Design and the reframing of participatory approaches in cultural heritage and museums beyond pandemic crisis

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The paper aims at reframing the concept of participatory approaches in Cultural Heritage to rethink and re-design, in an long–term perspective and taking in account the lesson learnt in the post-covid recovery and the post-digital scenario, the role, competences and modes of collaborations of museums and their community of stakeholders. It discusses the participatory paradigm in CH proposing a 'participatory continuum of phygital proximity' based on the concept of museums 'ecosystem', to re-consider the conventional participatory rhetoric and drive digital transformations and organisational changes with a long-term perspective.

Keywords: design for cultural heritage; participatory ecosystem; proximity museum model; post-covid recovery

1   Introduction: objective and structure of the paper

The paper aims at reframing the concept of participatory approaches in Cultural Heritage (CH) to rethink and re-design the role, competences and modes of operation and collaborations of museums and cultural institutions and their community of stakeholders, in an long–term perspective and taking in account the lesson learnt in the post-covid recovery and the post-digital scenario.

In particular, the pandemic crisis hindered the accessibility to CH, causing a rapid escalation in linking it to the already ongoing digital transformation of museums, in order to maintain and offer essential activities and services; and thus challenged the current and established paradigm of participation in CH. In fact, in Italy (that is the main context on which the paper is based upon), even succeeding in connecting to the audiences and providing access to the collections, a mere approach towards digitization revealed its vulnerability in promoting a real and extended participation, and often failed to reach and engage, beyond the public, the whole ecosystem of stakeholders and infrastructures of CH, that was the most affected by pandemic.

In addition, after decades of an a-critical participatory "euphoria", that considered participatory approaches as intrinsically positive models, infused with values such as accessibility, inclusion, democratisation etc, some critiques are emerging about contextual, cultural and technological biases.

The whole participation paradigm in CH therefore needs to be discussed and reframed in order to really help museums to embrace a sustainable transformation and to build a cultural resilience: from one side, the post covid opportunities disclosed the need of a blended model of engagement, and this should address the public but especially the stakeholders; from the other side it is important to re-consider the conventional and somehow stereotyped participatory rhetoric, to highlight and prevent the risks of instrumentalization.

The leading hypotheses are:

1. to rethink and design participation in CH as a concept of 'proximity', in which museums act as a cultural local 'ecosystem' for their diverse communities of stakeholders: this is very related with the concept of Italian 'diffused (or widespread) museum'. The challenge is, beyond bringing the audience to the museum with renovated interests, purposes and cultural needs, enabling the connections and collaboration between museums and all the territorial partnerships and stakeholders, based on a *phygital* approach;
2. to unfold the potential participation and contribution of museums stakeholders within all the museums value creation activities, based on participatory management strategies.

In our vision, a 'participatory continuum of phygital proximity should go beyond the usual participatory approach at the end-users /visitors level and engages museums and their stakeholder (audience, Cultural and Creative Industries- CCI… etc) in collaborative, contributive and co-creative management activities, to drive digital transformations and organisational changes with a long-term perspective.

Therefore, based on the review of the literature, the analysis of initiatives held especially in italy during the pandemic and reflecting on critical insights, the paper proposes how to re-address the challenge of participation in museums within this framework of phygital participatory continuum among stakeholders and along the whole museum value chain.

The paper is structured in five parts:

- In the first part we briefly review and problematize the concept of participatory culture in CH and the paradigm of participation, by the literature.
- In the second part we introduce the context of change, that is the lesson learnt from the post covid recovery.
- In the third part we present the role and competences of design in the CH field, stressing its role in building a cultural resilience and a sustainable organisational change and digital transformation in museums, due also to the COVID recovery.
- In the fourth part we describe our proposal of phygital participatory continuum of proximity for museums and how this emphasises a careful addressing of the participatory discourse with a critical approach.
- In the fifth and conclusive part we synthesise the main contribution and statements of this paper, providing also considerations about the limitations of the research and possible further developments.

2   Literature review: problematising the definition of Participatory Approaches in Cultural Heritage

Participation in cultural heritage has nowadays an extensive literature and a rooted history (Roued-Cunliffe, Copeland, 2017; Hetland, Pierroux, Esborg, 2020). Anyway the concept has acquired different meanings over time: it can be based on contributive or collaborative projects led by cultural institutions (e.g. museums) in a context of shared authority, or on bottom-up practices outside from formal institutions, based on community initiatives not fully professionalised and close to DIY (do it yourself) approaches. Within a formal cultural institution like a museum, it can range from participatory engagement of the community/audience/public (e.g., "crowdsourcing") to participatory management of CH. This complex scenario asks for better defining these different shades and for updating definitions.

The origin of participation can be dated back to the end of the 60, with the seminal work of Arnestein about citizen participation: in particular he distinguishes between degrees of participation measured against an eight-step 'ladder' that encompasses forms of illusory participation, approaches driven by tokenism and real citizen power and control (Arnstein, 1969). This model has then been inspiring for others (Wilcox, 1994). What they all share is the context of citizenship within public institutions (not in museums) and an assertive approach in correlating high levels of participation with a positive instance and a high degree of democratisation.

The concept of participatory culture re-gained visibility in the beginning of 2000, when, the integration of new social media technologies, had a profound and transformative impact on the personal and collective understanding, experience, construction and use of CH: the cultural sector witnessed the transformation from expert driven projects to alternative models of knowledge production, especially for marginalised or contested heritage, where the institutions were more reluctant in digitising and sharing collections, and the role of volunteer communities became crucial in preserving and archiving (Roued-Cunliffe, Copeland, 2017). Participatory culture is "characterised by relatively low barriers to public artistic expression and civic engagement, strong support for creating and sharing one's creations with others, and frameworks for formal and informal mentorship to novices, thanks to social media technologies that allow for a much broader and more profound phenomenon" (Giaccardi, 2012). In this interpretation, participation is mainly concerned and interrelated with community heritage discourses (Watson, 2007), in which new technologies enable social and indigenous practices in curating (Kreps, 2003,2009), collaborative and digital native exhibitions and the formation of interpretive communities (Hooper-Greenhill, 2007) and new publics and audiences (Taffe, Kelly, 2020). But at the same time technology affects CH with different bias concerning differences in opportunities and capabilities for non-participation like resistance, rejection, exclusion etc (Wyatt, 2003).

Within museums, participatory approaches in general are coping with visitors and with audience engagement: they have been framed by Nina Simon in 2010, distinguishing among 4 different types (adapting them in the CH domain by Bonney et. al 2009): contributory projects, collaborative projects, co-creative projects and hosted projects. In this sequence, the level of institutional involvement decreases, and the skills required for the community increases. Following this trend, museums developed participatory processes up to contributory practices, with the creation of user generated contents, and by full co-curation strategies, often focused on preservation (Mydland and Wera, 2012)

promotion (Salvesen, Keithsch, 2021) or protection (Wu, Hou, 2019). A co-design approach can be recognized where the collaboration between people and formal institutions in the understanding, experience, construction and use of heritage is encouraged by design processes (Lupo, Trocchianesi, 2016; Avram et al. 2019). Different approaches of museum experience design addressing public engagement and crowdsourcing by new technologies are also described in (Vermeeren, Calvi, Sabiescu, 2018).

Following this progression, in the scenario of co-creation (Grcheva, Oktay Vehbi, 2021), scholars started to talk about "crowdsourcing" connecting specifically the participatory approaches to the digital content lifecycle, in a virtuous cycle in which a participatory perspective can affect all the core activities of heritage organisations thanks to the digital domain (Oomen, Aroyo, 2011): in their analysis they showed that most crowdfunding initiatives today are primarily focusing on projects dealing with the stages 'Using and Reusing' and 'Creating'. According to them, crowdsourcing can be seen as a remediation: the effect of new media on old forms of relation, with a difference of scale and connectedness. In this context, the concept of sharing authorship became also relevant (Ridge, 2014). Crowd involvement in CH organisations can also happen in data collection processes through visitor sensing technologies to provide helpful information for redesigning the cultural offer (Cappa, Rosso, Capaldo, 2020).

At the beginning of the next decade, 2020, the "participatory turn" (Bonet, Négrier, 2018) has been acknowledged as a framework calling for institutions to change their model of interaction not only with their public but, more generally, with all their stakeholders. Cultural democracy is virtuously linked with the creative economy in order to bridge extensive "top-down" participation with bottom-up approaches that, beyond facilitating access to culture, endorse creation also from non-experts (Bonet, Négrier, 2018; Arnaboldi, Diaz Lema, 2021).Therefore participatory management and participatory governance emerged. Participatory heritage management looks for the engagement of the stakeholders in defining and prioritising heritage values providing invaluable tools for heritage managers (Heras et al. 2019). Sokka et al. identified four types of cultural heritage governance, with differing weights with regard to public authorities, civil society, markets, and citizens: governmental, corporatist, service-led, and co-creative. Corporatist and co-creative are the two that imply a higher citizen participation, respectively in institutionalised and hybrid cultural heritage. Four distinctive logics have been identified for local participatory governance: instrumental, interest-based, deliberation-based, and functional (Danielsson et al., 2018).

Only recently anyway some critiques about participatory approach emerged: even if top-down institutional management mechanism promoting community participation have been already a concern for strengthening inadvertently forms of control of the heritage (Aykan, 2013), currently scholars are questioning about how concepts of democratisation are framed and enacted, generating divides (knowledge infrastructures and asymmetrical power relations) and drivers (motivations) (Hetland, Pierroux, Esborg, 2020); Dore (2020) emphasises concerns behind the potential instrumentalization of participatory design (PD) within democratic institutions and city-making projects, challenging the democratic claims of PD, analysing three interdependent levels of institutional constraints: ideology, governance, and narratives; finally few studies problematize the use of technology in enabling communities in documenting their owned heritage (Graham, 2009).

The critical questions are: how is the "open-heritage" approach really open? How is it participatory? How do museums make their organisational and management model really participatory? How do CH accessibility and sharing by museums enable real reuse of CH and co-creation of value through new cultural experiences, services and products by the various actors and stakeholders? How does digital technology support this? And what is the design role?

3 The context of change: the lesson learnt by museums in the post-covid recovery

Framing those questions, we cannot avoid mentioning the changes occurred to the CH sector during the pandemics. The COVID-19 pandemic has dramatically impacted on the cultural sector (Sacco, Travkina, 2020). Museums, cultural institutions and organisations have been affected at many levels: closure and cancellations, loss of income of visitors and revenues, fire of employees. The crisis has also affected the cultural and creative sector and all the myriad of small and medium enterprises, whose productive system is extremely fragmented and difficult to support with financial measures. Finally on society, the impact of COVID-19 has considerably limited the access in presence to cultural heritage for the public.

Nonetheless, this crisis constituted a great opportunity: it do not only forced questioning of museums' business model and managing way but also asked for new approaches and ideas to connect to the audiences and provide access to collections in a meaningful way: e.g. offering alternative (digital) forms of learning and inspiration (NEMO, 2021).

Several CH organisations have published documents with indications to address the challenge of the post-pandemic (the European Commission[1], ICCROM[2], Europa Nostra[3]; "A Cultural Deal for Europe"[4], UNESCO[5]) or organised webinars on the topic (OECD- Culture, Creative Industries and Local Development section[6]). Specifically on Museums, NEMO-Network of European Museum Organization, reported the impact of COVID-19 on museums in Europe, giving some indications to adapt to the new (digital) normal, among which the necessary investment in digital cultural heritage[7] and ICOM-International Council of Museums suggested short-term solutions and medium/long-term opportunities[8]. The Museums Association launched a survey to track the impact of pandemic on the museums sector[9].

Consequently, the ongoing digital-based innovation of the cultural sector, in which digital has started to be acquainted within museums (Parry, 2013), has been improved by the cultural institutions to maintain and offer essential activities and services. Museum professionals and scholars mirror this evidence in different ways: some interesting and inspirational cases on creative approaches and

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[1] https://ec.europa.eu/culture/resources/coronavirus-response
[2] https://www.iccrom.org/heritage-times-covid
[3] https://www.europanostra.org/wp-content/uploads/2020/10/20201014_COVID19_Consultation-Paper_EN.pdf
[4] https://culturalfoundation.eu/stories/a-cultural-deal
[5] https://ich.unesco.org/en/living-heritage-experiences-and-the-covid-19-pandemic-01123
[6] https://www.oecd.org/cfe/leed/culture-webinars.htm
[7]https://www.ne-mo.org/news/article/nemo/nemo-report-on-the-impact-of-covid-19-on-museums-in-europe.html)
[8] https://icom.museum/en/news/webinar-coronavirus-covid-19-and-museums-impact-innovations-and-planning-for-post-crisis/
[9] https://www.museumsassociation.org/museums-journal/news/2020/08/help-museums-journal-track-the-impact-of-covid-19/#

collaboration in CH by the use of technologies in the time of Covid-19 can be seen in the EuropenaPro website; special issues of academic research journals are devoted to the topic of museum first response to Covid (2020); finally, different scholars provided review and insights (Mason, 2022). Anyway, while some institutions reacted promptly to the unexpected situation providing alternative ways for the public to access their collections (new digital content like newsletter, video, podcast, social media etc or new digital activities like workshop, virtual tour etc), just a few of them opened really to new innovative approaches and changed their business and organisational model (Agostino, Arnaboldi, Lampis, 2020).

In Italy, according to the idea of "a roadmap for digital innovation in culture" that goes beyond the mere use of technology, in 2019 MIBAC- Italian Ministry for Cultural Heritage, published the "Piano triennale per la digitalizzazione e l'innovazione dei musei (3 year Plan for museums digitization and innovation)" to start also a National Museum System. Hence, during the pandemic there has been a considerable effort in producing different projects and actions that are principally based on digital tools to maintain the dialogue with the public. They ranged from:

- short term solutions: content on the museum's social media (here the examples range from the simple increasing of number of posts on the social media, to the creation of new dedicated content i.e. the Museo Egizio Torino had on youtube video pills on single pieces of the collections10 or video walks with the Museum Director Christian Greco[11]; the Museo Nazionale Scienza e tecnologia Milano had everyday new contents on facebook and instagram[12]; Accademia di Brera Milano launched the online program BreraOnAir, showing by video the backstage work of curators, restaurateurs[13]);
- medium term solutions, like virtual tours or temporary digital exhibitions (the Museo Egizio Torino had a virtual tour[14] and a temporary exhibition[15]);
- long term vision: consultation of the full collection on line (the Museo Egizio Torino online collection[16]).

These experiences differ in approaches and objectives (communication, education…), type of relationship (one-way or two-ways communication between institution and public), lengths of use, time and space/place of interaction (asynchronous or synchronous, web or physical world) and therefore could open to reflection at many levels. In general, it is evident that, in comparison with some international experiences (Levin, 2020; Mason, 2022), only a low percentage of Italian cultural institutions went beyond the short term solutions, because only few of them (the biggest and most used to) were able to promptly respond to the situation with an overall digital strategy, thanks to a pre-existent culture and experience on it (Colombo 2020): this makes clear that exploiting the digital dimension of collections requires adequate expertises and resources to not be done superficially, or in a urgency driven manner focused on a one-way communication and publication of content from the museum to the public (Orlandi, 2020). In addition, none of them (because of the temporary lock-

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[10] https://www.youtube.com/playlist?list=PLg2dFdDRRClGGLypABB7-S1HbNfisurm1
[11] https://www.youtube.com/playlist?list=PLg2dFdDRRClGtp33i7xqUwFO82TEVnMz2
[12] https://www.museoscienza.org/it/storieaportechiuse
[13] https://pinacotecabrera.org/brera-media/
[14] https://virtualtour.museoegizio.it/
[15] https://cdn-cache.museoegizio.it/static/virtual/ArcheologiaInvisibileITA/index.html
[16] https://collezioni.museoegizio.it/

down) went beyond the digital dimension, looking for a phygital approach. Finally, digital transformation has been rarely considered an opportunity for organisational changes that could go beyond the audience development and impact instead on the whole value creation chain of museums.

The weak point has been the not preparedness of the museums, due to their structure and functioning, their lacking of skills and knowledge in digital literacy, and of flexibility and agile structures as well as the unmet capacity to seek out new, innovative funding schemes and opportunities (NEMO, 2021). The digital competences for museum professionals are often non easily implementable by small and local museums, due to lack of resources and, above all, personnel.

Furthermore, the lesson learnt from digital experimentation during closure led to think that the mere approach towards digitization is not sufficient. The digital dimension needs to be integrated to the physical one, in a hybrid phygital heritage model (Nofal, Reffat, and Vande Moere, 2017), or a blended model of public and stakeholder engagement, for instance by timing and personalisation of visit (Agostino, Arnaboldi, Lampis, 2020), but also by new participatory management strategies enabled by the digital transformation. This is imperative to assure really incisive and long-lasting innovative actions to create stable relationships between museums, their audience and community of stakeholders.

4   The role of design in building a cultural resilience

In this complex context it is crucial to recognize the relevant role that design plays. Design is, especially in Italy, fully acknowledged as a leading actor in the innovation of the CH sector and museum (Celaschi, Trocchianesi, 2004; Maffei, Parente, Villari, 2006; Irace et al. 2013; Spallazzo, 2012). The open ended concept of 'design cultures' makes design a plural discipline, which, in its emerging meanings, focuses on designing for a purpose, problems and challenges with which it is called to confront (Sanders, Stapper, 2008). Design for Cultural Heritage brings, based on multidisciplinarity and co-design, innovation in museums and cultural institutions in a groundbreaking, yet sustainable (culturally, socially and economically) way, in the so-called 'Culturally driven innovation'. The culturally driven innovation guided by design promotes a sustainable change towards creative practices based on CH, in which to involve, in dialogue with the safeguarding disciplines, the entire chain of stakeholders (institutions, policy makers, CCI), to discuss new policies and strategies for heritage, to deal with accessibility, authority of contents and IPR issues in the phygital age (Lupo, 2021). This approach is in line with the holistic vision of innovation in CH promoted by the H2020 conference "Innovation and Cultural Heritage'', held in Bruxelles in 2018: it suggests that different innovation layers (technological, social, policy, entrepreneurial, economic and methodological) need to be condensed in a holistic approach in which even digitization needs to be culture-driven instead of only technology-driven (Sonkoly, Vahtikari, 2018), acknowledging the ability of CH to facilitate social and economic development. The topic of design for CH is in fact strictly intertwined with the one of design for local development (Maffei, Villari, 2006) and design for territory (Villari, 2012; Parente, Sedini, 2019) as well as the concepts of development and innovation based on culture and CH (Jelinčić, 2017; Borowiecki, Forbes, Fresa, 2016).

In this respect, according with the widespread dimension and territorial diffusiveness of cultural heritage in Italy (Settis, 2002), a more design oriented vision of CH can be proposed by the concept of 'heritage continuum': a system that connects places, territories, collections of museums, archives,

online repositories and users in a fluid space between physical and virtual, ultimately providing an immersive mode of knowledge, production and experience. This continuum can be regarded both as a spatial system for connecting different forms, scales and contexts of heritage (both tangible and intangible) and a continuous circulation of cultural knowledge between institutions and people (Ozdil, 2014). Alongside authoritative and institutionally recognized forms, this continuum includes new forms of contemporary cultural production which can be defined as Contemporary Heritage (Battesti, 2012). The paradigm of smart heritage (Batchelor, Schnabel and Dudding, 2021), also emerged, thanks, but not only, to new technologies, to foster the 'intelligence' of the heritage in terms of augmented and extended experiences (Bekele et al. 2018), but activability and re-usability too.

Recently the creative orientation of national and international institutional and governmental policies on CH involves explicitly design. The launch of the EC call initiative on the "New European Bauhaus" is emblematic of establishing the role of design and co-design approaches as a lever of development and innovation. This scenario makes it clear that the design and creative approach towards CH is expressed through bottom-up processes and actions in which design competence is recognizable and codified, but is also promoted with a top-down approach, thanks to guidelines and institutional and governmental policies.

All these factors make spaces for a renovated, participatory design-driven approach for museums in the post-pandemic scenario[17].

5   Proposals for a design-driven participatory continuum of phygital proximity for museums

CH must be considered a lever for inclusion, cohesion, equity, wellbeing, social and economic development: the New European Agenda for Culture (EC 2018), the EU Work Plan for Culture 2019 (EC 2018) and the European Framework for Action on Cultural Heritage (EC 2019) give directions to strengthen its social and economic dimension (cultural based creativity, new professions, etc). But, in a scenario which witnesses both collective advanced digital literacy and digitization gaps, museums and cultural heritage sector organisations and enterprises need to better address the challenge towards stakeholder engagement and participatory management strategy led by the digital transformation in the post pandemic scenario. In fact, there is still a noticeable gap between policies and indications from CH organisations and their concrete translation and feasibility into real projects and applications by museums (the examples are often very specific and customised and lack scalability and replicability).

In this context, the concept of "proximity", that has recently emerged as a key issue for the post-covid recovery (Ramagosa, 2020; Manzini 2021), can be reshaped, in its meanings and forms, and adjusted, towards a blended way of phygital connection and closeness among museums and stakeholders, to boost an update model of participation.

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[17] Some examples of design contributions for the COVID-19 global emergency not in the CH sector have been reviewed in two special issues of the Strategic Design Research Journal, and they range from specific design responses to the ongoing crisis (from physical artefacts e.g. PPE, field hospitals, to digital solutions, e.g. apps to monitor the pandemic) to visions on the design processes to respond to the pandemic crisis, among which the need to reimagining space and place that well suit with the cultural sector. (lhttp://revistas.unisinos.br/index.php/sdrj/issue/view/872 and http://revistas.unisinos.br/index.php/sdrj/issue/view/884)

The phygital scenario is already a matter of discussion in museums: it is evident that for example material interaction (i.e interactive experience with CH by means of smart objects) that has been already fully explored and acknowledged to create a tangible experience with digital patrimony (Petrelli et al., 2013; Damala et al. 2016; Hornecker, Ciolfi, 2019, Hou et al.2022), needs to be re-defined and implemented to enable a real access, embodiment and human connection in the post-pandemic conditions (King et al., 2021). This hybrid materiality of the museum experience is addressing particularly the not neutrality of digital infrastructures to shape inclusionary or exclusionary practices (Galani, Kidd, 2020).

Anyway, to move this phygital proximity a step forward in the direction of enabling new modes of participation we need to apply it to the idea of museums as a cultural ecosystem. The concept of cultural ecosystems (Borin and Donato, 2015; Dameri and Demartini, 2020) refers to environments in which different actors (i.e., public and private organizations, associations, communities, artists, creative people, citizens) interact. This concept is particularly relevant for museums that are locally acting, e.g. territorial or community museums (De Varine, 1996), but is rather different from the traditional Eco-museums. The meaning of proximity, in this vision, moves from simply close-distance to a deeper connection with one's human and ecological community (Rantala et al., 2020), encompassing from a closeness and familiarity due to common roots, to a sense of fascination and curiosity, otherness and (cultural) novelty (Salmela et al., 2021): CH is made accessible and reachable by digital tools in a physical environment by phygital experiences (Ballina, Valdes, Del Valle, 2019).

For a museum ecosystem therefore, proximity refers to the phygital closeness and impact of all the museum stakeholders in the museum surroundings, based on a deep systemic connection in which cultural and technological factors are contextually negotiated. As a result a participatory continuum happens and traces back all the museum value chain, up to a shared management level among all the ecosystem stakeholders. In this fluid scenario the roles, competences and modes of collaborations among the different actors should overcome the conventional participatory rethorics (institutional/top-down, community based/bottom-up) for a more open heritage approach, within the values and constraints of the ecosystem itself, which should nurture with mutual benefits its virtuous and innovative constellation of activities and and actors.

We consider museum ecosystems a diffuse network of transformative cultural experiences, in which transformative refers both to the capacity of the museum to adapt and reorganise itself according to renovated needs (Nielsen, 2014; Bull, 2020), and to the mission to empower citizen transformation addressing socially relevant issues, i.e in sustainability (Museum Association, 2020; American Alliance of Museum, 2013) by new functions. Both the objectives are related to the recent re-definition by ICOM of museums, and the blurring of the boundaries between museums and other public service agencies (Gurian, 2006) rescinding the traditional notions of collecting, preserving, and protecting in favour of gathering, stewarding, and conversing (Matar, 2015). Transformative museum ecosystems can be considered in this frame institutions of soft power, in which influence is a key feature for persuasion, attraction and aspiration (Lord, Blankenberg, 2015) and therefore to carefully address participation by removing the dominant stereotyped discourses.

A practical application can be to make museum ecosystem providers of innovative cultural services of proximity, based on new inclusive and participative organisational models, that is designing the commitment of the audience and of the museum stakeholders in the realisation of the service, with

the aim of making happen a transformative experience. New organisational models are needed for shaping similar services in a collaborative commitment, rethinking both the spatial and the temporal dimension and the museums competences and professions, in order to engage, enable and impact on the capacity of its community of stakeholders as creators. Key areas of intervention can be re-use of museums' collections and advanced capacity in digital literacy, moving the co-creation from the end-user level to the organisational and management level; this in order to address the whole museums value chain (Porter, 2006) especially the initial stages of the chain, according to the foreseen digital strategy for museums (Freeman et al. 2016).

6   Conclusions

In this paper we wanted to discuss the rhetoric of participatory paradigms in CH, proposing a phygital participatory continuum of proximity for museums to address the participatory discourse with a critical vision. We emphasised how an ecosystem thinking about museums, in which cultural and technological factors are contextually negotiated, can offer a more transformative and open heritage approach in terms of co-creation along the whole value creation chain, tracing back new collaborative modes of participation at a shared management level. This approach, that seems apparently granted and even not too original, is in reality often disregarded (collaborative models are rhetorically and promotionally offered mainly at the end-user side of the museum value chain) and here therefore lies the importance of the discussion provided by this paper.

Pursuing phygital proximity among players belonging to different cultural and creative sectors (Sacco, 2018), the museum ecosystem aims at strong levels of cultural participation capability and moreover, at building among stakeholders a 'participatory continuum' between both primary activities and support activities of the museum value chain (Porter, 2006), to transform it into a virtuous value constellation and ecology of stakeholders. Many institutional and moreover cultural reasons make complex and somehow difficult to shift from a linear and top down approach towards controlled participation, to a networked dimension of leadership and capabilities of effective co-creation: and the issue about how to overcome these barriers needs further exploration.

Finally, since this paper is based primarily on literature review the contribution is mainly theoretical. Next study will imply a practical experimentation of the validity of the proposal in a real project that is currently under application for funding. We also observed principally the Italian context in which the concept of museum ecosystem assumes a peculiar quality strictly connected with the diffusivity of cultural heritage and small local museums in the territory. So scalability and replicability in different contexts need to be explored further.

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