Paola Rizzi[a]
orcid.org/0000-0003-3008-034X

Anna Porębska[b]
orcid.org/0000-0001-7939-9947

Aleksandra Rogulska[c]
orcid.org/0000-0001-6901-0686

Towards Alternative Strategies for the Post-disaster Recovery of Cultural Heritage Sites: A Case Study of the Basilica of St. Benedict in Norcia, Italy

Ku alternatywnym strategiom odbudowy obiektów zabytkowych po klęskach żywiołowych. Studium przypadku Bazyliki św. Benedykta w Nursji we Włoszech

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Introduction

When it comes to post-disaster recovery and reconstruction, it is difficult to disobey what Fordham defines as the tyranny of the urgent [Fordham 2005, 335–346; Lee 2016, 35]. Post-disaster decision making is one of the most challenging tasks, complicated by pre-existing problems and development issues. For many political agents, Building Back Better,[1] as well as other slogans that are associated with post-disaster reconstruction, are but a means to maintain the pre-disaster status quo. For members of the local communities instead, reconstruction entails the impossible task of replacing a pre-disaster city with a post-disaster environment [Lee 2016, 36]. At the same time, as emphasized by Folke et al., among others, following strategies that would be socially desirable may result in a vulnerable social-ecological system [Folke et al. 2010]. In most cases, the speed is prioritized over the form of recovery, and the form over the sense of it. In the 1990s, Brand pointed out that buildings in general, and historical buildings in particular, do not adapt well as they were designed, financed, constructed, maintained, regulated, and even taxed to meet certain purposes [Lee 2016, 34]. Yet, at the same time, they adapt anyway, because their use and function changes constantly. Monuments represent an exception, but to some extent they adapt to new functions, too.

In post-disaster recovery, embracing the fact that nothing is ever going to be the same again is among the most difficult aspects of the process. And so is spotting opportunities among threats and ruins, even if accepting and embracing the change should be a turning point in recovery. For cultural heritage sites and local icons, rebuilding them as and where they were in response to people's demands is the default solution. As

[a] *Prof., Department of Architecture, Design and Urban Planning, University of Sassari*
[b] *Ph.D. Eng. Arch., Faculty of Architecture, Cracow University of Technology*
[c] *M.Sc. Eng. Arch., doctoral student, Faculty of Architecture, Cracow University of Technology*

[a] prof., Wydział Architektury, Wzornictwa i Urbanistyki, Uniwersytet w Sassari
[b] dr inż. arch., Wydział Architektury Politechniki Krakowskiej
[c] mgr inż. arch., doktorantka, Wydział Architektury Politechniki Krakowskiej

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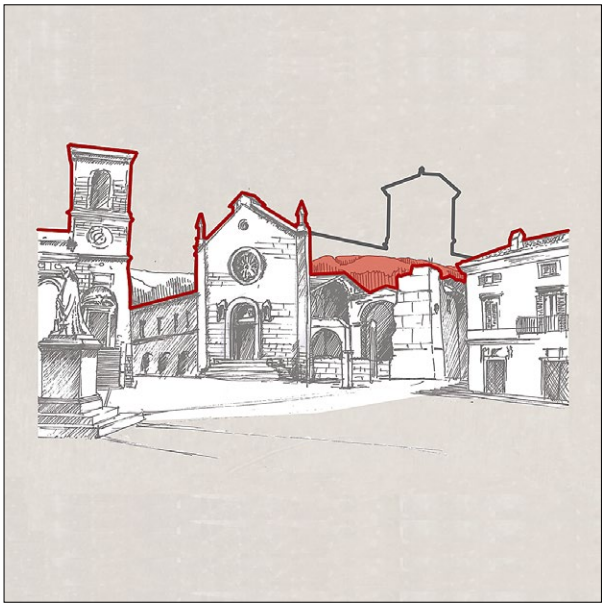

Fig. 1. St. Benedict Church in Norcia, Italy, damaged during the AVN seismic sequence: new views and temporary city skyline versus the original shape; photo by A. Rogulska
Ryc. 1. Bazylika św. Benedykta w Nursji we Włoszech, uszkodzona podczas sekwencji sejsmicznej AVN: nowe widoki i tymczasowa panorama miasta w porównaniu z pierwotną formą; fot. A. Rogulska

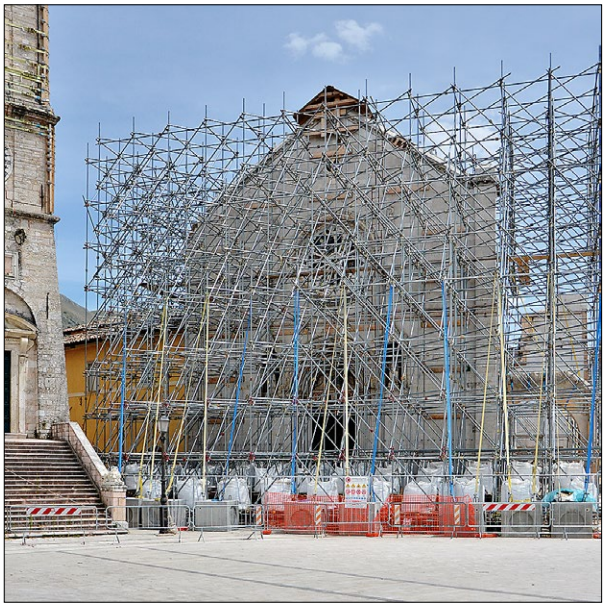

Fig. 2. St. Benedict Church in Norcia, Italy, damaged during the AVN seismic sequence, 2017; photo by A. Rogulska
Ryc. 2. Bazylika św. Benedykta w Nursji we Włoszech, uszkodzona podczas sekwencji sejsmicznej AVN, 2017; fot. A. Rogulska

a rule, people want their city, church, or house back, as if the event had never happened. Political promises are easily made on these bases. Fences are put on, shoring systems installed to keep broken facades in place, and then a long process of waiting for expertise and funds starts. Usually it doesn't take long for the stakeholders to realize how expensive pledges made in haste can be. Moreover, the time between the dramatic event and completion of the reconstruction is often so long it creates collateral damage itself.

When it comes to important cultural heritage, immediate responses and bold decisions are hardly ever on the table, as proven recently in the case of Notre-Dame de Paris. Since the damaging fire that started in the evening on April 15, 2019, it has remained closed to the public and it is not expected to reopen before the 2024 Summer Olympics. At the same time, the resilience of iconic buildings and places—their ability to bounce back and remain operational or return to being operational relatively soon [Meerow et al. 2016, 39]—is fundamental for the general resilience of the area. And since cultural heritage sites located in city centers are parts of bigger pictures rather than separate entities, their recovery and reconstruction should not be separated from the recovery of the city itself. And yet, it seems acceptable for them to lose their basic functionality along with losing their appearance for a significant period of time. Those were the reasons to speculate on the alternative scenarios for temporary or semi-permanent adaptation that would precede full reconstruction of particularly important monuments and sites, in the aim of shedding light on the advantages and disadvantages of maintaining the urban systems operational during the recovery and reconstruction phases.

Research problem, materials and methods

Lessons learned from previous post-disaster reconstruction processes, regardless of their differences or the character of the disaster (natural, anthropic, composed, etc.), emphasize the role of accessibility of critical public spaces and buildings in successful post-disaster recovery. Memories of the empty streets and squares of the historic city center of L'Aquila, capital of the Abruzzo Region, with its scaffolding-encased buildings, were the reasons behind our search for alternative scenarios for the St. Benedict Church in Norcia, Italy, severely damaged during the 2016 Amatrice–Visso–Norcia (AVN) seismic sequence and a shored ruin ever since.

Searching for alternative solutions to be applied in Norcia, we analyzed those used in L'Aquila after the 2009 earthquake[2] and in Christchurch, New Zealand, after the 2010–2011 Canterbury seismic sequence.[3] In L'Aquila, wooden bracing was provided for lightly damaged buildings whilst steel trusses occupying large portions of the surroundings were used for the severely damaged ones. In Christchurch, steel and concrete bracing was accompanied by container reinforcement.[4] Alternative technologies and materials usually used in similar circumstances were taken into consideration.[5] It was noted that the use of spatial trusses resulted in the consumption of public space and in the elimination of the building, its image, and its surroundings from the urban fabric. Therefore, a decision was made to focus primarily on spatial scenarios for the site and its surroundings, leaving the technical issue as an open research question.

The research presented here thus includes a comparative analysis of accessibility and mobility in the neighborhood of the Basilica of St. Benedict in Norcia before the 2016 seismic sequence (Fig. 3) and after the protection of the buildings damaged by it (Fig. 4). This was carried out on the basis of a site visit in 2017 (Fig. 1,2 and 4). Based on the description of the technical condition of the building provided by Iannelli [2020], three functional-spatial scenarios are presented, assuming the possibility of restoring, at least partially, the accessibility of the building, and analyzing accompanying engineering challenges (Fig. 5–7). The variants analyzed in the context of available structural and material solutions allow to define the parameters for future innovations and possible solutions.

The approach presented here focuses on spaces first, without losing sight of the structure. We argue that bringing the surroundings back to life, even through temporary or semi-temporary measures, can have a positive impact on the social, psychological and economic recovery of the city and its community. It can help to use the pre-reconstruction time and give the *genius loci* a chance to survive.

Learning from the past

After a disaster, any construction in a historic building is always a challenge. In many cases, as described by Bednarz and Opałka, preventive protection is provided chaotically and in a hurry [Bednarz, Opałka 2019, 123–124]. The reason why learning from the past is so important for post-earthquake recovery and reconstruction plans is that they are all formulated a-posteriori. Recovery, and disaster recovery in particular, is not a conventional reconstruction. It is meant to transform something vulnerable into something resilient—a better place to live in and to live with risk.

Warsaw, Poland is often referred to as an example of a resilient city despite all the flaws of its post-war reconstruction [Vale, Campanella 2005, 135]. In less than a decade most of the central districts on the left bank of the Vistula Rivers were restored from total ruins to a state capable of hosting the 5th World Festival of Youth and Students in 1955. Most of the 70,000,000 m^3 of debris have been removed, with main streets and many public buildings as well as some residential areas completed by that time [Biegański, Kalinowski 1986, 544]. The city rapidly returned to an operational state, long before it was rebuilt, and a new normality was found as soon as the war was over. But in terms of community resilience or the reconstruction of intangible urban heritage, referring to Warsaw as a resilient city is an overstatement.

In its operational aspects, the strategy applied in the case of Warsaw is difficult to repeat within democratic standards. Although Jan Zachwatowicz, an esteemed arts and architecture historian and initiator of the city re-modelling, managed to convince the State National Council (KRN, a self-appointed pro-Soviet political body), that the nation and the monuments are one [Majewski and Markiewicz 2012], progressive and conservative factions continued to clash in the Capital Reconstruction Bureau. Archival documentation was used wherever possible, yet, liberties were taken with conservation designs. For instance, on July 22, 1953, on the anniversary of the July Manifesto and during the year of Stalin's death, the Tract of Old Warsaw was handed over for use. As a result of pressure by the Party, deadlines, and working to meet the objectives of grand plans, it was decided that some buildings that had survived or that had been only slightly damaged were to be dismantled to procure construction materials. Development projects in other parts of the country were put on hold—also due to the fact that the communist government, pressured by Moscow, proudly rejected financial aid from the so-called rotten, capitalist West.

The scale of this reconstruction was made possible thanks to the Decree of Bierut (named after the 1st Secretary of the Communist Party and head of state) on October 26, 1945, which ruled that all land would be appropriated by the state. We see this aspect of the reconstruction as an example to learn from, rather than one to be repeated. The same for the reconstruction of the Warsaw Old Town, recognized by UNESCO as an historical site of universal value—yet defined by Lorens as a classic example of a theme-park city [Lorens 2006]—not for its historical integrity but as an exceptional example of the comprehensive reconstruction of a city that had been deliberately and totally destroyed [*Historic Centre of Warsaw: Description*].

The destruction of L'Aquila, although non-deliberate, was also total. The earthquake of 6.3 Mw left 309 dead, 1,500 injured and the entire population of just over 70,000 homeless [Alexander 2013b]. The state of emergency lasted three years, and 10 years later a large part of the red zone (a no-entry restricted area) was still in force. The seismic event was moderate but led to significant damages due to the vulnerability of the city center, composed of poorly maintained masonry buildings [Contreras et al. 2014, 125–142; Alexander 2013a].

The recovery process of L'Aquila has been severely criticized [Alexander 2013a]. The European Parliament launched an inquiry regarding the use of the EUR 493 million provided for it, while internal investigation proved strong mafia involvement.[6] Five years after the earthquake, the entire areas of the city center remained off-limits to citizens and plenty of buildings were hidden behind temporary safety countermeasures [Contreras et al. 2014]. Ten years after the earthquake the situation wasn't much different. Whilst initially cordoning-off the city was justified as a security measure and for the safety of the pedestrians, extending it in time along with a lack of a coordinated plan to bring L'Aquila the well-earned nickname of ghost town or the Pompeii of the 21st century. In the summer of 2019, fences, buttresses, and scaffolds could still be seen all over the city, the main streets included, and the main

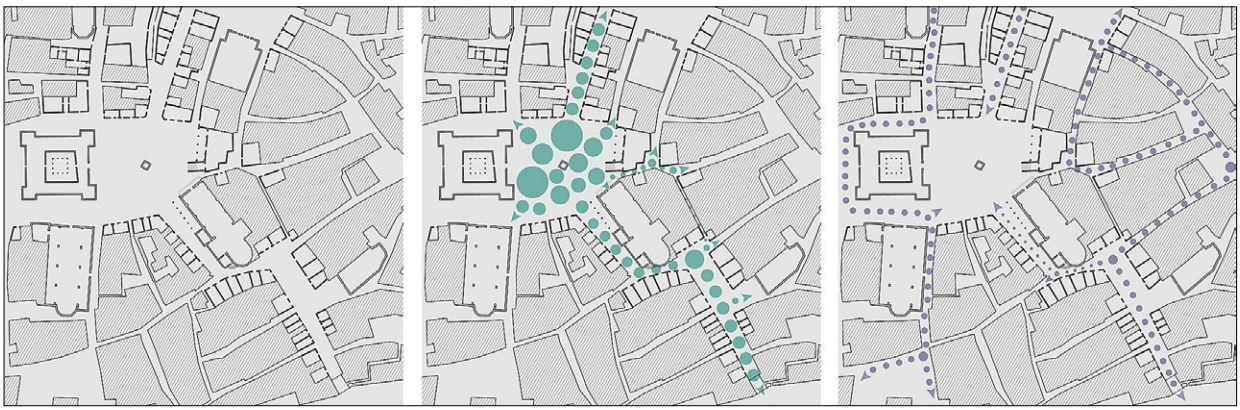

Fig. 3. The area of St. Benedict Square in Norcia, Italy, prior to the 2016 AVN seismic sequence; from the left: a) urban tissue, b) walkability, c) accessibility for vehicles; by A. Rogulska
Ryc. 3. Obszar placu św. Benedykta w Nursji we Włoszech przed sekwencją sejsmiczną AVN z 2016 r.; od lewej: a) tkanka miejska, b) przyjazność dla pieszych, c) dostęp dla pojazdów; opr. A. Rogulska

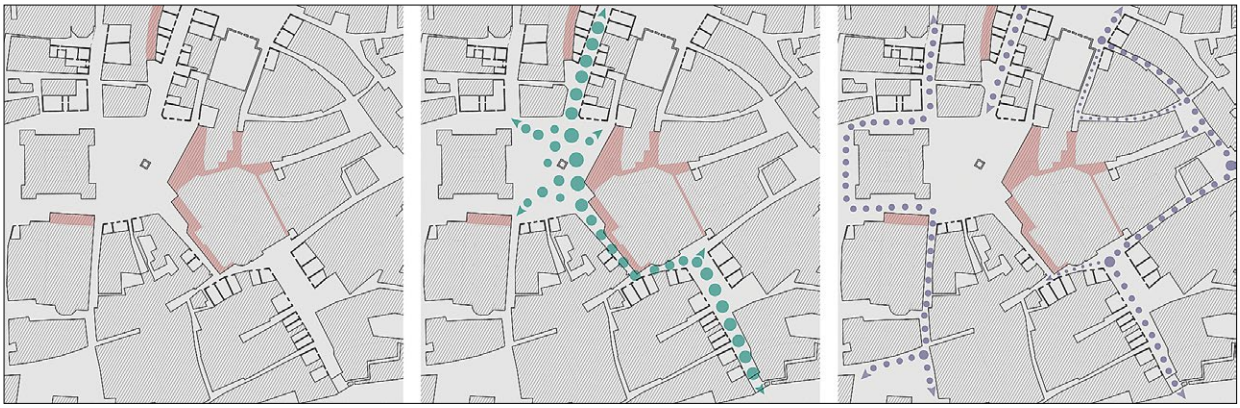

Fig. 4. The area of St. Benedict Square in Norcia, Italy, after the 2016 AVN seismic sequence; from the left: a) urban tissue, b) walkability, c) accessibility for vehicles; by A. Rogulska
Ryc. 4. Obszar placu św. Benedykta w Nursji we Włoszech po sekwencji sejsmicznej AVN z 2016 r.; od lewej: a) tkanka miejska, b) przyjazność dla pieszych, c) dostęp dla pojazdów; opr. A. Rogulska

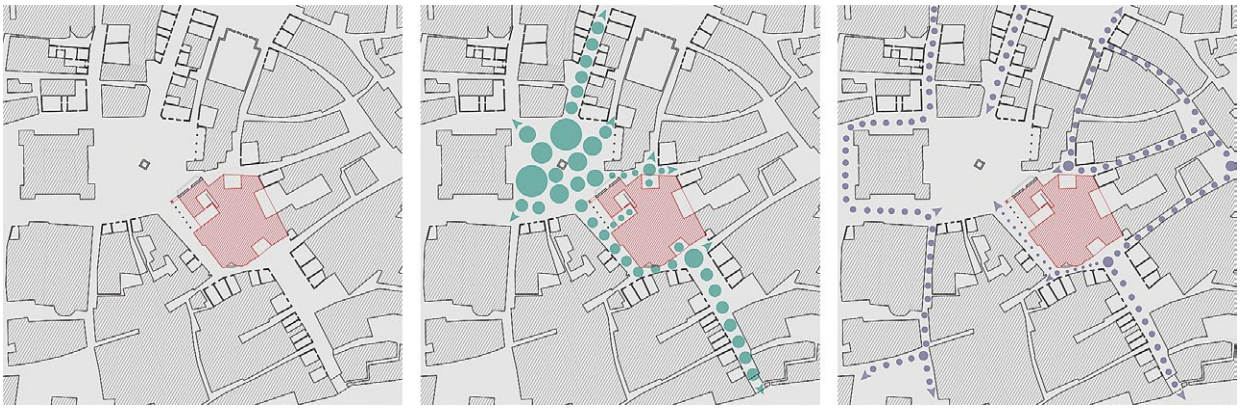

Fig. 5. The area of St. Benedict Square in Norcia, Italy, after the 2016 AVN seismic sequence: minimal intervention scenario; from the left: a) urban tissue; b) walkability; c) accessibility for vehicles; by A. Rogulska
Ryc. 5. Obszar placu św. Benedykta w Nursji we Włoszech po sekwencji sejsmicznej AVN z 2016 r.: scenariusz minimalnej interwencji; od lewej: a) tkanka miejska, b) przyjazność dla pieszych, c) dostęp dla pojazdów; opr. A. Rogulska

arrival point, in the proximity of the Fontana Luminosa—one of the city's landmarks—was still but a mess.

Different was the approach applied in Bugnara, a small town in the province of L'Aquila, listed among the most beautiful villages in Italy, one of the numerous sites affected by the 2009 earthquake. In this case, having secured the basic needs of the affected community, the local administration focused on the revival of the ruined city. Remains of the collapsed buildings were quickly removed and re-opened plots secured with simple means [Rizzi, Porębska 2017, 827–834]. The reconstruction of the essence of the city started with an immediate, low-cost, walkable, and accessibility-oriented strategy. The only logic behind the se-

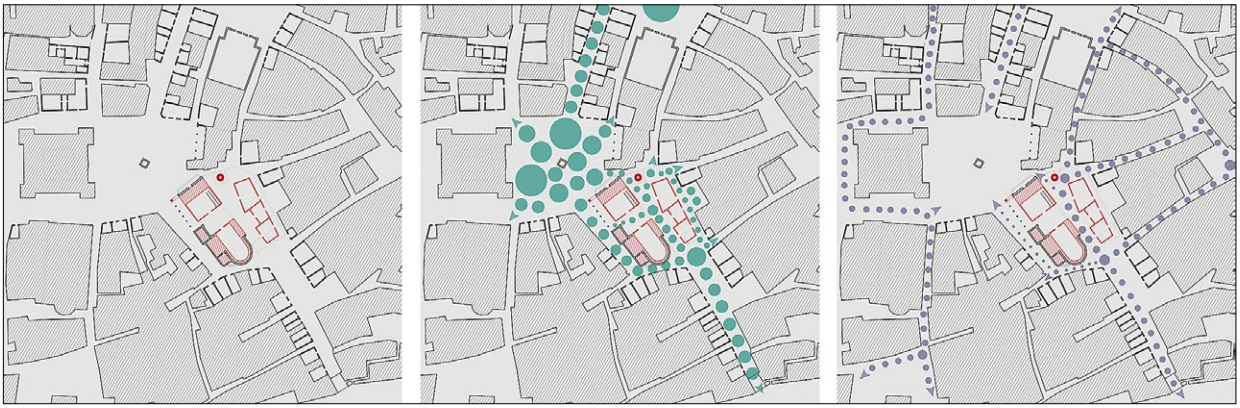

Fig. 6. The area of St. Benedict Square in Norcia, Italy, after the 2016 AVN seismic sequence: site-specific intervention scenario; from the left: a) urban tissue, b) walkability, c) accessibility for vehicles; by A. Rogulska
Ryc. 6. Obszar placu św. Benedykta w Nursji we Włoszech po sekwencji sejsmicznej AVN z 2016 r.: scenariusz dostosowany do miejsca; od lewej: a) tkanka miejska, b) przyjazność dla pieszych, c) dostęp dla pojazdów; opr. A. Rogulska

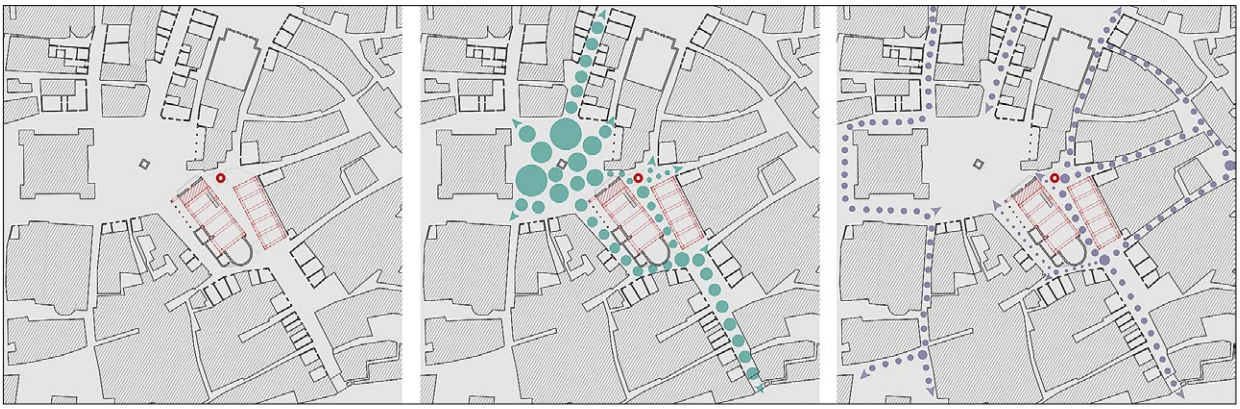

Fig. 7. The area of St. Benedict Square in Norcia, Italy, after the 2016 AVN seismic sequence: modular and reusable system scenario; from the left: a) urban tissue, b) walkability, c) accessibility for vehicles; by A. Rogulska
Ryc. 7. Obszar placu św. Benedykta w Nursji we Włoszech po sekwencji sejsmicznej AVN z 2016 r.: scenariusz z wykorzystaniem systemu modularnego wielokrotnego użytku; od lewej: a) tkanka miejska, b) przyjazność dla pieszych, c) dostęp dla pojazdów; opr. A. Rogulska

quence of paved spaces was the one that tore the buildings down, but the spaces themselves, dedicated to free time and hosting cultural events, were of public and urban nature.

When it comes to landmarks and city centers, the tragedy of their post-disaster reconstruction is that they are seen as political. They are symbolic, challenging and costly, and the context around them is vulnerable. Thus we can see the examples presented above as two extremes: at one end there is Warsaw—and in much smaller scale Bugnara—where the basic urban functions were immediately restored, on the other L'Aquila, where they were transferred elsewhere, leaving the city center obsolete.

In L'Aquila, the recovery did not open new and different ways of urban restoration or revitalization, whilst the time spans for the reconstruction resulted in private buildings being finished and public buildings and spaces yet to be touched. Today, after over ten years, it is evident that a process of rebuilding L'Aquila as it was, yet improved with basalt fiber-reinforced polymers and polymer cement injections, but not embracing change, can hardly be considered successful.

The church, the city and the earthquake

Norcia, traditionally known by its Latin name of Nursia, is a small Italian town in southeastern Umbria. Famous for its air and scenery, its picturesque skyline was marked, until recently, by the tower of the St. Benedict Church.

The buildings in Norcia, in particular historical ones, had already been weakened by a Mw 6.0 earthquake when a second one, measuring Mw 6.5—the peak of the Amatrice–Visso–Norcia seismic sequence [Margheriti et al. 2018], and the strongest to occur in Italy in the last 30 years—struck on October 30, 2016 [Improta et al. 2019]. It caused significant damages to the city destroying many landmarks including the iconic Basilica of St. Benedict [Putrino, D'Ayala 2016].

The church, dating back to the thirteenth century, was erected on a much older Roman house presumed to be the birthplace of St. Benedict and St. Scholastica. Over the centuries, its plan, height and form changed as a result of subsequent seismic events, in particular the one of 1703. None was, however, as devastating as the recent one. While the first of the earthquakes dur-

ing the AVN seismic sequence caused minor damages, on October 30 the church collapsed almost entirely.

In this case, the common approach based on the connection of masonry blocks by means of ties was not feasible, because only the facade remained. Therefore, a tube and coupler scaffolding was designed. Penna and others reported that "The entire scaffoldings for the facade were calculated by means of a detailed FEM model, to account for the seismic action, the significant wind action on the free-standing wall and very different load conditions during installation. To define accurately the amount and position of the weights, a model with only compressive restraints on nodes was adopted. Specific attention was given to the joints: connection details and capacity forces were defined by means of laboratory tests performed by the Fire Brigades" [Penna et al. 2019]. Another issue concerned the installation sequence: "To avoid building an additional temporary shelter, and taking advantage of the limited amount of debris in front of the facade, a remote-controlled scraper was used for debris removal, hence without the presence of any operator near the damaged facade. A crane subsequently moved the scaffolding, previously built on a safe position, directly on the facade. A cantilever scaffolding beam was installed on the internal side of the facade tympanum in order to prevent an overturning towards the nave" [Penna et al. 2019]. The completion of the internal part was postponed until the removal of the debris. The aim of the intervention was to preserve what little remained after the massive collapse.

The AVN seismic sequence confirmed the seismic vulnerability of Italian historic churches as significantly higher in comparison to other unreinforced masonry structures [Penna et al. 2019]. According to Professor Antonio Paolucci, the head of the committee for the reconstruction of the basilica, former Minister for Cultural Heritage and the director of the Vatican Museums, the reconstruction of the Saint Benedict Church will be more difficult (and expensive) than that of the Basilica of Saint Francis in Assisi (listed as a UNESCO world heritage site in 2000, after the 1997 earthquake) [*Interview with prof. Antonio Paolucci, the head of Commissione Basilica Norcia* 2018]. Despite the constant development of building technologies, reconstruction of buildings consisting of nothing but the outer walls is an expensive, difficult and uncertain one [Fudala 2016, 11–36]. It is easier—and more secure—to dismantle those elements that would require significant reinforcement, and recreate them simultaneously with the new structure. But in Norcia, the local community would most certainly consider that as "treason" and akin to simply finishing what the earthquake had started.

Local media give the impression that the citizens want their church back with all traces of the event to be erased. Cardinal Bóccardo, the Archbishop of Spoleto and Norcia launched the idea of integrating the collapsed elements with contemporary architecture through an international architectural competition. A committee arguing for an "identical" Basilica (Comitato pro Basilica identica di Norcia) was formed immediately. The special commission, headed by prof. Antonio Paolucci and composed of representatives of the Ministry of Cultural Heritage and Activities (Ministero dei beni e delle attività culturali e del turismo), the National Institute of Architecture (Istituto nazionale di architettura IN/ARCH), and of the Umbria region,) is responsible for both the reconstruction and organization of the above mentioned international architectural competition that, at the time of writing this article, is still to be announced. The commission claims the aim is to preserve the spirit of the place,[7] yet their approach seems unrealistic There is the risk that the site, situated in the central part of the city, will remain a ruin for a long time—too long for any spirit to survive (Fig. 1, 2 and 4).

Alternative pre-reconstruction strategies

Figures 1–4 present, through Nolli's graphic, the significant change that occurred in the area of St. Benedict Square after the earthquake. After such a strong, sequential seismic activity, the scale of downgrading accessibility of public buildings and spaces is not surprising. However, the acceptance of this state of things for years to come, in the light of what we can learn from the past, should be alarming.

As the examples of Warsaw and L'Aquila reveal, strategies regarding architectural heritage should not be separated from those regarding their surroundings. Otherwise, the result risks to be a scenography erected with public funds and that safeguards the interest of one group or another.

Bearing in mind that safety measures are not allowed to be permanent, hypothetical scenarios presented in Figures 5–7 speculate on alternatives. They are only demonstrative as it was not possible to conduct the necessary field studies and appropriate static simulations. Their goal is to highlight the potential of the use of new, unforeseen visual openings and cracks in the city's structure.

The variant presented in Figure 5 assumes a very limited possibility of interfering with the perimeter of the ruins. The difference between this proposal and currently applied solutions lies in the emphasis given to the surroundings and open spaces, in particular those important from the point of view of urban composition, urban design and mobility. Micro-spaces, with shapes and dimensions arising from the logic of existing spaces (the visual culmination of street axes, compositionally important points, etc.) help increase awareness regarding the city's vulnerability and emphasize its resilience, however superficial. This can be seen as a preliminary intervention preceding those requiring more detailed studies and surveys and applicable for scenarios presented in Figures 6 and 7.

The variant presented in Figure 6 assumes opening of new links and the introduction of new functions. This is combined with the use of small buildings or

lightweight structural systems aligned with pre-existing structures that maintained structural capacity, as well as those detached from old structures. Most importantly, it provides access to the critical and still-intact fragment of the Basilica—its crypt and the ruins of the Roman house thought to be the birthplace of St. Benedict and St. Scholastica.

The variant presented in Figure 7, introduces instead an option that would require using modular technology. Prefabricated, reusable elements would ensure the safety and integrity of the compromised structure. The original function could be restored, if only to a limited extent, or new functions introduced.

Variant 1 assumes that the building cannot be made accessible and thus focuses on the development of micro-spaces in compositionally and functionally important points of the former outline of the building. Variant 2 would partially open the undisturbed parts of the building, with particular emphasis on the crypt, with the use of mixed structural systems (lightweight structures for temporary functions, alternative safety solutions for the parts not open). Variant 3 optimizes the functional and compositional terms by proposing the introduction of new non-permanent cubic elements (modular and prefabricated systems). Such a solution is also possible due to how a temporary facility in the context of areas affected by natural disasters is defined.

All of the scenarios presented here tend to assume the possibility of introducing other safeguarding and preventative measures beyond those installed, namely, the relocation of support structures inside the building in order to free up its foreground. One alternative to this solution, and probably the cheapest, safest and most reliable, would be dismantling the damaged yet surviving facade and re-attaching it to new structural elements. This, however, would be hard to implement for political reasons. Should it prove acceptable, it would be possible to create a temporary mock-up of the facade as this is a place to which the residents identify strongly. All scenarios presented here assume the limited accessibility of the space behind the facade, which has been assigned for support structures.

Perhaps a parametric technology that will be able to adapt solutions to extant damage will soon be developed—providing customized elements made from reusable material. So far, however, more traditional solutions are the only ones available, offering a rigidity and constraints that can be overcome by employing qualitative criteria within the design.

Conclusions

All earthquakes are difficult to predict in terms of magnitude and effects and unfortunately we are still far from having effective pre-disaster reconstruction plans. However, since the reaction is expected to be immediate, it is possible to prepare a strategy.

Accessibility seems an intrinsic part of the process of coping with risk in all its phases: before, during and after a traumatic event. It is even more important should the event erode, break or destroy spatial, functional and social relationships. Being able to walk again—safely and with a purpose—through a recently destroyed hometown is the first step towards a city's recovery and it is part of autonomous adaptation and individual resilience.

Since it collapsed during the 2016 Amatrice–Visso–Norcia seismic sequence, the church of St. Benedict in Norcia has been a scaffolding-encased ruin. Despite the intrinsic bond between the recovery of a city and that of its cultural sites, in this case, as in many others before, the structure has been put before the place and its genius loci. The countermeasures applied in Norcia align with basic guidelines and mainstream approaches as they secure what's left of the structure. How deeply the shoring system penetrates the surroundings is not taken into consideration, because actions were taken based on time efficiency and initial costs.

In the context of post-disaster preventative measures, a vision of open passages and secure, adaptive, dual, analogue spaces with smart options in place of security fences and three-dimensional support truss—with passages that would blend into the existing substance by echoing its scale, proportions and openings, and that are neutral, pleasant, pragmatic and reversible, which give margin for errors, seems revolutionary, almost utopian, and yet worth taking into consideration.

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[1] Building Back Better (BBB) is at the core of the Sendai Framework for Disaster Risk Reduction 2015-2030 issued in 2015 by the United Nations Office for Disaster Risk Reduction (UNDRR) [Sendai Framework for Disaster Risk Reduction 2015-2030]. It was the first major agreement of the post-2015 development agenda and provides Member States with concrete actions to protect development gains from the risk of disaster. The term itself dates back to 2005. The widespread use of the term and adoption of this approach among disaster risk management practitioners, policymakers and researchers has been summarized by Fernandez and Ahmed [Fernandez and Ahmed 2019], among others.

[2] An overview of the post-disaster emergency phase and transition to reconstruction in the L'Aquila province after the earthquake with regards to the fields of structural-seismic engineering reconstruction and management was reported, among others, by Rossetto et al. [Rossetto et al. 2014].

[3] An overview of the impacts of the 2010-2011 Canterbury seismic sequence was provided, among others, by Potter et al. [Potter et al. 2015].

[4] This case study is relatively well-documented by open-access research papers, cf. [Bednarz and Opałka 2019] and [Bednarz, Koss and Jasieńko 2019], among others.

[5] General classification of reinforcement technologies and materials applied in post-disaster recovery and reconstruction processes was proposed by Buchmann, among others, cf. [Buchmann 2003]. Countermeasures provided for securing architectural heritage after the 1976 Friuli earthquake were also an important reference, cf. [Grimaz, Malisan and Zorzini 2018].

[6] Already in 2013, the European Court of Auditors issued a ruling according to which the project CASE, for instance, despite responding to many immediate needs of the population, lacked proper planning and economically reasonable implementation. The houses that were intended temporary facilities were erected as permanent buildings [The European Union Solidarity Fund's Response to the 2009 Abruzzo Earthquake: The Relevance and Cost of Operations, Publications Office of the European Union, 2013–46].

[7] Such aim was defined in the forming act of the commission [*Atto di indirizzo per l'elaborazione del documento preliminare alla progettazione* 2018].

Abstract

This article discusses the recovery and reconstruction of architectural and urban heritage sites damaged by natural disasters, such as earthquakes, and man-made disasters, such as armed conflicts. Analyzing the differences in the approach to the accessibility of public spaces, attention is drawn to the potentially negative consequences of the long timespans of decision-making processes. Since restoring the social dimension of the latter through temporary and semi-temporary measures can have a positive impact on social, psychological and economic recovery, alternative scenarios for pre-reconstruction interventions in the area of St. Benedict Church in Norcia, Italy, that collapsed during the 2016 Amatrice–Visso–Norcia seismic sequence, are proposed. The paper offers some insight on the potential advantages of saving places instead of saving only structures and contributes to the discussion regarding the post-disaster reconstruction of architectural heritage sites.

Streszczenie

Niniejszy artykuł omawia rewaloryzację i odbudowę zabytków architektury i urbanistyki zniszczonych przez klęski żywiołowe takie jak trzęsienia ziemi oraz katastrofy takie jak konflikty zbrojne. Poprzez analizę różnic w podejściach do dostępności przestrzeni publicznych zwraca się uwagę na potencjalnie negatywne skutki długotrwałych procesów decyzyjnych. Ponieważ odnowa wymiaru społecznego tego ostatniego poprzez tymczasowe i na wpół tymczasowe środki może mieć pozytywny wpływ na społeczną, psychologiczną i ekonomiczną odbudowę, zaproponowano alternatywne scenariusze przedrekonstrukcyjnych interwencji na obszarze Bazyliki św. Benedyka w Nursji we Włoszech, która zawaliła się podczas sekwencji sejsmicznej Amatrice-Visso-Nursja. Artykuł wzbogaca wiedzę na temat potencjalnych korzyści z ratowania miejsc, zamiast ratowania jedynie obiektów, i stanowi przyczynek do dyskusji o odbudowie zabytków po klęskach żywiołowych i katastrofach.