

# Ongoing adaptive reuse: patterns of heritage resilience before and after COVID-19

Ongoing  
adaptive reuse

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## Abstract

**Purpose** – The paper aims to assess the impact and responses to coronavirus disease 2019 in six European heritage labs (Horizon 2020 Framework Programme) selected for their adaptive heritage re-use practices based on participation, self-organisation and self-management. As they are naturally oriented towards building resilient urban systems, the hypothesis is that the co-production of cultural values and places promoted by these projects could create the conditions for equitable perspectives of resilience in the normality of contemporary urban life.

**Design/methodology/approach** – The paper draws on data collected through a survey of six European Living Labs between January and May 2021. The survey results are framed by a literature review that defines adaptive reuse in terms of resilience. The five resilience characteristics described by Judith Rodin (awareness, diversification, integration, self-regulation and adaptability) are used to navigate the literature and organise the survey results.

**Findings** – Combining survey results and insights from the literature, some modes and elements (territorial, social, financial) are presented that contribute to creating the conditions for resilience through adaptive heritage reuse according to community-based approaches. Without claiming to be exhaustive, this evidence should be considered in the design phase of resilience programmes, policies or projects related to cultural heritage.

**Originality/value** – The concepts of community and resilience are becoming increasingly important in the field of cultural heritage. This paper makes a creative contribution to the ongoing debate by presenting and evaluating the contribution of adaptive reuse practices to resilience building.

**Keywords** Cultural heritage, Adaptive reuse, Resilience, Community, Sustainable development, Adaptation, Urban practices, Heritage management

**Paper type** Research paper

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## 1. Introduction

In the last two years, several studies have shown that the coronavirus disease 2019 (COVID-19) pandemic has profoundly impacted all cultural heritage areas: from tourism to research and from conservation and protection to education (Europa Nostra, 2020). Cultural heritage development and management depend not only on (cultural) interest but also on the immersive presence of the public. Since the discovery of the SARS-CoV-2 virus (2020) as the cause of the COVID-19 infectious disease, literature on the impact of the pandemic on cultural heritage has increased. This literature focuses on how COVID-related restrictions have had both negative and positive effects on museum activities (Vayanou *et al.*, 2020, p. 19), events or festivals (Parker and Spennemann, 2021), socio-economic issues related to cultural heritage (Gupta *et al.*, 2022) and realisation of cultural heritage sites (Sofaer *et al.*, 2021). While most scholarly studies describe the impact of the pandemic on institutionalised heritage environments, little attention has been paid to the impact of COVID-19 on bottom-up



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heritage initiatives, i.e. ongoing, experimental cultural practices that have emerged from complex contexts and interactions between people and places.

Over the last century, the “cultural device” has undoubtedly taken on a central role in urban, social and economic changes. Since the 2008 economic crisis, the co-production of the built environment has gained considerable momentum (Bishop and Williams, 2012; Madanipour, 2017), increasingly encouraging public participation. However, in critical historical conjunctions such as the outbreak of the COVID-19 pandemic, these elements tend to be quickly overshadowed. Despite the real potential of socio-cultural tools for risk prevention and management, culture and cultural heritage continue to be marginalised as forms of resilience.

This article helps to contrast this reality by highlighting experimental case studies set within the Faro framework, i.e. heritage initiatives built on community-based approaches. It is clear that the presence of strong communities actively engaged in cultural heritage makes the selected case studies a kind of “resilience hub”. However, this paper hypothesises that a more resilient attitude in urban planning for risk preparedness and post-disaster recovery could be achieved by mobilising the *living process* of adaptive heritage reuse (AHR).

Over the last decade, resilience has played a significant role in the planning debate and has helped guide the innovation of planning theory and practice. However, Davoudi (2018) points out that the ambiguity of this term necessitates a struggle for *just perspectives* on resilience, which lie in the intention to search for «the conditions that necessitate resilient individuals, communities and societies» (Davoudi, 2018). Building on a particular segment of the AHR, namely practices that involve participatory, self-organised and self-managed processes, this paper aims to contribute to this endeavour by shedding light on the modalities and characteristics of reuse that frame resilience in the normality of contemporary urban conditions. From this perspective, resilience is thus a question of the culture of the (construction) project and, more generally, of the city itself.

To this end, the study conducts an initial assessment of the impact of COVID-19 on some European Living Labs proposed under the OpenHeritage project (Horizon 2020 Framework Programme) [1] as “Cooperative Heritage Labs” (CHL). The study explores, gathers and promotes community-led AHR through processes applied in different heritage contexts (rural, archaeological, industrial, etc.) and with different objectives (affordable housing and workplace, social and economic innovation, etc.). For this article, then, the pandemic has provided an opportunity to highlight at least some of the conditions that were most conducive to the prompt response of the six initiatives under the impact of the pandemic, allowing them to continue to thrive. Considering the CHL survey results, this paper also reviews the actual tightness of the management, organisational, financial and social variables proposed by the project itself.

The paper is organised into three main parts. Part 2 introduces the methodology by outlining the case studies and providing insight into their resilience characteristics. Drawing on the framework proposed by Judith Rodin in *The Resilience Dividend: Being Strong in a World Where Things Go Wrong* (Rodin, 2014), Part 3 presents a literature review that defines adaptive reuse in terms of resilience. The proposed postulate is corroborated by an open survey conducted as part of our current research (Part 4) without claiming to be exhaustive. The concluding remarks (para 5) describe some resilience patterns that could orient heritage planning and policy towards more balanced, non-emergency territorial development.

## 2. Methodology

### 2.1 Literature review and project description

This paper begins with a literature review to identify the most evident resilience aspects of AHR processes. To frame the discourse, we navigate the literature (para 3) through the five resilience characteristics defined by Rodin (2014) in the context of climate change: awareness, diversification, integration, self-regulation and adaptability [2].

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An attempt is thus made to apply the author's framework to complex spatial systems undergoing renewal based on participatory adaptive reuse processes. Recent studies have complicated the concept of adaptive reuse by showing a circularity that leads to human-centred perspectives based on co-evolutionary approaches of both people and heritage through the non-linear process of adaptation and transformation (Girard, 2020; van Knippenberg *et al.*, 2021). Following this holistic and shifting stance, Rodin's characteristics will help to theoretically present the inner features of adaptive reuse practices (para 3) and match them with the practical experiences gained in case studies (para 4.1 and Table 5) to identify tools and modes of planning for *urban* resilience.

As previously mentioned, OpenHeritage project situates the study within the Faro framework, the framework in which cultural heritage is considered according to the close connections of values and meanings recognised by communities. The project's overall aim is to develop an inclusive governance model for AHR by creating a set of tools to support long-term community engagement processes through an open-ended adaptation process (initiated, organised, used and managed by "active" subjects).

To this end, six CHLs were launched and developed throughout the four-year research project to test AHR strategies and tactics implemented by local communities. In line with the experimental nature of any laboratory, the CHLs are self-organised units that draw on 16 observatory cases (OCs) selected in diverse European contexts [3]. The OCs and CHLs have in common their open and innovative reuse methods, be it social, urban, architectural or economic. Each site has focused on building public-private-people partnerships and expanding territorial relationships to share the emerging benefits of heritage in the region. This study takes the six Heritage Labs, assuming pandemic shock, as another "crash test" that needs to be carefully examined to understand how and by what means community-led AHR practices contribute to resilience building.

## 2.2 Case studies and resilience patterns

Before we turn to the "inner" resilient features of the Labs, a basic description of the CHLs is necessary in order to present both the contexts of analysis and the fields of action.

The *Sunderland Lab* (UK) is a space for socio-cultural activities that is part of a larger project to rehabilitate three historic buildings on the edge of the city centre, contributing to the repopulation of this industrial city.

The *ACT Collaboratory* in Rome (IT) focuses on the archaeological park of Centocelle to initiate broad territorial connections with neighbouring districts. In particular, it aims to positively influence the socio-economic fabric of the area, which is one of the most disadvantaged in Rome.

The same municipality promotes the *Lisbon Lab* (PT) as part of one of the city's 67 priority intervention areas. It is located in a 17th-century building, listed as a historical monument and highly disconnected from the rest of the neighbourhood.

The *Pomáz Lab* (HU) is an archaeological site 20 km from Budapest, which is to be integrated into the territorial development of the region. As it is a privately-owned site, the Lab aims to expand the current coalition and define economically and culturally sustainable development patterns.

The *Hof Prädikow Lab* (DE) focuses on a rural Berlin site that is redeveloped through a cooperative housing project that integrates cultural and production purposes. The re-functionalisation of the old complex, which served mainly for agriculture in the last century, goes hand in hand with the idea of revitalising the small village by using local heritage values, stories and memories.

Finally, the *Praga Lab* is located in the district of the same name, which is strongly influenced by Warsaw's recent industrial past. It sheds light on Warsaw's complex

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environment and promotes actions to network and further develop the many bottom-up experiences of re-use that characterise this area [4].

Although the CHL's Local Action Plans included risk assessment (Szemző and Tönkö, 2019) and resilience as part of the normative baseline for AHR assessment (Fava *et al.*, 2021), it must be emphasised that CHLs lack explicit strategies and tools oriented towards community resilience. Nevertheless, features of resilience can be implicitly identified in the methodology used and more generally in the pillars of the project, i.e. community/stakeholders, resources and regional integration. Diversity and self-regulation are embedded in the development strategies adopted for both sites and communities. Awareness is firmly woven into the community building processes and, most importantly, the ongoing dialogue between stakeholders. In other words, the elements of resilience lie in the progressive approach itself, which is based on doing, assessing, adapting and doing again. As documented in the CHLs interim reports, managing change is a common feature of sites working experimentally and closely with communities. Adjustments and realignments have taken place despite external (pandemic) shocks [5].

### *2.3 Survey and organisation of results*

Data collection was conducted between January and May 2021 through a two-stage survey completed by CHL leaders. The survey consisted of four open-ended questions (see Tables 1–4). The intention was to provide a qualitative analysis (open-ended survey) on how the COVID-19 mitigation and risk-reduction regulations impacted the lab's activities and, consequently, the new heritage-making and management challenges (questions #1 and #2). On the other hand, the research aims to shed light on the “proactive” features that may have emerged during the pandemic. The survey proposed reporting on new forms of co-creation and solidarity to detect these aspects and ask how they affected the Labs' environment (question #3). Finally, it focused on the elements of resilience that occur in response to the pandemic (question #4).

The data collected was analysed and processed to produce a list of recurring responses to each question to make them comparable. These were then sorted into four tables (para 4.1 and see Tables 1–4), reviewed and operationalised (closed survey) by the team leaders with the options “Yes” (Y) or “No” (N). The results were finally summed to assess the significance of the individual statements.

As mentioned above, the interpretation of the data is based on Rodin's framework. The more obvious (or emerging) correlations between resilience characteristics and CHL responses to the COVID-19 crisis were summarised in a final table (see Table 5). Finally, a more detailed argumentation (para 4.2) is presented regarding the CHLs (Rome, Lisbon and Pomáz Labs) that responded more creatively to the pandemic and gave social and territorial management innovations.

## **3. Literature review**

Since the mid-20th century, the protection of cultural heritage from the effects of natural or manmade disasters has increasingly moved up the international agenda. Perceptions of risk and vulnerability are inextricably intertwined with creating cultural heritage values themselves, explaining their problematic relationships with loss and change (Holtorf, 2018; DeSilvey and Harrison, 2020). However, only recently, cultural and social factors related to heritage have taken an important place in the policy debate on resilience (Jigyasu, 2013).

In 2015, the Sendai Framework set out the framework for disaster risk reduction for 2015–2030. By emphasising the critical role of culture, traditional knowledge and heritage practices in risk prevention, mitigation and post-disaster recovery (UNISDR, 2015), the opportunity was

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created to better integrate cultural heritage into emergency planning and resilience building (Macalister, 2015) and to strengthen combatting climate change and future-making (Stegmeijer and Veldpaus, 2021). On the other hand, *The Hangzhou Declaration: Placing Culture at the Heart of Sustainable Development Policies* (UNESCO, 2013) emphasises the centrality of local culture and cultural heritage in defining new approaches to development that focus on human well-being and a more harmonious relationship between people and the environment.

This brings us to shed light on the connection between cultural heritage and community. As Fabbri *et al.* (2020) note, resilience is built at the community level. Therefore, the definition of “heritage community” introduced by the *Faro Convention on the Value of Cultural Heritage for Society* (Council of Europe, 2005) has opened the way for new perspectives on building resilience based on heritage-driven practices. The authors argue that the concept of community heritage resilience (CHR) integrates community resilience and heritage community characteristics to create circular development pathways for larger areas.

As is well known, the Faro Convention made an important contribution to renewing the debate on cultural heritage. The Convention highlighted the importance of what heritage “does” for society by recognising the right of groups and individuals actively participate in and benefit from cultural heritage processes.

In terms of community engagement, the AHR has recently gained increasing attention at the European level. Along with its contribution to the creation of sustainable (Conejos *et al.*, 2012; Yung and Chan, 2012; Othman and Elsaay, 2018) and circular urban patterns [6], the success of this practice seems to lie in its ability to accommodate creative forms of change while creating regenerative effects in territories (Asproni *et al.*, 2020).

Adaptability is one of the characteristics of a resilient system or entity that finds a direct counterpart correspondence in the concept of adaptive reuse, an old constructive idea in constant evolution (Wong, 2017) that ultimately expresses the ability to introduce new uses and functions into existing buildings and structures (Plevoets and Van Cleempoel, 2013) «by a minimum effort law» (Robiglio, 2017, p. 194).

Nowadays, AHR is increasingly seen within the idea of progressive adaptation, which relies on a more active attitude of “doing/undoing” the built environment (Stone, 2020). Thus, while the environmental resilience of built assets is related to parameters that enable long-term perspectives of use (Bullen and Love, 2011), the creativity of adaptive forms of reuse is better seen in the evolutionary dimension that emerges from the interspecific dialogue between (living) agents (Coccia, 2020).

This parallel also allows us to describe the symbiotic dimension of AHR and thus express the resilient character of this practice. van Knippenberg (2019) goes beyond traditional approaches to heritage, claiming that a «more precious understanding of community-heritage engagement» can be understood within a co-evolutionary heritage approach, namely within a framework that conceives heritage as a performative, open-ended and lived experience. The author argues that adaptive reuse creates a new complexity of cultural heritage linked to spatial planning and policy issues and different actors and stakeholders, both communities and individuals. In this view, adaptive reuse helps to integrate heritage more fully into the urban landscape (Rodgers and Bandarin, 2019) and to “augment” the interconnectedness of development and management strategies.

AHR is thus a cohesive social and territorial practice. As Pendlebury *et al.* (2020) note, integration was a constituent feature of the field long before the 2008 crash. The way adaptive reuse is placed at the heart of the development of the so-called “assemblage of conservation-planning practice” highlights the dynamic and open character of AHR, which brings benefits to the economy and regeneration (Pendlebury *et al.*, 2020). Worth mentioning here is that the authors present the openness of heritage-related assemblages as a critical feature for diversification. However, according to Plevoets and Van Cleempoel, the plurality of contemporary AHR is also reflected in its transdisciplinarity, which makes AHR a novel

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discipline: a practice «working with existing building as an emerging field that intersects the more established discipline of architecture, interior architecture, conservation, engineering and planning» (Plevoets and Van Cleempoel, 2019, p. 23). Since the actual capacity of resilience is to deal with complexity, Clarke *et al.* (2020) see this characteristic as the nexus between the two fields, so the authors assume that they can work together towards smart [7] and sustainable cities.

The flexibility of adaptive approaches thus points to a sort of “adaptiveness” that can be understood not only in terms of *new uses for old buildings* (Cantacuzino, 1975) but also in terms of an awareness of and negotiation between different interests and values (e.g. economic, environmental, social and cultural). Although cultural heritage *per se* is the result of a selective (political) process, the adaptation of heritage assets is a critical process that requires decisions about what to preserve or discard in terms of materials and narratives (Pendlebury *et al.*, 2018).

This has enormous implications for how an asset or territory is perceived and understood and raises ethical questions. Pendlebury *et al.* (2018) note that the process of adaptation of places with a complicated past (e.g. slaughterhouse, asylum and prison) provides an opportunity for a reflexive experience that can serve new social functions. According to Pendlebury and Wang, what distinguishes “adaptive reuse” from a more practical “reuse” or “recycling” of buildings, is a «communicative intent and a self-conscious valuation of the host building that, once acknowledged, requires an explicit response» [8]. Following Plevoets and Van Cleempoel (2019), this autonomy attributes AHR to a living dynamic that increasingly permeates the contemporary cityscape through vernacular forms of AHR, i.e. inappropriate, self-organised and self-regulated initiatives increasingly embedded in long-term (countercultural) development trajectories and planning practices (Cizler and Soriani, 2019).

## 4. Data analysis

### 4.1 Results overview

As explained in the methodology section, the interpretation of the data is based on the similarities and the disparities that emerged in the different CHLs, taking into account more recurring responses.

First, it can be noted that the impact of COVID-19 varied widely in terms of CHL expectations and objectives (e.g. management, finances and construction) (Szenzó and Tónkó, 2020). Nevertheless, the implications and challenges of the pandemic are little different from the results obtained through similar heritage assessments. Perhaps unsurprisingly for CHLs, the devastation wrought by the pandemic has profoundly affected tangible, intangible and community elements. Although they have continued with online activities, the forced disruption of in-person meetings as part of the participatory process has significantly altered the pace of everyday activities. The delay or reduction of construction/renovation work affected four out of five labs [9]. What stood out most, however, is undoubtedly the intangible dimension. Besides the “internal” (management and design) activities, external factors, such as the cancellation of events and site visits, have also changed the community of the labs and the dissemination of values and knowledge about the (local) cultural heritage (see Table 1).

Consequently, the main challenges (five out of six labs) are the need to maintain the interest of the involved/new communities and redesign community-based activities. Other common and problematic aspects related to organisation and management. These include dealing with the reduced pace of work activity and how to improve the physical and cultural accessibility of the sites/buildings (this applies to five out of six labs and four out of six labs, respectively. See Table 2).

However, more specific results emerge when we ask how the CHLs responded to the current challenges. As expected, the formalisation of new virtual public spaces occurred in all the contexts studied. For most of them, the response to social distancing and restriction meant

1. Which kind of impact have norms and prescriptions for COVID-19 containment and risk mitigation had in the CHL's activities?

	Prädikow	Sunderland	Rome	Pomáz	Lisbon	Warsaw*	Assessment
1.1. Forced stop of in-person meetings to orient the CHL activities	Y	Y	Y	Y	Y	Y	6/6
1.2. Switching on virtual participatory forms	Y	Y	Y	Y	Y	Y	6/6
1.3. Building/renovation activities are affected (e.g. delayed, reduced)	N	Y	Y	Y	Y	N/A	4/5
1.4. Cancellation of events and site visits with a strong impact on CHL communities	Y	Y	Y	Y	Y	Y	6/6

**Table 1.**  
Question #1 results

2. What are the major challenges in the heritage making and management introduced with the outbreak? In your opinion, how will they reorient community-led adaptive heritage reuse in the short and long term?

	Prädikow	Sunderland	Rome	Pomáz	Lisbon	Warsaw*	Assessment
2.1. How to communicate efficiently with the "heritage world" (e.g. local authority, experts, citizens, etc.)	Y	N	N	N	N	N	1/6
2.2. How to deal with the reduced pace of the work activity	N	Y	Y	Y	Y	Y	5/6
2.3. How to reshaping activities based on community involvement	Y	Y	Y	Y	Y	N	5/6
2.4. How to increase physical and cultural accessibility of sites/buildings	N	Y	Y	Y	Y	N	4/6
2.5. How to keep the interest of involved/new communities high	N	Y	Y	Y	Y	Y	5/6

**Table 2.**  
Question #2 results

a new interest in social values and spaces, which in some cases found its counterpart in more available spaces to be used collaboratively (Lisbon and Pomáz). Furthermore, surveys in Rome, Lisbon and Pomáz show a positive impact on cooperation between institutions and local communities (Table 3). Interestingly, as shown below, the first innovations have already appeared in the same cities as a response to the Coronavirus crisis (see para 4.2).

Nonetheless, the tendency to keep personal commitments and promises in the project (true in five out of six cases) is prevalent. Regarding resilience and preparedness, most CHLs highlight the benefits of (1) asset management based on risk distribution among different stakeholders and community members, (2) collective ownership models (e.g. heritable building right, trust ownership), (3) consideration of worst-case scenarios since the design phase and (4) integration of sectoral policy (Table 4). In this case, the ability to adjust to new conditions is also supported by features of flexibility expressed in budget allocation, activities and programming.

3. *Co-creation and solidarity are pivotal aspects in community-led adaptive reuse. Can you mention new forms of solidarity, new common spaces emerging from the pandemic? If yes, how do they contribute in supporting/improving their surrounding territory?*

	Prädikow	Sunderland	Rome	Pomáz	Lisbon	Warsaw*	Assessment
3.1. Creation of a new common space in the virtual world	Y	Y	Y	Y	Y	Y	6/6
3.2. Tendency to keep personal commitment and promises in the project	Y	Y	N	Y	Y	Y	5/6
3.3. Increased interest in social values and spaces	N	Y	Y	Y	Y	N	4/6
3.4. Increased collaboration between institutions and local communities	N	N	Y	Y	Y	N	3/6
3.5. Increased availability of spaces to be used in a collaborative way	N	N	N	Y	Y	N	2/6

**Table 3.**  
Question #3 results

Finally, if we compare the survey results with the resilience characteristics proposed by Rodin (awareness, diversification, integration, self-regulation and adaptability), we can see the first similarities (Table 5). In addition to the elements described above, regular reporting, a European obligation, is an awareness-raising tool that positively reinforces adaptive reuse’s inner reflexive characteristic.

4. *Risk, resilience and preparedness have a long history and increasingly important role in the heritage protection and management. Which forms of resilience have CHLs experienced while facing COVID-19 but also in a pre-pandemic scenario?*

	Prädikow	Sunderland	Rome	Pomáz	Lisbon	Warsaw*	Assessment
4.1. Asset management strategy based on particular ownership models (collective, third sectors, trust, etc.)	Y	Y	N	N	N	N	2/6
4.2. Asset management based on risk distribution among different stakeholders and/or community members	Y	N	Y	N	Y	N	3/6
4.3. Flexibility in budget allocation	N	Y	Y	N	N	Y	3/6
4.4. Consideration of worst scenarios since the design phase	N	Y	Y	Y	N	Y	4/6
4.5. Sectorial policy integration	Y	N	Y	N	Y	N	3/6

**Note(s):** \*Considering the complex framework within which the Praga Lab operates, some specifications are required. About questions: No. 1, entry 1.3: Praga Lab does not carry out any renovations work; No. 3, entry 3.3: authors note that a strong and steady interest characterized the lab pre and post COVID-19; No. 4, entry 4.1: Praga Lab mainly works to connect heritage productive activities and sites in the district, meaning heritage assets are owned by different (public and private) entities. However, the selected sites do not present particular ownership models

**Table 4.**  
Question #4 results

	Awareness	Diversification	Integration	Self-regulation	Adaptability
First empiric data	<ul style="list-style-type: none"> <li>- Consideration of worst-case scenarios since the design phase</li> <li>- Periodical reporting activity (EU obligation)</li> </ul>	<ul style="list-style-type: none"> <li>- Stakeholders and community members</li> <li>- Asset management based on risk distribution among different stakeholders and/or community members</li> </ul>	<ul style="list-style-type: none"> <li>- Community, resource and regional integration (project pillars)</li> <li>- Sectorial policy integration</li> </ul>	<ul style="list-style-type: none"> <li>- Flexibility in budget allocation</li> <li>- Flexibility in kind of activities and programming</li> </ul>	<ul style="list-style-type: none"> <li>- Asset management strategy based on particular ownership models (collective, third sectors, trust, etc.)</li> <li>- Asset management based on risk distribution among different stakeholders and/or community members</li> </ul>

Ongoing adaptive reuse

**Table 5.**  
Resilience characteristics and data matching

4.2 Innovations and resilience dividend

Some of the case studies analysed have reported other experiences worth exploring in more detail. As mentioned earlier, new organisational-spatial configurations emerged in Rome, Lisbon and Pomáz to respond to the pandemic. These findings are recognised as the first realisation of what Rodin calls the “resilience dividend”, namely «the capacity to create and take advantage of new personal, social and economic opportunities» (2014, p. 25).

In Rome, the discussion on how to face the critical circumstances imposed by the pandemic, i.e. sharp decrease in the district’s cultural life, has led to the implementation of a digital community hub managed by the lab cooperative and its members with the support of the Co-City coalition [10]. The project proposal provided local communities with a community platform and a virtual space for a broader audience. For the ACT Collaboratory [11], indeed, this space’s functioning aims to offer emerging technologies, digital tools. and community services to provide further innovative services for the area development (Figure 1).

A platform is also at the core of the city of Lisbon, which supports a territorial networking activity of social-oriented projects funded by BIP/ZIP programmes [12]. Urban Forum (Figure 2) is thus a tool created by the City Council to connect the needs and opportunities of the “priority neighbourhood” of the city, among which Marvila Velha, where the Lisbon Lab is located [13].

This initiative aims to provide a fast and effective response to the pandemic, leveraging on projects previously “sealed” within a “collaborative pact” and thus capable of providing territorial cooperation and synergy.

As in Lisbon, the improvements in the Pomáz Lab cannot be adequately assessed without considering the growing interest of local authorities in civic initiatives [14]. For the Lab, introducing online heritage-related activities meant developing and implementing the Local Heritage Inventory (LHI) project, initiated by public authority leaders and facilitated by the Lab partners in cooperation with the Friends of Pomáz Association. LHI is a crowdsourcing project that aims to «define what the local community sees as their heritage, both tangible and



THE CO-ROMA PLATFORM

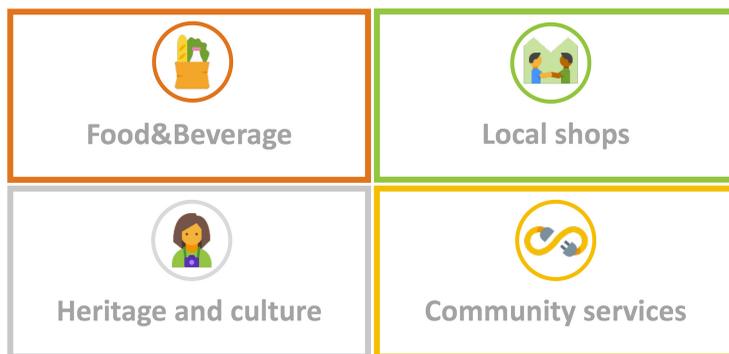


Figure 1. Draft scheme of the digital community platform

Source(s): Credits: Alessandro Piperno



Source(s): Credits: Municipality of Lisbon

**Figure 2.**  
Billboard for the  
Campaign *Physical  
isolation is NOT social  
isolation*, BIP/ZIP  
Network solidary  
response to COVID-19

intangible» [15]. In this way, the project aims to initiate a discourse on local heritage and its valorisation/development as part of the social and economic life of the community (Figure 3).

## 5. Conclusion: Towards resilient patterns

This paper contributes to heritage studies, highlighting resilience-related aspects connected to adaptive reuse practices that may be considered in policy and planning for preventive urbanism and conservation. By highlighting some resilience modes and characteristics, we argue that the AHR could strengthen its already growing importance in the socio-ecological planning of the territory due to its intrinsic ability to contribute to disaster risk reduction strategies while informing the culture of the project and the city.

From a theoretical point of view, resilience in AHR can be synthetically recognised in the ability to: constantly and creatively adapt heritage use and programmes over time, considering emerging needs and actors (adaptability); connect different stakeholders, values and approaches coming from diverse disciplines (diversification); initiate dialogue between additional planning and policy sectors (integration); having and creating a deep knowledge of



**Figure 3.** Online crowdsourcing project to create a LHI of Pomáz

**Source(s):** Credits: Kyra Lyublyanovics

the past, memories and wounds that characterise heritage (awareness); living the transformation through self-directed processes that continuously (re)consider and (re)align the needs and resources of the people in the city (self-regulation).

This paper measures the impact of the COVID-19 pandemic on six European Living Labs. It presents how ongoing AHR practices have responded to this stressor and continued to thrive and which system elements have most supported this process. Undoubtedly, the cases analysed are a particular cause for investigation. Moreover, the results of the CHL survey are certainly partial, and further research is necessary to gain a deeper understanding of the resilience elements and the impact on readiness in the AHR field. However, they do show some practical similarities with Rodin’s resilience characteristics, which mainly include the multiplication of relational possibilities in all sectors of urban systems analysed: territorial (e.g. ownership, policy), community (e.g. management, spatial arrangements/activities) and financial (e.g. budget flexibility) (see above Table 5).

These aspects should be considered in the design phase of resilience programmes, policies or projects related to cultural heritage. The examples presented in Rome, Lisbon and Pomáz

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have confirmed that creative and innovative approaches can flourish in such contexts, fulfilling Rodin's postulate of the "resilience dividend". In this way, various networking activities emerge that reach multiple territorial areas and scales. Although it is too early to assess the actual impact of these innovations, the implementation of service, participatory or cooperative infrastructures could trigger a more significant territorial impact and influence urban resilience through culture.

### 5.1 Consent

Written informed consent for publication of the participants details and/or their images was obtained from the participants.

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### Notes

1. See the project website: <https://openheritage.eu/>.
2. According to Rodin, for an entity being resilient means that it: «has the knowledge of its strengths and assets, liabilities and vulnerabilities, and the threats and risks it faces [...] [it] includes situational awareness» (aware); «has different sources of capacity [...] [it] can draw upon a range of capabilities, ideas, information sources, technical elements, people or groups» (diverse); «has coordination of function and action across systems» (integrated); «can regulate itself in a way that enable it with anomalous situations [...] it can fail safely» (self-regulating); «has the capacity to adjust to changing

circumstances by developing new plans, taking new actions or modifying behaviours. The entity is flexible [...]» (adaptive). See more in Rodin's description (Rodin, 2014, p. 42).

3. For a detailed description of Observatory Cases, see the section "Practices" on the website: <https://openheritage.eu/practices/>.
4. For a detailed description of all labs see the section "Heritage Labs" on OpenHeritage website: <https://openheritage.eu/heritage-labs/>.
5. «Overall, the assessment of the first period also shows that the Labs have worked substantially to achieve their major objectives, and have been really successful in reaching out, establishing their local communities. They have also managed to carry out focused campaigns for financial or for community building purposes. At the same time, they are lagging behind their original schedule, not only because of the COVID-19 epidemic, but because realizing plans can be difficult, unexpected obstacles happen with the most precise planning.» (Szemző and Tönkö, 2020).
6. See CLIC project: <https://www.clicproject.eu/>.
7. It needs to be noticed that for the authors "smartness" is deeply grounded in spatial justice, accessibility and participation more than in high-tech solutions.
8. The contribution by Pendlebury and Wang, *What distinguishes "adaptive reuse" from "reuse"?* was presented in the session The ethics and aesthetics of adaptive reuse, curated by Federica Fava and Loes Veldpaus at the 5th ACHS Biennial Conference, 26–30 August 2020. See the Book of abstract: <https://achs2020london.com/book-of-abstracts/>.
9. This entry can be assessed in the case Praga Lab. See Table 1.
10. For more details see: [https://co-roma.it/?page\\_id=3989](https://co-roma.it/?page_id=3989) or on the OpenHeritage website.
11. See the project website: <https://co-roma.openheritage.eu/>.
12. BIP/ZIP is a program launched for the first time in 2010 by the Lisbon Municipality. Since then, it has been funding projects in priority neighborhood to promote strategic partnership between institutions and local stakeholders. See more in Patti D. 2017, "BIP/ZIP – Promoting partnerships in sensitive urban areas", online at: <https://cooperativecity.org/2017/05/07/bipzip/>. Accessed [March 2021].
13. The Municipality of Lisbon is the main initiator of the Lab and one of the OpenHeritage partner as well.
14. As Dóra Mérai states in the survey: «before 2020 the local municipality was not willing to cooperate with the civic initiatives at all, but the local elections in 2019 autumn were won by a group set up by local civic activists. Since then, local NGOs and civic initiatives became more active aiming to increase the quality of life in the town and the area around which also involves the field of heritage.»
15. As reported by Dóra Mérai in the survey.

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