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Françoise Collanges



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Assessing Damage and Measuring Impact: From Crisis to Recovery - What Is Required?

Françoise Collanges

- 1 The 2021 floods were one of the most significant events for Belgian cultural heritage since the Second World War. Triggered by heavy rainfall, the floods devastated an area primarily affecting the southern border of the Netherlands, two Länder in South-West Germany (North Rhine-Westphalia and Rhineland-Palatinate), and South-East Belgium (Wallonia). In this latter region, over 200 cultural sites were impacted. Local archives endured severe flooding, resulting in considerable losses, despite the emergency freezing of many records. Several important collections of objects and works of art suffered damage to artefacts numbering in the hundreds, necessitating several years of work for recovery.¹ More than a hundred listed buildings also sustained damage.
- 2 Cultural heritage was not recognised as a vulnerability within the overarching crisis management system established at federal, regional, or provincial levels. Although some information was shared among heritage professionals,² the sector itself remained unprepared, and emergency planning for collections was not considered a significant issue prior to this crisis.³ In response, action was organised on the spot by leveraging the goodwill of professional bodies in the sector; a key point emerged: evaluation was necessary. However, what type of evaluation was required, regarding which aspect of the situation, and for what purpose?
- 3 Evaluation encompasses various processes aimed at expressing an opinion based on judgment regarding a situation, project, or asset, for example. While it is sometimes used interchangeably with assessment, the latter focuses more on the process, whereas evaluation emphasises the outcome. Given the limited information available in July 2021, identifying and conveying what was occurring was essential. Was there a crisis affecting cultural heritage as well? If so, what was happening, and where was assistance needed?

- 4 The term ‘evaluation’, even when considered within the narrow scope of cultural heritage, encompasses a wide array of competencies, methodologies, and indeed, professional perspectives - whether viewed from the standpoint of a curator, conservator, or crisis manager, for example. Drawing on the experience gained during this crisis, this paper offers insights into the evaluation tools that were available, which ones were utilised, and the impact they had on the response and recovery efforts. The case study provided by the Belgian crisis may enhance understanding of the tools and objectives of evaluation for cultural heritage both during a crisis and in the long term.

Evaluation During and After Crisis: Methods and Purpose

- 5 Crisis management for cultural heritage has been an expanding field since 2000.⁴ With climate change and the rise of conflicts, the past decade has highlighted the critical issue of assessing significant risks and damages within a crisis context.⁵ While some risk-prone countries have developed a local culture of crisis management, typically associated with specific types of events, many low-risk countries are caught off guard when an exceptional occurrence arises.⁶
- 6 The 2021 floods in Belgium were among such significant events. They took place during the second year of the COVID pandemic, which had dramatically underscored the scale of a global humanitarian crisis, and before the war in Ukraine, bringing to mind memories of conflict in Europe. At that time, there was little culture of emergency evaluation for heritage in Belgium, and the management of cultural heritage was, and continues to be, primarily focused on long-term policies and prevention, as implemented through legislation centred on gradual measures.
- 7 However, regarding cultural heritage, as no emergency response was organised prior to this crisis, what were the key points that required assessment?
- Is there a crisis concerning heritage? If so, how significant is it?
 - If there are any affected sites, what actions should be taken to assist them and why?
- 8 Evaluation methods were required to answer those questions, encompassing quantitative assessment (how many, where, what kind of heritage, what is needed) and qualitative assessment (what type of heritage is affected, how severely it is damaged, whether it is possible to rescue, salvage, or restore it).

Evaluation: Who Is in Charge?

- 9 The definition of a disaster⁷ used by the International Federation of Red Cross and Red Crescent Societies (IFRC) makes a direct link between the event and the social capacity to react to it. It is a situation where the capacity of a community to respond is overcome. In July 2021, Belgium had recently reopened its borders for travel following the initial lockdown. When the floods occurred, many heritage professionals were abroad on holiday. Furthermore, among the heritage professionals convened in the crisis committee established by KIK-IRPA and Blue Shield Belgium on 20 July 2021, very few had any knowledge or training in crisis management for cultural heritage. Thus, while the desire to assist and contribute was undoubtedly present, the capacity was limited, both in terms of numbers and strategies for managing a crisis.

- 10 A second element was access:⁸ cultural heritage not being a listed asset in Belgian emergency management, what mandate on disaster-struck sites was allowed? For human rescue, calls were made early on to the general public to provide some help, but within an organized frame, as civil protection, Red Cross were on the field.
- 11 For heritage professionals, visiting damaged sites without an official mandate raised both personal and professional concerns, particularly due to the potential hazards posed by the buildings and the looting that had occurred in certain areas.⁹ The only institutions authorised to intervene were the site owners or the administration responsible for technical oversight. For example, the State Archives of Belgium holds such a mandate¹⁰ for archives and can promptly initiate on-site assessments. In the case of listed buildings, the regional agency responsible (AWaP, Agence wallonne du Patrimoine) can undertake similar actions. However, they are accountable only for specific types of heritage and are not inclined to adopt evaluation methods that would provide a comprehensive understanding of the damage. Furthermore, they do not share their information to foster a broader understanding of the crisis, as there is no general official mandate for assessing, monitoring, or developing knowledge of damage to cultural heritage during crises, whether at a national or local level.
- 12 A third element that hinders evaluation is the nature of what requires assessment. In humanitarian rescue, there is no ambiguity regarding the human aspect of the victim, and evaluating the severity of their condition is a medical speciality dependent on specialised services. In the realm of cultural heritage, we encounter the issue of relative importance: what is recognised as heritage? By whom? For what reasons? Since when, and for how long? Heritage protection heavily relies on research and inventory; from selection and description to expertise, a rather lengthy process determines what is regarded as heritage and the level of protection it can claim. As the definition of cultural heritage is itself a cultural process, the list is never exhaustive. Since 1945, heritage protection has been organised by authorities through inventories but the task is still ongoing. Therefore, in an emergency, while we are confident of the heritage status of certain objects, how do we approach all the others?
- 13 Although it was evident that an exceptional disaster was unfolding and the heritage sector across the country quickly expressed a strong willingness to act, neither the legal framework, the relevant crisis management actors, nor the necessary methods for a comprehensive assessment of the situation were readily available. However, both the immediate emergency response and subsequent recovery efforts depended on an initial evaluation and continuous monitoring of the situation.

What Types of Evaluation Tools Were Available to Us?

- 14 Cultural heritage evaluation is conducted within two distinct frameworks: Under normal circumstances, cultural heritage professionals are trained to identify and study various items over the medium to long term; during a crisis, rescue specialists develop specific short-term, operation-oriented methods for first aid and early recovery. In 2021, we could use available documents from heritage professionals aimed at long-term management and research or international methods that were at a certain level of development and known to fewer specialists.

Situation Analysis

- 15 This tool represents a crisis management process formalised within ICCROM's First Aid for Cultural Heritage methodology.¹¹ It acknowledges that cultural heritage is rarely seen as a top priority during a crisis, and very few heritage professionals are trained to operate in insecure environments. Therefore, while awaiting access to and basic security at the affected sites, a remote evaluation of the situation can still be conducted, facilitating the anticipation of the next effective steps in the impacted area. This approach could have been utilised during the 2021 floods, as one individual was trained in the ICCROM methodology; however, since no one else recognised the necessity, it proceeded without being acknowledged as either completed or required by the majority of crisis response actors. Nevertheless, relying on actor mapping and context analysis allows an expert external to the local context to gain insight into a fluid situation that was previously unfamiliar to them. In this sense, it provides a comprehensive understanding of what evaluation entails: making sense of diverse data. However, aside from this specific type of context analysis, other areas of evaluation were also required.

Traditional Evaluation Tools: Inventories, Databases, Reports, and Condition Reports

- 16 Evaluation is continually undertaken in the heritage sector, as the definition of what constitutes part of heritage is subject to various assessments. In the cultural heritage professional sector, evaluation is traditionally conducted in two distinct areas: defining what constitutes heritage, along with its values and significance, to support legal protection; and assessing its condition, whether for conservation, restoration, or management/curation. These two areas emphasise quality evaluation for individual objects or small groups. A more recent addition is preventive conservation, which highlights a holistic approach to the conservation of groups or collections of objects, integrating significance and material condition for improved management.

Evaluation of Heritage Values and Significance

- 17 The first field traditionally relies on specialists in the social sciences, such as historians, art historians, and ethnologists. Their typical working methods utilise techniques for reports and inventories primarily aimed at description, ultimately supporting decisions to list or protect items while omitting a cost-benefit analysis. It depends on professional advice from experts who are aware of potential biases, including their own specialisation and the perceived value of an item's age, alongside the cultural context that assigns varying significance to different types of objects or periods. Nevertheless, it hinges on personal expertise to determine whether a cultural item warrants documentation in national or regional inventories and databases. The outcome is a collection of technical information, such as dimensions, location, and techniques, supplemented by written analysis. This facilitates crafting a narrative that may or may not substantiate the claim for legal protection of the item. If it does, the listing process necessitates a political decision, as regional listings are ultimately enacted by the Minister responsible for cultural heritage. An example of this evaluation process is illustrated by the inventory of movable heritage in Catholic churches. This has been a mandatory document since 1809¹² that all church managers - a group of parishioners

organised in a 'fabrique' - must produce with the assistance and support of an association, namely the CIPAR (Centre Interdiocésain du Patrimoine et des Arts Religieux) in Wallonia.¹³ The CIPAR also selects files of objects regarded as particularly valuable cultural heritage so that their descriptions can be archived in the Adlib national inventory¹⁴ and its public portal, BALaT, managed by KIK-IRPA. Consequently, the process for selecting the most valued objects that could be considered for listing by regional authorities (FWB, Fédération Wallonie-Bruxelles) may commence.

Evaluation of Physical Condition

- 18 The second type of professional is conservators, who evaluate the materials of items. Conservators-restorers usually examine individual objects for stabilisation or restoration treatments. Depending on the evaluation's aims, methods may differ, but they generally depend on condition reports that provide an overview of the materials and techniques used and an analysis of damages and weaknesses in the item or collection.
- 19 Conservator-restorers, who specialise primarily in specific types of materials (such as metal, ceramics, or glass) or objects (like paintings or painted sculptures), utilise condition reports tailored to the materials or objects in question. They assess the items presented to them and categorise deteriorations as either active or passive. Subsequently, when a treatment proposal is made, a cost evaluation is provided. In this method, the kinetics of deterioration are not a primary concern. Furthermore, the condition report serves as a detailed record, necessitating a certain amount of time per object to complete, as it offers a comprehensive description of the item and its conservation status.

Evaluation of Risks and Values for Collections

- 20 Preventive conservators focus on global environmental conditions, sometimes concentrating on a single object, but more frequently on all the contents of a site or collection of items. Their primary activity is grounded in risk analysis. To evaluate a set of objects or a collection, preventive conservators develop a broader synthesis to grasp the general damages and pathologies associated with the shared environment of the group.
- 21 In this field, risk evaluation methods combine quantitative and qualitative approaches to assess the values of the collection, utilising visual representations (such as value pies and radar charts) alongside risk matrices or tables to provide probabilities of risks. The ABC and CPRAM methodologies are internationally recognised techniques designed for comprehensive assessments, while QuickScan offers a quicker preliminary overview.¹⁵ These methodologies introduce the concept of risk, focusing not solely on deterioration but also on addressing event scenarios, which are central to risk evaluation. Additionally, they consider groups or volumes of objects for broader analyses, with both ABC and CPRAM aimed at providing a cost-effective perspective on conservation. While they are intended to uncover medium and long-term risks, these methodologies can become complex and time-consuming to yield results, which is not a concern for preventive measures (such as emergency planning and conservation strategies); however, this does become an issue in contexts of emergency or post-disaster monitoring.

Damage Assessment for Crisis and Needs Assessment for Recovery

- 22 Methods for first aid to cultural heritage emerged from wars and conflicts in the 20th century,¹⁶ initially involving the evacuation, storage, and potential concealment of objects at risk of looting. In Europe, following the First World War, evacuation policies were developed and implemented in Spain (1936, evacuation of the Prado Museum) and subsequently in France (evacuation of the Paris Museums, 1940). After 1945, the threat of atomic warfare prompted plans to use bunkers to protect cultural heritage alongside human lives. However, at least in Europe, cultural heritage management ultimately shifted its focus to slow-risk assessment from the 1990s onwards.
- 23 Crisis evaluation abroad, particularly in high-risk countries, has taken a new direction. At the international level, the need to organise emergency responses for situations where local capacity is lacking and international aid proves insufficient is increasing. For instance, in response to requests for funds and direct contributions to ad hoc clusters during emergencies, UNESCO has developed evaluation tools based on damage assessments¹⁷ to estimate costs for on-site support from a distance, thereby necessitating the allocation of more time and resources to where they are required (fig. 1).

[Fig. 1]

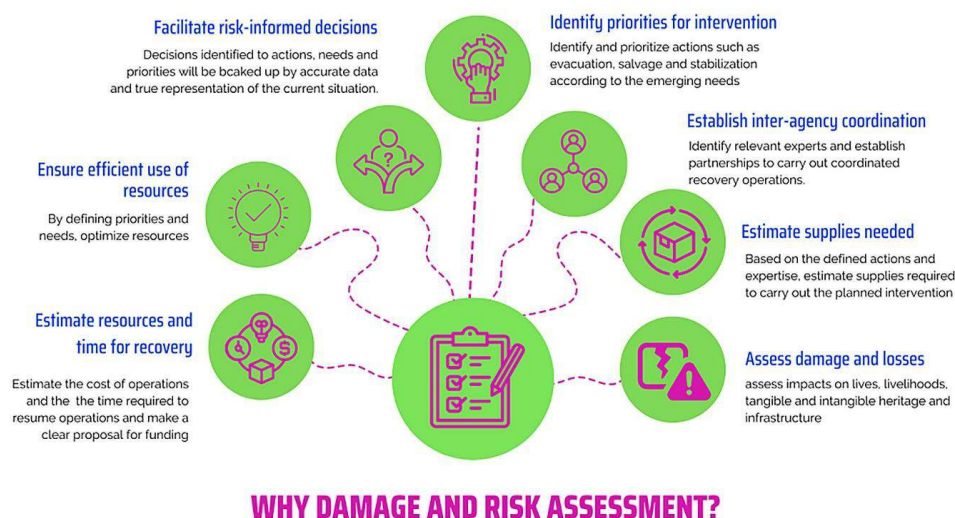


Diagram published by ICCROM, post on assessment of damages in Ukraine, 1 February 2023, <https://www.iccrom.org/news/results-are-iccrom-far%E2%80%99s-app-damage-and-risk-assessment-ukraine>.

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- 24 These evaluations are primarily aimed at emergency management agencies, who assess the scale of a disaster by quantifying and generating cost estimates for rescue efforts and, at times, recovery processes. This involves identifying affected areas and prioritising sites, types of collections, or specific items of considerable cultural value to facilitate rescue and/or restoration as swiftly as possible. They are also customised for difficult survey conditions. The Post-Disaster Needs Assessment (PDNA), used by UNESCO, serves as an example of such methods.¹⁸

- 25 In terms of cultural heritage, these evaluations initially centred on material damage, recognising that restoration was the primary means of recovery. This approach aimed to 'mend' emotional loss while facilitating a resurgence of economic activity tied to the material restoration. This aligns with the common perception that recovery involves 'fixing' what was broken, reflecting a strong desire to return to the state that existed prior to the event.¹⁹ At first glance, restoration appears to be a field that perfectly meets people's expectations for recovery as a process of reverting to the past.
- 26 Since 2010, ICCROM, an institute established to support UNESCO's initiatives, has developed its International Form and a unified methodology for cultural heritage first aid. These resources are now available online and on demand.²⁰ The methodology facilitates a general survey of damages, such as the *Report to promote risk-informed cultural heritage first aid in Ukraine*.²¹ It also seeks to prioritise emergency measures regardless of who implements them.
- 27 This comprehensive panel of methods could have been used during the 2021 flood emergency. However, their effectiveness heavily depends on the expertise of the professionals called for intervention.

What Did We Use?

- 28 In 2021, the primary methods for heritage evaluation were qualitative and based on expertise, concentrating on the type of heritage and cultural region. However, when the floods occurred, the assessment tools and evaluation methods proved inadequate for the circumstances. In contrast, the adapted emergency measures available were diverse yet demonstrated inconsistent effectiveness during the crisis. The conventional methods were unfamiliar to the professionals involved. So, what options were available? In a crisis, a crucial factor is mobilising all possible goodwill. Consequently, as a coordinating body established at the national level, the evaluation was organised in various ways.²² The result was a blend of international and ad-hoc tools. The objectives clearly aligned with those of crisis evaluation: communication and targeted local rescue operations, depending on the resources available in each locality. However, it needed to be conducted by professionals trained for long-term evaluation.

Gathering Information by Every Possible Means

- 29 The initial information received consisted of brief reports via email. While social media, photographs, and press images were also valuable, phone calls and informal exchanges among professionals proved particularly crucial. Furthermore, the first individuals on-site were able to send photographs and more detailed information. Once the purpose of these reports was explained and understood, additional reports could be obtained from colleagues who visited specific sites.
- 30 Efforts were also made to compile lists of sites and objects for inspection in the affected area. For instance, regarding the movable heritage of Catholic churches, in 2021, the 30 impacted churches had at most partial inventories. Consequently, the documentation of items that could be preserved within any of them had not been reviewed or validated, making it impossible to determine remotely which items should be sought or assessed, whether simply recorded at KIK-IRPA as valuable or officially

listed. Evaluating the heritage values of religious textiles presents a significant challenge for non-specialists, with few experts available to identify techniques or provenance, particularly in an emergency. Thanks to the dedication of certain individuals, limited emergency identification was achieved, although not systematically across all 30 affected sites.

- 31 Reports were also prepared by organisations responsible for specific types of heritage, alongside conservators who were initially invited to provide voluntary assistance. During the recovery phase, they contributed preliminary estimates for restoration work. While most institutions agreed to share at least some of their reports or lists for general assessment, this process remained entirely reliant on goodwill and personal networks. Condition reports, however, were not shared to support broader assessments for several reasons. Firstly, they were primarily produced by private practitioners and continue to be generated for scheduled restoration projects. Secondly, their analysis would have been highly time-consuming - a resource that was scarce during both the crisis and its immediate aftermath. Finally, it quickly became evident that standard condition reports, designed for restoration purposes, were of limited use in rapidly gathering initial information. Nevertheless, they were crucial for scheduling post-crisis restoration campaigns.

An Efficient Excel Tool for Streamlined Information Recording

- 32 To extract quantitative data from the narrative evaluations regarding crisis management, a monitoring sheet for the affected sites was established. This document continued to log new entries for over a month following the crisis.²³ This initial evaluation was regarded as a quantitative assessment tool. It thus listed the location and type of heritage impacted. The spreadsheet aimed to record the extent of the impact in order to prioritise emergency rescue efforts, achieving limited success due to the diverse heritage under examination and the lack of time for further analysis. This initial document was intended to provide a general overview of the situation, identify emergency operations requiring external resources, and generate relevant data. It was also envisioned as a tool for organising information from various sources. The list expanded rapidly during the first three weeks before its growth slowed considerably.
- 33 After three weeks, the voices of heritage professionals began to be heard in the media. Once the initial impact of the human drama had subsided, available figures supporting the claim of a cultural heritage disaster became a compelling asset in advocating for essential action. A systematic evaluation should then have commenced, utilising more detailed recording tools.

ICCROM Damage Assessment Forms

- 34 Since the available professionals lacked training in crisis evaluation, a crash course appeared to be a viable option for establishing a shared tool to provide accessible data. KIK-IRPA sought the assistance of ICCROM's First Aid programme. As the programme's damage assessment tool was being tested for digital use, an online workshop was organised to customise it for professional volunteers and subsequently create a digital shared form. This approach would enable evaluations to be carried out by individuals

from various organisations using a common standard, thereby facilitating the evaluation, comparison, and prioritisation of sites for emergency missions.

- 35 Ultimately, it was not used extensively for several reasons. Firstly, these forms are designed to generate homogeneous data within a short timeframe, which is only feasible if a specific team is deployed onsite for a limited assessment period. This proved unachievable given the available resources and the restricted mandate granted to the ad hoc crisis management structure.²⁴ Each stakeholder chose to postpone onsite visits and make multiple trips with different specialists to collect more accurate data rather than relying on a collective tool and evaluations by colleagues from other institutions. Over time, particularly regarding church objects, this approach evolved somewhat, though it never fully developed at the institutional level.

Alternative Forms of Assessment

- 36 In a country with many cultural administrations, depending on the type and location of heritage, each found its way to gather data in a form that suited their purpose. For built heritage, AWaP had its listing to summarise the information collected for its needs. Each commune did the same, primarily through subcontracted architects. Most of the time, these assessments were written as reports, but they were not always standardised. For museums, these assessments were done at the level of each site management, and for single objects, series, or all collections. Finally, for the damage assessments of objects, the identification of the source of damage and its degree of emergency was performed at the level of each conservator-restorer.
- 37 Studying different restorers reports for the same objects in the same sites at different moments is significant for this. Stating that there is mould or mechanical damage to a painting is done consistently whoever the restorer is, but the cause of the damage can be discussed in different ways: is mould linked to the lack of dusting in a damp church before the flood? Is the mould development increased by the flood? Is it only due to the flood?
- 38 These may be somewhat theoretical questions; however, they are significant for an insurance company: events arising from a flood may not qualify for compensation if they result from previous neglect. Nevertheless, insurance companies often rely on cost assessments from restorers when covering expenses related to public heritage. As a result, the expertise required to ascertain whether damage stems from the flood or subsequent issues can be contentious, with particular emphasis placed on the restorer as an expert.
- 39 The insurance federation Assuralia publishes annual estimates of the costs incurred due to flooding, indicating an increase from €2,164 million at the end of 2021 to €2,570 million in July 2024. Payments totalling €1,452 million were made to large companies or public authorities, likely covering some expenses related to damage to public heritage while privately owned properties are presumably insured under home policies.²⁵ Unfortunately, insurance companies do not compile data or generate statistics for this type of damage. They rely on assessments from expert restorers to determine reimbursements; however, each case is treated individually rather than evaluated collectively. Consequently, the information is not shared with the public, which could assist in a comprehensive evaluation.

Outcomes: Key Findings from These Evaluations

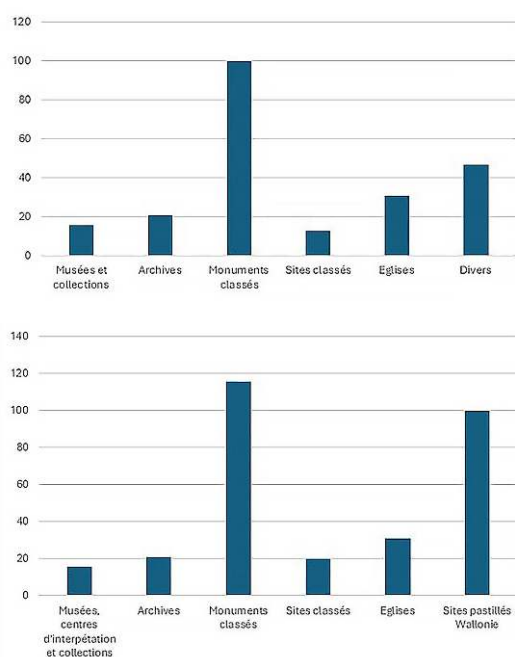
- 40 As it stood, the selection of key sites for visiting and monitoring relied more on informal communication and the expertise of a few dedicated specialists than on a systematic survey of sites considered important. From the various types of evaluations conducted during crisis and post-crisis management, one conclusion emerges: to be effective, global evaluations require an agreed-upon mandate from all partners and authorities. Had we possessed an official mandate to assess the situation - whether from the federal government, a regional authority, or any other recognised and stable partner - gathering data for the entire heritage sector, both remotely and on-site, would have facilitated crisis management and improved its efficiency.
- 41 This could only be undertaken if the aim of the evaluation was clear and addressed a common concern. The most apparent issue was that no official political or administrative authority seemed to comprehend why a global perspective would be beneficial, even for the short-term management of the crisis. This is, in many respects, the most significant problem. However, it does not imply that the heritage sector and local communities should overlook its importance or fail to organise, as they did in 2021. For future crisis management, recognising the significance of centrally evaluating and monitoring the situation and the damages in the short, medium, and long term would represent a considerable advancement. Nonetheless, the partial evaluation that could be conducted achieved some success and raised important questions for the future.

Overall Damage by Heritage Type

- 42 While gaining a comprehensive view of the impacts, damages, and losses may be impossible, some facts can still be gleaned from a broad assessment. The number of sites and figures could be monitored over the year following the event (fig. 2).

[Fig. 2]

Number of heritage impacted sites 01/09/2021 and 21/03/2022



Number of sites impacted in 2021.

Working documents (Françoise Collanges).

- For buildings: In Verviers, sixty listed buildings owned by the municipality were inundated, along with two listed churches (Pepinster and Beaufays) in neighbouring villages. Although there are no reports of complete destruction during or after the flood, quantifying the losses and damages for these buildings is particularly challenging, as the drying phase may still be ongoing.
- Archeological collections: in numbers and volumes, they were the most hit, as the AWaP storage was flooded twice in a week. The figures communicated offered an evaluation of 5% of losses, however, this is a figure evaluated from what was recorded in the database, which was not final. How to evaluate a loss is also critical. The objects or samples can still exist, but if their registration numbers are lost, they become of limited use. As to the potential for study of some objects soiled by the mud, it is still to be investigated.
- Public and private archives, along with religious textiles, pose significant challenges when evaluating their quantity, volume, significance, and salvage potential during emergencies. These can be damaged in less than 72 hours, and mud stains complicate straightforward identification during salvage operations. Consequently, quantifying the losses becomes particularly challenging.
- Museum collections. Approximately 2,000 objects in the museums of Verviers have been impacted. This encompasses various archaeological collections, furniture, sculptures, and a substantial number of ceramics stored in the basement. By spring 2024, around 245 items had either been restored or were in the process of restoration, which amounts to just over 12%. Other museums were not systematically evaluated.
- Contemporary art. The IKOB collection in Eupen has seen a 40% reduction in its contemporary art collection.

- Polychrome sculptures and paintings exhibited typical signs of deterioration. With the exception of one site, none of the paintings were directly flooded in 2021, as they were hung at a height sufficient to avoid the water. However, they were seldom removed to prevent secondary damage. Two years later, at least twelve paintings have suffered damage due to extensive mould growth.
 - Wooden furniture and metals: Due to the limited number of experts in Belgium, certain items could not be assessed. In the 27 affected churches, a systematic evaluation of the impact on the furniture, often of considerable value, was not possible. Similarly, no assessment was carried out for the metals.
- 43 While some figures concerning the number of affected sites could be gathered, it soon became clear that a more detailed assessment of the numbers, volumes, or types of collections is not feasible.

Assessment to Confirm the Existence of a Crisis

- 44 One primary objective of the assessment was to facilitate communication: was there a crisis affecting cultural heritage, or merely specific sites that, after a few hours or days of disarray, would manage to regain control? Understanding the strategic and pedagogical value of evaluation is crucial. Most countries, assuming they accurately catalogue the initial impact of a disaster on their cultural heritage, seldom publicise it. The focus tends to be on specific sites imbued with considerable symbolic value, yet a broader perspective is often deemed uninteresting to the general populace. Three weeks post-event, most individuals believed that the crisis had passed.²⁶ Continuing to count and announce an increasing number of affected sites served to signal to off-site authorities and colleagues in the heritage sector that the situation remained unresolved. A headcount could be presented and updated weekly by the press from July to November 2021, and, over time, interest in the topic within the national media grew.
- 45 An indirect yet significant outcome of this advocacy may have been the funding secured the following year by KIK-IRPA for its CHrisis project from federal authorities, alongside support from Blue Shield Belgium to develop its activities, supported by the regional authorities in Wallonia and Flanders. Both instances highlight the recognition that cultural heritage must be integrated into crisis management despite dependence on project funding.

Assessment to Estimate Rescue Costs

- 46 The evaluation conducted during the 2021 flood crisis involved organisations with varying capacities to assess the costs related to emergency stabilisation or rescue efforts. For regional authorities such as AWaP, on-site evaluations were anticipated to provide urgent advice to owners and outline procedures for securing financial assistance. This reliance was, at least in part, based on estimates from tradespeople and architects. For cultural objects, restorers were promptly engaged to assess the costs of emergency treatment or complete restoration, thereby facilitating the pursuit of funding thereafter.
- 47 However, the costs of rescue encompass various additional expenses beyond restoration that are often overlooked. In 2021, significant support was provided by other institutions, which supplied materials and the working hours of their teams to

assist affected heritage sites. These initiatives were managed within the financial capacities of the institutions; however, no extra funding was available to purchase packing materials, cover transport costs using hired vans or removal companies, and, most importantly, secure evacuation space. When larger institutions were affected, such as the Archaeological Conservation Centre of AWaP, the public owner had to absorb unforeseen costs, particularly as no insurance was in place. Consequently, assessing the costs of on-site rescue proved impractical, as all rescue operations depended on goodwill and extra time. Nonetheless, a post-crisis evaluation of these costs could have provided valuable insights, aiding in the establishment of data and the potential consideration of pre-positioning emergency funds or insurance. At the institutional level, affected authorities may have evaluated these costs; however, on a national crisis scale, accessing exceptional funds such as disaster funds would require a better understanding of the effective costs for heritage rescue, as such funds currently do not adequately account for heritage.

Assessment for Recovery: Long-Term Damage and Losses

- 48 Enhancing our understanding of what truly occurred during the flood crisis is crucial for fully comprehending its scale and impact. As a singular event, it is already causing numerous long-term challenges for the affected regions and their cultural heritage. However, as climate change exacerbates the frequency and severity of weather events, interpreting damage and recovery is vital for fostering long-term resilience.

The Journey from Crisis to Recovery

Damages, Losses and Long-Term Impact

- 49 The perception of what constitutes severe or long-term damage and loss raises numerous intriguing questions. The 2021 floods serve as a case study that illustrates the limitations of these terms. IKOB is an institution managing a contemporary art collection in the Walloon Region, overseen by the German community administration. It features a main exhibition hall, a small storage area, and external storage within a shared building that houses a printing company. Although the flood did not affect the exhibition hall, it devastated the storage, which contained the collection of drawings and various other works of art. While awaiting the insurance company's assessment before accessing the site, the art in storage could not be salvaged. Ultimately, 40% of the collection (more than 200 artworks) was deemed lost. Before being classified as lost, each piece was evaluated by three experts with complementary skills. As the entire collection was insured, values were determined for each item. Fifteen items could potentially be restored, requiring more funding than their declared value; however, given the total losses, they could be financed, and after treatment, the objects retained their insured value as before.
- 50 In light of this crisis, the museum decided to reorganise its storage within the exhibition building and could benefit from the support of a RE-ORG operation carried out by Blue Shield Belgium and the KIK-IRPA preventive conservation team. Once the storage was reorganised, the collection could be reconstituted through donations or purchases. Some lost artworks could be replaced with equivalent pieces by the same artist, initiating discussions with them to determine which works they would like to see

represented from their oeuvre. Other acquisitions made in the last three years have contributed to shaping the collection differently, particularly by promoting younger artists.

- 51 This example illustrates a scenario in which significant damage, along with considerable loss, led to a limited impact: the art centre did not close or cancel exhibitions, and collections could be restructured.²⁷ Nonetheless, the team regards this as a substantial loss. Since this is a contemporary art collection rather than a heritage collection, its connection to living artists provides a different perspective on the crisis. It may be more akin to an impact on intangible heritage: something is lost, and something new and different emerges - a phenomenon of recomposition that is less feasible with tangible heritage.
- 52 The parallel with the Verviers Museums highlights this difference. In those institutions, actual losses were limited, and most of the objects could be recovered. Since 2021, more objects are scheduled for treatment. However, certain types of collections, such as the furniture collection, sustained significant damage. The main buildings of two museums were affected, resulting in the permanent closure of one museum and a very partial reopening of the second two and a half years after the disaster. In the short and medium term, the impact was therefore substantial. Nevertheless, it also spurred the project for a new museum and the renovation of one of the older buildings, which has been transformed into a well-organised and managed storage facility. Consequently, it may be that, in the longer term, if the new museum is completed, the impact will be more contained.
- 53 In both cases, it is noteworthy that damage assessment evolves over time. What was deemed a complete disaster following the flood at IKOB had little impact on the museum's operation and even spurred a renewal of acquisitions, whereas in Verviers, the impact remains significant, with potential for long-term improvement.
- 54 This also raises the question of what restoration signifies in a post-crisis context. Once restored, some objects may be regarded as valuable as they were before.²⁸ Their monetary value often remains similar, and at times, the status of being a survivor of the disaster actually enhances the object's worth. This process is distinct from the financial aspects of restoration. For example, at the Verviers Folklore and Archaeology Museum, a child's violin that once belonged to the renowned musician Henri Vieuxtemps (1820-1881) was heavily damaged by the floods. A musical instrument restorer volunteered to repair it free of charge, restoring it as if nothing had occurred. This object was returned to Verviers as a symbol of resilience.²⁹ One might wonder if a certain magical quality is attributed to restoration, 'bringing back to life' the object as an ultimate expression of resilience. In a sense, erasing the damage is viewed as a contribution to the healing of the community, much like reversible damage is better tolerated than irreversible damage, and statistical spread risk is more manageable than individual risk.³⁰ The fact that the entire ground floor of the Folklore Museum was damaged speaks less to the public than the solitary image of the destroyed violin, which represents the entirety of the crisis. Simultaneously, as it was saved from destruction, the violin acquired a new symbolic value (fig. 3).

[Fig. 3]



Verviers Museum's violin, after the flood (a) and after restoration (b).

© Musées de Verviers (Photos C. Henry).

- 55 These examples highlight the variability of values and the challenges involved in assessing them, complicating the evaluation of damage and impact. While physical deterioration may seem straightforward to identify, restoration can either enhance the value associated with the crisis by keeping it visible or foster healing through denial by obscuring it. Regardless of the choice made, assessing the medium- or long-term

damage or impact on the heritage object itself or public perception remains a complex undertaking.

- 56 In the CHrisis project, the work undertaken to assess religious textiles provides intriguing insights by promoting a method of value assessment that embodies a 'potential for development', recognising that shifts in knowledge or perception could enhance an item's value in the future. This must be acknowledged: evaluation is an exercise conducted within a specific time frame. Types of heritage that are highly valued during one period may be overlooked in another, only to regain interest at a later date. This is why evaluation holds significance regarding its objectives, as it can generate data that, over time, may become partly or wholly irrelevant. In this context, emergency evaluation, by focusing on community needs, takes a pragmatic approach: preserving what aids the current community's recovery. Does it include a longer-term or heritage-centred perspective? Not always. For this, slower evaluation process are needed.

Long-Term Inventories and Databases for Cultural Heritage

- 57 Long-term inventories in Belgium – including KIK-IRPA's, CIPAR's, and PARCUM's inventories, along with regionally protected heritage lists – collectively document various aspects of Belgian cultural heritage.³¹ However, differences in definitions and geographic coverage complicate their effective use during a crisis. Do they generate data that facilitates the assessment of damage and loss in the aftermath of a crisis? For objects, this question warrants careful consideration, as the answer is closely tied to the initial objectives of each inventory.
- 58 Currently, the only accessible database that includes heritage objects in Wallonia – aside from the limited number of listed items, is KIK-IRPA's BALaT. The national inventory was initially conceived as an archive and resource database for historical research and restoration, a mission further emphasised by the devastation wrought by the two World Wars.³² The digital version was also intended as a long-term tool, featuring details about the condition of objects, links to prior treatment reports, and the capability to record the most recent visit dates. However, the local databases created since the transfer of heritage protection to the regions in the 1980s are seen as overshadowing this inventory mission.³³ Consequently, not all of them provide information back to Adlib; nonetheless, for certain organisations, the fact that an object is recorded in Adlib is still regarded as a form of preservation due to the high-quality images supplied by KIK-IRPA since its inception and the recognition of its cultural significance (fig. 4).

[Fig. 4]



Beaufays, Church of Saint John the Evangelist, Eagle lectern, 1701-1710.

© Brussels, KIK-IRPA, cliché M248448, 1976 et CIPAR, September 2021.

- 59 An example of a specific type of heritage, such as church heritage, is the comprehensive database currently under development for the areas managed by CIPAR. This initiative began with data extracted from Adlib for the dioceses overseen by CIPAR; however, the inventories are designed to be exhaustive: all objects within the church that serve a purpose are included, regardless of their religious or cultural significance. In 2000, of the 'fabriques' responsible for nearly 3,000 churches, only 800 had formalised their inventory.
- 60 However, the structure of the database does not support broader research. For instance, it fails to facilitate the assessment of how many heritage objects were damaged or lost in the floods, nor does it indicate how many churches house specific types of heritage that require emergency evaluation. The CIPAR database was designed around bishopric administration to serve the needs of parishioners, but it does not align with the operational framework used by rescue services. Local stakeholders did not anticipate that structuring the data solely to generate lists for churches would impede broader searches, including those that are crucial during a large-scale crisis. Greater integration with heritage databases is necessary, and some efforts are already underway. Since January 2023, CIPAR has been tasked with proposing certain objects for listing by community authorities. Additionally, it updates the KIK-IRPA database, which could be used for emergency response and recovery monitoring. However, this occurs without formal recognition of the database's potential role in emergency and recovery assessments. As a result, other heritage databases across the country do not view this process as significant and, therefore, do not provide updates. A relatively small investment would suffice to maintain and develop the Adlib database, ensuring that a valuable tool - one that still holds potential as a crisis management asset - is not lost.

From Recovery to Long-Term Conservation

- 61 A significant outcome of this crisis is the recognition that the mapping of heritage items in Wallonia, particularly in areas lacking permanent staff, such as churches, has been insufficient for determining where to organise an effective response to the crisis. Furthermore, it fails to facilitate recovery monitoring, let alone long-term statistical or qualitative evaluation. This poses a challenge, as during the recovery phase and the transition back to non-crisis management, all this data becomes dispersed across too many administrative levels, resulting in a loss of clarity regarding the final losses or the long-term impact. When a subsequent event occurs, this lost data will complicate the situation analysis even further, creating a cycle of incidents that ultimately leads to unrecognised losses. This situation may signify the end of life for a cultural artefact, with dwindling interest equating to a loss of heritage value.³⁴ However, one fundamental concept of heritage is that it consists of what endures through time and adversity to reach us further down the line. In previous eras, one might have considered that heritage was indeed what survived all the hardships and risks that an object could encounter, but in our current age of cataloguing and listing, should we continue to rely on chance to define what ought to be preserved?

Which Tools Would Have Been Most Useful?

- 62 Survey methods in emergencies have rapidly evolved since 2010, and various actors have emerged in the field since 2020. One such actor is ProCultHer,³⁵ a network supported by European civil protection that seeks to develop a common method based on the experiences of various European countries. However, these methods are highly complex and intended for trained experts. Currently, no formal protocol for preliminary distant or on-site evaluation has been established in Belgium.

Assessing the Situation and Losses: Optimising the Use of Existing Database

- 63 Evaluating the situation from a distance has proven effective, but improved information sharing could benefit this approach. A comprehensive database on tangible heritage, outlining the locations and dates of the most recent assessments for each object, would significantly strengthen this endeavour. Whether it should take the form of a national database like Adlib/BALaT or a system (such as a consortium or an exchange platform) for the emergency coordination of various local databases, any solution would represent a substantial enhancement compared to the circumstances in 2021.
- 64 Without this, assessing losses remains nearly impossible. While larger and heavier objects can be challenging to move during a flood, smaller items are easily lost in this manner. Consequently, in the aftermath of the event, there exists a significant risk of theft or dissociation. Proving theft is difficult without documentation; however, the distinction concerning dissociation (i.e. the loss of connection between an object and its context) can be quite subtle during a crisis when provenance may be compromised during preventive or post-event evacuation, potentially leading to the object being absorbed into private ownership. In the absence of a prior inventory, establishing proof

of ownership or origin becomes exceedingly difficult, involving a responsibility that extends beyond local and individual concerns; it necessitates authorities to organise measures to mitigate this risk.³⁶

Articulating Emergency Evaluation and Narrative Assessment Methods

- 65 Given the limited number of Belgian heritage professionals trained and available at short notice for emergency evaluations, it is unrealistic to expect that the aforementioned international crisis management tools can be deployed rapidly after an event. However, traditional reporting methods, which most heritage professionals master well, could be adapted for quicker and more sustainable on-site evaluations.

Efficient Use of On-Site Evaluation: Pictures and Quantitative Emergency Reports

- 66 Initial documentation upon arrival at a damaged site should be paramount; a systematic photographic report ought to be the default approach for any first responders on-site. While it is nearly impossible to expect directly impacted individuals to adopt this mindset in the immediate aftermath, trained humanitarian rescuers, even lacking a background in heritage conservation, may still be able to achieve this, as a photographic report does not necessitate specialised knowledge of heritage objects handling.
- 67 If the evaluation of cultural heritage were integrated into mental health support by the Red Cross and other rescue organisations, it could offset the currently limited number of disaster-trained heritage specialists and enhance the preliminary remote evaluation. This method would only be relevant if the images could then be assessed remotely by heritage professionals. Additionally, it would significantly improve subsequent on-site evaluation by limiting expert visits to only the most necessary, thereby preventing the exhaustion of affected individuals during the initial post-event phase.

Professional On-Site Evaluation Tools

- 68 Either the ICCROM or ProCultHer-NET tools³⁷ should be adapted to the Belgian context and implemented prior to the crisis. Building capacity is essential. Heritage professionals using these tools must receive thorough training beforehand to apply them accurately, or the tools need to be customised to the evaluators' professional profiles (fig. 5). Blue Shield Belgium has a reserve of 200 specialists, some of whom could benefit from targeted training in this area.

[Fig. 5]



On-site evaluation in the Church of Fraipont, September 2021.

© F. Collanges.

Advocating a Better Use of Narrative Assessments

- 69 Subsequently, for both immediate and long-term recovery, narrative assessments ought to be scheduled. They are increasingly used in advocacy to communicate personal experiences in a way that is straightforward and impactful for a cause.³⁸ Widely embraced in the heritage sector, these assessments encapsulate both a personal perspective and the specialised expertise required for generating detailed knowledge. This can support decision-making by authorities and facilitate the collection of stories, which in turn strengthen the coping mechanisms essential for addressing post-event trauma and create a record of what cultural heritage has withstood. During the initial phase of rescue, these assessments are often overlooked as more pressing matters take precedence; however, they merit better utilisation for long-term recovery.

The Need for Monitoring Tools

- 70 Monitoring to understand secondary and long-term damage, as well as the increased sensitivity of affected sites and artefacts, will become increasingly essential. More than three years after the flood, it is evident that the main event itself was not the sole direct source of destruction. For tangible heritage, accurately reporting damage and deterioration is crucial for making informed conservation decisions and restoration treatments. However, while curative treatments aim to stabilise, investigating the kinetics of deterioration is not always a primary concern. Research projects focused on understanding the reasons behind the efficacy of treatments at a chemical level are

regularly conducted, yet the extent of damage an object experiences in a disaster context seldom receives adequate research attention. This is primarily because research initiatives rely on medium- or long-term funding, which is complex to secure, thereby making the likelihood of successfully launching a research programme during an active crisis rather low. Nevertheless, for conservation and restoration, several initiatives were undertaken within the CHrisis project, including research on the flood's impact on restoration products for archaeology, metals, and their potential implications.

- 71 Digital condition reports, whether commercial - such as Horus or Artreport - or bespoke, are developed and designed to be adaptable to any objective, including emergency management. They are quicker to use and standardised, supporting the monitoring of damages during post-crisis recovery while producing consistent and comparable data over time. Considering restoration in a crisis context may generate additional research topics, as evidenced by some of the projects led at KIK-IRPA within the CHrisis framework.

Is There a Gap in Our Culture of Evaluation?

- 72 Heritage professionals operating in a 'normal' context and heritage crisis specialists do not collect, require, or utilise the same data for evaluation. On the one hand, the former category of professionals engages with descriptions, analyses, and balanced expertise to determine - typically through collective knowledge and occasionally political decisions - what warrants official notice or additional protection. However, the items not selected may still hold value. Recent developments in Belgium have encouraged more local definitions of heritage, sometimes aligning closely with the desires of local populations or communities, and at other times adhering to more traditional expert perspectives, depending on the entity responsible for that type of heritage. On the other hand, crisis specialists require global figures and clear priorities based on the expertise available at the time of the survey in order to make decisions that support the recovery of the local population within a specified timeframe. However, it is acknowledged that certain 'intangible damages', such as those to assets that cannot be quantified in monetary terms, are challenging to assess.³⁹ Cultural heritage falls into this category, and currently, there is no effective scale capable of conveying the extent or proportion of loss associated with the damage or destruction of a cultural item. Because it cannot be measured due to the lack of an appropriate scale, it is simply excluded from damage evaluation methods.
- 73 In the meantime, the economic landscape and sustainability-focused planning provide a third perspective on the situation. Both long-term conservation and crisis intervention require funding, yet they are vital for achieving lasting cultural and social objectives. Since 2000, conservation methods have relied on a broader body of research into the assessment of 'non-use'⁴⁰ values and cultural significance, initially aligning mainly with monetary values. More recently, some sustainability-related research has aimed to translate cultural values into monetary terms, employing various financial methodologies within the heritage sector, including willingness-to-pay and travel-cost methods.⁴¹
- 74 It is easy to assert that the recent evaluation methods, which focus on cost-effectiveness in financing conservation plans - whether addressing the increasing

scarcity of funds or supporting the tourism economy within a sustainable framework - have had little impact on conservation professionals, as they are neither embraced nor considered by the experts typically responsible for assessing heritage protection. Simultaneously, the speed of decision-making, crucial in crisis management, is not regarded as a beneficial constraint. For instance, the 2021 floods did not lead to any expedited listing of items in Wallonia, and the listing process continues to take ten months to a year. Furthermore, there may be cultural resistance to the very notion of reducing heritage value assessments to monetary figures, graphs, and statistics.

- 75 The mounting economic pressures on the heritage sector, which produces studies on heritage value assessment for cost-effectiveness, alongside the impacts of climate change that necessitate a more consistent application of emergency methodologies, should serve as a warning that new approaches to value assessment must be developed, involving heritage experts and communities. It is now crucial to bridge the gap between traditional narrative assessment and quantitative evaluation. The alternatives are that public authorities and stakeholders will inevitably concentrate on economic indicators to measure cultural losses, or they will struggle to articulate why the loss of heritage during disasters is, in fact, a significant issue.
- 76 In a sense, international methods such as ICCROM FAR address this situation by relying on the collective sense of importance ascribed to an item, whether tangible or intangible, during a crisis. This approach realistically confronts situations where expertise is unavailable while also responding to the needs of the affected local community. The increasing connection between heritage rescue and humanitarian aid, along with the growing significance of the concept of intangible heritage, encourages this method to assess damage so that means for resilience can be provided.
- 77 Does it consider the long-term perception of tangible heritage? As this perception changes, and some types of heritage or individual items may see gain, lose or change in their values, should a 'value development factor' be considered? This should be integrated in some manner into our value assessment during crises, as the emergency rescue of heritage aids in selecting items for preservation, while others will be abandoned and discarded.
- 78 Thus, incorporating both types of expertise is vital for attaining a thorough understanding of cultural heritage in times of crisis. Awareness of material damage and associated losses regarding cultural significance is essential and should assist in evaluating the extent of damage during crises. On the other hand, a more refined understanding of the long-term effects of a disaster may foster a redefined perspective on cultural heritage protection - one that is less focused on gradual risks and more sensitive to the circumstances that can result in complete loss.

Conclusion

- 79 Disaster management requires emergency techniques, but it should not be a fleeting moment in the history of an object (thanks to restoration treatment) nor the end of its life (if it is destroyed). As stated in the Sendai Disaster Risk Reduction Framework, 'We cannot reduce risk effectively if we cannot measure disaster losses.' When it comes to cultural heritage, quantifying losses is particularly complex. The heritage sector needs more methodological support to manage crises, employing adapted tools that range

from a grounded understanding of the criteria defining heritage to robust evaluation and monitoring of damage during a crisis.

- 80 The traditional narrative methods significantly contribute to the recovery phase; however, a more data-driven approach is also essential for effectively communicating with stakeholders involved in preparedness and response. This can enhance communication and advocacy while aiding in monitoring progress during recovery. Following the 2021 floods, substantial advancements were made in improving the understanding and management of crises relating to cultural heritage in Belgium. How this can be implemented and integrated into general crisis management remains an open question; nevertheless, further progress can still be made in building capacity and developing tools tailored to Belgium. A crucial first step would be to recognise the benefits that sound and balanced evaluation methods can offer in an emergency situation, as well as to our overall understanding of cultural heritage and its evolution over time.

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NOTES

1. Collanges, Debulpaep and Otten 2023.
2. Blue Shield Belgium has been active since 2001, and professional international organisations like ICOM and ICOMOS, through their Belgian committees, were also offering information on the topic. At the regional level, FARO was also offering support in Flanders.
3. The first training on writing an emergency plan for museums was organized in Wallonia by ICOM Belgique Wallonie Bruxelles and Musées et Sociétés en Wallonie (MSW) in 2022, with the support of the National Centre for Research and Restoration in French Museums (C2RMF).
4. In 1999, the second protocol of the 1954 Hague Convention enabled the creation of National Committees of Blue Shield, active in 43 countries in 2024. 2010 saw the first international training for First Aid to Cultural Heritage (FAC program, now renamed FAR) by ICCROM, as well as the actions of the Smithsonian Institution in Haiti (<https://haiti.si.edu/partners.html>). UNESCO World Heritage Committee started to promote disaster risks management since 2007 (see HP of UNESCO World Heritage Centre: Reducing Disasters Risks at World Heritage Properties, <https://whc.unesco.org/en/disaster-risk-reduction/>) while the creation of CER (Cultural emergency Response, 2003) or ALIPH (2018) supported the increase in international recovery projects.
5. Li 2024.
6. Bündnis Entwicklung Hilft/IFHV 2023, p. 55: Belgium is rated with a WRI of 5.83, which puts it in the medium category. This rating is based on a certain degree of exposure and vulnerability to natural events, tempered by a lower level of susceptibility, but increased by a high lack of coping capacities, i.e. 'the direct actions and available resources in the form of formally or informally

organized activities and measures, as well as to reduce damage in the immediate aftermath of an event and initiate recovery' (p. 40).

7. 'Disasters are serious disruptions to the functioning of a community that exceed its capacity to cope using its own resources. Disasters can be caused by natural, man-made and technological hazards, as well as various factors that influence the exposure and vulnerability of a community', <https://www.ifrc.org/our-work/disasters-climate-and-crises/what-disaster> (28/09/2024).

8. These issues were discussed during the crisis committee weekly meetings, organized online on 20 July and early August, see KIK-IRPA archives for recordings and written reports.

9. In Belgium, there has been no heritage administration with a national mandate since 1980. See Collanges and Marique 2024.

10. Royal Archives of Belgium, law of 1955, reviewed in 2009.

11. Tandon 2018, p. 25-40

12. Article 55 of the imperial decree of 1809.

13. Decree of 1 January 2023

14. KIK-IRPA's database for inventory of Belgian heritage, based on its collection of pictures started before 1900 by federal institutions, is supported on Adlib software (soon to be called Axiell) since 1989, to allow web-based searches.

15. Brokerhof 2016

16. *75 ans d'histoire* 2023.

17. The damage assessment following the 2015 Nepal earthquake exemplifies UNESCO's role in evaluating cultural losses within a broader international framework (assessment after the Nepal earthquake in 2015 is an example, UNESCO evaluating cultural damages within a wider international framework, see <https://reliefweb.int/report/nepal/unesco-starts-depth-damage-assessment-nepal>). For the different types of evaluation practiced at international level: Vecvagars 2006.

18. PDNA is a methodology for recovery endorsed by European Union. Guide 2015.

19. Crozier *et al.* 2016.

20. <https://www.unesco.org/en/articles/ukraine-unesco-gathers-military-cultural-and-justice-personnel-protection-cultural-properties?hub=66116> and https://www.iccrom.org/sites/default/files/2018-10/fac_toolkit_print_oct-2018_final.pdf; since 2021, European projects such as ProCultHer gathered further tools for such types of assessment, see PROCULTHER-NET Project 2023.

21. ICCROM 2023.

22. Collanges, Debulpaep and Otten 2023.

23. Mentions of flooded heritage sites were still added two years afterwards. No doubt that systematic evaluation visits would have produced a better and more accurate view of the real damages.

24. Collanges, Debulpaep and Otten 2023; Collanges and Marique 2024.

25. Heritage collections are generally not taken into account by insurances for public authorities as they would increase drastically the annual premium. It is however possible that some asbls or public authorities in specific context may have been able to negotiate this point. The details are not published by Assuralia.

26. KIK-IRPA 2021, Crisis committee report n°3.

27. UNISDR 2016, p. 13.

28. Elkin and Norris 2019, p. 67.

29. <https://musees.verviers.be/actualites-musees/2023/restauration-du-violon-de-vieuxtemps>.

30. CDC 2019, p. 12.

31. PARCUM is an organisation akin to CIPAR for the provinces of Flanders.

32. This link to restoration is a long-standing goal in Belgium, as shoes the Letter of Edmond Fierlants, Brussels photographer, to Charles Rogier, minister of Interior in 1860: « *La photographie peut produire un catalogue, un inventaire vivant de toutes nos richesses artistiques. Cet art seul peut donner une reproduction fidèle des objets pour que ceux qui viendront à disparaître laissent après eux une trace assez précise, soit pour permettre de les rétablir, soit du moins pour consoler de leur perte* ». Joseph and Schwilden 1989, p. 45; Coremans 1946, p. 14–17.
 33. The creation of a broader category of ‘exceptional items’, aside from the ‘treasure’ category, in the 17 March 2022 FWB’s decree should extend the number and variety of protected objects, but not before some time.
 34. Guillemard 2018, p. 29.
 35. ProCultHer, followed by ProCultHer-NET are EU projects started in 2021 for Protection Heritage from disaster (<https://www.proculther.eu/international-workshop/>).
 36. Dissociation is the loss of link between an object and the documentation identifying its values. Henderson and Waller 2024.
 37. ProCultHer-NET Project 2023, p. 29–47; presents various assessments used in crisis response.
 38. Van Wessel 2018 and associated projects, see <https://hivos.org/assets/2021/09/Narrative-Assessment.pdf> and <https://narrativeassessment.org/>; for consulting local communities in planning projects: Devos, De Blust and Desmet 2018.
 39. Messner and Meyer 2005.
 40. Throsby 2002, p. 103.
 41. Halkos *et al.* 2024; Merciu, Petrisko and Merciu 2021.
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ABSTRACTS

The 2021 floods struck the Belgian heritage sector while it was ill-prepared. Amid an *ad hoc* response and post-crisis management, evaluation methods played a crucial role in raising awareness of the situation, advocating for a response, and organising longer-term support for the most affected sites. Reviewing the assessment tools available at the time and their application prompts reflection on their limitations and suggests a more suitable blend between traditional narrative assessment methods and newer crisis management tools. Finally, contemplating how to assess tangible cultural heritage in a disaster context reveals how value assessment and our definitions of cultural heritage are reaching critical junctures in such circumstances.

Les inondations de 2021 ont frappé le secteur du patrimoine belge alors qu’il était peu préparé. Dans un contexte de réponse improvisée et de gestion post-crise, les méthodes d’évaluation ont joué un rôle crucial pour sensibiliser à la situation, plaider en faveur d’une intervention, et organiser un soutien à plus long terme pour les sites les plus touchés. L’analyse des outils d’évaluation disponibles à l’époque et de leur mise en œuvre invite à réfléchir à leurs limites et suggère une combinaison plus adaptée entre les méthodes d’évaluation traditionnelles, fondées sur le récit, et les nouveaux outils de gestion de crise. Enfin, s’interroger sur les modalités d’évaluation du patrimoine culturel matériel dans un contexte de catastrophe révèle combien l’évaluation des valeurs patrimoniales et nos définitions mêmes du patrimoine culturel se trouvent à des points de bascule critiques dans de telles circonstances.

De overstromingen van 2021 troffen een slecht voorbereide Belgische erfgoedsector. Tijdens ad-hoc-respons en post-crisisbeheer speelden evaluatiemethoden een cruciale rol bij het vergroten van het bewustzijn van de situatie, het pleiten voor een interventie en het organiseren van ondersteuning op langere termijn voor de meest getroffen sites. Het herzien van de, op dat moment beschikbare, beoordelingsinstrumenten en hun toepassing zet aan tot reflectie over hun beperkingen. Dit vraagt om een geschiktere combinatie tussen traditionele narratieve beoordelingsmethoden en nieuwere crisisbeheerinstrumenten. Het stilstaan bij de evaluatiemethoden van materieel cultureel erfgoed in een crisiscontext, tenslotte, zorgt ervoor dat onze waardebeoordeling en onze definities onder druk komen te staan.

INDEX

Trefwoorden evaluatie, waardebeoordeling, crisisbeheer, materieel erfgoed

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AUTHOR

FRANÇOISE COLLANGES

Françoise Collanges specialises in the conservation of cultural heritage, encompassing emergency management and general preventive conservation. Initially a museum curator, she holds an MA in Preventive Conservation from La Sorbonne in Paris and an MA in Conservation Studies from West Dean College in the UK, where she focused on the Restoration of Clocks. Currently, she is preparing a PhD in the conservation of 19th-century French clocks at CY Paris Cergy University. She worked at Royal Institute for Cultural Heritage (KIK-IRPA) in the Preventive Conservation Unit from 2021 to 2024, focusing on crisis management and recovery after the 2021 floods.