

Fragility and Antifragility in Cities and Regions

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Fragility and Antifragility in Cities and Regions

Space, Uncertainty and Inequality

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9. Antifragile strategies for abandoned heritage: new approaches and a dialogue between humanism and technique

Annunziata Maria Oteri

9.1 INTRODUCTION: FRAGILITY AS OPPORTUNITY

This chapter starts from the idea that fragility¹ is an intrinsic characteristic of humans, objects and, on a larger scale, buildings, cities and territories. According to psychologists, fragility is our destiny from a psychological and phenomenological perspective (Borgna 2014, pp. 8, 99). Like vulnerability, sensibility and hope, it is not a pathology but an ordinary expression of human life. Fragility forces one to face the passing of time and caducity; hence it is a continuous challenge towards the supposed certainties of life, an invitation to transform ourselves, abandoning our reassuring everyday life. Of course, given some specific external conditions, fragility can augment other adverse effects, such as anxiety, fears and stress, crossing the border of ‘normality’ and overrunning the field of pathology.

With a rather simplistic transfer, the reasoning can be extended from humans to objects in the sense expressed by Remo Bodei: not the simple matter, but something that includes strong connections with people and the environment (Bodei 2011, p. 13). Suppose one considers fragility as one of the many characteristics of objects, including architectural and urban heritage. In this case, fragility is simultaneously a value (an opportunity to give things new significance instead of thinking of them as obsolete) and a weakness (fragility can increase vulnerability, disaffection, even abandonment). The balance between

¹ The meaning of ‘fragility’ and ‘antifragility’ related to abandoned architectural heritage will not be defined in the following pages as this is not the purpose of the chapter. For definitions and related concepts clarified at a general level, see Chiffi and Curci (2020).

the two meanings mainly depends on the relationship with the context, as fragility, for both humans and objects, is amplified by indifference, intolerance, distance and forgetfulness. In this ambivalence, fragility and antifragility are the two opposite faces of the same coin.

In the case of built heritage at risk of abandonment, which is the focus of this chapter, it means that antifragile strategies should act on the exact characteristics of the object that, in other conditions, could determine fragility. It means – and this is not easy – accepting fragility and its related complexities. For example, abandonment aggravates the fragility of historical buildings, but new uses can increase their fragility too. This could happen when the new use is not compatible with the characteristics and values of the structure (physical and cultural compatibility), and/or with the requirements of the local community (socio-economic compatibility). Expelling fragility might not be a suitable strategy in architectural heritage preservation, as the result could simply be replacing old fragilities with new, different ones. Quoting the example mentioned above again, the common idea of replacing the original and deteriorated parts of a building with new sections to improve its appeal would mean contrasting physical fragility, but at the same time, impoverishing the values connected to memories, authenticity, and so on. The building is momentarily saved from physical decay. Yet, it can be ‘affected’ by another kind of fragility related to people’s awareness of the heritage which can be perceived as beautiful in the new appearance or, on the contrary, as unauthentic. Given this second option, fragility affects the sphere of perception. Obsolescence due to abandonment would become a new form of disaffection: unfamiliarity. Hence, an increase of the economic value, thanks to the new use and related transformations, could correspond to the loss of other, no less important values that one can generically define as human values² (values of memory, values of identity, cognitive values, and so on).

A less popular but more responsive alternative would be to ‘listen’ to fragility-imagining strategies which contemplate fragility as an inevitable condition of built heritage, or even an opportunity: for instance, considering ageing and alterations – naturally excluding damage that worsens the condition of materials, structures, and so on³ – not as an illness or infection, but as a new

² In a well-known essay, Alois Riegl defined the values related to cultural heritage, distinguishing between values of memory and contemporary values. In this still valid critical interpretation of values, he highlighted and explained the possibility of a conflict between the two different categories widening the focus of preservation, mainly concentrated on the material aspects of preservation, to immaterial values recognized by humankind in built heritage (Riegl [1903] 1982).

³ It is not by chance that in the illustrated glossary on stone deterioration patterns the difference between alteration (‘Modification of the material that does not necessary

language that the building expresses over time (Treccani 1999, p. 107). Under the ‘material’ perspective, it would mean preserving the traces of changes (for example, new volumes or decorative elements added over time, different finishings, multi-layered transformations due to different uses over time, and so on); an approach that should enhance the sometimes contradictory complexity of the construction, rather than the supposed coherence of the aesthetical appearance in the idea of renouncing to the always-claimed supposed original splendour.⁴ Looking at the immaterial sphere, this approach would preserve or reinforce the complex relationships between people and their heritage. Community backgrounds and local experiences significantly influence their awareness of heritage as beautiful and relevant or, on the contrary, useless, obsolete or even imperfect, increasing or reducing its appreciation. In this view, the question is not the recognition of specific values to ‘create’ the identity of the place, which is the final (even if often not declared) purpose of top-down approaches, but the legitimization of complexity as the base of any possible value that built heritage may have.

Accepting fragility is not a common approach as it requires a radical change of perspective. It implies considering built cultural heritage as ‘living knowledge systems’ (Della Torre 2019, p. 27) rather than an immutable relic of the past, and its preservation not as a passive (and necessary) achievement but as an interesting opportunity. The prevalent idea, which has recently emerged in some Italian studies in the field, is that conservation preserves and enhances the co-evolutive potentialities of cultural heritage (Della Torre 1999, 2019). It is not a passive action (adapting to changes) but a process through which an object interacts with the environment and society, and possibly influences it. Whatever the scale of the process – the territory, the urban fabric, the building – the question is the relationship between the physical traces and the corresponding values of the object, both changeable over time, and the unavoidable economic and social transformations: two central aspects that rarely dialogue with each other.

In this perspective, ‘antifragile’ practices are inadequate when the idea of antifragility matches with a rigid ‘defensive strategy’ (Della Torre 2013, p. 71) characterized by prohibitions and permissions. This ‘strategy’ is based on the idea that heritage, which is fragile, must be defended from any possible exter-

imply a worsening of its characteristics from the point of view of conservation’) and degradation (‘Decline in condition, quality, or functional capacity’) is highlighted. See Icomos-ISCS (2008, p. 8).

⁴ Even if the purpose of this chapter is not to go through the current debate on architectural preservation, it is helpful to quote some references, among the many, on the Italian two-century-long discussion regarding binomial conservation/restoration. In particular, a good synthesis can be found in Carbonara (2012) and in Treccani (2017).

nal risk (Oteri 2017). In this black and white vision (what one can and cannot do), there is the risk of simplifying the approach to cultural built heritage that, on the contrary, as a system, is characterized by relevant and undeniable complexities.

If one looks at fragility as an opportunity, it implies the acceptance of complexity as the base of any possible antifragile approach for heritage at risk of abandonment, and cultural heritage in general. It also means accepting the responsibility of interpreting and managing such complexity without delegating choices and decisions to illusionary and nostalgic returns to the past or, conversely, to revolutionary but unhistorical ideas of the future.

9.2 TRADITIONAL APPROACHES TO THE TEST OF FRAGILITY

Fragility and complexity are primary conditions when one deals with built cultural heritage, mainly in inner areas at risk of abandonment which can be considered, at the same time, fragile systems and relevant reserves of cultural capitals and capabilities. As one deals with complex systems of objects and relations, any possible attempt to simplify such complexity risks nullifying the efforts. ‘Complexity is a muddle of connections that keeps things linked among them’ (Minervini 2016, p. 23).

However, if one looks at the overall approach to architectural preservation in the last two centuries, it seems that the main effort on the part of experts has been to remove any kind of fragility from historical buildings. It is the core of a top-down approach, not only in terms of materials and structural fragilities but also regarding the meanings that the past transmits through heritage. It is an approach which looks at the fragilities of buildings and settlements from the past from a negative perspective (sites at risk of abandonment that need to be saved, possibly thanks to external supports) without considering the humanistic level of the question (the relationship between people and the environment). From this point of view, the richness and complexity of the ‘locality’⁵ have been totally disregarded in the strategies for reusing abandoned heritage in marginal areas, ignoring the fact that they have their own histories and traditions, including ideas and programmes⁶ (Lupatelli 2021, p. 25).

⁵ This term is here intended as the whole of people (hence the humanistic dimension) and their history, traditions, experiences and economies which have characterized and shaped settlements, urban fabric and buildings over time.

⁶ Green communities, new models for tourism and sports, preservation of historical settlements, home care assistance and other forms of resilience, which clearly emerged during the Covid-19 pandemic, characterize these areas (Lupatelli 2021, p. 26).

A discrepancy between the growing interest in new methodologies and models for studying historical settlements and buildings, and the traditional practice of restoration, is also evident. On the one hand, new interpretative models, sophisticated tools and knowledge systems are designed to ‘capture our sense of responsibility’ towards fragile heritage at risk of disappearing (Oteri 2019, p. 187). These models and tools not only classify and analyse the historical and physical characteristics of built heritage, but also focus on complex relationships with the productive and economic context that orients (and clarifies) the many stratifications and transformations over time.⁷ Furthermore, interesting interpretative models that focus on the historical dimension of the abandonment processes have been defined. The purpose is to assess the various dynamics that triggered these processes, and their effects on the defining perception of these abandoned places in terms of safety and liveability.⁸ On the other hand, architectural restoration is still mainly oriented to the patrimonialization of selected historical buildings – preferably the most attractive and symbolic – frequently for touristic purposes. Self-referential and expensive interventions, which rarely respect authentic values, are mainly addressed to restoring these selected examples from the past, transforming them into pieces of art which are excluded from our everyday life.

A process of domestication to eliminate fragility and related implications seems to be the prevalent method of such strategies. In this view, built heritage must offer the ‘users’ a clear educational and aesthetical message that can only be achieved by eliminating complexity. Choosing the ‘right phase’ with a rigid selection of values (what is or is not worth being preserved) and removing stratifications is the method used to present (offer) built heritage to the public. In the idea of proposing an understandable edition of the building or complex or urban fabric, the only result is that it puts distance between people and heritage or, which is the same, it dehumanizes heritage. To quote a significant example that regards the Italian case, a vast number of historical buildings in small villages across the country, which in recent years have been reused

⁷ It is worth quoting improvements in the use of databases and other information systems to gather different types of information on historical settlements and buildings. They combine the cartographic scale with more detailed elements of sites and building with the purpose of facilitating the management of the many different data and information related to historical building and sites (Barazzetti 2021; Fiorani 2019).

⁸ In Italy, for example, the RESpro (Rete di storici per i paesaggi della produzione) association, a network of historians for production landscapes, has been improving multi-disciplinary research and initiatives to foster knowledge of rural and productive landscapes, including the socio-economic processes that conditioned abandonment and obsolescence over time. The final purpose of these studies is to provide some interpretation of the historical phenomena to suggest strategies for programming the future. Among the many interesting examples of such an approach, see Ciuffetti (2019).

as museums of local traditions with the idea of enhancing a generic sense of the place (even when traditions and identities have been definitively lost), are now closed. The attempt to understand a place through the enhancement of some specific values, along with the idea of selecting only some specific ‘histories’ of the site to be presented to a generic public (visitors, tourists, and so on), mainly generates a sense of non-involvement in local communities. It is the accomplishment of stereotypes, which ignores both the complexities and potentialities of cultural heritage: mills, farmsteads, hamlets, and so on have been reused and become museums of traditions and agrifood locations or scattered hotels for potential visitors, ignoring the real history of places and buildings (Oteri 2020, p. 47).

These interventions overlook the complexity and the multi-layered values of historical buildings and settlements, and they rarely positively affect the local economy or communities. More frequently, they turn out to be self-referential, useless, or even a burden in terms of maintenance costs and resource wastefulness. Furthermore, this approach does not consider the relationship, as mentioned earlier, between communities and cultural heritage, in the misguided idea that conservation is an elitist process – a prerogative of experts and policymakers – rather than a social practice. For example, at least in Italy, it is still rare to base choices and interventions on a proper evaluation of their economic, technical and cultural feasibility. Still today, programmes for managing the goods once restored are rare, and programmed conservation or prevention is not widespread yet, compared to ‘traditional’ restoration (Oteri 2017). Interventions mainly act on the physical and aesthetical fragilities, ignoring that such a complex network of material traces, spread knowledge and multi-scale values require complex solutions rather than simplistic remedies.⁹ Given the narrowness of the objectives that often inspire them, these initiatives rarely reinforce the fragile relationship between communities and their past. On the contrary, acting for constricted purposes (for example, generating income through the reuse of a building, or at least a group of buildings), they do not transmit any sense of continuity to local communities, with that capital of culture and economies that communities should nurture. Furthermore, even when projects are based on a solid theoretical structure, it seems that the results are not sufficient to fix antifragile strategies. Discourses based on history, authenticity and/or minimum intervention cannot face the complexity that

⁹ The necessity of preserving the complexity of architectural heritage first emerged in the 1970s when awareness of the memorial and social dimension of preservation arose. See particularly Council of Europe, *European Charter of Architectural Heritage* (Amsterdam, 26 September 1975), <https://www.icomos.org/en/charters-and-texts/179-articles-en-francais/ressources/charters-and-standards/170-european-charter-of-architectural-heritage> (last accessed 10 March 2023).

the proposed territorial dimension of heritage-based processes would imply (Deom 2015).

9.3 PLACE-BASED APPROACHES TO THE CARE OF FRAGILE HERITAGE

The recent interest in inner areas, from politicians, central governments and experts, is noteworthy as the new frontier for a sustainable relaunch of countries and towns. Moreover, the importance of cultural heritage, and culture in general, in fostering positive processes for marginal areas has been highlighted by many parties at an international level (CHCfE 2015; Cotte and Funds 2019; Voices of Culture 2020).

In this framework, top-down approaches or centralized policies are inadequate to face the complexities of working on fragile heritage and territories. As we have seen, the risk is to amplify fragility rather than reduce it. Conversely, in the last few years, place-based approaches involving communities have been under the spotlight of experts, policymakers and different stakeholders as possible alternatives to traditional, centre-based initiatives. Hence, let us suppose that complexity is the key to facing fragility. In that case, only an accurate network of ideas, knowledge and competencies – that compose the cognitive capital of communities – can provide valuable resources to manage it (Minervini 2016, pp. 38–39). Such an approach seems to characterize some heritage-based practices in marginal areas promoted by local communities.¹⁰ The participatory processes in relaunching inner areas have been fostered at an international level (Valiante and Oteri 2022). In Italy, this tendency was incorporated into the National Strategy for Inner Areas (SNAI) in 2013. The Strategy, fostered by the National Agency for Cohesion and the European Commission, is mainly based on reducing inequalities by improving health, education and accessibility. It also empowers the enhancement of important cultural capitals that inner areas preserve. It is a place-based policy built on the idea that local communities play an essential role, as they have been considered keepers and upholders of the important legacies that marginal areas preserve.

SNAI has revealed the unexpected vitality of local communities, which are fragile but at the same time resilient, as they hold solid potentialities for innovation despite their rooted attachment to tradition and identity (Oteri 2020; Rossitti and Torrieri 2021). The proof is in the significant number of heritage-based practices promoted from north to south Italy, not only within

¹⁰ The idea of community includes not only people, but also institutions, rules and mutual relationships (Oteri 2020, p. 48).

the SNAI programme. The topic is not the focus of this chapter,¹¹ but its mention is helpful to introduce what follows.

In a perfect virtuous circle, heritage-based practices activate antifragile processes as they are built (or should be built) on the specific characteristics and potentialities of a given territory. In a place-based approach, the idea of territory in itself is relevant: it is not an unreal space where theoretical models for economic growth are applied, but the totality of the territorial capitals that own strong potentialities in terms of development. In this perspective, place-based matches with antifragile, as any possible initiative for relaunching marginal territories is bottom-up, that is to say, strictly suggested by the territory itself (Oteri 2019).

Still, place-based strategies, which are (or should be) based on the collective management and care of local resources, should also be historically based, as the awareness of the potentiality of a given territory or settlement only derives from an in-depth knowledge of the historical processes which govern changes. Recording these phenomena (the productive, social and cultural tissue of a given area over time) means drawing a map of fragilities based on antifragile programmes which have been derived from the very knowledge of the fragilities themselves. It is the opposite of those attempts of territory domestication that mainly characterize top-down initiatives with the risk of increasing, rather than reducing, fragility.

Just to quote some practical examples, interesting studies on the area of the Italian Apennines, which was struck by a devastating earthquake in 2016, show how seismic events accelerate long-term, existing, even if moderate, social and economic processes (Ciuffetti 2019). It also demonstrates that in given conditions, inhabitants react in the same way (resistance or resignation, loss of the sense of community or solidarity, perception of the risk or willingness to stay, disaffection or sense of belonging, and so on). Other ongoing research on Southern Calabria¹² shows how the relevant abandonment processes were triggered back at the beginning of the 20th century due to seismic risk and hydrogeological instability. Natural hazards combined and overlapped with the agricultural crisis with effects on the economic, social, cultural and geographical aspects still currently being faced. Consequently, some of these settlements were abandoned, others transferred to the coast, and in other cases only part of the local community was transferred. In others, the

¹¹ Purposes and structure of SNAI can be found at <https://www.agenziacoesione.gov.it/strategia-nazionale-aree-interne/?lang=en> (last accessed 31 August 2022).

¹² See the Riba project 2021, 'Lost and Found. Processes of Abandonment of the Architectural and Urban Heritage in Inner Areas: Causes, Effects, and Narratives (Italy, Albania, Romania)', scientific coordinator A.M. Oteri, Department of Urban Studies (Dipartimento di Architettura e Studi Urbani [DAStU]), Politecnico di Milano.

abandonment generated a process of exodus. Unlike the differences, the examples mentioned above show how an overall analysis of the historical dynamics of abandonment, and their territorial, social, cultural and economic effects, including the narrative generated further, is essential to address their possible future repopulation and reuse. Even abandonment, in some cases, can become a correct solution. Indeed, sometimes the end of a given productive, cultural and civic system matches with the end of that specific site, and any attempt to relaunch it risks failing.

The lesson learnt from historical interpretative studies is that antifragile strategies need to be constructed considering the transformation of territories over time as a process, rather than a sum of events (Kealy 2015). This means that all the negative and positive transformations over time (economic, social and cultural changes) are connected, shaping settlements, buildings and people as important 'reserves of meanings' (Lanzani and Curci 2018, p. 102).

This perspective, mainly ignored in the field of architectural preservation, implies that before acting on the physicality of built heritage (including the issues of risk, vulnerability, physical decay, and so on), and assessing the potentialities for its reuse, strategies and programmes must act on the complex relationships that over time gave it significance (perception, obsolescence, disaffection, and so on) and that are the results of long-term historical processes. In practical terms, strategies and choices should be suggested by those complex networks of resources, practices and competences that have moulded territories and settlements over the centuries.¹³ As a consequence, both built heritage and its preservation assume new meanings. The former is not an object to valorize in itself, but a lever to activate processes for relaunching marginal areas. The latter is not only the physical preservation of heritage, but a more multi-faceted action that also implies the inclusion of heritage, with all its complex, rich and often contradictory values, in transforming and developing a given territory (Kealy 2020; Oteri 2020).

As recent studies demonstrate (Fusco Girard and Gravagnuolo 2017; Rossitti and Torrieri 2021), the place-based approach for architectural heritage preservation in fragile contexts matches quite well with the 'circular approach', where local resources, which also include people, are essential. In a circular vision, return to the territory implies the possibility of enhancing the many creative and stimulating suggestions which come from marginal areas and capitalize the various 'attempts of resistance' that have been promoted in

¹³ Interesting methodological indications on this kind of approach and the usefulness for understanding the influence of historical processes on a given territory come from the field of environmental history. Regarding Italy, an unmatched lesson comes from the study by Diego Moreno (1990).

the last few years, in fragile and depopulated territories: new models of production, unique lifestyles, new relationships with nature, culture and people.

Common ground depends on the attempts to extend the lifetime of goods as much as possible, on fostering value creation based on the relationships between different actors, and on favouring a more ethical economic growth avoiding resource exploitation and land consumption (Rossitti and Torrieri 2021, p. 65). It is a conservative approach – not in the misguided idea of the traditionalist or fundamentalist – which is ideally in line with an awareness of architectural conservation.¹⁴ Despite common belief, the theoretical base of architectural conservation is in the relationship between built heritage and present time, in the idea that changes are vital, and the past is the frame within which defining one action to ensure that what has been built over time persists despite unavoidable changes. For this reason, preserving everything that comes from the past is unthinkable. It is an anti-economic and aprioristic vision that is often wrongly ascribed to architectural conservation (Bellini 1999, p. 2).

On the contrary, and in line with the place-based approach, architectural preservation tends to preserve the past as a non-renewable resource that can provide possible benefits in the future (Bellini 1999). A deterministic approach cannot work in such a compound tangle of material and immaterial aspects given that the main purpose of antifragile approaches, not only concerning heritage-based strategies, should be to activate positive changes: in terms of new uses of the existing resources (built heritage in the specific case), but also, and simultaneously, in terms of new productions (of knowledge, competences, and so on).¹⁵ These processes would also show awareness in a long-term perspective (and in a perfect vision of the world).

9.4 TAKING CARE OF FRAGILITIES, MANAGING COMPLEXITIES: SOME CONCLUSIVE NOTES

In architectural conservation, place-based approaches are still marginal, particularly in Italy. Despite awareness of the benefits deriving from community

¹⁴ The term ‘conservation’, often used in Italy to define the act of preserving cultural heritage, is here not intended as embalming the ‘status quo’ but as a process through which to manage transformations. Unlike common belief, the conservation of built heritage is based on the idea that changes are vital. In this view, the past is the frame within which to define one’s action to ensure that what has been built over time persists, despite the unavoidable changes.

¹⁵ It is not by chance that, regarding fragile territories and heritage, since the 1970s the debate among experts and politics in the field of preservation has mainly been focused on the preservation of historical city centres. It is a noteworthy debate, but not comprehensive of the wider problem of inner areas’ abandonment. See Fiorani (2019).

involvement in heritage-based initiatives, the lack of participatory culture in this field has been noted. Furthermore, the conventional approach based on 'expert' knowledge is the most common attitude (Rossitti and Torrieri 2022, p. 3).

If we look at the Italian case, for example, this is particularly evident. The idea that simple restoration of buildings by designing new uses is enough to activate local development prevails at the institutional level and among the experts, possibly defining new uses a priori without considering compatibility with the buildings and the context. All decisions are confined within the reassuring boundaries of projects which clearly define (or presume to define) the technical aspects, including the new functions, which are often planned without considering the specific characteristics and values of the buildings. Instead, the economic returns in terms of benefits for tourism, enhancement of local productions, increasing the sense of belonging in the young generations, contrasting depopulation, and creating new jobs, generally prevail. Again, it is a defensive strategy to contrast the common idea that architectural preservation is anti-economic. However, the effect is quite the opposite, as such projects often do not produce positive results for buildings, places and people. Conversely, as the new cultural economy tendencies demonstrate, preserving built heritage rich in values and significance can activate economic growth if based on long-term strategies, and if included in a territorial dimension (Della Torre 2013, pp. 79–80). However, this challenging perspective – which matches with place-based approaches – implies widening the limits of the project. More precisely, it requires a relevant conversion from project to process (Carrosio and Zabbatino 2022, p. 119). In practical terms, the change-over means accepting the uncertainties that such a challenging vision implies (Chiffi and Curci 2020).

From social, economic and anthropologic fields, some interesting studies have tested more suitable methods that, with some adaptation, can suggest new ways for heritage-based processes. These methods imply community participation in a 'regenerative process' (process, not project). The regenerative policy, which implies the involvement of groups as aware people rather than passive citizens, activates processes of change that are manageable but not predictable (Minervini 2016, pp. 15–16). In this case, ideas and strategies are oriented by community vitalities, passions, competencies and time, accepting that places suggest the possible strategies to be activated and how to activate them. In the socio-economic field, this method is regulated by 'incomplete agreements' as one accepts to not pre-determine what will happen, accepting the possibility that the strategy could change during the process (Carrosio and Zabbatino 2022, p. 97). It is a non-deterministic approach that implies accepting uncertainties and risks, and can be included within action research

approaches. In recent times, the possibility of applying action research¹⁶ to heritage-based processes has been tested in the field of evaluation methodology, with the idea that adopting such a perspective is particularly urgent in marginal areas (Rossitti and Torrieri 2022, p. 5). As is known, at the same time this approach produces research (hence knowledge) and action in strict collaboration between researchers and stakeholders.

There are many difficulties in applying such approaches in heritage preservation: just to mention the most troubling, the long time required to activate the processes and gain some results and, no less, the fact that changes in mentality, which are at the base of antifragile approaches, are definitely slower than economic and social changes. Even if not always desirable, nor legitimate, the latter still condition and determine policies and programmes in any field (Oteri 2019, p. 181). Furthermore, as many bottom-up experiences demonstrate, this change could only happen considering that cultural heritage can produce more than 'simple' use (economic value) if included in broader preservation programmes which generate cultural and social values (Rossitti et al. 2022, p. 183). In doing so, reuse and conservation programmes could become a good opportunity to activate knowledge and competencies in a long-term process. 'In this perspective, built heritage is included in a coevolutionary process that looks at buildings and sites in term of potentialities (what they can offer) instead of how they could fit the new needs' (Rossitti, Oteri, Sarnataro, Torrieri 2022, p. 183).

Indeed, the results of such an approach, in terms of how to manage the physical transformations of historical buildings and sites, are still open. It is well known how communities often have a traditional or even anachronistic vision of cultural heritage. In terms of practical results, and despite the extraordinary technical knowledge that locals often have about their heritage, tendencies are mainly addressed to restoring the 'original splendour' of buildings and sites that often match with a significant or symbolic episode in the history of the site. In doing so, they often ignore the multi-layered values of cultural heritage reaching the same results as top-down approaches. However, and in contrast with what has just been affirmed, communities sometimes have a clear vision about the potentiality of their heritage, thanks to that skilful knowledge mentioned above and the familiarity that they have acquired over time with the territory where they live. If well addressed, a community-centred vision could help in better defining the destiny of sites and buildings at risk

¹⁶ Action research is a 'participatory process oriented towards developing practical knowledge for useful purposes. It aims to integrate action and reflection, theory and practice, to provide practical solutions ... and to foster the progress of individuals and their communities' (Reason and Bradbury 2001, quoted in Rossitti and Torrieri 2022, pp. 6–7).

of abandonment. For this reason, the involvement of locals in heritage preservation strategies has been recently promoted by many parties.¹⁷ In this sense, whether the roles of communities impact or do not impact on the physical dimension of buildings and sites, the benefits of their involvement in fostering heritage-based good practices are undeniable.

As some experiences demonstrate, another risk which can particularly affect the action research method in architectural preservation is that the process stops at the phase of knowledge and co-learning,¹⁸ without facing the phases related to co-design and action. This is partially due to a 'natural' tendency in the field. As mentioned above, working with complex, multi-layered values implies a scrupulous and long process of knowledge and awareness of historical processes and transformation. The risk is gathering too much data from different sources and of various natures without having the proper tools or competencies for plotting and interpreting them. However, this is not the only risk, as decisions and actions, due to the complexity of the matter, often imply closure to non-expert knowledge. It is a fact that many projects and programmes for preserving architectural heritage in inner areas are missed occasions to transform knowledge into actions. To quote a practical example related to reuse of vernacular heritage as part of local development processes, a project promoted by Fondazione Cariplo, Distretto Culturale Valtellina, could be considered a good example of an action research approach in cultural heritage for the centrality and empowerment of the community that can be enriched through experience. In this case, the idea of recovering the dry stone wall terracing systems of the valley, which represents a fundamental element for the economic, cultural and landscape features of the place (the knowledge), is combined with the idea of training the communities to maintain and care for this interesting example of built heritage (the action). It is no secondary aspect that the dry stone terracing system guarantees hydrogeological stability and wine production (Osti and Jachia 2020). Other interesting heritage-based examples seem to adopt such an approach (Fondazione Fritzcaraldo 2019).

These practices mainly come from the bottom: spontaneous organization, occasionally supported by local administrations rather than institutions and policymakers. The reason is not only due to the difficulty of changing mental-

¹⁷ As is known, a significant step into this direction has been taken with the so-called Faro Convention which defines the idea of heritage communities. See Council of Europe Framework Convention on the Value of Cultural Heritage for Society (2005), <https://www.coe.int/en/web/conventions/full-list?module=treaty-detail&treatynum=199> (last accessed 10 March 2023).

¹⁸ Action research is commonly articulated into five steps: co-definition of the problem, co-learning of relevant knowledge, co-learning and co-design actions, taking actions, and interpreting results (Rossitti and Torrieri 2022, p. 7).

ity. Certainly, young people, informal groups, and brave businesspeople and stakeholders are more inclined to accept the risks of a process (not a project) and the uncertainties of the results than are institutional groups and politicians. However, despite significant investments in the reuse of built heritage to foster cultural and social innovation in marginal areas at an international level (Rossitti et al. 2022), rules and tools are still oriented to traditional approaches and they cannot fit the complexity of action research processes. For example, initiatives that aim to preserve the complexity of built heritage and, at the same time, have the ambition of fostering local development (in short, the antifragile initiative) always imply different possibilities. All of them are characterized by different uncertainties, and it is still difficult, given traditional tools, to manage such uncertainties. Some interesting attempts to apply multi-criteria methods in the reuse of built heritage seem to give ‘positive results as they allow to analyse decision-making problems in complex negotiation and mediation processes between different interests and values’ (Rossitti, Oteri, Sarnataro, Torrieri 2022, p. 183). Through multi-criteria methods it is possible to list the objectives and priorities of all the involved stakeholders, which frequently clash (for example, the necessity of preserving the complex meanings and values of the building, and on the other hand, the needs of communities that may not converge with this), and to manage the conflicts by evaluating different solutions and decisions.

Unlike the validity and interesting perspectives that open up, the examples mentioned above are still far from becoming commonly applied tools and methods. Nevertheless, a quick mention is helpful to (momentarily) conclude these reflections. Whatever the instruments one uses, whose inadequacy hinder any possible progress in heritage-based processes for marginal areas, a significant change of approach seems to be more urgent starting from the idea, always claimed but rarely applied, that built heritage is an extraordinary palimpsest of different values, and its preservation, more than an economic investment, is a cultural and social capital for humanity. In other words, more than antifragile, the approach to caring for built heritage must be responsible.

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