from the aforementioned actors and GLAMs’ development as sustainable and self-sustained entities. Towards this direction, financial autonomy and sustainability is crucial, as in many cases relevant dependencies can lead to negative implications to governance arrangements, through the overwhelming agency on behalf of state and market actors, imposed through top-down, closed and authoritarian modes of governance and decision-making. The third principle concerns accessibility, served and materialised by commoning practices that concern the modes of engagement and role of communities and audiences emerging around relevant resources, content-creation and the sharing/distribution of knowledge and outputs, but also commoning practices and ethos.

4.4. Some key challenges for realising a GLAMMONS’ future

Challenge 1: Interactions between the physical and virtual spectra

The works of art held in a gallery, or the movable monuments of museum collections attain their value for being original pieces produced in the past. GLAMs as ‘memory institutions’ are assigned with the mission to ‘reproduce’ them in the present by collecting and safeguarding them for future generations, generating new knowledge around them and ascribing them with current meanings that are socially relevant. Therefore, much of what is being produced by GLAMs is immaterial, namely, knowledge, ideas and symbolic capital, in the form of public exhibitions and archives, education and outreach programmes, public events and so on; a small proportion of which takes on material form (e.g. books, journals).

At the same time, culture and heritage are closely connected to the production of locality and surrounding communities (Lekakis 2020c). Cultural and artistic products are often ideologically-charged and deeply political, tied in a complex web of meanings, values and personal, collective, historical and cultural norms and memories, of which some can

be also traumatic. This is why ‘the alternative mode of collective organisation whereby strangers collaborate, interact and self-manage their activity on a global scale’ (Kioupkiolis 2022: 57) may work for digital commons and potentially for some niche areas in the GLAM sector, but it cannot fully function across all aspects of GLAMs’ operation and processes since locations formulate specific cultural, social and political settings, with unequal relations (e.g. in capacities and skills, human capital, access to finance etc.). In this light, we need to elaborate on how a multi-spatiality of geographically-bound, distant, virtual and imaginary resources and groups of commoners might work in practice.

The question that follows is where to position these new cultural/heritage commons. As Holder and Flessas (2008: 308) opine, ‘the specific locations of museums and other institutions of display and identify formation contain tropes of memorialisation of a common cause and a commons past, a common narrative that is perceived as belonging to all, while remaining the private property of none’. Thus, location and geography matter both symbolically and pragmatically.

Commons theorists, such as Kostakis et al. (2023) and Ramos et al. (2017) have proposed the idea of ‘cosmolocalism’, which draws on both local capacities/infrastructure and the unlimited possibilities of global digital commons. As it has been highlighted, ‘at a local level, the challenge is to develop economic systems that can draw from local supply chains: what is light (non-rivalrous; e.g. knowledge) becomes global and what is heavy (rival; e.g. manufacturing equipment) remains local’ (Bauwens et al. 2019: 40). In the GLAM sector, this implies that material resources, such as original artefacts, along with human labour, spaces, tools and equipment would be managed locally whereas intangible resources (e.g. digital archives/collections, 3D replicas, software, guidelines for good practice) would be shared across international GLAMs’ communities.

The ‘cosmolocalism’ solution seems useful for allowing GLAMMONS to embody a hybridity of material and digital resources, communities and related production/consumption processes. Still, it cannot by itself address critical issues related to the symbolic production of meaning, so interwoven with cultural/heritage goods and much of the work undertaken by GLAMs. Especially when dealing with conflictual heritage, difficult pasts and collective trauma, the application of ‘cosmolocal’ practices calls for much reflection, especially in the milieu of heritage interpretation and re-production. We have already suggested that in GLAMs enclosures and erosion do not merely concern market capitalisation of symbolic value but also extend to ideology and political uses.

The long-held idea of ‘universal value’ that has been evangelised in international conventions and charters, promoted the position that heritage resources ‘belong to all the peoples of the world, irrespective of the

territory on which they are located’. Today, there is sufficient evidence that this approach often fails to accommodate the values that lie outside the canon of ‘authorised heritage discourse’ (Lindstrom, 2019; Smith, 2006). At the same time, the assumption that ‘human beings – regardless of their differences in socioeconomic status, geographic origin or cultural frame of reference’ appreciate cultural goods in the same way is heavily problematised (Labadi, 2013). Recent critics have also accused digital heritage of being apolitical and technocratic, failing to address questions of power and inequality, such as, who is producing it, for whom it is produced and who owns it, thus becoming susceptible to neo-colonial practices (Stobiecka, 2020).

So how GLAMs operating as commons would allow for various virtual and local commoners to interact in order to negotiate different versions of ‘pastness’ under different spatiotemporal circumstances? This is a question yet to be answered both theoretically and practically.

Challenge 2: Power-sharing when managing the past

With regards to governance arrangements, the existing body of literature does not provide ‘sufficient clarity regarding the implications of the theoretical roots and critical operational aspects’ (Gould 2017: 173) of commons’ principles to the culture field. This is critical given that commoning processes integrated in the GLAM sector herald a paradigm shift in the organisational culture and social functioning of cultural institutions; one that places community self-management at its heart and employs collaborative processes as a pathway to value creation and distribution. In much of the GLAM territory, the right (and power) to manage cultural/heritage resources challenge the development of commons-based governance structures. In most EU countries, central-government agencies ‘have legal mandates and institutional incentives that often are inconsistent with governing heritage resources through mechanisms that are centred in local communities’ (Gould 2017: 180).

The transition from current centralised regimes to commons governance systems would require devolving management authority from state actors (e.g. ministries of culture) to local actors while facilitating them through financing and capacity-building (Gould 2017; Iaione et al., 2022). GLAM institutions may be reluctant to share their materials and knowledge in a common setting, where they will have limited control and authority (Marttila & Botero, 2017). This implies that state and by extension, experts’ assumed ‘ownership’ and role as the custodians of culture/heritage resources (e.g. collections, monuments, archives) need to be negotiated, if commoners are to be granted legitimate authority to act upon the management and governing of GLAMs as commons.

Furthermore, on the practical side, collaborating with experts and cultural organisations under a hypothetical commons poses an additional challenge; GLAMs professionals follow specific protocols and procedures for managing cultural/heritage resources (e.g. acquiring, inventorying, preserving and exhibiting objects). It is plausible to argue that communication and synergy between experts and non-expert commoners would call for the advent of a common 'language' and mutual understanding so that roles and rules/areas of contribution can be co-decided and re-coded for each party. Given that 'community actors need to be proactively involved in design and co-management', GLAMs' experts and professionals do not merely need to 'provide technical expertise' (Iaione et al., 2022: 16) but rather work towards the development of channels for reciprocal knowledge transfer that will also appreciate and draw on social capital, citizens' skills and community experience. Such knowledge-transfer processes would not intend to undermine professionalism or substitute expert workers with low-cost (or volunteer) 'amateur' creators but rather replace one-way monologue with dynamic multi-vocal conversations (Tapscott & Williams 2008) in order to better serve and enhance the societal role and mission of GLAMs. That requires a process of re-codifying existing practices and processes in order to arrive at a mutual commoning state of practice that serves the communities of commoners. This inevitably brings our attention to motivations to pursue commons' governance. Similar to applying participatory modes of practice, the drivers may not only be ethical but also pragmatic. Community support might be useful or even necessary for protecting and preserving related goods and their institutions by safeguarding the necessary funds or manpower, employ a broad spectrum of skills, raise awareness and attention to heritage under threat and develop new tools to work with (OMC 2018). These pragmatic drives are coupled with ethical considerations related to democratic governance, social relevance and responsiveness to local needs, as well as, alignment with good professional practice in managing cultural/heritage resources, as prescribed by international conventions that advocate for community-inclusive, participatory approaches (OMC 2018). Thus, for researchers such as Gould (2017: 172), the commons paradigm can provide 'ethical and practically effective' solutions to heritage management.

Government bodies, for-profit cultural heritage management companies, tourism operators, non-profit and multilateral organisations may also 'claim a place at the governance table' (Gould 2017: 177). A system to manage value conflicts and power disputes between commoners and stakeholders 'of the outside' (at regional, national and global levels; *ibid.*: 178) would thus be critical for the successful application of the commons paradigm to the GLAM sector. The reconciliation of diverse interests within

this complex network of stakeholders calls for experimentation with hybrid models; namely, ‘governance approaches that will employ elements of classic CPR models, American- or British-style non-profit models, public-private partnerships, and government-sponsored quasi-NGOs or Quangos’ (Gould 2017: 184). The multi-actor commons-based governance model proposed by Iaione et al. (2022) might also be useful in this respect, however, we need to pay attention to the boundaries and criteria that will help distinguish genuine commons from mere ‘commons-inspired’ participatory projects, or even ‘commons-washing’ practices that disorient the discussion. In this light, apart from reciprocal knowledge flows, GLAMs operating as commons would need to set up channels where power and capital would also circulate (Tapscott & Williams, 2008).

Given the complexity and uncharted territory of GLAMs as commons, we thus need to adopt a broad horizon (encompassing semi-commons, quasi-commons or other ‘mixed-breeds’ of production and sharing) to address related conceptual and practical questions in the related sectors. In their discussion about cultural/knowledge commons Madison et al. (2010) argue for adapting a wide spectrum to study the commons or even sub-spectra for the different dimensions; for example, dissemination and use could range from exclusion to open-access, whereas governance could consider different degrees of ‘openness and control’.

Challenge 3: Open access, copyright and the protection of cultural goods

Since the commons necessitate wide and open access to resources, we need to consider whether there are any GLAM-specific legal impediments or implications in the process. While the question of cultural commons inevitably ‘turns on questions of copyright, authorship and patentability’ (Holder & Flessas, 2008), professional practice has also raised the issue of publicly sharing resources for free or allowing users to rework, comment and remix on original artwork and heritage monuments.

At present, there is a clear distinction between copyrighted works of art and artworks that belong to the public domain along with an abundance of artworks that are exempted from copyright and can be shared and used freely. In parallel with these, digitalisation projects and a changing museum practice have already made important steps towards open access and use at least in the digital realm (see also section X). In contrast, strict legislative barriers are in place for national cultural heritage and monuments in many EU countries, even for non-commercial purposes.

Although closed licensing models may serve as income-generation streams for GLAMs, in reality, high fees for the reproduction of digital and physical images and archives often discourage purchase and realisation of broader scientific and social benefits through dissemination and use (Sanderhoff 2014). For Sanderhoff (2014), the financial motives of charging

fees for using images of artworks in the public domain rarely stand alone, as justification normally relates to protection and misuse arguments. ‘Their concern extends to the moral rights associated with the image and are based on worries that the integrity of the original artwork could be damaged’ (Sanderhoff 2014: 40). This brings us back to the role of GLAM professionals as custodians of cultural heritage, wishing to retain control over ‘legitimate’ uses of their symbolic value. This creates conflict between legal restrictions, moral rights and efforts to share knowledge and serve public interest. Similarly, when GLAMs apply fees for reproducing materials from their archives and collections, even when intended to deter commercial and political abuse, they compromise the public character of resources that supposedly ‘belong to all’. Thus, ultimately, a question of access and use is truly a question of ownership.

We have already raised the point of Graeber (2001: 17) that property is a social relation that determines who has the right to use or not use a resource. In the case of cultural heritage, ownership determines who has the right to ‘control access to objects, places and practices’ and by extension, the power to remake the past in the present (Harrison 2010: 154). For this reason, it has been suggested that digitised resources produced by/for GLAMs ‘should be set free as a cultural commons’ to encourage learning, research, and creativity since on principle ‘the works belong to the public, and because this is the most efficient and sustainable way for the GLAM sector to fulfil its mission’ (Sanderhoff 2014: 64). Would the same rule apply to physical objects, collections, and artworks, which are restricted by their materiality and their non-replicability (as originals)? And what about the symbolic uses and appropriations of artistic and intellectual works of GLAMs that we discussed earlier? Or even, what about supporting resources that serve as input in GLAMs’ operation, such as infrastructure, equipment, and machineries.

As prescribed by commons theory, the rules of use are to be decided collectively by commoners. In the GLAMs, the commoners may need to devise a combination of elements that are *res nullius*, i.e. they can be appropriated by anyone but belong to no one, and *res communis*, i.e. they are owned by many but cannot be appropriated by none (Holder & Flessas 2008: 301), or where appropriate, apply legislative measures to allow creators and artists to retain their intellectual and economic rights. In the case of digital resources or intellectual works, open licences can be employed to prescribe what users can and cannot do with their content to prevent undesirable or inappropriate reproductions. As Sanderhoff (2014: 76) put it, the solution is ‘a matter of some rights reserved instead of all rights reserved’.

Challenge 4: The transformative potentials of commons-oriented GLAMs: A response to recurring crises on the antipodes of platform capitalism?

During the last years, we have been witnessing the association of the positive image related with the notions of sharing and collaboration with the practices of large, for-profit corporations, within the framework of activities that reproduce exploitative relations of production and consumption. This phenomenon, often framed as “share-washing”, is driven by actors that do not differentiate from but, instead, further enforce capitalist logics and fail to trigger or empower transformative dynamics, also in the cultural sector.

Nevertheless, Eidelman and Safransky (2020) bring out the possible benefits of associating the emergence and reproduction of the commons with the sharing economy and collaborative consumption, under logics that are positioned on the antipodes of both market-oriented (e.g. platform capitalism) and state-driven (smart cities) “sharing” practices. Towards this end, commons-oriented GLAMs have the capacities to develop “transformational sharing” (Sharp, 2020) practices through community-led sharing and collaboration. Previously, we discussed the ways sharing practices can contribute towards serving the goal of openness and accessibility for commons-oriented GLAMs, mainly focusing on the production and sharing/ dissemination of a series of outputs (cultural products, knowledge, archives etc.). Moreover, sharing may also involve the provision and shared use of infrastructure, from physical spaces to tools and equipment. Focusing on the landscape of GLAMs, we consider as “transformative”, practices that challenge established power relations and trigger, accelerate, or enforce change through redistributing power to the benefit of disadvantaged groups. These groups may be composed of actors who are directly (e.g., workers, volunteers, artists) or indirectly (audience and visitors, broader communities, residents of the districts/ cities in which the GLAMs are situated) engaged with GLAMs. Concerning the former, transformative practices can include increased participation in decision-making, higher degree of control and agency over cultural and knowledge production, co-creation and participative modes of content creation etc. As for the latter, they can include broad, open access to cultural and knowledge outputs, the operation of GLAMs as terrains in which under-privileged groups can claim visibility, the bringing out of neglected or oppressed sides of urban history and collective memory. All in all, the aforementioned practices have an impact that extends beyond the GLAMs and the cultural sector, serving broader goals of progressive societal change through the empowerment of currently underprivileged actors.

Such an approach could contribute towards overcoming understandings of the commons as arrangements that are inherently non- or anti-capitalist

but, instead, as modes of collective resource management that can emerge within capitalist systems, while operating in tension with the latter. Moreover, the commons on many occasions involve a wide range of governmental actors and authorities, which can also benefit from modes of commons-based peer production (Bradley, 2015). In this frame, especially through the increasing adoption of digital means and tools, it is crucial to explore the degree to which commons social systems in the cultural sector create, circulate and establish sets of alternative narratives and practices that are promoting and realising meaningful and transformative sharing, as well as the ways these practices operate in tension and challenge relations of production and consumption that fall under the “platform capitalism” (Srnicek, 2017) side of sharing and collaborative economy.

4.5. Concluding remarks

The conservation and management of cultural heritage goods and resources, a large part of which is undertaken by GLAMs, is a collective action problem (Bertacchini & Gould 2021), which has created a multi-disciplinary topography of enquiry by scholars in museum studies, heritage studies, organisation studies, computer programming, economics and law. Acknowledging that the commonplace ‘top-down’ model of governance has often limited capacity to address effectively the current challenges of the sector, researchers have often seen the commons paradigm as promising a collective resolution to the management of shared resources for the production of goods and services that deliver shared benefits. However, the review of the available literature suggests that GLAMs as commons lie in potentia, yet to be realised and take a full form in both theory and practice. Commons-oriented management of cultural/heritage resources (tangible, intangible and digital) is a new and largely uncharted field. The commons can help cultivate a ‘new culture’ in the sector; a culture of ‘co-creation, sharing and pooling productive knowledge and other resources’ (Kioupkiolis 2022: 55). Apart from technology, grassroots initiatives and civil society groups can be catalysts for the transition to a commons-oriented GLAM sector, supported by law and the economy.

The working paper attempted to situate the GLAM sector within the Commons theoretical framework, taking into account the specificities and challenges of the GLAMs (as a mere homogenous sector) and the variegated approaches of the Commons literature. What we propose, is a new conceptualisation of GLAMs as commons (GLAMMONS) where various elements from the Commons literature inform a new conceptual framework where commons-oriented GLAMs can operate. We believe that that new framework can offer a device to all those communities that are

assembled through a collective interest over a particular historic past, and they are willing to preserve and transform it via a commons-oriented management structure and ethos.

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