

## ***HIC ET NUNC. CHURCHES AND THE 2016 EARTHQUAKE IN CENTRAL ITALY: FROM THE EMERGENCY TO THE POTENTIALITY FOR A TEMPORARY RE-USE***

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### **Abstract**

Seismic events that hit our National territory with a relatively high frequency pose a threat to our Cultural Heritage, which is largely composed of churches.

The earthquakes that have recently occurred in Central Italy –with its strongest shakes on August 24, October 26 and 30, 2016, and January 18, 2017– have left many damaged churches. These are "crystallized" at the instant when the earthquakes struck them. Until now, only provisional interventions for safety have been carried out, waiting for better conditions in the future, when organization procedures and financial supports can bring these heritage assets back to life. These churches are currently deprived of their *essence*, having lost, beyond their specific function, both their role of works of art and containers of works of art.

In this specific period of transition, the community cannot benefit from these goods. Actually, even when their functional activities have been temporarily relocated to tents or emergency structures, it is impossible to enjoy the artistic and cultural values when access is restricted. Therefore, this period of interruption is determined by economic, administrative and logistic reasons.

In recent times, "bottom-up" initiatives have been adopted to take care of several neglected heritage assets. Through participatory actions, these have sought to go beyond the normal valorization and restoration processes. The economic crisis and the ever-decreasing resources for interventions on Cultural Heritage, have surely influenced these activities, giving way to projects of temporary re-use. In this moment of post-earthquake emergency, where the normality is disrupted, the need of "reinventing" and "rethinking" may become a promoter of changes. To this regard, the work proposed here will present examples taken from other comparable situations.

In this perspective, the post-earthquake emergency could become a potentiality for living Art and Architecture in this specific span of time in an unusual way. Situations like these can make a community feel and share unique emotions and, in many ways, they could help in the process of safeguard, conservation and valorization. Indeed, some forms of partial

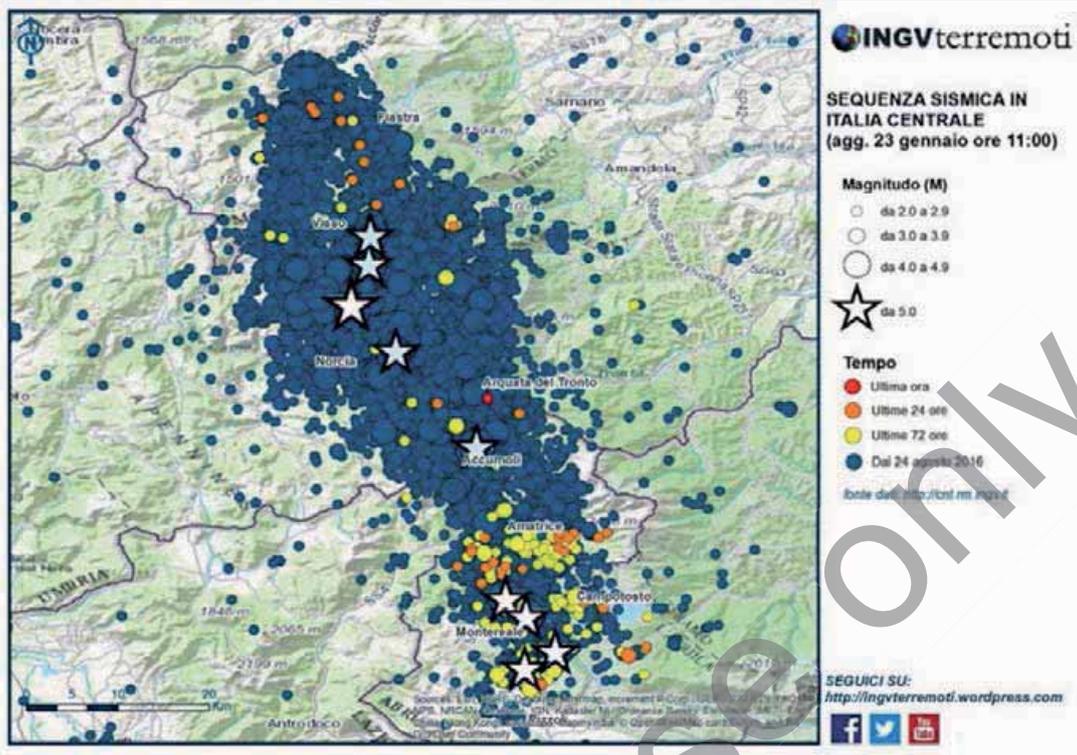
and controlled access could be possible thanks to provisional emergency interventions, allowing the appreciation of decorative or constructive elements that under normal conditions cannot be perceived from that perspective and with such attention. This makes the considered building a sort of temporary museum of itself. Moreover, impacting events like these enable us to experience an unrepeatably moment in the life of a heritage asset, that will, in the future, become part of its history, but that will certainly not be lived again. *Hic et Nunc*, as part of the title of this article, intends to emphasize precisely this aspect.

## Introduction

Earthquakes are one of the environmental disasters which pose a threat to our National Cultural Heritage. This is, in part, composed of churches, which are architectural structures particularly vulnerable to seismic actions, as past earthquakes have demonstrated. Since the 1976 Friuli earthquake, a systematic study on the vulnerability of churches and on the state of damage after seismic events has started (Doglioni et al., 1994). The dispersal and the huge quantity of churches in Italy is well known. At this regard, the 2016 Central Italy earthquake brings to consider the situation of damaged churches after the four main shocks, which hit Central Italy between August 2016 and January 2017, and to discuss the problem of the *state of crystallization* that churches are suffering and will continue to suffer until the moment that financial supports and intervention strategies will bring them back to life. During this temporal gap, the damage and temporary inaccessibility of these assets is not only a physical question; indeed, if the function could be transferred to other places, the intangible benefit of the churches is temporarily subtracted to the community.

The series of shocks, which hit the territory of Central Italy, arrived over a period of several months leading churches to suffer a progression of damage or, in some cases, the occurrence of damage in the latest shocks (Parisi & Sferrazza Papa, 2017).

Figure 1 represents the seismic swarm which hit Central Italy. The epicenters of the consecutive shocks migrated from south to north getting to south again with the shocks of January 2017. The effect of the several shocks covers a large area of the territory; in this context, many churches were damaged. As common practice, after seismic events, professionals of MIBACT and of ReLUIS performed a first recognition of the damage, recurring to the *damage form for churches* (PCM-DPC, MiBAC, 2006). Thanks to these filled forms a general idea of the damage in the territory is drawn. Indeed, a series of sections guide the compiler to describe the level of damage for each possible mechanism and to express the accessibility (Fig. 7). This is the step which anticipates the planning of safety interventions. On May 2017, the authors had the chance to execute a second survey on some already damaged churches visited at the beginning of October, and to examine new ones (Parisi, Sferrazza Papa, 2017). This allowed to see the situation a few months after the major shakes. During this on-site survey some churches had already been put in safety conditions (Fig.2, Fig.3, Fig.4, Fig.5, Fig.6).



**Fig. 1** – INGV (Istituto Nazionale di Geofisica e Vulcanologia) map. The seismic swarm of Central Italy from August 2016 to January 2017. The white stars represent the events with a magnitude greater than 5. The first shock, M 6.0, was felt in Accumoli on the 24<sup>th</sup> of August; shocks in the area of Visso with M 5.9 on the 26<sup>th</sup> of October 2016, and in Norcia, 6.5 M, on October, 30; the fourth major event occurred on the 18<sup>th</sup> of January in the area of Monteverde - Capitignano. [INGV, 2017]



**Fig. 2** – Inside of a church in Central Italy. Scaffolding along the walls (in white) and at the base of vaults of the nave (in timber, at the top of the photo).



**Fig. 3** – Inside of a church in Central Italy. Timber safety intervention between the pillars which separate the naves.



**Fig. 4** – Inside of a church in Central Italy. Scaffolding close to the facade wall, in the choir area.



**Fig. 5** – Detail of a church in Central Italy: vaults and arches above the principal nave. The detail is appreciable thanks to a timber temporary scaffolding.

**Fig. 6** – Detail of a church in Central Italy: decoration at the basis of the vaults of the principal nave. Detail appreciable thanks to a steel temporary scaffolding.

**A<sub>18</sub> - AGIBILITA'**

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**Fig. 7** – Section A<sub>18</sub> of the damage form for churches: the accessibility [PCM-DPC, MiBAC, 2006]

This article intends to stimulate a possible approach “to remove” the *state of crystallization* which churches suffer in the temporal gap between the seismic event and the action of restoration. Another aspect is the implication that churches could have in the urban scenario. They could be seen as a tool which contributes to the resilience capacity of the hit city.

In the following, a deductive methodology is adopted. Starting from general concepts like bottom-up and participatory actions with examples of applications, the article will finally arrive to suggest a proposal of action. The objective is to stimulate a possible different approach that could be applied in the current case and that could be exported to similar situation elsewhere.

### **Bottom-up initiatives, participation actions, and temporary re-use**

In the last years, public institutions are considering in their policy decisions *bottom-up* initiatives. These are actions which see the community or a group of people involved in the realization of their ideas with a cooperative and participative attitude. Indeed, bottom-up actions exemplify what the community may sometimes feel as a need, materializing faster an idea. This approach is an alternative to the classical *top-down* one, where the change is the result of a “superior” decision, planned and “imposed” to the community. In this case, the decision-making process is not influenced by physical, human, and social capital. The factor which distinguishes the two approaches is the role of participation. Indeed, *participative action* means inclusion in the decision-making public policy.

The participative process can be a way to re-think spaces which have always been seen from a same perspective, associating the space with its function; or, maybe, it can be a way to push people to re-discover their origins under “a cultural story-telling”.

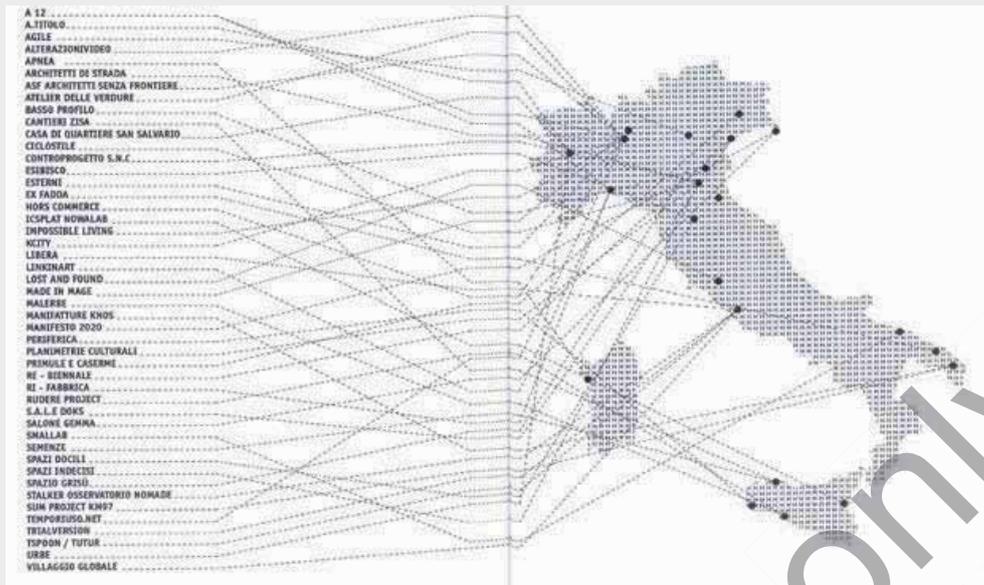
An emergency moment, like the post-earthquake, could represent an opportunity of experimentation. Temporary use has demonstrated in different situations to have contributed to the change in a less traumatic and more efficient way. To this regard, according to Gabriele Pasqui (Pasqui, 2014) occurrences of temporary re-use are also the ordinary transformations of the city. The change of the city results from actions, which are apart from the urban planning or economical decisions. It exemplifies an approach which shows possible different visions of the places with respect to their original function.

The temporary re-use, is one of the practices of the contemporary city and an occasion to valorize the extraordinary Cultural Heritage that sometimes belong to our cities without attracting their attention.

According, again, to (Pasqui, 2014), even with difficulties, especially in Italy, an institutional and administrative culture careful to the temporary re-use in public decisions for the city, and capable to design and to realize forms of social innovations, is growing. Virtuous examples come from associations active in different Italian cities. The multi-disciplinary character of the temporary re-use processes makes them able to answer to situations where the classical procedure cannot arrive.

In 2009, the municipality of Sesto San Giovanni (MI) started the experimentation of temporary re-use projects for buildings belonging to industrial archeology, that were waiting to be restructured to become museums (Inti, 2014). Sometimes, the collaboration of different authorities and groups may study solutions to problems of lack of specific regulations. For example, a joint project among the municipality of Milan, Politecnico of Milano, and the association Temporiuso, started on 2012 with the aim at developing in Italy some actions of temporary re-use of abandoned or under-used buildings.

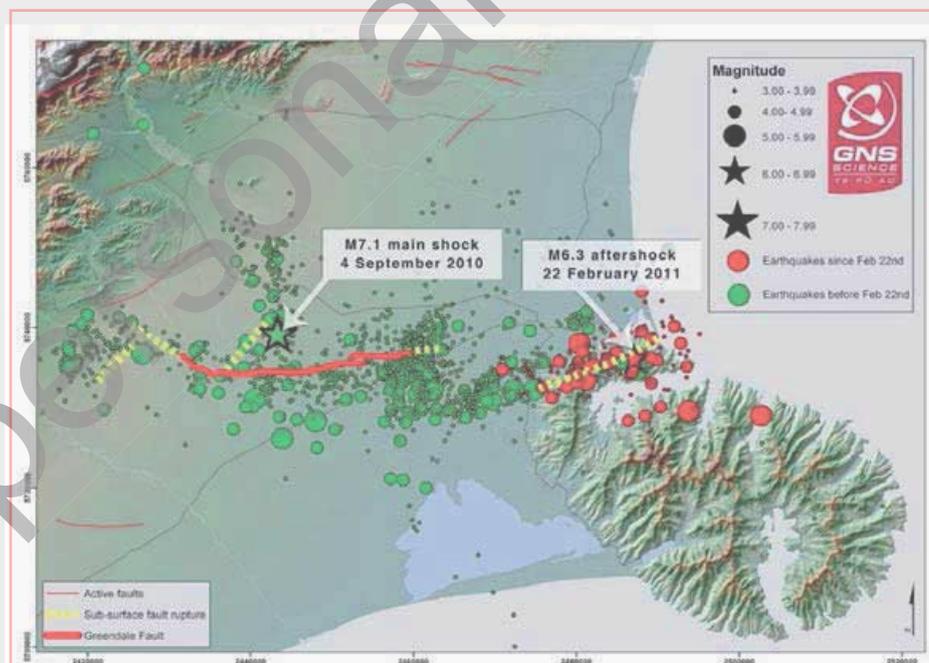
Figure 8, shows an informal network of “re-users from the bottom” composed of associations and organizations, artists, architects, urban planners between 25 and 45 years old, that since 2009 have organized public talks, workshops for ideas, and active actions starting from the national cultural heritage. They have promoted events to increase awareness and strategies of intervention for future re-uses of our cultural heritage, landscapes and open spaces currently abandoned or underused. This helps to understand that the approach of bottom-up initiatives is a reality that is diffusing and could represent a mean to reach results in several fields.



**Fig.8** Map of associations dealing with the temporary re-use. [Inti et al., 2014]

### An example abroad: Christchurch, New Zealand

A foreign example of bottom-up action and temporary re-use as answer to earthquake disaster comes from Christchurch, the second largest city of New Zealand, that was hit by the 2011 earthquake that devastated the 70% of its central area. A first shock hit this area of New Zealand, on the 4<sup>th</sup> of September 2010, 7.1 M, and a second one, 6.3 M, with the epicenter closer to the city, on the 22<sup>nd</sup> of February 2011 (Fig.9).



**Fig.9** The GNS Science map shows the two major shocks which struck Christchurch: one on the 4<sup>th</sup> of September 2010, M 7.1(Green star), and another on the 22<sup>nd</sup> of February 2011, M 6.3 (Red star). Dashed yellow lines indicate the position of buried fault [UNAVCO, 2017]

Some months after the February earthquake, a new Christchurch urban plan, called “blueprint”, was presented by the New Zealand government for the rebuilding of the city. This plan had some major projects which constituted the principal nodes of a development network that could help the city to arise from the disaster. The time needed for the elaboration of the blueprint, the time before works could start and financial supports could arrive, and the time needed to see anchor projects accomplished, pushed the community to react and to become active part of the change of the city. Citizens, NGOs, and artists started to cooperate, re-thinking the scenario of their new city through the conception and realization of *transitional projects*. This is the way in which Christchurch City Council (CCC) called those projects that were born under the label of *temporary projects*. The CCC preferred to call these projects in this way because, in their opinion, the word *transitional* implicitly includes the idea that they could contribute to the future development of the rebuilding process (Moore & Bennett, 2015). These projects were driven by different kind of people coming from several disciplines, providing space for a large variety of social functions, such as temporary cinemas, markets, bike workshops, urban farming, sports, and commercial spaces. Often, they were low-budgets and low-risk ones, a simple answer to needs. In Christchurch the transitional projects were many and spread all over the central city, and born with the intention of testing ideas or to stimulate debate on some space-related topics. They have acted through activation of spaces and not waiting for master plans nor planned decisions.

As reaction to the emergency, many new organizations, such as Gap Filler, Life in Vacant Spaces, Ministry of Awesome, Greening the Rubble, The Food Resilient Network, Festival of Transitional Architecture, and the Student Volunteer Army, were born. In this context, the CCC has answered in a positive way, supporting transitional projects, facilitating regulations and laws, unlocking sites, and providing funding and guidance with the Transitional City Projects Fund. Some of these projects after years are still there, others have been modified, some are gone. Some of these were already thought to have a lasting life of a short lapse of time.

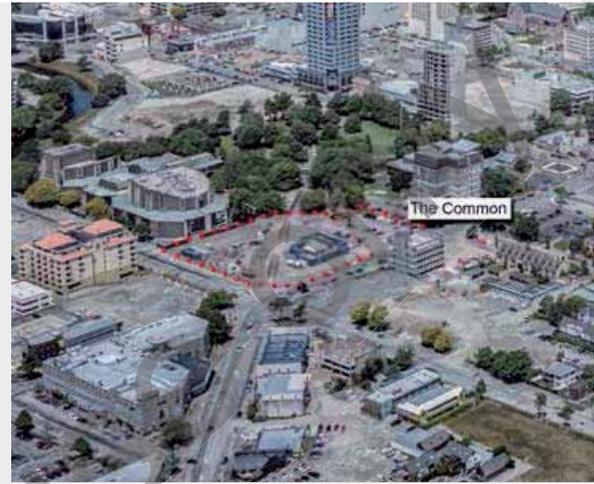
Gap Filler started as a simple initiative after the shock of the 4<sup>th</sup> of September 2010, with some projects on empty spaces, that became empty because of the earthquake loss. After the February earthquake, looking at the response of people, this group started using transitional projects to experiment and push forward a different way to approach the rebuilding of the city. In order to give a new temporary look to the damaged city they run some temporary installations, experimenting ideas amidst the nineteenth and twentieth century damaged buildings. The Gap Filler organization has worked with a fluid organization shifting from taking the role of organizers to that of a mean to materialize community ideas. They called their way to proceed a *propositional mode* of development (Reynolds, 2014). They could get people involved in the rebuilding without being a planner, a developer or an architect. They welcomed people’s ideas and suggestions. People have reacted more to propose ideas than to accept their proposed projects. Gap Filler has created up to 2014 a total of 45 projects and has helped to be realized 40 more. The temporary projects were monitored to understand the level of response by the community to those projects. Some of these were sometimes changed or adapted in response to feedbacks.

Figures 10-11 show an example of transitional project of Gap Filler, the Pallet Pavilion

with the contextualization of “The Common” block. In one of the blocks of the city for 16 months, a community space, made of 3000 pallets, taking the name of Pallet Pavilion, was designed, built, and used. After this period, the sense of community, that this project produced, influenced the subsequent project, “The Common”. Since that time, this block started to be an ever-evolving space for experimentation of projects. As still the long-term future of this block is unclear it will continue to be a place of experimentation with a community-based connotation.



**Fig.10** The Pallet Pavilion in “The Common block”, Christchurch (New Zealand) [Gap Filler, 2017].



**Fig.11** Aerial view of Christchurch city centre. Red dots indicate “The Common block”.

### The proposal

From these premises, a possible approach to conserve churches in Central Italy could be that of aiming at their temporary preservation before their final restoration; through bottom-up initiatives, able to make the disaster situation a potentiality for the setting up of new scenarios.

Creating indoor and outdoor temporary projects, churches could have a key role in the change, intended as a rebirth of the city, contributing in the meantime to their own valorization and preservation in a weak moment of their existence. Involving the community with participatory actions, the level of *sense of belonging* of these Cultural Heritage assets would increase.

The community, feeling involved into the process of valorization, would start to look at these assets not as architectural buildings that require money to be invested on, but as elements that contribute to bring forward their identity in their future rebuilt city. Here, the earthquake situation is used as a catalyst to have a step forward, able to transmit to the future a moment of history of these areas. In this situation, the principles of restoration of *reversibility* and *compatibility* are followed.

In concrete, the action could take its initial steps as follows:

- Subdivision of churches in groups depending on the evidences from the section A18 of the filled damage form for churches, classifying the accessibility level, as in Figure 7. In this way, proper actions of valorization could be devised, recurring also to modern tools and with a multi-disciplinary approach; every action will

depend on the level of accessibility and on the type of space. This could allow to think an adequate temporary project. Public art, participatory planning, and social design could work together. A cross-over of personalities from different disciplines and layers of the society could take charge of a temporary moment of crystallization that characterizes the post-earthquake situation.

- Elaboration of a map presenting churches over the territory accompanied by a legend explaining how each one could be exploited; the result is a general territorial overview which shows the relative potentialities; in order to avoid redundancy in the valorization, a correspondent map of valorization could be elaborated, establishing also rules of accessibility and compatible uses of the spaces. This last will be the result of the process and not a pre-established plan.
- Identification of active organizations or groups socially involved which could act as a link between the public administration and the community.
- Identification of possible users.
- Organization of trainings for the stakeholders and volunteers, to make them aware of the cultural value assets which are going to enter in contact.
- Monitoring of the response to these kinds of projects trying to interpret the results for use in future restoration and valorization policy decisions. Indeed, results could help to give a criterion in the management of future funds or in the way to valorize that specific place.

Positive aspects of the proposal:

- The temporary re-use can avoid the state of crystallization that churches are suffering, pushing towards future scenarios of valorization.
- The temporary projects constitute a test of the possible vocation of those spaces, going beyond the function that is usually and commonly associated to that space.
- This kind of approach would test the resilient capacity of the community to the post-earthquake scenario.
- This *temporary valorization* will have positive consequences on the territory, in a time-span comprised between the disaster and the restoration action. In this context, the emergency becomes an opportunity to increase the intellectual capital (intangible benefit), as happens with the planned conservation, which focus at preservation, thought as a process over a long period (Della Torre, 2010).
- The valorization of churches as single elements could have a positive impact on the environmental historical building context, recalling the importance of acting with a wider view, that is not focusing only on the individual element as a monument, but considering the whole Cultural Heritage assets (Charter of Krakow, 2000).
- This action of participation will help to create social cohesion, avoiding the phenomenon of depopulation of the hit areas and it will help to revitalize the sense of territorial identity.
- The fact to make the community involved into the process will have a positive impact on increasing their sense of ownership of those goods; also in a future perspective when the restoration step will be done, this will lead to perceive these assets positively and with respect.

- The territorial economy will receive a positive impact, thanks to the exchange and interaction and cooperation between different fields.
- Based on their level of appreciation and success, these temporary projects of valorization could be a discriminating factor once restoration decisions will be taken and financial supports will be available.
- Taking advantage of the present moment, there will be the possibility to appreciate architectural details that are not easy to perceive in a “normal” situation (Fig.5, Fig.6).

All in one, this proposal comes from the fear that the loss of our National Cultural heritage could be more than that caused by the earthquake, if the time before interventions and financial support and decisions will be too long.

Based also on the direct contact with the new Zealander experience, the suggested approach seems capable to make re-activation of the hit areas quicker, avoiding the worsening of the state of conservation of churches. Moreover, this strategy could help to build a *new* territorial identity: if, on the one side, some portions of the local cultural heritage were lost, on the other side, this new consciousness could favor the handing down to future generations of the memory of a particular moment in the life of those territories. Of course, a constant and constructive dialogue is necessary with professionals of the local offices of Cultural Heritage (Soprintendenza) and other administrative and public offices responsible for the management of the emergency.

### **The acceptance of the proposal**

Seeds that a similar approach could be welcomed could be found in the press. At the beginning of July, 2017 an article (Romano, 2017) was published, where the Cultural Heritage was identified as a mean able, through innovative projects, to push the physical, economic and social reconstruction of the areas hit by the 2016 Central Italy earthquake. Some actions have already started, born by the participation of citizens, professors, and personalities involved in cultural fields.

Another positive signal comes from Camerino (MC), where some experiments involving the participation of the community in the process of rebuilding, are under way (Ronchetti, 2017). Art, culture, economy, landscape and infrastructure are the elements that could be the driver of a territorial network of the damaged cities which cannot be abandoned or deprived of their cultural value.

### **Conclusions**

The 2016 Central Italy earthquake posed a threat to the Cultural Heritage assets of those areas, in part composed of churches. The time of interruption determined by economic, administrative and logistic reasons, is a temporal gap between the moment when the earthquake struck and the moment when the interventions of restoration will be executed. From what discussed in this work, the post-earthquake emergency phase could create opportunities to rethink or experiment some approaches of interventions. In this case, the work has shown as a temporary use of these churches could constitute an approach of temporary valorization which considers the contingent and out of ordinary moment in the

history of existence of these churches. The temporary and participative re-use of the damaged churches also aims at putting in practice a territorial strategy, that starting from the valorization of the single churches could give a positive impact to the surroundings; in the meantime, the awareness of preservation of the cultural heritage asset will be achieved with the strengthening of the sense of identity which the participative action could foster.

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