La gestione dei rischi e del recupero nei beni culturali♦
Risk and resilience management in cultural heritage

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Abstract

Obiettivi. *Verificare le strategie organizzative per la gestione del rischio e del recupero dei beni culturali dopo eventi catastrofici. La domanda è: quali approcci applicare al patrimonio culturale per la gestione del rischio disastri e per il recupero dei beni danneggiati o distrutti?*

Metodologia. *Esame dei principali approcci esistenti e verifica della loro adeguatezza al campo specifico che dal ristabilimento della situazione antecedente alle catastrofi come terremoti, tsunami, inondazioni oggi si va estendendo alla distruzione di edifici storici, monumenti e musei in conseguenza di posizioni e movimenti iconoclastici.*

Risultati. *Il paper presenta e discute due approcci organizzativi strategici, di Clustering e Networking, rivolti ad affrontare eventi catastrofici nel campo dei beni culturali rapportandone la strategia al grado evolutivo delle istituzioni preposte al patrimonio culturale.*

Limiti della ricerca. *La rapida evoluzione del contesto e della casistica in cui verificare gli approcci proposti.*

Implicazioni pratiche. *Adeguamento delle strategie di intervento alle dimensioni del fenomeno ed allo stato evolutivo delle istituzioni operanti nel campo dei beni culturali in caso di catastrofi intenzionalmente causate dall'uomo.*

Originalità del lavoro. *Poiché non ci sono ancora modelli di gestione dei rischi e del recupero dei beni culturali in caso di disastri intenzionalmente prodotti dall'uomo, il paper fornisce un quadro teorico per la costruzione e verifica di modelli possibili applicabili ai beni culturali.*

Parole chiave: *Gestione dei rischi; Recupero; Beni Culturali; Modelli organizzativi.*

Abstract

Objectives. *To verify the organisational strategies for the risk and resilience management after catastrophic events. The question is: which strategical approaches can be applied to cultural heritage for disasters risk management and for the resilience of damaged or destroyed heritage ?*

Methodology. *Analysis of main existing approaches and verification of their adequacy to the specific field that from the recovering of the previous situation to catastrophic events like earthquakes, tsunamis or floods, today it is extending to historical buildings, monuments and museums destruction as the consequence of iconoclastic positions and movements.*

Findings. *The paper presents and discusses two strategic organisational approaches, of Clustering and Networking, addressed to face catastrophic events in the field of cultural heritage relating the strategy to the evolution grade of institutions dedicated to cultural heritage.*

Research limits. *The fast evolution of the context and of the cases number in which verifying the proposed approaches.*

Practical implications. *Adjustment of intervention strategies to the dimensions of the phenomenon and to the*

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evolution of institutions operating in the field of cultural heritage in case of catastrophes intentionally produced by mankind.

Originality of the study. *As there still are no models of risk and resilience management in cultural heritage with regard to disasters intentionally produced by mankind, the paper provides a theoretical frame for the creation and verification of possible models applicable to cultural heritage.*

Key words: *Risk Management; Resilience; Cultural Heritage; Organisational models*

1. Introduction

Resilience Management is mainly concerned with recovering the previous situation in case of catastrophic events, like earthquakes, tsunamis or floods. The recent destruction of the ancient city of Nimrud and the Mosul Museum by ISIS, together with the Nabi Yunus Shrine and the Tal Afar Citadel in Iraq, dramatically imposes the need for resilience management to be extended to catastrophic events intentionally caused by mankind and its specificities in cultural heritage (CH).

In some of these CH sites, copies of original artefacts were transferred to more secure locations before they were destroyed, but in some cases this transfer was not possible. This was the case of the aforementioned ancient city of Nimrud as a whole and also of the Buddha statues in the Bamiyan Valley in Afghanistan, which were blown up by the Taliban during their iconoclastic campaign against idols[1]. Similar fates also occurred to other pre Islamic monuments, which gave a media audience to this problem and to the particular surge of the risk of human hostility against CH in a kind of diffused *damnatio memoriae*. The events at the Tunisi Museum widened the target of these terrorist activities to visitors and museum staff.

Obviously, these are only the most recent incidences of damage to CH. Similar damage happened during the Second World War, and looking further back, there is also the famous case of the Parthenon sculptures and other examples of CH, which were transferred to Western Museums, because of the risk of further damages occurring during the conflict between the Greeks and the Turks.

The reaction to these risks ranges from the enforcement of security measures to the transfer of materials - when possible - to other more protected places. However, to face this increasing danger, managerial theory and practice have to answer the question of whether the usual recommendations, structures and processes, prepared for disaster and resilience management, have to be changed or adapted to the specificity of CH. In short, what could be the strategical consequences on the resilience management concept in the approach to CH?

The difficulties in defining an approach of resilience management in CH are that the CH itself refers to different definitions and boundaries.

The CH could be defined in several different ways, from the more restrict and material perspective as consistent in urban structure, monuments or materials to the immaterial one with human knowledge about origins and history of human beeing. Each of these definitions outlines a different point of view: the material one is mainly linked to single materials, while the cultural one to relationships among knowledge and information.

Thus the definition of "Cultural Heritage" implies a wide variety of tangible and intangible items (Santoro, 2013), that create a socio-cultural structure, characterized by an intrinsic symbolic nature and by its capacity to signify a specific identity through symbols (Prats 1997).

Cultural Heritage connects the memory (tradition) and identity development of a community concepts as Cultural Heritage from the past (Boudiaet al., 2010). For a more complete concept of CH we have to consider the Faro Convention (The Council of Europe Convention on the Value of Cultural Heritage for Society, acting from 2011) in which CH comprises "all aspects of the environment resulting from the interaction between people and places through time", beyond the single monument and in direction of an affective value.

According to the traditional approach, with the Convention concerning the Protection of the World Cultural and Natural Heritage (UNESCO, 1972), the experts selected by public institutions define what is heritage (and consequently what it is valuable of protection), based on categories as Monuments, Groups of Buildings and Sites using scientific criteria measured on national scales.

With the notion of CH focused on its connection with the community (Fairclough, 2009:31) communities changed their position from mere consumers to producers of the same heritage.

[1] Since 2002, international funding has supported recovery and stabilisation efforts at the site. Fragments of the statues have been documented and stored, with special attention given to securing the structure of the statues still in place. We hope that in future partial anastylosis can be conducted with the remaining fragments. In 2009, ICOMOS constructed scaffolding within the niche to further conserve and stabilise the remains. Nonetheless, several serious conservation and safety issues exist, and the Buddhas are still listed as World Heritage in Danger.

In consideration of structures and processes, we can refer to two main approaches: the one of United Nations Educational Scientific and Cultural Organization (UNESCO) with its list of World Heritage in Danger (WHD)[2]. The second refers to the process of Resilience management, standardised by the CERT Resilience Management Model (CERT-RMM). In addition, inform the practical view, these two subjects represent the reference on the ground concerning management decisions in strategy, policy, actions and performance measurement (Bianchi, 2006).

The paper begins with the illustration of the resilience concept. It then develops the three-dimensional model to represent catastrophic events and the Clustering/Networking approach that may be used, with the aim of preserving CH. The final section presents the theoretical implications, the limitations and the potential for future research.

2. The concept of Resilience

What is resilience? Although this concept is submitted to many interpretations, as stated by some authors (Haigh and Amaratunga, 2010), the definition used is connected to the disaster risk reduction that represents a conceptual framework, presented by the United Nations International Strategy for Disaster Reduction (UNISDR) Hyogo Framework for Action 2005-2015.

In this context, the concept of resilience underlines multiple stable states and a more positive and proactive perspective to disaster risk reduction. The UNISDR (2005) defines resilience as "*The capacity of a system, community or society potentially exposed to hazards to adapt, by resisting or changing in order to reach and maintain an acceptable level of functioning and structure. This is determined by the degree to which the social system is capable of organizing itself to increase its capacity for learning from past disasters for better future protection and to improve risk reduction measures*".

The literature outlines many approaches to define resilience: as stated by Haigh and Amaratunga (2010), for some authors (Horne and Orr, 1998; Sutcliffe and Vogus, 2003) resilience derives from a return to a stable state after a perturbation, with a single stable situation of constancy, efficiency and predictability. Others (Douglas and Wildavsky, 1982) outlined the perspective of risk, considering the resilience as the asset that mediates the passage from a stable state to other states. Douglas and Wildavsky (1982, p.196) specifically defined resilience as "the capacity to use change to better cope with the unknown: it is learning to bounce back" and emphasised that "resilience stresses variability". In a similar way, Dynes (2003) connected the concept of resilience to an emergent behaviour, based on improvisation and adaptation, while Kendra and Wachtendorf (2003) stressed the creativity.

Furthermore, Wildavsky (1988, p.77) specified resilience as the "capacity to cope with unanticipated dangers after they have become manifest" and pointed out that resilience is usually demonstrated after that a catastrophic event has happened.

Lettieri et al. (2009) opposed the concept of resilience to that of resistance, based on the intervention time: resilience refers to after-crisis activities, while resistance to before-crisis activities.

Within this framework, Longstaff (2005) focused on a positive perspective, describing the resilience concept in terms of an approach wider than that of mere survival, due to the implication of individuating potential risks and assuming proactive functions. For Paton et al. (2001) resilience "describes an active process of self-righting, learned resourcefulness and growth".

The research on political ecology and climate change associated the term of resilience to adaptive capacity (Cutter et al., 2008). On this topic, Brooks et al. (2005) considered adaptive capacity as the ability of a system to adjust, change and moderate the effects and cope with a disturbance. Therefore, adaptive capacity is a key issue in the environmental or climate change perspective of resilience, but less developed in hazard literature, where mitigation is an outstanding concept, defined as an action realised for reducing or avoiding risk or damage from hazard events (Mileti, 1999). In a similar vein to adaptive capacity, the mitigation tools usage can increase the resilience of a system to hazards (Burby et al., 2000).

It is interesting that most of these definitions or concepts shows some difficulties in applying them to disasters determined by wars, conflicts or by a cultural programme of destruction, as all events are quite difficult to predict. Moreover, problems emerge in single events submitted to a logic of intentional effects of destruction with cultural motivations, as is the case with movements like ISIS, Al Qaeda, and Boko Haram.

It is well recognised in literature (MacKee and Askland 2014) that the restoration or recovery of damaged CH is often neglected in plans addressed to post-disaster reconstruction and in strategies for disaster mitigation. Organisations involved in disaster management often do not distinguish Cultural Built Heritage (CBH) from the general built environment. Therefore, it is necessary to define an approach to disaster management that considers pre-disaster circumstances, mitigation practices and preparedness.

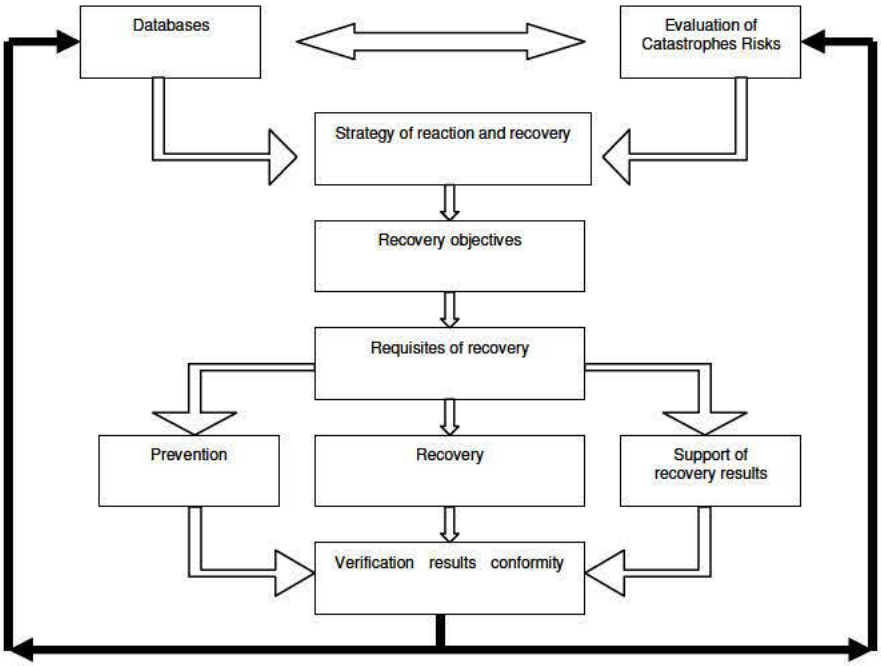
When we deal with disasters that occur to CBH, understanding risk and vulnerabilities are key elements that significantly increase in the case of natural catastrophic events (Taboroff, 2003). In these situations, CBH is vulnerable,

[2] Updated with the results of October 2013 monitoring presented at UNESCO BAKU Forum and 2008-2015 UNESCO Periodic Reporting Questionnaire.

particularly exposed in the wake of disasters due to the fragile nature of ageing structures, with the consequent high risk of collapse.

To this end, a general model of resilience management is summarised in Fig. 1.

Fig.1: A model of Resilience Management



Source: Bianchi, Malaj, 2013, p. 709

Nowadays, organisations are constantly bombarded by events and conditions that can cause stress and may disrupt their effective operation. Controlling organisation behaviour and response during times of disruption and stress are a primary focus of operational resilience management, which provides an organisation with the ability to adapt to operational risks, including realised risks (Caralli et al. 2010, p.15).

In this perspective analysed by Caralli et al. (2010) the stress related to managing operational risk, and thus operational resilience, can come from many factors. These include the pervasive use of technology, operational complexity, increased reliance on intangible assets, such as digital information and software, the global economy and economic pressures, open borders, geopolitical and cultural shifts, regulatory and legal constraints and the view of security as an IT problem, not an organisation-wide concern.

3. The three dimensional model for the management of catastrophic events

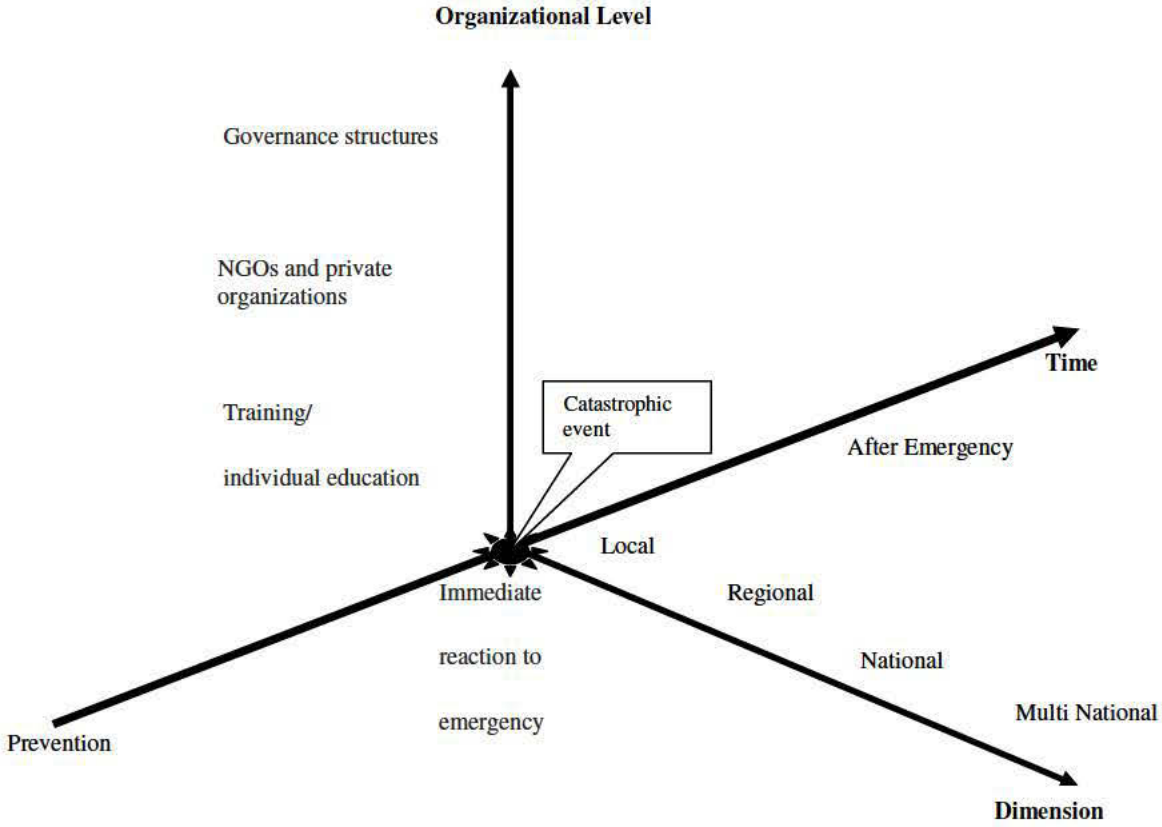
The reading of complex and chaotic events as catastrophes with the aim to deal with an adequate strategy could be referred to two models. The first is a three dimensional one as a tool to consider the different aspects of events. The second is an evolutionary model which allows to connect different strategies to the conditions of involved organizations.

In the three dimensional model (Fig.2), the first dimension is the time that distinguishes the prevention from the immediate reaction and the successive recovery. These aspects must be continuously updated considering that the alert levels, in emergency procedures, are in continuous growth and the migratory flows constantly modify the demographic and social profile of involved populations.

In the prevention of damage to cultural properties, we can insert lists like those arranged by UNESCO for World Heritage in Danger, but also the diffusion of new communication tools that widely increases the quantity of data, with the aim of predicting dangerous situations, like the anomalous behaviour of people susceptible to catastrophic evolutions or material deeds. The maintenance of this list and keeping it up to dated is an actual problem with regards to the danger of damage from local conflicts and civil wars, as these can be unexpected and fast, compared to other catastrophes related to climate change and natural events.

To this purpose the process to preserve and update information about CH in danger is only a step to deal with catastrophic events. Except for what it will be said as it concerns the network of the involved institutions, the events have to be connected to the individual dimension by the training of the staff of units dedicated to this purpose as the Emergency and the Operative Rooms. The aim is to avoid, if possible, the break of the communication lines or their overload informing the individuals about the functions carried out by these units and how to convey on them the more pertinent information.

Fig. 2: The managerial dimensions of catastrophic events



Source: Bianchi, Paganelli, 2014, p. 525

The intermediate level of this activity is given by organisations, not belonging to public administration, like NGOs, associations and enterprises. Each of them plays a determining role before, during and after the event. With regards to governance structures, the system is always regulated by the normative that mainly refers to civil defence. It is a system of relationships in continuous renewal and consequently it keeps up to date with the structures to be activated and with the procedures to be carried out in each phase as the alert, the intervention and the recovery.

A further dimension to consider in an emergency organisation is the width (or breadth or spaciousness) of the events themselves, that can have local, regional, interregional, national or international relevance.

To this end, we can focus our attention on three levels: Prevention, International and Governance structure. No matter that the problem could be considered in an international perspective, that prevention could be the only one to avoid the damage of original and not replica materials, and finally, that the level, although with concrete implications, would be mainly a concern for governance strategy in the field of CH preservation.

This perspective, in addition to constituting a challenge for coordination among the involved organisations, is closely tied to the features of the territory to which we refer.

An immediate result of this model is that the risk management has to be included in resilience because the efficiency and effectiveness of the recovering after catastrophic events is strictly connected to the performance of risk management. In few words a good resilience depends from a good risk management and prevention initiatives.

At multi national level we can note UNESCO with its List of World Heritage in Danger that aims to inform the international community about the conditions which threaten the very characteristics for which a property was inscribed on the List, and to facilitate corrective action.

4. The UNESCO list of World Heritage in Danger

The UNESCO list of World Heritage in Danger is dedicated to the preservation of World Heritage properties threatened by armed conflicts, warfare, earthquakes and other natural disasters, pollution, looting, unrestrained urbanisation and tourism. The danger may be "ascertained" when the property is faced with specific imminent danger, or "potential" when it is faced with circumstances which may have negative effects on its World Heritage value.

In accordance with the World Heritage Convention (1972), each cultural property was listed according to the following template, as shown in Tab.1.

Tab.1: Template for cultural properties

Name	Image	Location	Criteria	Area ha (acre)	Year WHS	Endangered	Reason
Landscape and Archaelogical Remains of the Bamiyan Valley		Bamiyan Valley Afghanistan	Cultural	159	2003	2003-present	Fragile conservation state due to abandonment, military action and dynamite explosions; causing dangers such as risk of collapse of Buddha niches, further deterioration of cave murals, looting and illicit excavations. Destruction during the rule of Taliban due to their teachings that the statues are abominations for Islam.

Source: our elaboration from http://whc.unesco.org/en/158/

The number of properties today is 46, but it is interesting to note that only in 12 there is the risk of intentional damage caused by wars and conflicts.

This, despite the extension of the iconoclastic campaign underway that surely is threatening many other CH sites present in non-critical areas[3].

To give an example, the presence of a river that crosses several regions automatically implies an interregional coordination that can assume the form of a permanent structure like AIPO, the Interregional Agency of Po river, namely to suggest an adequate structuration of competencies on a territorial basis, as it regards the presence of industrial areas among more administrative repartitions. It is on this dimension that it was applied to numerous emergency plans of international organisations, which foresee the distinction between a localised event (checkable by local means), a circumscribed one (requiring special interventions) and a general case (event of serious proportions). On the international plan, a widened concept of region is applied, i.e. a macro-area, characterised by a homogeneous geographic system, as in the case of Latin America and of Caribbean countries.

In this last situation, UNESCO is organised on a Regional Disaster Information Centre (CRID), sponsored by six organisations to ensure the compilation and dissemination of disaster-related information in Latin America and the Caribbean as follows:

- Pan American Health Organisation - Regional Office of the World Health Organisation (PAHO/WHO).
- International Strategy for Disaster Reduction (ISDR/UN).
- Costa Rica National Risk Prevention and Emergency Commission (CNE).
- International Federation of Red Cross and Red Crescent Societies (IFRC).
- Coordination Center for Natural Disaster Prevention in Central America (CEPREDENAC).

Authors (Matthews et al., 2009) underlined the presence of international organisations, such as UNESCO, the International Centre for the Preservation and Restoration of Cultural Property, the International Council of Archives, Museums and the International Federation of Library Associations that work to promote and coordinate internationally and nationally effective disaster management.

The coordination among these different actors is influenced by their capacity to manage operational resilience. On this purpose the CERT model presented by Caralli et al (2010) emphasized a multi dimensionality of the resilience concept comprising for instance the use of technology, the diffusion of intangible assets, global economy and legal constraints.

[3] We also must not forget that the threat of damage to cultural heritage can be submitted to blackmail against governments, as happened in the case of the terrorist campaign launched by the "mafia" in the 1990s, culminating in damage to Uffizi Gallery.

5. The CERT Model and FEMA experience.

The CERT Resilience Management Model, although criticised for its main orientation on information technology, represents a systemic tool considering different aspects of resilience activities and the need to coordinate a wide range of subjects in different positions.

The work was sponsored by the U.S. Department of Defense and produced by the Software Engineering Institute on the Campus of Carnegie Mellon University. The declared purpose of the report was to represent "an innovative and transformative way to approach the challenge of managing operational resilience in complex, risk-evolving environments" (Caralli et al., 2010, p. VI). It has a fundamental process perspective enumerating and describing analytically different steps to be accomplished by different subjects in the management of resilience. To this end, the methodology is connected to a continuum of practices focused on managing operational resilience, and at the same time, as an evolutionary method that allows organisations involved in the process to test their capabilities in the field and to evaluate the level of their performance in resilience.

Although it is a global perspective, from a technical point of view another limit of the model is its main focus on enterprise management, business continuity and engineering that remarks its limitations with problems concerning CH and the mission of organisations operating in this field. Yes, the relevance of the information system is not in discussion, but it is difficult to accept that in CH the managerial focus supports the specific actions taken to secure information, by making them more effective and efficient.

The orientation to move from structured models to processing ones standardized by the CERT Model can be individuated in the experiences of FEMA (Federal Emergency Management Agency) which isn't an institution to manage the emergencies but an organization coordinating a team among local public managers, companies, volunteers associations, NGOs, religious entities and citizens. The pragmatic approach of FEMA is to favour the initiatives, the doing and the spontaneous collaboration among different and non structured roles to deal with the emergencies. In Italy, it was initially applied the Method Mercurio, based on the maintenance of structures and materials immediately available in case of catastrophic events. Owing to disappointing results, Mercurio was substituted by the Method Augustus mainly inspired to the FEMA experience which highlights the collaboration among involved organizations and the on going process activated by the condition of emergency.

The diversity of situations trigged by catastrophes makes difficult to prepare standard answers but, anyway, can be focused on the particular field the emergency is dealing to.

In the case of CH, the problem provoked by iconoclastic campaigns and intentional damages demands some consideration about the strategies of cultural institutions, mainly museum organisations, which, despite their mission and priorities, could be inserted in an evolutionary cycle with different stages of structuring and fruition and a different link with the strategy to face catastrophes.

6. The evolutionary model and Clustering / Networking approach

The cycle concerning the strategic phases of a museum organisation considered in a wide sense implies in its different items the concept of resilience orientated to the prevention (Fig.3).

The catastrophic events can intervene in any of the development phases of a museum. In the first phase, the focus for the determination, delimitation and allocation of these resources prevails. In these operations, the juridical problems play quite a relevant position.

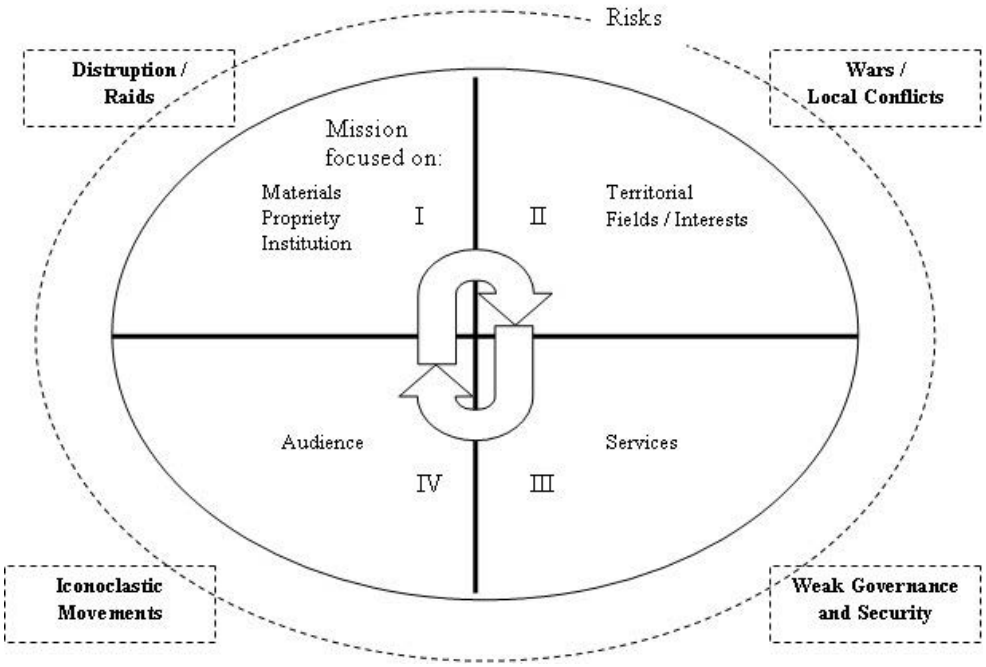
In the second step, the museum institution focuses its mission on the territorial location and on the acquisition of a reputation wider than the narrow local area. Therefore, in this phase the local presence of the structure with all initiatives that may contribute to this assumes a strategic importance.

Once ensured, this position to manage more resources becomes necessary. The support to the museum activities through services, which can further enhance the ability to use and consequently attract a greater audience, becomes significant (Phase III).

The recent debate focuses on the possibilities of museum corporatisation, taking into account the evolution of Italian socio-economic needs, together with the increasing internationalisation of museums and competition among different countries. This contributed to insights on management aspects, and in particular, on user profiles.

Phase IV provides operators and scholars with user features, distinguished by the intensity of use (indicated for example by the duration of the visitors permanence in the museum and from the delivered services). It also provides seniority (consequently from the necessity of taking into account the different needs) and frequency (consequently of the distinction between frequent and not frequent visitors or users as the museum has structures dedicated to study and consultation).

Fig. 3: Evolutionary cycle of museum mission and connected risks



Source: elaboration from Bianchi, 1996, p. 64

The evolutionary model told us that the strategies of resilience can't be univocal. We have resilience activities consisting in a new location of materials transferred in safer places with centralized services of security or with a less dangerous collocation as it concerns the territory. Another strategy, in case of museum structures evolved into network organizations, is the distribution of materials among other museums, in order to reduce the risk of a punctual catastrophe on the territory. The turnover within the museums network could limit the criticisms against the relocation of CH.

An approach to the problem could be derived from previous researches on Project Management and Organisational start up, with the definition of managerial strategies named Clustering and Networking (Bianchi, 2005; 2010) (Fig.4).

The two structures/processes in discussion are the Cluster, as an aggregate of organisations, services and materials concentrated in a location or an area and the Network, as a net in which items are distributed among network partners diffused in the territory (space that could also have a worldwide dimension).

The Clustering activity has the strategical purpose to concentrate elements, preferring the concepts of proximity and efficiency, with a better efficacy and efficiency of protecting interventions. Networking is based on a cooperation approach among cultural institutions spread worldwide (Bianchi, Orelli and Tampieri, 2010). The Networking allows the dissemination of cultural items that preserves them from local risk and facilitates a global and secure fruition (by chance according to the general orientation to preserve the historical identity against the *damnatio memoriae*).

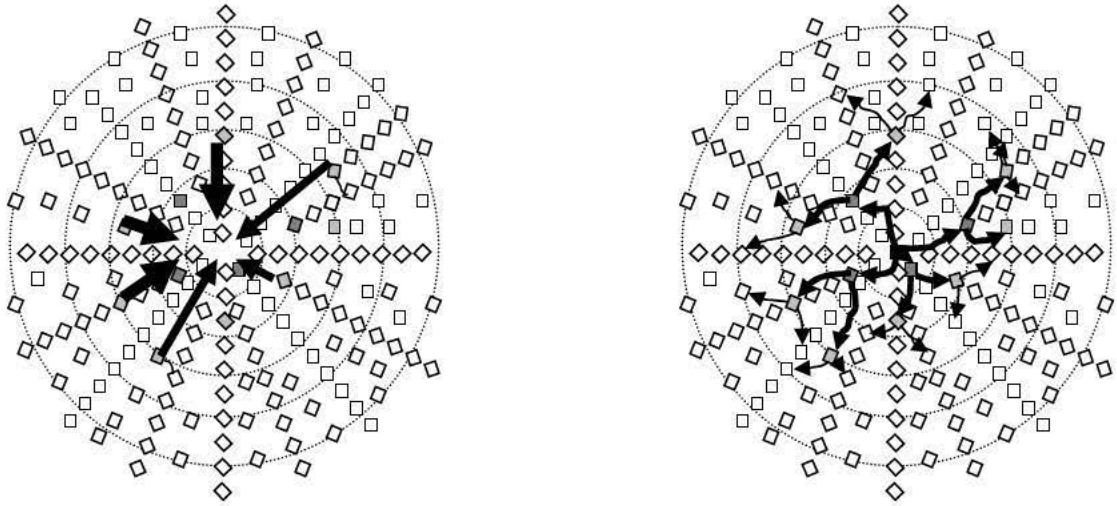
Although these good intentions, both approaches give relevant reasons to arguments. The concentration strategy of historical materials in securitized sites or its displacement in less dangerous localities could cause the hostility of local population and be lived as a stealing of own historical memory.

This contrariety could be overcome in case of serious danger, as in conflict areas, and mitigated by the substitution of reassigned materials with copies. Furthermore, the actual technology could allow an acceptable reproduction of damaged or destroyed monuments. This approach can also be used if there is a problem in maintaining the objects, like with the statue of Marco Aurelio in Rome, whose original is preserved in the museum, whereas a copy is exposed in Bernini square. The use of 3D printers could speed up this process, once acquired the analytical data of the materials, and makes feasible the reproduction of adequate and similar prototypes.

Fig. 4: Clustering and networking

4.1 Clustering

4.2 Networking



Source: Bianchi, 2005, p.15

Networking, with the dissemination of cultural materials, breaks the connection among objects and their location, contributing to the diffusion of fruition and to the comparison of different heritages in diverse locations. The dispersion of materials from Egypt and Greece, with the famous displacement of the Parthenon Sculptures, was provoked by Lord Elgin. This was due to the danger of damage from conflicts with the Ottoman Empire and the indifference of local populations, together with the weakness of national governments. There is no chance that similar reasons could be attributed to the present situation in areas under the control of ISIS or other iconoclastic movements.

7. Conclusions

The main tools up to now produced by managerial theory and practice in the field of risk and resilience management are mainly connected to natural disasters and catastrophes due to climate change.

The situation on the ground concerning CH is rapidly changing, and many issues are debated with the aim of understanding if CH and the particular challenges given by iconoclastic campaigns demands an adaptation of existing models or the creation of new ones. The main criterion of updating the lists of historical sites in danger has to take into account the socio cultural evolution of countries and local communities orienting the risks evaluation connected to Clustering or Networking approaches.

It is believed that the direct defence is not the best way to preserve CH. An example of this is the conflict at the Tomb of Rachel, a shrine to the biblical matriarch revered by Jews, Christians and Muslims. The shrine is on the Israel side of the West Bank barrier. The Israelis say that the barrier was built for security reasons, but Palestinians say that it constitutes a land grab. The International Court of Justice has ruled that the barrier is illegal and should be removed where it does not follow the Green Line, which is the internationally recognised boundary between the West Bank and Israel. This new perspective could be realised, not only with a change in the methodology to assess these lists, but also with the structuring of organisations partner of this process. The models of resilience management can't only be considered from the point of view of logistics and technology, but they need a multidisciplinary approach. Furthermore resilience processes have to be reconsidered from an ethical point of view, particularly as this concerns the fruition of originals, copies, prototypes or reproductions of CH.

This could open the way to a different balance of clustering and networking approaches with a feasible decision making between the concentration of materials in protected sites and their dissemination - almost temporarily- far from dangerous areas. Anycase, the field of research is wide and promises many challenges for scholars and practitioners.

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