Contents lists available at ScienceDirect



International Journal of Disaster Risk Reduction

journal homepage: www.elsevier.com/locate/ijdrr



A roadmap for making a salvage plan. Valuing and prioritising heritage objects

Nina Kjølsen Jernæs

Norwegian Institute for Cultural Heritage Research (NIKU), Norway

A R T I C L E I N F O Keywords: Emergency planning Salvage plan Value Priority Cultural heritage Decision-making tool	A B S T R A C T		
	One of many measures to prevent or at least mitigate damage to cultural heritage sites is to make a salvage plan for items with heritage value. Several guides and manuals have been written for museums to help in the work of ascribing values to their collections. A review of international work on emergency response planning, salvaging of items and detailed information on preventive work shows that only two guidelines mention how to prioritise heritage items when making a salvage plan. This article combines relevant guides and manuals with experiences from projects undertaken in Norwegian churches. It presents a roadmap that can be used by non-professionals in their work on salvage plans. The roadmap contains all steps from preparation and background work, to relevant discussions and assessment of heritage items, in combination with the definition of salvage needs and of the vulnerability of the valuated items. By including when and how to involve the needed experts, this article offers a tool that fills a gap for the management and the owners of cultural historical buildings.		

1. Introduction

Through several projects dealing with emergency response and salvaging of valuable items in Norwegian churches, it has become evident that it is difficult for the local managers and owners to draw up a salvage plan. Many of them are uncertain of how to assess value and how to prioritise. This paper discusses a number of value assessment methods and a number of designs for salvage plans. On the basis of workshop outcomes, the paper provides guidance for combining both ingredients into a value-based prioritised salvage plan.

Existing guides and manuals have been written to provide advice in this work of valuing and prioritising collections in cultural institutions as part of museum management. This means that the implicit expertise resource is taken for granted. Ferraro and Henderson [1] present an evaluation of the manuals and emergency rescue plans used by cultural institutions, but how to ascribe values and prioritise items in the collection is not mentioned in their overview. Regarding the core features of the evaluated emergency response manuals, six of them had an evacuation plan, and only two had an evacuation priority [1]. There is a twofold knowledge gap regarding this work: the decision tools for valuing heritage items are not written for non-professionals in cultural heritage field, and the existing manuals for valuation of heritage objects and museum items are in many cases too thorough regarding the in need of expert vision on the assessments. Therefore, it is argued that the existing guides and manuals needs modification, simplification and added assessment issues in order to be a useful tool for non-professionals when making salvage plans.

2. Research questions and methodology

There seem to be a lack of manuals to guide non-professionals through the preparatory work of identifying and recording valuable objects on their sites in order to make a well-thought-out salvage and rescue plan. The research question is therefore as follows: How will a non-heritage expert be able to make well-considered choices when identifying the cultural significance of heritage objects and then use such information for item prioritisation in a salvage plan?

This article aims to illustrate the importance of including a valuing process when making a salvage plan, and second, to suggest a roadmap that puts this into practice. To do so, the article provides a selection of the existing literature on valuing heritage objects, which is largely written for museum professionals. This is followed by an overview of the manuals on making salvage plans for buildings and collections that include heritage objects. The literature overview uncovers the knowledge gaps and functions as a basis for the developed roadmap for valuing and prioritising heritage objects. Four workshops in four counties in Norway have been carried out in 2020, with the goal of starting to make a salvage plan for the churches in their care. The discussions, obstacles

https://doi.org/10.1016/j.ijdrr.2021.102266

Received 30 November 2020; Received in revised form 29 March 2021; Accepted 14 April 2021 Available online 24 April 2021

2212-4209/© 2021 The Author(s). Published by Elsevier Ltd. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/).

E-mail address: nina.k.jernaes@niku.no.

and results from these multidisciplinary workshops form the foundation for the developed roadmap. Two flowcharts have been designed to illustrate the processes of value assessment and prioritising.

Heritage objects cover all interior, inventory, items and collections that have cultural value and significance for the past, present and/or future society or groups of societies. To be able to make a salvage plan with a list of prioritised heritage objects, their inherent values need to be defined. Heritage value refers to the set of characteristics of artefacts or other objects. According to Mason and Avrami [2], we can speak of heritage values as the qualities of artefacts, interiors or buildings.

A salvage plan is defined here as a part of an overall emergency response plan where items for salvaging are described with key information for the fire brigade to salvage them with minimal damage. Salvaging, which is the object of this paper, is only one of several possible response options. The salvage plan often consists of several documents, such as an inventory sheet, grab sheets and first aid for the salvaged items. I will not go into making the set-up for a salvage plan or dealing with first aid. The article will instead provide building blocks for the making of a salvage plan. Dealing with financial value assessment is beyond the scope of this article, as irreplaceable values constitute the key issue when making a salvage plan for heritage objects. The work is, however, interconnected with insurance issues, so financial value will be mentioned.

3. Literature review and knowledge gaps

The precise meaning of 'value' cannot be captured in just a few words. Discussing the assessment of value in relation to cultural heritage, involves reasoned, verifiable statements about its value [3]. For the most part, heritage values are subjective, context-bound, changeable and malleable. Opinions about characteristics are inseparable from those ascribing and describing the values. However, heritage objects also have objective qualities, such as age and history. Often, many kinds of values are not necessarily exclusive; sometimes, they are even in conflict [2]. Attributing value to buildings and objects is also the reason to preserve cultural heritage. An object only has the value that is ascribed to it; no one cares for or pays attention to something that is not deemed valuable [4].

Nearly fifty years ago, in the Convention Concerning the Protection of the World Cultural and Natural Heritage, UNESCO [5] declared the importance of considering the significance and value of such heritage. Shortly after, The Burra Charter was written in 1979, assessing cultural significance of places (6). Even though museum collections need explicit expertise in ethnology, art history, conservation and other typical museum professions, not all museums have the needed resources. The same is true for other types of cultural historical buildings, such as churches, palaces, fortresses, mansions and old houses of cultural heritage importance. Explicitly making a value tag and a priority list of valuable heritage objects or within a heritage interior is always difficult because each is, without a guidance through an arsenal of criteria, unique by nature. A value system should be applied, and most of the value systems created over the last 40 years are based on the system developed by art historian Alois Riegl [7]. However, the current key publications on value assessment is the research report, Assessing the Values of Cultural Heritage [8], published by the Getty Conservation Institute (GCI), which both is founded on the Burra charter.

3.1. Valuing heritage objects

Here I look at which value assessment methods exist and how it is combined with salvage planning. Table 1 presents in a chronological order the relevant literature for discussing the assessment of value for heritage objects.

There are slight differences in valuing cultural heritage buildings and objects or collections. Based on Riegl's system [7], other systems have

Table 1

Assessment tools and guides for valuing heritage objects.

Reference	Subject	Assessment criteria	Comments
Riegl 1903 [7]	First system for assessing value of heritage monuments	Age, historical, commemorative, use, newness	
UNESCO Convention 1972 [5]	Protection of the world cultural and natural beritage	Historical, artistic, scientific	
The Burra charter 1979/2013 [6]	Guidelines for the conservation of places od cultural historical significance	Aesthetic, historic, scientific, social and spiritual values	
Mason, Getty Conservation Institute 2002 [8]	Assessing the values of cultural heritage	Lists different systems and problematize the different typologies and	Mentions the need for having different criteria for non- professionals
Clavir 2002 [9]	Preserving what is valued in museum collections	intended meaning. Problematizes the change of values of an object depending on who's assessing it. Writing about "museum values" as an opposite to "First Nations	The need for both museum professionals and including non- professionals in the assessment work
Cultural heritage agency 2014 [3]	Assessing museum collections Collection valuation in six steps	values" Features (ensemble, provenance, rarity), culture historical, social and societal use	
Appelbaum 2007 [10]	Book concerning Conservation Treatment Methodology	Artistic, aesthetic, historical, use, research, educational, age, newness, sentimental, monetary, associative, commemorative, rarity values	Listing a comprehensive value analysis at a given timeline in advance of a conservation treatment
Russel and Winkworth 2009 [11]	Significance, A guide to assessing the significance of collections	Primary criteria: Historic, artistic/ aesthetic, scientific, research potential, social/ spiritual Comparative criteria: provenance, rarity, condition, interpretive capacity	Made for prioritising the museums' resources, not prioritise more og less valuable objects. Comparative criteria evaluate the degree of significance.
de Beyer and Takke 2012 [12]	Guidelines on ways of dealing with religious objects, assessment guide	Current value (significance to community, emotional or religious value), historical value (church history, general history, art history) and comparative criteria (rarity, condition,	Guidance for church management.

(continued on next page)

N. Kjølsen Jernæs

Table 1 (continued)

Reference	Subject	Assessment criteria	Comments
The museum association in Great Britain 2014 [13]	Disposal toolkit, guidelines for museums	ensemble value, presentation and documentation value) Lists things to consider when select items for disposal	Tool for assess value to museums collections in order to plan disposals. Stresses the need for stakeholders when assessing items for disposals
Haugalandsmuseene/ Arts council Norway 2016 [14]	Assessments of museum collections, guidance.	Historical, artistic/aesthetic, knowledge/ scientific and social/religious values	
Author 2018 [15]	Involving stakeholders in the value assessment of religious objects	Most used values for assessing heritage objects when reviewing literature; age, historical, aesthetic, scientific, social and spiritual values	Literature review in the use of different value typology

been developed, and many overviews present the types of relevant values for single objects and collections with slight variations [3,10–12]. The existing guidelines tailored for collections are generally intended for improving museum management. Overall, these are systems that need the inclusion of the heritage or museum professions. The guidelines stress the need to combine different kinds of expertise [3,9,12]. On one hand, a heritage specialist views the object primarily from a historical or art history perspective. On the other hand, churchgoers for example, are influenced mainly by personal experience and by an object's sacred quality or its connection to local history. None of these perspectives is inherently more or less important; they complement each other. The guidelines from the Cultural Heritage Agency [3] in The Netherlands introduce a shift in who assesses cultural heritage. Until now, the valuation has been executed by professionals. However, a multidisciplinary team can help cultivate a more nuanced view of a collection [3]. None of the reviewed manuals are specifically designed for use when working with a salvage plan. However, they all support decision making and prioritisation in general, as needed in many cases for museum collections.

In addition to the mentioned values, there is a financial value that needs to be mentioned that becomes apparent when talking about risks, and hence, the need for insurance of art. The financial value of an object often reflects its significance, as spelled out in the Significance guide [11]. However, financial value is not a significance assessment criterion in the Significance guide. An item may be significant and worthy of inclusion in a public collection, but still be of limited financial value. Similarly, many valuable items are of limited significance for public collections, and hence not a good criterion to follow [11]. However, it is an aspect to be aware of when valuing heritage objects in case of risk scenarios and emergency response. A recent article on fine art insurance policies and risk perceptions written by Pavia et al. [16], finds that art owners and policymakers of fine art insurance in Malta rank the high rank the highest risks as 1) damage and deterioration and 2) loss of art (total damage, theft and misplacing). Damage and deterioration are elaborated in the article focusing on fire and floods that damage and deteriorate art, illustrated by the flood of Florence in Italy in 1966 and the Notre Dame fire in France in 2019 [16]. These examples highlight the importance of mirroring the financial value and insurance policies to risks and costs of restoration and conservation, as the conservation of art due to the flood in Florence is in fact still ongoing.

Another aspect that is intertwined with both financial value, insurance and the responsibility tied to the risk perceptions, is the issue of loan of artefacts. It is not considered as a frequent issue when it comes to cultural historical buildings such as churches, palaces, fortresses, mansions, and old houses of cultural heritage importance. But for smaller museums this might be an issue that needs considerations. Due to the responsibility of another owner's artefact, items on loan might be ranked higher than if it was within the institution's ownership. Often these issues are being described in the contract between the institutions and will not be followed further in this paper.

To sum up the assessment of significance and salvage preparation, none of the revised manuals and guidelines mentions assessing value as an important factor when making a salvage plan. A theory here is that manuals regarding valuation are not combined with themes concerning emergency preparedness, or it is outside the scope. It seems that both are understood as two separate issues, although some manuals regarding emergency response include their preparatory work on valuing the objects for use in the priority list.

3.2. Relevant international guides on emergency response and salvage planning

Here I look at how emergency response and salvage planning support setting priorities, and which aspects they look at (Fig. 1). If they look at value, how do they incorporate value assessment in setting priorities?

Through the years, many guides and manuals have been developed on the topic of emergency response action regarding cultural heritage, and the international guides are often interpreted and further developed into more nationally focused and specialised manuals. There is no aim to present all existing guides and manuals but to describe the existing level of assessing value and prioritising heritage items. There is in fact so much material on the general topic that information overload is claimed, making it difficult to navigate [17]. Manuals tailored for non-professionals are highlighted.

Historic England [18] provides an overall orientation on the content of emergency response plans on its webpage, where making decisions about prioritising objects in collections is mentioned in the preface. So do several other heritage management entities and fire brigades in



Fig. 1. The fire brigade salvaging prioritised objects from Tromøy medieval church in September 2019. Drill organised by Norwegian institute for Cultural Heritage and the Norwegian Association for Church Employers. Photo: Author.

different countries, such as the Oslo Fire Department, the Norwegian Directorate for Cultural Heritage and the Swedish National Heritage Board, to mention a few. They all reach out to the crowds by providing general information on emergency response plans and salvage plans on their updated websites, but they do not discuss in depth how to map value and make a priority list of heritage items.

ICOM's Committee on Museums Security [19] has written a handbook, including possible threats, with a checklist on how to prevent and how to deal with an emergency. The Swedish National Heritage Board has prepared the Handbook on Emergency Response and Salvage for Art and Heritage Collections, Buildings and Sites where they mention the need for a priority list for valuable objects [20].

In its guide for making a disaster management plan, UNESCO et al. [21] write about the consequences in terms of 'loss of value'. In one property, some objects could be irreplaceable, whilst others could be less crucial or more easily restored. Therefore, UNESCO et al. mean that the factors for risk evaluation could be developed by devising a recovery index for objects that can be restored. Thus, the level of risk can be assessed by examining the consequences (social, economic or physical), the probability and the loss of values [21]. The values that the inscription to the world heritage site is based on, is the base of all plans and actions. Therefore, the inclusive meaning of 'value' is not further described in the guide. Pedersoli Jr et al. [22] have written A Guide to Risk Management of Cultural Heritage, which is a joint publication by the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) and the Canadian Conservation Institute (CCI). They present the ABC scales for risk analysis. However, the guide does not mention the need for a salvage plan in case of a disaster.

Only a few manuals and guides go further than mentioning the need for a value assessment or for a priority list before a disaster. Those mentioning what kind of criteria should work as a basis for the needed priority list are GCI's book "Building an Emergency Plan. A Guide for Museums and other Cultural Institutions" [23], the CFPA-E Guideline for Managing Fire Safety in Historical Buildings [22], The Institution of Fire Engineers Special Interest Group for Heritage Buildings' (IFESIG) guide Fire Safety for Traditional Church Buildings of Small and Medium Size [23] and Bin Ismail in an article for a symposium for ICOM [24]. Now, we will take a closer look at the publications.

GCI lists various ways to assess an object's importance to an institution, as follows: historical/cultural/religious value, economic value, a certain object's vulnerability to specific hazards (e.g., remove photographs, paper and textiles first in a flood), the institution's mandate, rarity or replacement possibilities (e.g., classify as 'irreplaceable', 'replaceable at a high cost' or 'easily replaceable'), loan status, condition of and/or damage to objects (e.g., rescue all objects that are not yet damaged) [23].

The CFPA-E European Guideline is intended for owners, managers, caretakers and others responsible for the safety of historical buildings [24]. The guideline recommends a damage limitation plan, and when developing such a plan, a system of categorisation should be established to ensure that clear priorities exist for object removal. This should identify items of international heritage value that are closely connected with the building or its previous occupants (first priority) and items of national value or those that are important for explaining the history of the building or its occupants. This should also include items with a high monetary value (second priority), items that would be difficult or expensive to replace and contribute to the history of the building (third priority), and the unclassified are the items that will be left in place.

Set up by the Institution of Fire Engineers in 2008, IFESIG consists of fire and rescue services, English Heritage, Historic Scotland, National Trust and insurance companies, amongst others. Its guide, *Fire Safety for Traditional Church Buildings* [25], states that ideally, the priority objects should be limited to three in each area of the building. If an emergency threatens that part of the church and there is only a limited time for retrieval, then the most important objects are saved first. If there is time, the remaining objects can be salvaged. The guide does not include

criteria for making the priority list, but it states that even this prioritisation is difficult – it is impossible for firefighters to make such decisions when the building is filled with smoke or water or both [25].

ICOM held an international symposium, *Cultural Heritage Disaster Preparedness and Response*, in 2003. Again, from a museum's perspective, the suggestion is that priority lists should include irreplaceable objects, with the focus on significance or cost, reproductions or original properties and objects on loan or at risk [26]. Here, the need for art experts or heritage experts becomes apparent. Therefore, regarding the need for general guidelines written for non-professionals, only two relevant guidelines exist today – GCI's guidelines and the European Guidelines.

UNESCO et al. [21] note that the risk of a disaster is a product of a hazard and vulnerability, thus posed by both external and internal causes. Whereas a hazard is the external source of a disaster, vulnerability is the inherent weakness of the heritage property. The external cause is the disturbance or damage to a cultural heritage site caused by fire, flooding, precipitation or other incidents. Even though UNESCO et al. write about heritage sites and buildings, it is relevant to implement its guidelines for heritage objects as well. The internal cause is the fragility of the structure or the materials of heritage sites or objects and their sensitivity to the environment. GCI also include the vulnerability questions (23).

GCI's reports are worth having a look regarding assessment of value when developing a salvage plan, which is the focal point of this article. The two aspects of GCI's work (valuing objects and creating a salvage plan) is however parted in different reports where the report on value is not customised for use by non-professionals. As an interdisciplinary working group, IFESIG covers the needed arenas for valuing, prioritising and salvaging heritage objects in its guide for small and medium churches. Despite these written sources, in this article, it is argued that there is a knowledge gap in the means for enabling the local management to use guides for mapping value and prioritising its heritage objects.

4. Roadmap for making a salvage plan

By combining the relevant guides for valuing and using the author's own experience from working with salvage plans for churches, this article presents a roadmap tailored for non-professionals. The roadmap will guide the project team through the most important factors to consider when making a salvage plan (see Fig. 2). First, the overall work is viewed as a whole project, and important factors are defined, from starting the work to evaluating the drill for the salvage plan. The roadmap will define the needed groundwork before the team starts the project, which is shown in steps 1-2. In certain steps of valuing and prioritising, the community-initiated work might need input from experts, and the way to do so is presented in steps 3-5. The last steps (6-8) will guide the project team through processing and assessing the value ranking and prioritising, the completion of the form and the need for a drill. To delve in depth into the valuing process and what kind of information is needed in the salvage plan, two flowcharts are presented. These flowcharts describe in detail steps 3-5 of the roadmap and should thus be used together.

A salvage plan is a part of the emergency response plan. So, before the roadmap for valuing and prioritising can start, one should undertake a risk assessment. This might be undertaken by another group than the group working with the valuing, but a general understanding of level of hazards and risks is needed.

Step 1 is the preparation and the creation of the project team. It should comprise a minimum of three persons who are directly involved in the management of the historic building. If one does not feel comfortable in making a value assessment for salvage planning, one can involve professionals, either directly as a consultant or as a quality assurance checker. Here, the relevant professions might be conservators, art historians, heritage managers and firefighters with experience from preventive work or fighting fires. If additional local stakeholders who



Fig. 2. Roadmap for making a salvage plan.

know the building and its history are relevant, consider how to involve them in the work. Clear definitions of roles and the group's mandate are important. The lines of communication should be stated specifically and signal the need for anchoring it in the local fire department. Although the salvage plan is the responsibility of the owner or the management, the firefighters are its direct users. It is important to involve them, and a good way to start can be to invite them on a visit and inform them about the forthcoming work, or engage them in it.

Step 2 involves the background of the project. As a group, the team should define its motive and reasons for undertaking this project. The members need to define the hazards and obtain an overview of the current preparedness situation. Here, it is relevant to discuss the needed mitigation measures and other measures to help prevent a situation where a salvage plan is needed. Different types of hazards and the following emergency situations that might occur, triggers different types of damages and hence, vulnerability and diverse need for response in a situation. This is important to bear in mind when working on the next steps. It is however, recommended that one make one overall salvage plan for the interior and inventory, where different measures for different hazards can be described, if relevant. The team should make an overall list of the interior and the inventory if it does not exist yet, so everyone involved will have an updated overview of the current situation.

Step 3 entails assessing the value of the interior and the inventory. The overall question is *What do we want to salvage*? It can be fruitful to start assessing values by asking the question *What are the most important objects for us as a community*? The team should start removing the objects that clearly have no cultural significance, typically the easily replaceable items. One example could be psalm books in the church. The 'washed list' should consist of items where the team believes that one or several heritage values are attached, which is attributed either to the materiality of the object or its meaning/stories. The relevant research for collecting information about the objects can be undertaken by searching books and the Internet, and talking to local members of the National Trust, local historians and/or stakeholders. The team can contact a heritage professional, such as an art historian, a conservator, or the local

museum. The next step is to decide which reference work, guide or roadmap to use that includes relevant criteria. Here, it is important to note that many of the existing guides made for museum collections are insufficient or focus on issues other than what is needed by nonprofessionals in valuing the content of a historic building. When explaining why certain objects are important to take care of and salvage in case of an emergency, it is useful to use a common language, so others understand you, and in addition making it easier to prioritise certain objects. Different reference works on assessing values provides this common language. Here, the relevant assessment values are part of the



Fig. 3. Flowchart, mapping heritage values.

presented roadmap for valuing (Fig. 3).

The methodology used in the flowchart is founded on the assessment presented in Dutch assessment guide made for assessing religious objects [12]. Slight adaptations are done to tailor it for non-professionals to use for salvaging heritage objects in general. The three-parted values are kept, current value, historical value and comparative values. The historical values are seen as important information in this matter. Condition is kept out of the flowchart, as should not be a criterion for valuing which objects should be prioritised. However, condition is a part of the evaluation of salvage and emergency measures (Fig. 4) and will be assessed in step 4 of the roadmap. The current value links up with the current insight that the value attached to an object by a heritage community is of importance, in addition to the expert's assessment [12].

The flowchart incorporates the notion that local heritage is not necessarily less important than national heritage. Local history too helps to shape a country; therefore, every value needs to be assessed within the scope of national or regional value [12].

Step 4 involves an evaluation of vulnerability. The overall question is What are you able to salvage? The item's placement, materials and

condition all influence the possibility of damage and should accompany the evaluation of priorities (step 6) when undertaking a salvage of objects. Use this step to get an overview of the situation. It might help to visualize a certain emergency, and look at the possible routes for salvage; are the doors wide enough? Are there any obstacles along the way? It is helpful to seek the advice of a conservator and an experienced firefighter. The placement of the item might be of severe limitations for salvaging. The ability to remove and handle the item must be assessed when making the salvage plan (Fig. 4). Hence, the wight and size place an important part in the practicalities of a salvage. If for example, the most valuable object is a chandelier unreachable from ground floor, it becomes rather a security issue for the fire brigade rather than a reachable object for salvage. The security issue relates both to the amount of time that is needed to access it, and the danger if the chandelier falling because of a fire in the attic. The item's condition could indicate that the need of two people to salvage. The materials indicate a certain buffer to a hazard. If the sculpture on the floor is made of granite, it is not as vulnerable to flooding as if it was made of wood. Another aspect to assess, is that objects in certain situations would face a



Fig. 4. Flowchart showing the process of finding out if a prioritised object is possible to salvage and planning emergency measures. The flowchart describes the process of asking the right questions to draw up a salvage plan. It explains in depth step 4 and step 5 of the roadmap. When looking at vulnerability and the possibilities for salvaging and mitigate damage, the flowchart can help navigate.

destruction if not the right measures are taken. There are assets that may not be mapped as most valuable item but may lose all their value if they sustain even a small physical damage. These considerations should be included in this step.

Step 5 is about salvaging, mitigating the damage to the prioritised items and how to find the best possibilities. By looking at previous steps on valuing objects and looking at the vulnerability and limitations of salvage, one should start asking the question *Can you salvage the objects listed as valuable*? The conditions, materials, dismantling, and placement are factors to be considered. If it is not possible to salvage an item, are there any mitigation steps to take? Can it be fully or partly dismantled? Can it be covered with a fire-proof cover to protect it from smoke and heat? As in step 4, it is helpful to have a dialogue with a conservator, especially regarding the dismantling, and an experienced firefighter to find the best feasible solutions.

In step 6, the fundamental assessment is undertaken, and the processing of the information can start. The team should rank and prioritise the items that have been categorised as valuable. The prioritisation work demands weighing the different values to find the most significant items. One can often tick of more than one type of value when assessing heritage objects, and the overall assessment with description of different values needs a holistic assessment to be able to prioritise the objects. It is more important to get the most significant heritage objects on the list, rather than using time and discussion on which priority it should have. Roughly, they should be tagged as "most important" and "important". When it comes to emergency situations and possible solutions, there might be situations where only one parts of the building is possible to reach. The fire brigade will then need to freestyle from the priority numbers. In these cases, it could be useful to plot in priority zones. The use of the salvage plan would always depend on the current extreme situation, and the prioritised objects might be unreachable. Creation of zones is more a practical guide for the fire brigade to know which zone to prioritise if parts of the building is not reachable.

Step 7 involves completion of the salvage plan for prioritised heritage objects. The process should again focus on communication, especially with the local fire department, as well as with other heritage experts that have experience with making such plans. Perhaps the local museum or library has done something similar and can review the most important issues. The plan should include a date for the next review and update, in case of outdated phone numbers of the management or objects being moved around. In the dialogue with the fire department, the firefighters should have a choice on how to use the plan, if they want it on paper in their archive systems and in the fire trucks or in digital form at the regional emergency call centre – or both. The salvage plan should also be available in the historic building but unavailable to strangers.

Lastly, step 8 involves a drill where multiple agencies are invited. Here, it can be fruitful to involve neighbours, stakeholders and others that might be useful resources in case of an emergency. The aim of the drill can be to test the prioritised list and make sure that it is clear and easy to understand, holds the needed information, and that the fire brigade and management makes acquaintance with the document. It is time consuming to implement a drill, so this can effectively be made as a desk exercise inside the heritage building.

5. Discussion

When an object or a collection is being assessed in terms of its inherent values, the specific goal in mind is to know which objects represent the highest value for the site [27]. This might differ within each building, which is challenging for a non-heritage professional to know. If an object is of importance to the local community, this is essential to know, but it is also vital to learn if the object is rare or especially valuable in the national context – which is also difficult for a non-professional to know. It pinpoints the need for certain cooperation with heritage professionals. This is also evident in the statement of UNESCO et al. [21] and GCI [23] that the heritage object's condition is

an important factor when considering risks. The object's condition is crucial when determining which objects can be salvaged and what mitigation measures can be undertaken. Nonetheless, there might be difficulties in finding heritage professionals who are able to help, especially if the institution cannot afford to hire external consultants. Some institutions might obtain support and help from a local museum or archives, but this is unfeasible for many managers of historic buildings.

In theory, an object can be assessed by a single person, but as stated here, it is recommended that a working group be given the mandate to undertake the preliminary work on the salvage plan. This is intended to consider different views on valuing, coloured by different professions and positions within the institution, which de Beyer and Takke [12] state as important. It will always be a subjective way of working when identifying an object's meaning, significance, and value, and as Mason and Avrami states [2], the values are also context-bound, changeable and malleable. It is a complex question that necessitates discussions along the way.

In many cases, most of the community-based working groups have an intuition about which objects or details in the interior are the most significant and irreplaceable, but while working their way through the different value tags, multiple dilemmas can occur. How can a community-based working group claim that the cupboard from 1850 is more valuable than the ceramics from 1900? Many of the values can be experienced as more abstract and therefore be intangible and distanced from the person carrying out this work. The presented roadmap should be followed by specific questions about each type of value and then by examples. In this way, the work becomes more tangible and to the point. Scores might be assigned to the questions and answers that can suggest and guide the group towards a priority in the list of valuable objects. However, this needs to be easily assessed so that the community-based working group will find it manageable, interesting, and possible to implement.

The local management owns the salvage plans, and they are made for emergency response teams that should not take these decisions in an emergency. In the Dutch guide, every value is parted in national and regional level [12]. This is implemented as a check-point in the flowchart enabling the working group to assess it. It helps them define the scope; is an object rare in the region of rare in national terms? In many cases, the national values include regional value, but not always the other way around. However, these are entangled. In terms of a national value, it will often score high on priority, but regional values will also in some situations be ranked to the highest priority. This can sometimes mirror the objective values, such as history and age (being national and regional) and the subjective values (often regional). But again, the roadmap will hopefully function as a guide, not a recipe, and open for a holistic approach.

IFESIG [23] mentions the limit of three objects in one zone; otherwise, there is no clear advice on the quantity of items in the priority list. There are church offices in Norway that initiate this priority work by limiting it to five objects in each church, enabling them to start prioritising and making a salvage plan for all the churches in their diocese. However, this is regarded as a starting point for the emergency response plan. Indeed, a balance is needed between being able to salvage as many objects as the situation allows and not making a too comprehensive and detailed salvage plan. This balance is important to bear in mind and can be discussed with the local fire department to make a clear and tidy plan.

In enabling non-professionals to valuate objects within their building, it is a perceived need that the flowchart of valuing heritage objects (Fig. 3) is aided by a more detailed form with questions and typical examples. The flowchart shows the needed steps. However, a form with questions and examples of weighing between different values will make the working group reflect on the different types of values. The values can then be given a score, which will make it possible to rank the different values to help prioritise the objects of search.

Overall, the mission of making a roadmap with in-depth details about valuing heritage objects and implementing the roadmap in a salvage plan is to enable non-professionals to get started and have some structure and overview of the needed work to be done. It can be argued that the list of the most significant objects itself is more crucial than their internal ranking. In the worst case, the top three objects might be unavailable for the fire brigade to salvage due to the unknown emergency. For this reason, it can be stated that despite the possible 'wrong' ranking of heritage objects from a professional viewpoint, this is a chance that a project team can afford to take in order to have an updated, well-funded salvage plan.

6. Conclusions

Relevant manuals and guidelines have been searched, and in general, two emergency response plan guidelines explicitly include values as relevant for prioritising when working on a salvage plan: Building an Emergency Plan published by Getty Conservation Institute [23] and the CFPA-E Guideline on Managing Fire Safety in Historical Buildings [24]. These differ in scope and contribute to the field of emergency planning, but they both lack reviews of an object's vulnerability and placement. When developing the roadmap for valuing and prioritising that is intended for use by the management of cultural heritage buildings, the existing relevant guidelines are combined with the experiences from workshops and salvage exercises in Norwegian churches. The roadmap presented in this paper is tailored for non-professionals in cultural heritage studies and stresses the extra effect on multidisciplinary collaboration. When ascribing values to items and their vulnerability in case of a salvage, there is an explicit need for a working group. There are possible obstacles and dilemmas occurring when non-professionals undertake this type of prioritising work, which the article pinpoints. This becomes particularly visible when internally ranking different significant objects. The practicalities that need to be assessed in this type of prepatory work, governs the needed holistic approach. Compared to the many guides and manuals for museum professionals on assessing values, this is in its nature multidisciplinary and should be based on collecting different views and challenges. It involves a type of evaluation which is to a larger degree steered by heart and feelings, compared to when museum staff assess significance of their collection. One should therefore highlight the need for knowledge before assessing value and use heart and mind when prioritising (as an objective and subjective assessment). On the other hand, making a salvage plan where there are ambiguities in prioritising, is better than not having a salvage plan at all, especially when considering all uncertainties tied to the nature of an emergency. Future work to aid this, should be examples of objects and ranking, which could help in understanding the different values. By presenting the roadmap for assessing value and prioritising heritage objects, the goal is to provide for the management of cultural heritage buildings at a local level, a decision-making tool, so they can start working on emergency response plans and salvaging heritage objects with the necessary awareness and confidence.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgements

The author thanks Hanne Moltubakk Kempton (the Norwegian Association for Church Employers) and researcher Tone M. Olstad (Norwegian Institute for Cultural Heritage Research) for their useful readings along the way. Experience through the mentioned projects provides the data incorporated in this study, and gratitude is expressed to all the involved people. The completed projects have been partly financed by the Directorate for Cultural Heritage and the Norwegian Association for Church Employers. The Norwegian Research Council provided financial support for writing this article. This research did not receive any specific grant from funding agencies in the public, commercial or not-for-profit sectors.

References

- J. Ferraro, J. Henderson, Identifying features of effective emergency response plans, J. Am. Inst. Conserv. 50 (1) (2011) 35–48.
- [2] R. Mason, E. Avrami, Values and Challenges of Conservation Planning. Management Planning for Archaeological Sites. Proceedings, International Workshops, the Getty Conservation Institute and Loyola Marymount University, The Getty Conservation Institute, Los Angeles, CA, 2000, 19–22 May 2000, Corinth, Greece.
- [3] Cultural Heritage Agency, Assessing Museums Collections. Collection Valuation In Six Steps. Amersfoort, Cultural Heritage Agency, The Netherlands, 2014.
- [4] T.M. Olstad, E. Andersen, Development of a matrix for assessing values of Norwegian churches, Eur. J. of Science and Theology 14 (2) (2017) 141–149.
- [5] UNESCO, Convention Concerning the Protection of the World Cultural and Natural Heritage, UNESCO, Paris, 1972. https://whc.unesco.org/archive/convention-en. pdf. (Accessed 17 November 2020).
- [6] Australia ICOMOS. Burra charter. The Australia ICOMOS guidelines for the conservation of places of cultural significance ("Burra charter"). Australia ICOMOS 1979/2013, Burwood: Inc. https://australia.icomos.org/wp-content/uploads/The -Burra-Charter-2013-Adopted-31.10.2013.pdf. (Accessed 22 February 2021).
- [7] A. Riegl, Der moderne Denkmalkultus sein Wesen und seine Entstehung. K. K. Zentral-kommision f
 ür kunst- und historische denkmale, W. Braum
 üller, Wien, 1903 (in German).
- [8] M. De la Torre (Ed.), Assessing the Values of Cultural Heritage: Research Report, Getty Conservation Institute, Los Angeles, CA, 2002. http://hdl.handle.net/10020/ gci_pubs/values_cultural_heritage. (Accessed 10 November 2020).
- [9] M. Clavir, Preserving what Is Valued, UBC Press, Vancouver, 2002.
- [10] B. Appelbaum, Conservation Treatment Methodology, Elsevier, London, 2007.
- [11] R. Russel, K. Winkworth, Significance 2.0. A Guide to Assessing the Significance of Collections, Rundell Mall: Collections Council Australia, 2009.
- [12] M. de Beyer, J. Takke, Guidelines on Ways of Dealing with Religious Objects, Museum Catharijneconvent, Utrecht, 2012.
- [13] Museum Association, Disposal Toolkit Guidelines for Museums, 2014. https://ma-production.ams3.digitaloceanspaces.com/app/uploads/2020/06/181 45447/31032014-disposal-toolkit-8.pdf. (Accessed 15 November 2020).
- [14] Haugalandsmuseene/Arts Council Norway. Assessment Of Collections. Guidance. Assessment Of Art And Culture Historical Collections [No: Vurdering Av Samlinger. Veiledning. Vurdering Av Kunst- Og Kulturhistoriske Samlinger], Arts Council Norway, Oslo, 2016.
- [15] Author Religious, Art in a social context; how to involve stakeholders, in: R. Melin (Ed.), Meddelelser Om Konservering vol. 1, Nordisk Konservatorforbund, IIC-Nordic Group, Copenhagen. Denmark, 2018, pp. 13–26.
- [16] L. Pavia, S. Grima, I. Ramanova, J.V. Spiteri, Fine art insurance policies and risk perceptions: the case of Malta, J. Risk Financ. Manag. 14 (2021) 66, https://doi. org/10.3390/jrfm14020066.
- [17] G. Matthews, Disaster Management in the Cultural Heritage Sector: A Perspective of International Activity from the United Kingdom: Lessons and Messages. World Library and Information Congress: 73rd IFLA General Conference and Council, 19–23 August 2007, Library and Information Association of South Africa, Durban, South Africa. Durban, 2007.
- [18] Historic England. Emergency response plans. https://historicengland.org.uk/advi ce/technical-advice/emergency-and-fire/response-plans/. (Accessed 23 November 2020).
- [19] ICMS (ICOM Committee on Museums Security), Handbook on Emergency Procedures, ICOM, 2019. http://network.icom.museum/fileadmin/user_upl oad/minisites/icms/pdfs/2019_Emergency_Handbook_english.pdf. (Accessed 17 November 2020).
- [20] L. Nilsen, Handbook On Emergency Response And Salvage For Art And Heritage Collections, Buildings And Sites [5: Handbok I Katastrofberedskap Og Restvärdesräddning (RVR) För Konst- Og Kulturhistoriske Samlingar, Byggnader Och Miljöer], Riksantikvarieämbetet, Stockholm, 2011.
- [21] UNESCO, ICCROM, ICOMOS, IUCN, Managing Disaster Risks for World Heritage. Resource Manual, UNESCO, 2010. https://whc.unesco.org/en/managing-disaster -risks/. (Accessed 10 November 2020).
- [22] J.L. Pedersoli Jr., C. Antomarchi, S. Michalski, A Guide to Risk Management of Cultural Heritage, International Centre for the Study of the Preservation and Restoration of Cultural Property/Canadian Conservation Institute, Los Angeles, CA, 2016.
- [23] V. Dorge, S.L. Jones, Building an Emergency Plan. A Guide for Museums and Other Cultural Institutions, Getty Conservation Institute, Los Angeles, CA, 1999.
- [24] C.F.P.A. Europe, Managing Fire Safety In Historical Buildings. CFPA-E Guideline No 30:2013 F, 2013. http://cfpa-e.eu/wp-content/uploads/files/guidelines/CFPA _E_Guideline_No_30_2013_F.pdf. (Accessed 20 January 2020).
- [25] IFESIG (Institution of Fire Engineers Special Interest Group for Heritage Buildings), Fire Safety for Traditional Church Buildings of Small and Medium Size, 2017. https

N. Kjølsen Jernæs

://historicengland.org.uk/images-books/publications/fire-safety-for-traditional-ch

- [26] I. Bin Ismail, The Need for Disaster Preparedness and Emergency Plans. Cultural Heritage Disaster Preparedness and Response, International Symposium Proceedings, 23–27 November 2003, ICOM, Hyderabad, India. Paris, 2003, pp. 197–204.
- [27] H. Arijs, Values and Collections/Collections and Values: towards an Online Tool for Collection Value Assessment, ICOM Conference Paper, 2014. http://network.icom. museum/fileadmin/user_upload/minisites/cidoc/ConferencePapers/2014/ARIJS_ Hilke_CIDOC2014.pdf. (Accessed 10 November 2020).