GUIDELINES FOR SUSTAINABLE MANAGEMENT OF CHURCHES

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The project partners:
Conservation Centre Kanut (CCK)
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Uppsala University (UU)

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Written by: Derek Worthing, Tor Broström, Mikael Hammelev Jörgensen, Joakim Hansson, Kaire Tooming and Ann Vainlo.

Designed by: Madis Kivi

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Conservation Centre Kanut Pikk tn 2 Tallinn 10123, Estonia

Project Manager (CCK): Kaire Tooming
Representative (TUT): Targo Kalamees
Representative (UU): Tor Broström

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Index

Foreword

This report is part of the Central Baltic Interreg IVa program project Sustainable Management of Historic Rural Churches in the Baltic Sea Region.

These guidelines are intended for professionals and laymen involved in the management of historic churches. The objective is to provide a general methodology and tools to establish a conservation management plan for any church.

The guidelines are not heavily referenced; for background and in depth reading, the reader is referred to an extensive literature survey, which will be published in a separate report. Furthermore, indoor climate issues are covered in another separate report.

The main author of the report is Derek Worthing, who was a visiting professor at Gotland University in 2012 and 2013. The co-authors are Tor Broström, Mikael Hammelev Jörgensen, Joakim Hansson, Kaire Tooming and Ann Vainlo.

SECTION 1

Overview, context and concepts

Conservation Management Plans: what are they and why are they used?

Conservation of the built cultural heritage is based on the notion that certain buildings and spaces represent and embody significant social and cultural values which society chooses to protect. A Conservation Management Plan (CMP) is concerned with the development of effective management strategies and processes for the protection and enhancement of the built cultural heritage. The general approach is sometimes known as "values-based management". At its heart is a focus on the need to identify the cultural significance of a place. The cultural significance of a place is made up of the totality of the values which it embodies and represents. A CMP uses an assessment of cultural significance as the base from which to develop policies and actions which are aimed at protecting what is important about a place.

You cannot protect something unless you understand why it is important, and are able to identify, measure and articulate what it is about the place (or object) that constitutes that importance . It is also necessary to be able to identify how the different elements of the place contribute to that importance. A CMP is therefore concerned with determining why a place is valuable and what aspects of the place embody and represent those values. A CMP is based on the notion that through a comprehensive understanding of the particular cultural significance of a place better informed management decisions can be made that will respect, conserve and potentially enhance that which is important about a place. However, a CMP must also set out how that cultural significance can be protected (and perhaps enhanced) through management decisions and actions. Therefore, a Conservation Management Plan must also articulate policies and tactics, and the strategies and processes for implementing them.

In order to be effective, it is important that there is an integration of value-led decision making at all levels of the organization that owns and/or occupies the place in question. The CMP must therefore not only address the issues of what to protect, how to protect it, how to prioritize actions and how to deal with conflicting interests, but it also must synchronize this with the organizational culture and processes in order that people at all levels within

In some cases, local opinions were expressed very early. When the Granhult church was to be demolished in the first half of the 19th century, the local population took over the responsibility for the old wooden medieval church, which dated from the early 13th century. The Granhult church, Småland, Sweden. *Photo: Joakim Hansson.*

the organization (and those from the outside who will either work on the building or whose actions impact it) will understand how their actions and activities interact with the cultural significance of the place.

The idea of values-based management therefore is centered on:

- The principle that in order to protect and manage a place you need to know why it is important, and what elements contribute to that importance.
- The fact that the importance of the place (and what it is that contributes to that importance) cannot be inferred or assumed, but needs to be demonstrated through the development of a thorough understanding of the place and an assessment of its cultural significance, which is arrived at through a rigorous, transparent and objective process.

Conservation Plans as tools for the sustainable management of built cultural heritage

Conserving the built cultural heritage can be seen as a sustainable activity because of the way in which it can bring social, economic and environmental benefits. In addition to these broad criteria, there are also a number of implicit characteristics that help define sustainable activity. These include:

Besides the church building, there can be other pieces around the church that need to be taken care of. These tombstones were taken out of the church in the 1890s. The stones were collected and put under a roof. The interest of the congregation members was not great at first, but grew rapidly when they understood that the stones had been their ancestors´ tombstones. The Hablingbo church, Gotland, Sweden. *Photo: Joakim Hansson.*

- Social justice and equity.
- Quality of Life.
- The participation of citizens in decision making.
- Transparency and Accountability.

A CMP can be considered to be a tool/ methodology for the sustainable management of built cultural heritage in that it emphasizes the need to:

- take a long-term view, including a consideration of threats in the future (and encouraging plans and processes which mitigate against vulnerability).
- be holistic in nature and content, in that it sets the historic place in its wider context and integrates issues and concerns.
- understand a place and articulate and debate its values as a precursor to making decisions.
- involve stakeholders not just in how the place is managed but also in deciding how important it is and why.
- manage change while protecting that which is valued by society.
- adopt a precautionary principle approach.

- be rigorous and methodical in obtaining information and analyzing it.
- demonstrate transparency in decision making.
- allow decision makers to be held accountable for decisions.

What is Cultural Heritage, and why is it important?

The Built Cultural Heritage consists of the buildings, spaces and objects that are believed to make some contribution to society, i.e. they have a value which is above and beyond their use value. Some of these are protected through legislation. The benefits that accrue to society through the protection and enhancement of the built cultural heritage are connected with such ideas as the importance of familiarity, identity, guidance and enrichment, and so it can be suggested that conserving elements of the past serves present and future society because:

- there are significant benefits for the social, psychological and political well-being of individuals, groups and nations because of the physical reminder of, and connection to, the past provided by the built cultural heritage, which tells us about who we are and the past that has formed us.
- there are, potentially, significant educational benefits. The physical remnants of the past are historical records that are important as tangible expressions of the stories of history. We can understand aspects of past societies through analysis of the physical remnants of the past, but also the historic environment is a focus and an opportunity for a less "expert" engagement with the lives and experiences of previous generations.
- the structures that make up the historic environment are resources that should and can be used, and reused, for (environmental, social and financial) sustainability reasons.
- the historic environment contributes to a sense of place through its character and visual aesthetic.
- there is the potential to attract tourist revenue.

Perhaps the most important point is that the built cultural heritage is an inheritance that is irreplaceable and therefore precious. There is a responsibility to past generations as well as future generations. Conserving built cultural heritage is what civilized societies do.

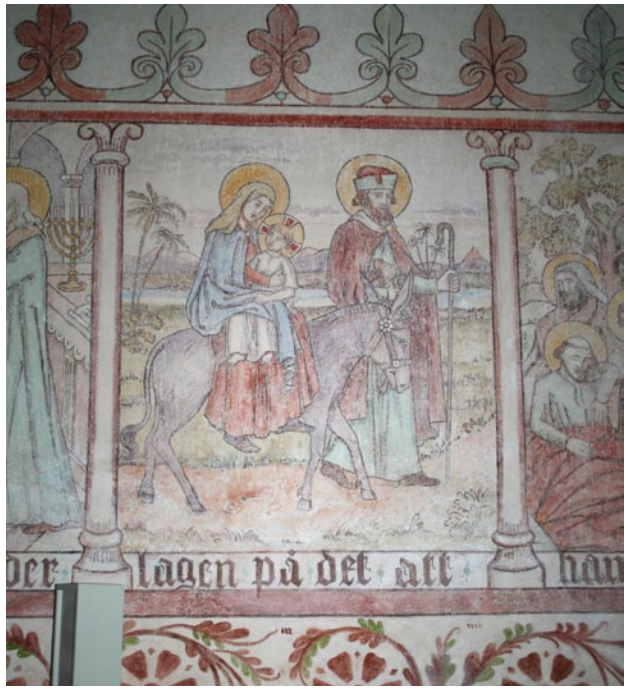
Conservation: Key ideas and Principles.

Conservation Principles

Conservation principles should inform any decision or action and should be used to judge the appropriateness of interventions which affect a building, a space or an object. Conservation principles are based on the sense that the materials of buildings form a physical expression of the cultural values of the place and that all the developments throughout time that are embodied in, and represented by, these buildings are potentially of significance.

The way that conservation principles are expressed, or indeed interpreted, may vary from country to

In the Levide church, you can see an early principle of truth and honesty conservation work. The akantus paintings were made during the 18th century, but there were problems with humidity in the church and the paintings were restored in the early 19th century. In this restoration, the painter used another colour to show the additions. The Levide church, Gotland, Sweden. *Photo: Joakim Hansson.*



Reconstruction is now rarely done. In the Levide church, the Passion paintings from the early 20th century were over-painted in the 1950s because of heavy moisture damage. In the last restoration, there was a desire to repaint the paintings after old pictures. This was carried out because the paintings did not interfere with any other paintings or interior details. The Levide church, Gotland, Sweden. *Photo: Joakim Hansson.*

A marble imitation from the first half of the 12th century. The artist had probably never seen real marble so he could not make it in a realistic way. However, this is an important piece of evidence of how the medieval painter imitated the real material. The Källunge church, Gotland, Sweden. *Photo: Joakim Hansson.*

country and from organization to organization, and some may be given higher prominence than others. However, the requirement to value, enhance and protect authenticity is universal.

The following principles are also present in most national and international guidelines:

- minimal intervention. This notion emphasizes the importance of materials as evidence in understanding the development of a place. However minimal intervention not only refers to the materials, it also refers to all actions in the place, including additions, new buildings and changes in use. The idea of minimal intervention is not intended to stifle change but to ensure that any changes protect and enhance cultural significance. The Burra Charter emphasizes a cautious approach to change and says *"do as much as necessary to care for the place and to make it useable, but otherwise change it as little as possible so that its cultural significance is retained"* (Australia ICOMOS, 1999).
- truth and honesty. Along with minimal intervention, this can be seen as perhaps the most important (and oldest) of the principles. With repairs, for example, the new work should be in harmony with but, at the same time, distinguishable from the old. What this means in practice will vary with circumstances and context. It is also, of course, a matter of judgement and interpretation. A basic principle of conservation is that all interventions in the materials should be handled "truthfully" to make clear what is "original" and what has changed. This is in order to avoid producing a parody or facsimile of the past or pretending that something is what it is not (hence the issue of authenticity is relevant here). As with the concept of minimal intervention, the idea of honesty is most often used in reference to repairs to materials. However, as a principle, it should be applied to all interventions in the historic environment, including alterations, additions and indeed new buildings in historic areas, which generally should respect the historic context, and certainly not detract from its significance, but should also be clearly distinguishable in design and form from the old building(s). The issue is one of truthfulness, but it also involves acknowledging that changes made now are part of the continuing history and development of the place. The physical evi-

dence of the way that the building and the site have evolved over time is important, and such changes should be respected as they help tell the story of the place and the society that made those changes.

- reversibility. This is quite a pragmatic principle in that it allows current elements to be replaced by future, possibly more appropriate options, perhaps where a repair is not functioning properly or where it is causing unforeseen damage to adjacent materials. As with other principles, reversibility could equally apply to actions other than repairs: for example, with the physical aspects of the introduction of a new use, where the design allows for the (future) removal of the new structure without adverse impact on the "original" materials.
- fit the new to the old. This again works at a number of levels and covers "molding" the new to the old because this will usually reduce the amount of original material lost in repair work and may, for instance, reinforce the value of "plastic" repairs in stonework. Equally, as with the other principles referred to, it should also, as a concept, influence how new uses, additions and new buildings are "fitted in" with the existing.
- the importance of maintenance in prolonging the life of the materials (and hence the significance represented by them).
- the importance of the relationship of a site to its surroundings. This relates to the sense that the context of a building is important and that its loss detracts from the cultural significance of a place. This would also apply to objects within a building, in which the removal of objects would inevitably reduce their significance, and that of the building.
- The importance of records. Creating a record of the built cultural heritage is part of the process of establishing its significance and also of managing the care and protection of the place. The need to record all actions in order to help others to understand "the story" of a place is also an important aspect of the process. It is important that records are kept of decisions and actions that take place in order that future generations can understand our present.

All historical layers are important for the integrity of the building. None should be preferred over others. Three different layers of vault paintings, dating from the late Middle Ages to the Baroque, were found and displayed during conservation work in the Martna church, Estonia. *Photo: Kaire Tooming.*

In the Levide church, there are medieval paintings from different times. In this painting, there are three layers, and in the oldest the cross interferes with the painting from the 15th century. The painting was heavily restored around 1900. The new layers partly destroyed the old ones. Here there was no possibility of going back to the original. The Levide church, Gotland Sweden. *Photo: Joakim Hansson.*

- The physical evidence of the way that the building and the place have evolved over time is important and such changes should be respected as they help tell the story of the place and the society that made those changes.

Restoration

A building or place can be restored by either removing or adding items or elements. Therefore, a simple repair can be seen as a restoration. For some conservationists, restoration is considered to be dishonest in that it can be seen as falsifying the past by replacing something which is original and authentic with something which is a facsimile. However, in some instances restoration is seen as appropriate, particularly where it involves an action which may protect or enhance cultural significance. Restoration may also be acceptable where there is sufficient evidence to allow for accurate replacement and the loss of historic materials is kept to a minimum. However, restoration should be approached with caution in order to safeguard historic integrity and authenticity, i.e. it is generally accepted that restoration (and reconstruction) should only happen where it will reveal culturally significant aspects of a place, and only if there is sufficient evidence of an earlier state of the materials; it should not be based on conjecture. The issue of restoration, particularly of major parts of a place, is not just a matter of truthfulness; there is also the concern that, unless it is handled sensitively, it can negate the development of a place by suggesting that one era is more important than another. Also, restoration is often in conflict with the principle of minimal intervention.

The English Heritage document *Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment* makes some useful points about restoration when it states that :

Restoration of a significant place should be acceptable if all the following criteria are met:

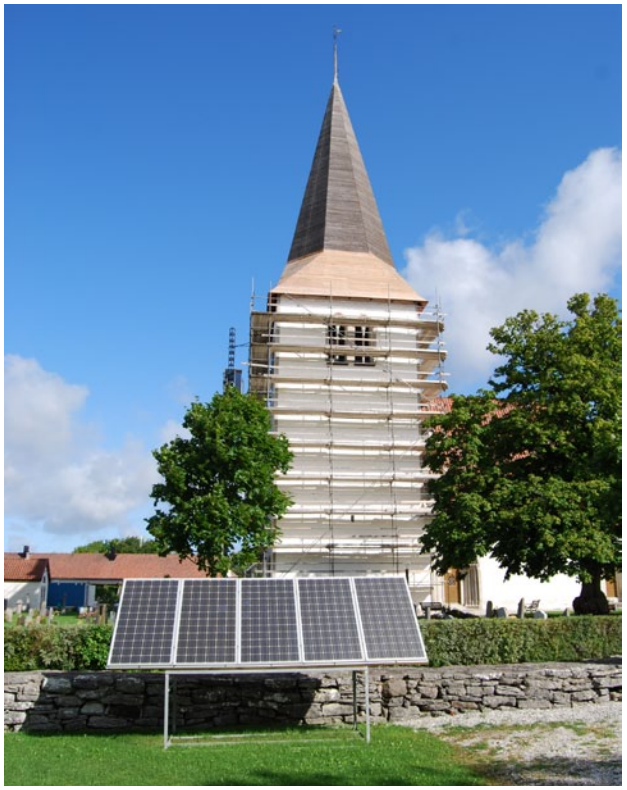
- *the heritage value of what would be revealed or recovered decisively outweighs the value of what would be lost;*
- *the work proposed is justified by compelling evidence of the previous form of the place, and is executed in accordance with that evidence;*
- *the current state of the place, the form in which it survives, is not the result of an historically significant event;*
- *there would be no obvious incongruity, through creating something that has never previously existed as an entity;*
- *resources are available to maintain what is restored.*

(English Heritage, 2008),

What is conservation?

Conservation can be considered to be the sensitive management of change in built cultural heritage.

It has been observed that *"The creation of cultural heritage is largely derived from the way people remember, organize, think about and wish to use the past, and how material culture provides a medium through which to do this"* (Avrami ,2000l). Conservation is therefore more than a physical act. Conservation is about understanding and articulating cultural significance by attributing value(s) to the built cultural heritage and by undertaking measures to ensure its protection and enhancement.



A restoration affects many different aspects. Usually the old church and the cultural values are respected, but there are also needs for new technical installations and research. In the Hangvar church, research was conducted on how to heat the church with solar panels. The Hangvar church, Gotland. *Photo: Tor Broström.*

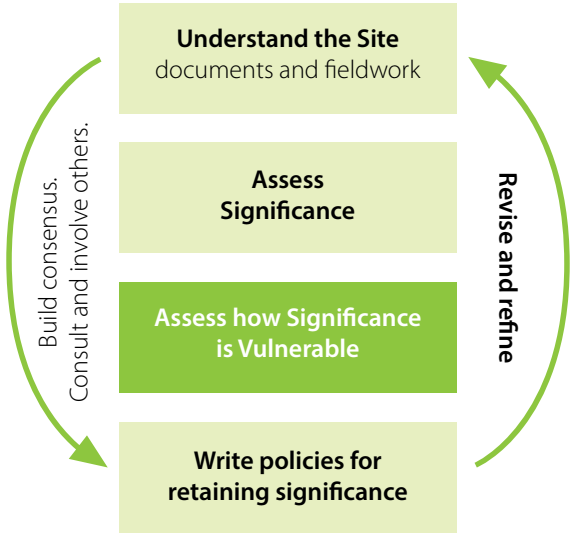
Conservation is both the idea of protecting cultural significance and the processes and activities through which this is carried out. The idea of protecting values is fundamental to the notion of conservation activity.

The Burra Charter, which is perhaps the most often quoted of all international conservation charters, defines conservation as being *"all the processes of looking after a place so as to retain its cultural significance."* It goes on to expand on this by observing that *"Conservation may, according to circumstance, include the processes of: retention or reintroduction of a use; retention of associations and meanings; maintenance, preservation, restoration, reconstruction adaptation and interpretation; and will commonly include a combination of more than one of these."*

The process of making a Conservation Management Plan (CMP)

It is important not to be too formulaic about producing a CMP for an historic place because each site is unique. Therefore, the details and contents of a plan should be determined by the characteristics of a specific place and informed by the requirements and culture of the organization that owns and/or uses it. In order to be effective, a CMP must also recognize and work with the constraints and opportunities presented by the site and its context. Nevertheless, there is an acknowledged overall framework and approach to producing a CMP which has proved to be effective at various sites and in various contexts throughout the world. This framework is shown in the diagram below:

The Conservation Plan Process



Source: Informed Conservation – an introduction to the guidelines (HELM/English Heritage).

The basis of a CMP is an understanding and articulation of the cultural significance of a place, i.e. an analysis of what is important about the place and why. The key elements in a CMP are:

- an understanding of the cultural significance of a place through the identification, analysis, measurement and articulation of the cultural values of the place.
- an identification of the attributes or elements of the cultural artifacts and buildings that embody and represent those values, so that it is clear what needs to be protected and hopefully enhanced.
- an identification of any factors that may adversely affect cultural values now and in the (measurable) future. It is important to assess in what way cultural values might be vulnerable and identify the processes and situations that may lead to erosion or loss of those values. This leads to the question of what the actions are that need to be put in place in order to avoid those threats, or at least mitigate them.
- an identification of opportunities to protect and enhance cultural significance, including by proactively seeking out opportunities for positive changes.
- an identification of "where we are now" in relation to such matters as the condition and use of a place.
- the development of a management plan that links the assessment of cultural values to the operational needs and activities of a place, and to the objectives of the organization(s) that own(s) and/or occupy/occupies it (and which integrates built cultural management planning into the general built asset planning of the place). Such a management plan must focus actions, processes and priorities on the protection of built cultural heritage values, i.e. be primarily concerned with the implementation of management practices that maximize the protection and enhancement of heritage values.

Each site is unique and contains different heritage objects. Some of them are situated far from the central church building. The 17th century belfry of the Kihelkonna church, Estonia. *Photo: Kaire Tooming.*

The Sundre medieval church lies in the far south of Gotland. This defence tower is situated near the church, and it gives the place a certain significance. The tower is one of the oldest buildings in Gotland, dating back to around 1000. The Sundre church defence tower, Gotland. *Photo: Joakim Hansson.*

- the development of monitoring, evaluation and review processes that address such issues as "how we are doing", while also considering the continuing validity of the (heritage) management objectives.

CMPs also implicitly acknowledge that change in the historic environment is inevitable, whether caused by natural processes, through use and reuse, or by responses to social, economic and technological change. The key challenge in protecting built cultural heritage then is, as previously observed, essentially about managing change to a place while protecting, and hopefully enhancing, its cultural significance. The focus therefore should be on management planning which optimizes the benefits that can be gained from a place without diminishing its value and potential for the future.

A Two Stage Process

It is important that the process of creating a CMP is carried out in two stages: the first stage involves understanding the place through the gathering and analysis of evidence, and the second involves developing conservation policies and evolving strategies and actions for the implementation of those policies.

A typical step-by-step structure for a plan is:

Stage 1 - Determining significance and vulnerability

Step 1: Understand the site by drawing together information, including documents and physical evidence, in order to present an overall description of the place and an understanding of how it has developed over time.

Step 2: Assess the site's significance, both generally and contextually, and in detail for each of its main elements. This will include the site's relative significance (to other places), as well as how each part or element of the site contributes to its overall significance.

Step 3: Define issues that affect the significance of the site or that have the potential to do so in the future; in other words, assess the site's vulnerability to deleterious change.

Step 4: Write a conservation statement: a short accessible summation of what is significant about the site and why.

The site's significance lies in different aspects, including historical and religious diversity. The coexistence of medieval Catholic and modern Lutheran church furnishings at the Kaarma church, Estonia. *Photo: Kaire Tooming.*

Stage 2 – Developing and applying policies and actions

Step 5: Develop conservation policies, processes and actions that will ensure that the significance of the site is protected and, where possible, enhanced in its future management. This will include identifying and appraising options in the light of an assessment of opportunities and barriers.

Step 6: Apply the conservation policies, processes and actions at all levels of the organization.

Step 7: Develop and implement policies and processes for monitoring, reviewing and readjusting the management plan.

As with all good practices in planning, there needs to be a monitoring system that asks "How are we doing?" Therefore, a timetable for the action plan is needed which can provide measurable benchmarks. In addition, it is important to acknowledge that conservation plans are time-specific, because circumstances change, as do perceptions of significance (new evidence may also emerge that affects the understanding of the significance of a place). Even if this were not so, the sense that conservation plans are management tools, and not primarily documentations of the past, means that they must be dynamic and therefore reviewed and updated at regular intervals in order to ensure their continuing validity and usefulness.

The two-stage approach is important, and it should be emphasized that the assessment of cultural significance should be undertaken first, without considering any constraints, development plans, intentions etc., in order to ensure that the determination of the significance of the site is not distorted by predetermined or preplanned outcomes. This means that the appropriate conservation management policies can only be established once a comprehensive understanding of the site's significance and its vulnerability to change have been determined.

However, it must be remembered that the two stages, though carried out separately, are not independent, in the sense that stage one has no real value if stage two is not carried out properly, and stage two will operate in a void if it is not derived from the logic and understanding arrived at in stage one. It is important that the final two-stage document should read as one entity, as neither part has any real value unless both are completed in an integrated manner.

Undertaking a conservation management plan

Understand and describe the place

Before analyzing the cultural significance of a place, it is important to describe the site as it is now and to examine and understand its context and setting, as well as some of the general issues that affect and will affect it, and to describe and record this. This is essentially about answering the prosaic but important question of "What have we got?" This process will, firstly, include a consideration of:

- the location of the place and its context related to local geography and the surrounding environment.
- the wider context in terms of the political, social and economic environment in which the site exists and operates, and the extent to which this might affect the aims and objectives of the plan, both in terms of opportunities and threats.
- how the conservation plan might relate to, or be affected by, other policies and decisions under-

Sites contain different types of heritage. The baroque funeral chapel in the churchyard of the medieval Karuse church, Estonia. *Photo: Kaire Tooming.*

taken by the organization that uses the site and/or others whose decisions might affect the place now or in the future (wider spatial planning issues, etc.).

- specific issues that need to be addressed by the conservation plan which may already be decided upon or are in the pipeline, in relation to new developments, changes of use, improvements to facilities etc.
- ownership and interests in the site, how it is managed now and the uses to which it is to be put.

And then

Describing the place as it is now:

This should be a written and visual description of the place in its present condition, including its buildings, its other structures, and its open spaces. The buildings and open spaces should be described in terms of their functional relationships, both holistically (i.e. how they relate to each other and to the overall function of the site) and as individual elements. The individual elements – both buildings and spaces – should be described in terms of their layout and how they are used.

Contents should be described where they are important to the function of the space, to the architectural style or design of the building or perhaps more intangible aspects of the significance of the place, i.e. the meaning and association between the place, the building and the contents. This understanding may of course be reinforced or perhaps changed by undertaking the assessment of cultural significance.

The main methods of construction and the key materials used should be noted.

The architectural style, or styles, should be noted, as should the scale and detailing of the buildings, and any unique elements or details.

The nature, quality and physical characteristic of the spaces, and the objects and natural features that they contain should be assessed and described. This should include hard and soft landscapes and enclosures.

The condition of the physical aspects of the site should be assessed in outline, in both general and relative terms. A more detailed assessment may or may not be needed later in order to clarify issues of vulnerability: there may be particular defects which are in urgent need of attention because they may be endangering known and unknown elements of significance. It should be emphasized that at this stage the assessment of condition is undertaken in order to help provide a picture of the place in its present condition. However, it makes sense to undertake a full condition survey (see under maintenance management policies later on in the guidelines) as soon as possible after the assessment of significance has been undertaken (and irrespective of where in the condition survey cycle the place is) in order to align the survey cycle with the establishment of cultural significance.

It is important to consider character as well as appearance. A detailed assessment of character should of course emerge from the assessment of cultural significance, but it is useful to carry out an initial assessment in terms of the nature of the quality of the place and the factors that affect its character. This will include such factors as atmosphere, use and activities, as well as perhaps more easily measurable aspects: architectural qualities, materials, etc. It can sometimes be useful in this context to think about what makes the place in question different from similar places.

A medieval church is often a complicated object. There are additions from many different periods. The Ekeby church building was mostly built in the 13th century. Besides the medieval pieces, most of the interior was added later, mostly from the 17th to the 19th centuries. These additions form a great part of the historical atmosphere of the church. The Ekeby church, Gotland, Sweden. *Photo: Joakim Hansson.*

The different types of heritage that exist on the site should be described, including, where appropriate, the natural heritage; this would cover buildings, archeology, collections, historic landscapes and gardens.

The limits of the place should be shown as boundaries of the site, and its topography and setting in the wider landscape should be described and visualized. Determining key sight lines out of the place and into the place in order to identify important and sensitive views is useful.

The significance of the place may also be connected with other sites and so an understanding of how plot size has increased or decreased over time will have a possible effect on understanding the cultural significance of the site; there may a symbiotic relationship between the place and its surroundings which is more than just contextual.

A checklist for making an inventory of church buildings and contents is available in Appendix A

Assessing significance

This is the key part of the conservation plan and is concerned with determining the cultural significance of the place. The previous section ("understand and describe the place") is obviously part of the process, particularly as it will involve some analysis, as well as description. The task here is in gathering material that adds to the understanding of the place and its social, historic and environmental context, as it was originally and how it has developed. This information is then analyzed in order to determine the cultural significance of the place and how this is embodied in and represented by the elements – the buildings, spaces, structures and objects (and their relationships) that constitute the physical manifestation of the place – and by its uses and associations.

Gathering evidence about significance

The cultural significance of a place is the summation of the various values associated with the site. It is extremely important that all aspects of the site are investigated and that the values and their relative importance are not assumed or predetermined because, even where it is thought that values are known, or at least obvious, ideas of what is valuable and why are subjective and change over time. There are many examples of where the rigorous, focused and holistic approach adopted by a conservation plan has shown new aspects of significance in places which were assumed to be already well understood.

The guidelines of the Burra Charter suggest that the information that needs to be collected concerns:

- the developmental sequence of the place and its relationship to the surviving materials;
- the existence and nature of lost or obliterated materials;
- the rarity and/or technical interest of all or any part of the place;

Rare features add value to the site. Historical graffiti on the western portal of the Kadrina church, Estonia. *Photo: Kaire Tooming.*

- the functions of the place and its parts;
- the relationship of the place and its parts to its setting;
- the cultural influences which have affected the form and materials of the place;
- the significance of the place to people who use or have used the place, or descendants of such people;
- the historical content of the place with particular reference to the ways in which its materials have been influenced by historical forces or have influenced the course of history;
- the scientific or research potential of the place;
- the relationship of the place to other places, for example in respect to design, technology, use, locality or origin;

(Australia ICOMOS, 1999)

Information on significance can be gathered from physical, written, oral and figurative sources. In practice, this means:

- Documentary Material.
- Interpretation of materials and spaces.
- People, in the sense of the meaning of a place to a variety of people (particularly the community/ stakeholders).

Documentary evidence

Documentary evidence includes written or graphic evidence that helps to build a picture of the place and how and why it has developed over time. Depending upon the place and the types and sources of the documents, some specialist skills and knowledge may be necessary in identifying, sourcing, reading and interpreting the materials. Some of the material will be primary (i.e. original) and some of it will be secondary (books and articles written about the place, for example).

Secondary material is often more readily available than primary material but, clearly, as it is the result of someone's interpretation and analysis, it is important that a judgment be made about its accuracy and veracity. However, it is also important to understand that primary material is not necessarily accurate or truthful. For example, historical records were sometimes written after the event, and are subject to mistakes, misinterpretation etc.: a contemporaneous report may not be a truthful or full account, and a building may not have been built exactly as it is shown on a plan, or in an illustration/ painting. Quite often mistakes are made, for example, in assuming that an old painting of the exterior

Sometimes the building itself can shed light on important building phases. The date on the western door of the Valjala church, Estonia. *Photo: Kaire Tooming.*

or interior of a building was rendered accurately by the artist, leading to incorrect assumptions about, for example, past interior color schemes.

A common mistake in identifying appropriate documents is to be too narrow in identifying material and where it might be sourced. It is important to think in diverse ways about where appropriate information might be found and to look beyond "official" and "normal" material.

Examples of the types of documentary material which might be useful are shown in Appendix B. Appendix C makes particular reference to archives for churches in Sweden and Estonia .

Interpretation of buildings, structures and spaces

This is evidence that derives from the place itself: the way that the materials and layout of the site, its landscape and immediate setting and/or the building(s) and its/their use(s) have changed over time.

The process of interpreting historic materials involves a study of the evolution and change of such matters as architectural form, layout, construction technique and the materials and services used in construction. Physical evidence of changing uses and the processes that occurred at the place should be sought in order to understand the specific functions that took place on the site over time. Examining elements of the materials may be justified but generally where this involves damage it should be avoided (the process of paint analysis is an example of an intervention that may be justified because it is usually minimalistic but leads to greater understanding of the place).

Documentary evidence and the interpretation of materials are processes which can hopefully complement and substantiate each other in order to build a more or less complete "story" and to confirm evidence, although in practice there will be both lacunae and some bits of evidence which cannot be interpreted with certainty. It is important that where uncertainty exists, or evidence is lacking, that this is acknowledged.

People as an evidence resource.

Clearly those who have some knowledge and experience of a place (as part of the wider community, as members of the organization, or as the individuals who occupy and use it) are potential sources of information, either orally or through their possession or knowledge of documents that have not been archived. This information may help to fill in gaps in knowledge, help resolve conflicts and contradictions in the documentary evidence, or even validate evidence. The caveats about accuracy and veracity made earlier of course apply here and particularly so in regard to oral evidence.

The concern here is with people as sources of evidence, which is distinct from a process which interprets the meaning of the place to stakeholders and which is essentially about assessing in what ways the community values the place.

The materials used in building churches have often been reused. A medieval stone cross used as part of the buttress at the Kaarma church, Estonia. *Photo: Kaire Tooming.*

Assessing community and stakeholder values.

It is extremely important in an assessment of cultural significance that the way in which people relate to a place, and the meaning(s) it holds for them is taken into account. This is often connected with people's memories and associations and, in effect, those people are the repository of the contemporary social value of the place; the significance of a place essentially resides in how it is understood and

valued by people. Stakeholders, therefore, need to be identified and involved in the process of undertaking and determining significance. This includes the past and present owners and occupants of the site, and the past and present members of the community who used, were associated with, or associated themselves with the place. These associations and memories may be connected with the physical aspects of the place but may also be related to its symbolism and use. In many cases, stakeholders' values are often related to "intangible" aspects, such as the atmosphere and "the spirit" of the place.

The need for clarity and openness

The development of an understanding of the significance of a site should be as objective as possible. It should, however, be borne in mind that it is always an assessment carried out by a particular group of people, with particular interests, knowledge and skills, who are operating in a particular cultural context and at a specific point in time. It is therefore important that the process is not only rigorous, but is seen to be rigorous. Therefore the methodologies and processes used should be set out and explained. Such an approach should aid credibility and transparency, and therefore accountability. So it is important that:

- it is made clear what information and evidence was drawn upon, from where it was sourced and how it was analyzed and interpreted. It should also be shown how competing ideas, contradictory information, etc. were dealt with.
- where there were gaps in the documentary evidence these should be acknowledged, and again it should be shown how they were dealt with.
- all sources used should be cited with sufficient precision to enable others to locate them.
- all sources consulted should be listed, even if not cited (i.e. there should be a comprehensive bibliography, as well as a detailed and accurate reference section, both arranged using an acceptable and appropriate "referencing" system).
- all major sources not consulted should be listed and the reasons why they were not used explained.
- it should be made clear how stakeholders were identified and by whom, and how their input was managed, recorded, analyzed and used.
- any areas or aspects of the site that could not be properly accessed and/or documented should be noted, and reference should be made to how this was dealt with.

Categorizing cultural values: using value typologies

The cultural significance of a place is made up of the values embodied in and represented by the place. The type of values that are present in any given place are variable of course, but in making an assessment it is useful to have in mind a range of possible values that may exist at the place.

Appendix D contains examples of value typologies that are in current use, and below are some examples of cultural values that may be present at a given place with some observations about their meaning.

Aesthetic

This involves perception by the senses: what can be seen, smelt, heard and touched. This is essentially about character and what creates a "sense of place". Appearance (including the "patina of age") is part of the character of a place, but there is a real danger that it may dominate the assessment of this value category, in part because it is easier to measure and articulate that which can be seen compared to other aspects of character. There are many examples in which the appearance of a place has been "enhanced" but the aesthetic of the place has been damaged. Sometimes this has occurred because of a misplaced desire to "tidy up" and "improve" the place, but often because the use and feel of the place – and its noises, smells and activities – have neither been understood nor their importance appreciated.

Architectural/technological

Architectural value is concerned with innovation, development and perhaps pinnacles of achievement (as in "the finest example of. . . ") in relation to architectural ideas and movements, and also in the work of individuals. This value also embraces the work of craftsmen and the development of ma-

There are high cultural values in many churches. In many cases, a piece can also have high aesthetic, educational, historical etc. values, as in this stained glass window from the 13th century in the Lye church. The Lye church, Gotland, Sweden. *Photo: Joakim Hansson*

terials and technology. Some architectural values may be related to developments and high points in technical achievement.

Because architecture and technology (and indeed art) are not created in a vacuum, the social, cultural, political and economic contexts which informed their development are also represented by the architectural and technical achievement.

Archaeological

Archaeological value is represented by structures both above and below ground. This relates strongly to educational value and to the ability of the place to be a source of information about the past through scientific investigation. In part, archeological potential may be related to representativeness and completeness.

Artistic

This may be closely connected to historical value and architectural value. Artistic value may be related to the work of a particular person or an artistic or architectural movement, and may be important because it is a unique example, it is pivotal, or it is representative.

Associational

Clearly a place may be important because of its associational links with a person or event. But how symbiotic that link is needs to be considered: the link should be substantial, and generally it should not be transitory. The intactness of the place in relation to the period, and activity related to the association, and/or its "spiritual quality" in relation to the association are also key points to consider.

Commemorative

These are different from associational values in that the commemorated place may or may not be located where the event actually took place. Churches may provide good examples of this.

Economic

This can be seen, at a very simple level, as pertaining to how much money is generated by heritage places, either directly through admissions and sales of services and goods at the site, or indirectly in the sense of visitors to a place purchasing goods and services in the wider area. The effect of heritage value on attracting visitors to the wider region, or indeed a particular country, is also an economic value that can be measured in terms of direct and indirect investment and employment opportunities and realities. This important value may, of course, lead to negative effects on the place itself.

Another way of measuring economic value is by asking people what they are prepared to pay for something: how much they are prepared to pay to enter a particular place or how much public money they think they are prepared to see spent on it (in the context of perhaps higher taxes or in relation to other things of public value, such as health care or street cleaning). In the case of churches, this may

Churches contain extensive amounts of information, which can be used for educational purposes. Conservation students' workshop at the Pöide church, Estonia. *Photo: Kaire Tooming.*

be referred to as existence value; people value the existence of something even though they may not interact with it directly themselves.

There is also of course a more prosaic economic value, and that is the value of the place as "real estate", including its development value. This is important to measure as the potential to develop the site through a new use may be what actually effectively protects the place, as long as the new use is compatible with its cultural significance.

Ecological and Environmental

Environmental value is often confused with ecological value, but they are and should remain quite distinct; for example, a landscape can have environmental value without being ecologically significant.

Educational

Educational value is derived from various of the other values, including, of course, the historical value of the place. This can work at an informal level, in that a place may invite and stimulate individual interest through curiosity. However, in many instances educational value is only truly realized through effective interpretation strategies (although the sense of place can sometimes be reduced by poor, and in some cases any, interpretation).

Historical

The concept of historical value is of primary importance in the notion of built cultural heritage, and to a large extent it underpins and validates many of the other values. Clearly, historical value is closely linked to social value and associational values.

Inspirational

Like the spiritual and religious, this is a cultural value that can be hard to define precisely, because of its very personal nature.

Recreational

Clearly, many built cultural heritage places are enjoyed as sources of recreation, and thus have amenity value.

Scenic and panoramic

These are closely associated with visually aesthetic values. Panoramic value includes sweeping outward vistas, whereas scenic value may be related more to beauty in a reasonably confined setting and may include the subject place or be experienced by looking from it.

Social value

This mainly involves the meaning that a place has for individuals or groups because of some kind of association they have with it, or with events that occurred there. It refers to the benefits of social cohesion and group identity, and a sense of continuity, familiarity and rootedness. In this it has both psychological and sociological benefits.

Spiritual and religious

These can obviously be related to organized religion but they can also encompass secular experiences of wonder etc. (cathedrals and churches are good examples).

Symbolic/iconic

The symbolism of places is a widely referred to value. Very often the symbolic values that a place holds are interpreted differently by different groups. In some cases, different interpretations are relatively harmonious and positive and reinforce the importance of a place, but sometimes they are negative, e.g. if they are seen by minority groups as celebrating past events which oppressed or damaged them. There can, of course, be benefits in conserving places precisely because they are reminders of past wrongdoings or attitudes and events that are condemned. Whether those benefits are realized depends on perceptions and interpretations.

In a slightly different way, the very human sense of belonging can attach symbolic or iconic value to a place, both for individuals and sometimes for whole sections of a community. Related to this form of symbolic value is the importance that many people, when traveling, place on landmarks as way-markers and symbols of arrival at a destination (again churches often play a significant role here).

The medieval suite of stained glass windows in the Lye church is the biggest preserved collection of medieval glass in the Nordic countries. The value of the windows is evident. But in addition to the art historical value, there are also other important values. These can be more difficult to determine. The Lye church, Gotland, Sweden. *Photo: Joakim Hansson.*

Some points to consider in assessing values and significance

- Many of the values of a place can be identified and assessed by an expert/team of experts, but it is important that the views of the community about what values the site holds for them are

taken into account, and that those views are seen as being as valid as those of the experts. What we mean here are communal values, i.e. the meanings of a place for the people who relate to it, and whose collective experience or memory is represented by it or embodied within it. Communal values are often symbolic/intangible and therefore difficult to measure. They can also be contentious. This does not reduce their importance. It follows that any typology needs to acknowledge the range of possible values in a place so that all stakeholders recognize that their perspectives are represented.

- Any particular place may or may not contain all of the values indicated above. However, using a typology with a comprehensive range of values at the beginning of an assessment is a useful starting point, and it will tend to encourage divergent thinking. This range will then be adjusted to take into account the particular qualities of a place. However, the typology should not be regarded as a check list that excludes the notion of other values existing at a particular place, nor should time be wasted on trying to identify values that clearly do not exist in a particular place.
- The articulation of values in a typology never provides an "absolute" definition of the cultural significance of a particular place, but it is useful as a framework which can be an organizational tool for an assessment, although it should be seen as both fluid and flexible.
- Usually a place has multiple values and this will tend to reinforce its importance. However, having multiple values also probably means that different individuals or groups see the place, and particular aspects of the place, as being important for different reasons; this may cause tensions in making the assessment, and possibly lead to management problems later.
- The credibility and/or the value attached to different types and different sources of evidence may vary between different cultural groups in the community, between the community and experts, and possibly between experts with different backgrounds and perspectives. This emphasizes the notion that all cultural values are subjective and therefore reinforces the sense that the attitude and make-up of the team which is undertaking a value assessment is important. It also underlines the point that the process of value measurements, as well as the results, need to be transparent and objective.
- There may also be problems with interpretations of terms and even meanings: it may seem that different groups perceive the same value as being embodied in the same aspect or element of a place (e.g. aesthetic value), but in reality they conceive and interpret that value in different ways. This reinforces the point that agreeing on terms and meanings is important, as is explaining how values have been identified and measured.
- What is regarded as valuable about a particular place not only varies between individuals and groups but also changes over time: significance is dynamic and subjective and evolves within the context of changing social, cultural and political contexts. In other words, changing social perceptions considerably influence the value that we place on our historic environment. Cultural significance is a social construct, and there are no inherent values.

The value assessment process

It is important that the general approach to assessing cultural significance should be one where all the possible values are intrinsically considered to be of equal standing and that no one value is automatically allowed to dominate the assessment of significance, nor the decisions flowing from it. It is important that the assessment team not subjectively assume – perhaps because of their training, background or personal beliefs – that, for example, architectural or art history values at a given place are always more important than other values. This should be the working premise when carrying out the assessment of a place. In addition, following on from an assessment, this balance needs to be maintained to ensure that one set of values does not obscure other values in managing a place. As noted above, there should also be an assumption, initially at least, that the full range of values is potentially represented by the place and that the investigation of the site may reveal other, previously unacknowledged values.

The process of assessment should then normally follow these procedures:

- the identification and assessment of the overall and particular values embodied in and repre-

sented by the site and how those values relate to, and are represented by, the buildings, objects, spaces and landscape of the place.

- an assessment of how valuable the site in relation to comparable sites.
  - a determination of the contribution to significance made by the setting and context of the place.

Following on from the above, there should an evaluation of the relative significance of the various aspects and elements of the place.

It can be seen that at the heart of this process is an assessment of value which looks outwards at comparisons and looks inwards at relative significance.

Relative Significance

- Relative significance is usually expressed by using a hierarchy of ascending or descending levels of value. For example:
- Exceptional: features of exceptional/international significance or which contain elements with a significance beyond national boundaries.
- Considerable: features of considerable/national significance, possibly reflected in statutory designations (including those of ecological and nature conservation value).
- Some: features of some significance, important at the regional level either individually or in group value.
- Limited: features of limited/local significance.

Old heating systems in churches can be very dangerous. This is not only due to technical conditions, but is also a matter of changes in conditions in the building; in this case, the combination of the heating system and the climate conditions have blackened the church walls. The bench was put against the wall to protect the wall paintings, but this has produced a poor result. The Lye church, Gotland, Sweden. *Photo: Joakim Hansson.*

Without the necessary expertise, the wrong materials may be used. In this case, concrete mortar has been used to repair a hole in the medieval plaster surface, which was definitely a flawed approach. The Lye church, Gotland, Sweden. *Photo: Joakim Hansson*

- Unknown: features of unknown significance resulting from a lack of sufficient information on which to base a sound analysis of value.
- None: features of no significance to the study area.

This approach is preferable to one that allocates numerical scores, as they can become too rigid and thought of as being absolute.

As well as reinforcing which aspects of a place should be protected and enhanced, this assessment of relative significance allows for changes, and gives guidance to how changes can be made with the least impact on the overall value of the place; the point of the exercise is not just about constraining future action, but also about identifying where change and development can, and should, take place.

In many cases, a further category – "negative significance" – is also used in this kind of hierarchy in order to identify features that are thought to have such a deleterious effect that they detract from the overall significance of a place, or from elements of it. There is, of course, the practical problem that the elements are likely to have necessary functions, but at least the negative value can be taken into consideration in future decisions about making changes to the place.

Comparisons

Another aspect of measuring relative significance is to compare the relative importance of one site with that of another site. Comparisons between places provide a context that helps to assess and then to justify, explain and illustrate significance. This might be based upon such questions as:

Is it the most complete?

Does it perhaps have a design and layout which represent or illustrate some change in the development of how the building type functions?

Is it a representative example of an era or a type?

If it is the work of a particular architect, does it represent an early example of the architect's work, or a particularly fine example of it?

If it is a good example of a particular style of architecture, is it the only known example in that area or perhaps a pioneering example?

Is it an early example, or the oldest or rarest?

Is it a seminal building (function and/or style)?

Is it a high point (in architectural style or functional effectiveness for example)?

There is a danger though that too much emphasis on comparisons may obscure the unique qualities of a particular place. In addition, comparisons may be useful in gauging relative architectural merits but not in gauging social value and meaning.

Vulnerability

Once the site has been understood and its cultural significance assessed, it is important, before policies are developed to protect and enhance that significance, that there be an assessment of what factors might possibly damage or detract from the cultural values of the place: it is important to understand the extent to which values are at risk now or in the future. The ways in which a place and its values are vulnerable may be multifaceted and relatively complex to address. Other ways, such as a lack of financial resources, may be simple to identify but extremely difficult to address adequately.

The assessment of vulnerability should consider the medium and long-term view, as well as issues that may cause immediate and obvious problems. Also, it is important to look externally as well as internally at possible future problems. Looking externally includes understanding possible threats that are generated through forces outside the control of the organization (such as future socio-economic changes or climate change), as they may have long-term effects that are difficult to deal with.

It is important that all of the issues of vulnerability that are identified are linked to a policy in the management plan which will address and mitigate the problem.

Examples of the sort of issues that might be identified as rendering the cultural significance of a place vulnerable to damage or deterioration are shown in Appendix E.

SWOT analysis: identifying strengths, weaknesses, opportunities and threats

This is often a useful exercise to undertake after the assessment of cultural significance and perhaps along with the consideration of vulnerability.

It is important to involve as many people as possible in this exercise. This should obviously include those using and managing the place, but may usefully involve others from outside the organization, such as the local government and the local community. Widening participation in the exercise may have added value in making and sustaining links, and in gathering support for future actions.

The undertaking of a SWOT analysis can be very useful not only in identifying opportunities and barriers but also in terms of:

- team building and involving people in decision making, thereby building consensus.
- allowing and stimulating creative thinking.

- creating a realistic and shared understanding of the current position and the issues facing the site and the management team (as well as the community).
- helping develop a structured approach to problem solving.
- getting a range of interested parties to "buy into" solutions and agree to priorities, schedules and deadlines.
- predicting future vulnerability, evaluating problems and agreeing on solutions and fall-back plans.

This exercise clearly needs to precede the policy development process. Some of the threats and weaknesses will, of course, have been identified in the assessment of vulnerability.

Examples of the sort of issues a SWOT analysis might raise include:

- cultural values vs. other values on or around the site. This may present both opportunities and constraints, and of course may raise issues of trade-offs between heritage values and other (e.g. socioeconomic) benefits.
- requirements and aspirations of the owner. Again this may offer opportunities and constraints.
- availability of resources (including financial, skills and knowledge. A constraint perhaps, but may also be an opportunity: the production of the plan may provide access to grants/funds or identify development opportunities.
- physical or environmental issues (difficulties in reducing vulnerability due to poor condition, overuse, vandalism, pollution, or natural risks such as flooding, erosion, etc.)

SECTION 2

Developing and applying policies and actions

Introduction

As mentioned above, this second stage of the CMP should only begin after the assessments of significance and vulnerability have been completed. This stage is concerned with determining what is required on the site in order to protect and enhance cultural significance and mitigate vulnerability. This is done by focusing on how the place can and should develop, and the key management issues related to this and how they will be addressed. This part of the process is concerned with moving from a holistic vision of "where do we want to be" to general and specific policies, and from there to tactics and actions.

It is important that the policies are sympathetic to, and synthesize with, the culture of the organization owning and/or occupying the place, and the requirements and constraints related to the functions of the place. It follows that representatives from the organization must be actively involved in developing and implementing policies and actions. It also follows that they must understand and "buy into" the cultural significance assessment and its policy implications.

One possible sequence of undertaking the management plan is to:

- consider what actions need to be taken to mitigate vulnerability.
- consider opportunities and constraints in relation to the place itself, its setting and its socio-political and economic context.
- develop policies to protect and enhance significance and mitigate vulnerability.
- identify and appraise possible strategy options for the implementation of policies.
- develop and implement an action plan that links policies and strategies to procedures and processes, and which:
  - sets out a timescale and sequencing related to requirements, priorities and resources.
  - sets out how the plan will be implemented, and by whom.
  - develops and implements procedures for monitoring and review.

In many cases, the church is too big for a small congregation. There are solutions for dealing with the indoor climate. In the Lau church, there is floor heating under the benches and infra heating from the armature. The model for the armature was made after a medieval one in the same church. The Lau church, Gotland, Sweden. *Photo: Tor Broström.*

The characteristics of this part of the CMP, which is concerned with developing and applying policies and actions, might include:

- that it can be implemented, as far as possible, without too great a change in the existing management structures.
- that it should, where possible, relate to, and work with, existing processes. This applies as long as cultural significance is not threatened by an unwillingness to make necessary changes in organizational culture and organizational practices.
- that financial and human resources are available to implement it.
- that it pays due attention to the needs and concerns of the community and stakeholders in general.
- that it allows and plans for monitoring, review and, if and when appropriate, a refocusing of strategies, policies and actions, and that there is a process which asks "How are we doing?"

Developing Policies

As mentioned above, the policies contained in any given Conservation Management Plan should be derived from the assessment of significance and vulnerability (and the SWOT analysis) of the particular site, i.e. policies are specific to a time and a place. It is, therefore, clearly not possible to write standard policies in advance, nor to know what the full range of policies that are likely to be needed at a particular site will be. However, it is possible to suggest that there will be certain activities and situations for which policies are required irrespective of the type of site or the issues emerging from the assessments of significance and vulnerability. A range of the policies that are likely to be needed at any given place are highlighted below, followed by some thoughts and advice on what factors and ideas need to be considered when producing the place-specific policy documentation.

- Access
- Conservation
- Energy efficiency and indoor climate
- Finance
- Management structures and processes
- Maintenance management
- Records and archives
- Security
- Use and reuse

To enjoy the treasures of a church, visitors should be given information about the building and its furnishings. A detail of the 17th century chandelier chain at the Martna church, Estonia. *Photo: Kaire Tooming.*

Access

The issue of access to churches has to be considered from two different angles: keeping churches open for the local community and visitors, and enabling access for disabled people.

Churches should operate an "open door" policy. Keeping churches open outside of service times is important both to the local community and visitors. An open door enables people to find a quiet place to think or pray and enables visitors to the area to enjoy the treasures of the church. To keep a church open is in the public interest, as many conservation projects done in churches have been funded from state budgets. With an "open door" policy, it has to be considered that this may attract unwanted visitors. To avoid theft, small objects should be locked away or fastened down. There are many ways of ensuring the security of the church while offering hospitality to people.

Historic churches with staircases, different floor levels, and uneven floors may be difficult for disabled people to access. Legislative regulations require that all public buildings must be physically accessible for everyone. This means that people must be

able to move freely and cope with different floor levels. Most regulations, though, accept that historic buildings should be treated flexibly to avoid damaging interventions. Historic church buildings require a special understanding to ensure that the alterations made to increase accessibility do not reduce the historic value and significance. Every historic church building is unique and must therefore be handled separately.

In most cases, access can be improved without affecting historic value and significance. A proper access plan should be worked out to determine what needs to be improved, and this should involve both the building itself and the way it is managed. The access plan should work out reasonable adjustments and highlight the features of the building that cannot be altered or removed. In many cases, physical alteration of the building may not be needed as alternative routes can be provided or the use of space can be reorganized.

It is important that not only visitors or users with limited physical mobility, and those who are wheelchair users be considered in the access plan. Those with visual and hearing impairments also need to be considered. This means that sound transmission, lighting, notice boards, signs etc should be considered as parts of the access improvement strategy.

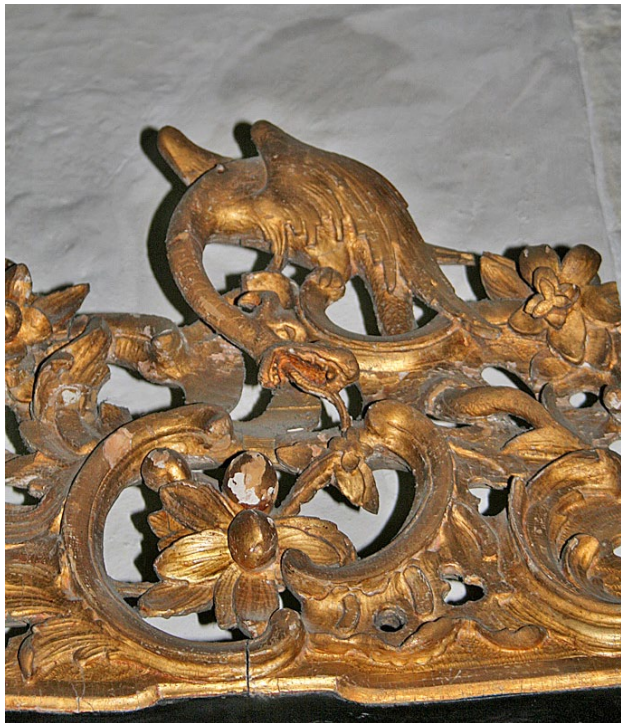
The most common way to improve access to a church and its different parts is to use portable ramps. When this solution is not sufficient and physical alterations are required, it is important to ensure that all changes are reversible and cause minimum intervention to the building materials and the space. Where it is not possible to provide physical access for disabled people to all parts of the building, alternative forms of access via audio, video or internet facilities should be considered.

A lack of regular maintenance will lead to massive conservation work. The Pöide church, Estonia. *Photo: Kaire Tooming.*

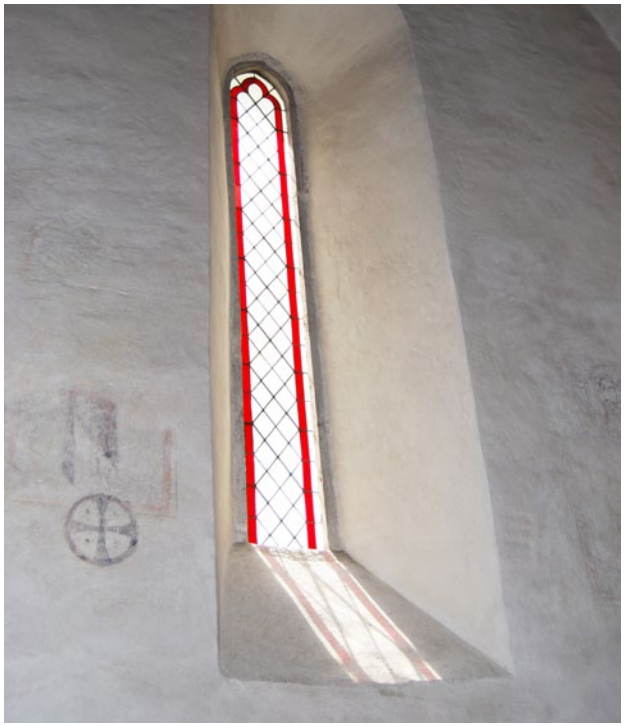
Conservation

There should be a clear framework for showing how decisions about physical interventions in the materials of a place are made, and the basis on which this should be done. In essence, the framework should show how conservation principles (see earlier) are to be interpreted and then integrated and applied within the significance-based management of the place, including all processes and procedures in relation to, for example:

- maintenance.
- repair.
- alteration and additions.
- reconstruction and restoration.
- new uses.



This frame (detail) has been damaged by the heating system in the church. You can see damage over almost the entire surface. The Klinte church, Gotland, Sweden. *Photo: Joakim Hansson.*



One of the weak points in heating a church is the windows. Old windows have high cultural value and must be saved. *Photo: Tor Broström.*

Together with finding finances for the conservation of a church building, funds for the conservation of furnishings and textiles must be found. A detail of a 19th century Bible cover from the Karja church, Estonia. *Photo: Conservation Centre Kanut.*

This also means that all those working on the materials, or with the objects of the place, should be aware of the implications of the value and relative value assessments, to the extent that all understand how their actions might affect cultural significance. This applies as much to those cleaning or repairing items as to those who may be responsible for changing or exlarging the building.

Indoor Climate and Energy Efficiency

Indoor climate and energy efficiency are two important factors in achieving the sustainable management of churches. The indoor climate should provide comfort for visitors and people working in the church. At the same, one must consider how the indoor climate affects the preservation of the building and its interiors. Based on the requirements for conservation and comfort, indoor climate control must be achieved at a reasonable cost and with a minimum use of energy.

Guidelines for indoor climate and energy efficiency in churches is given in a separate document, *Energy efficient climate control in historic buildings*. Guide-

lines for heating churches are provided in the European standard *EN 15759-1: Indoor climate Part 1: Guidelines for heating churches, chapels and other places of worship.*

Finance

Economic sustainability is a necessary condition for the sustainable management of churches. Operation and maintenance have to be financed over a long-term period. The main responsibility lies with the local parish. As membership is decreasing, many small parishes simply cannot afford to use their churches, much less maintain them.

The second source of financing is from the state, and often this is for specific and/or major restoration work. The availability of, and routines for, state funding vary greatly among the European countries.

The European Union contributes to a series of policies and initiatives for the sustainable development of the built environment. The cohesion policy of the European Union, with its diverse financial instruments, such as the European Regional Development Fund (ERDF), plays a key role in supporting the development and revitalisation of cultural heritage spaces.

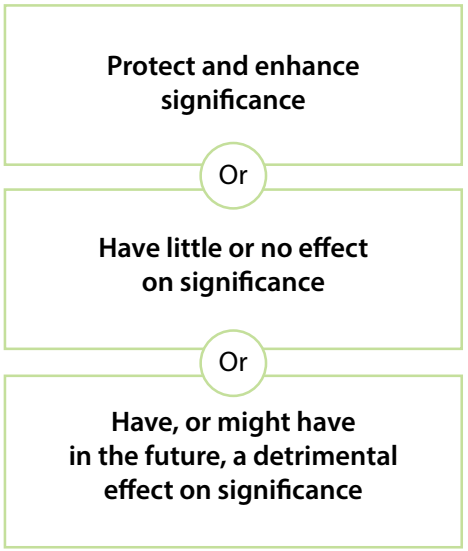
Revenues from activities in the building

The church can be used for non-religious events, such as concerts and seminars. Going one step further, part of the church building can be used for kindergarten classes, offices, cafés etc.

Generally maintaining a church requires a combination of state funding and funding from the local parish.

Management structures and processes

Existing management structures and processes should be analyzed in the light of the assessment of significance and vulnerability. It is necessary to look at how these might:



An important part of the analysis involves ensuring that the idea of significance, and the related responsibilities, implications and actions can be effectively embedded in all procedures and actions carried out by all who work, advise on, or visit the place, and that practices and procedures that may damage or detract from cultural significance are addressed. However, as far as possible, any restructuring should "work with the grain" of the organization's culture and attempt to improve the effectiveness of existing processes rather than trying to impose wholesale change.

Maintenance Management

Introduction

Maintenance is concerned with work which is routinely carried out in order to protect and extend the life of the materials of a building. This involves a continuous process of care. Although the terms maintenance and repair are often used interchangeably in the building industry, in conservation they are distinct ideas – as are the actions involved – and although in practice they overlap to some extent the difference is important. The phrase "as much as necessary, as little as possible" encapsulates the key overarching theme for the care of historic buildings and echoes the conservation principle of minimal intervention. Maintenance is an important activity for all buildings because of the need to protect and enhance the materials of a building, and to allow it to function effectively. For an historic building, the protection of the materials has an additional and fundamental importance because the materials themselves have cultural significance and, therefore, activities which protect materials and prevent (or more realistically slow down) deterioration are important: even good repairs involve replacement

A maintenance plan should also cover the basic maintenance of furnishings. A lamp from the Mihkli church, Estonia. *Photo: Kaire Tooming.*

Site maintenance must deal with several issues, including storage of redundant grave monuments. The churchyard of the Kadrina church, Estonia. *Photo: Kaire Tooming.*

and or damage to existing material. Obviously, repair work is necessary as all materials deteriorate over time and, when carried out properly and judiciously, proper repairs prolong the life of particular elements and the entire building. Good repairs are important for the long-term protection of cultural significance, but it is important that it is understood that they are interventions that, in most cases, involve some level of damage to or loss of materials; repairs involve either restoration or reconstruction. Any unnecessary replacement of materials is likely to diminish authenticity and thus historical/cultural value. The balance, therefore, between preventative maintenance and repair is important, not just in relation to the conservation of materials, but also because of cultural significance.

Maintenance is essentially work which is intended to prevent defects and/or slow down rates of deterioration in the materials and services of a building. So, true maintenance involves such routines and processes as painting, clearing debris from rainwater gutters, servicing boilers, testing machinery, and minor repairs, such as fixing loose slates.

Maintenance management involves an approach that is systematic (i.e. not a series of random activities) and continuous, in the sense of being regular, cyclical and, as far as possible, proactive. It also assumes that the process is based on regular inspection in order to collect information, followed by prompt actions and orderly decisions and priorities.

In order to be effective, maintenance management must be related to the overall goals of the organization and integrated into the management strategy, and this should then inform policy, tactics and day-to-day activities. Most importantly, maintenance policy and its consequent actions must focus on the assessment of significance and the implications of identified vulnerabilities. It must also be informed by conservation principles, such as minimal intervention.

Benefits of maintenance

The objectives of most maintenance programs include the retention of the continuity of function, the protection of buildings as capital assets, the protection of the comfort and convenience of users, reinforcement of image and meeting statutory obligations (related to fire, health and safety, disabled access, etc.). Therefore, one of the benefits of maintenance is risk minimization. In addition, effective maintenance:

There must be storage space for all movable objects. The lack of proper storage rooms is often a problem in churches. In the Linde church, both spaces beside the organ were used as storage areas. The Linde church, Gotland, Sweden. *Photo: Joakim Hansson.*

- retains the building's appearance and value, and safeguards the investment made in it by extending its life.
- mitigates against disruption to use and associated costs that can result when building elements fail. Preventing large repair bills reduces capital expenditure and the need for larger repair and replacement work, which can be expensive and disruptive (particularly if the work is unplanned). A small but regular investment in such tasks as the routine cleaning of gutters and drains is much cheaper and less inconvenient than having to cope with defects (for example a serious outbreak of dry rot in timber roof trusses following years of neglect of dampness problems).
- makes it more likely that dangers (loose coping stones, broken handrails etc) will be spotted before damage and injury result.
- is a key element in a sustainable approach to managing an historic place in that it is concerned with preserving resources, as less material is used than in repair and replacement, and consequently this reduces the environmental costs of extraction, processing, transport etc.
- can promote the idea of guardianship and enhance a sense of place.

From a cultural heritage perspective, maintenance is important because, in prolonging the life of building components, there is a minimization of the loss of original historic materials and therefore it is a key action in preserving heritage.

Processes

As mentioned previously, for historic buildings, maintenance needs are driven by an understanding of the cultural significance of materials. However, this goal also needs to be related to the proper day-to-day functions of the asset and to be synthesized with such matters as insurance requirements, health and safety considerations and other statutory obligations. A process also needs to be established which identifies what maintenance and repair work is to be carried out, and how and when it is to be done, particularly taking into consideration the continuing functionality of the building. How work is to be prioritized and on what basis are also of fundamental importance.

It is customary to divide maintenance into :

- long-term programs (an expression of policy rather than a detailed scheduling of tasks);
- medium-term programs (on an annual basis)
- short-term programs (daily, weekly and monthly tasks).

Also, it is normal to make a distinction between two broad types of maintenance action:

- Reactive: day-to-day, or corrective. This is usually seen as a response to a problem or failure, and an intervention that is usually initiated by the building user.
- Preventive. This is a planned approach that maintains buildings through a rational program formulated through knowledge of conditions, predictive assessments and identified priorities. It creates benefits associated with economies of scale.

Although a focus on economies of scale can work against the notion of minimal intervention, generally problems identified and dealt with in early stages can minimize the need for more intervention and costly repairs later on. Planned maintenance may also play a role in ensuring that the buildings project the right image for the organization, in protecting the visual impression that "well-maintained" buildings give to occupants and the public at large.

It is useful to divide planned (preventative) maintenance into "condition independent" and "condition dependent". Condition-independent maintenance ("cyclical maintenance") requires no pre-inspection and tends to be work that is undertaken at regular intervals: external painting, annual safety checks, clearing gutters, lubricating moving parts, removing plant growth and bird droppings, painting and testing, etc. It may include work related to statutory or insurance requirements etc. Condition-dependent maintenance occurs when an element is assessed through an inspection or a condition survey and the action to repair or maintain it is subsequently prioritized.

Clearly a management system based on condition-dependent maintenance is more complicated and resource dependent, as it requires monitoring the condition of materials, effective information collection, recording and management, and the development of an approach that involves decision making informed by a determination of relative priorities.

Even with an efficient planned maintenance program, some form of user-initiated reactive ("response" or "day-to-day") maintenance is inevitable. This needs to be considered at both the strategic and operational stages, in terms of establishing response criteria, timing, procurement and recording.

However, planned maintenance should be the overwhelmingly dominant approach, mainly because of the need for a minimal intervention ethos, particularly as reactive maintenance, by definition, allows failures to occur, and therefore entails the possible loss of historic materials (clearly, however, some reactive maintenance is necessary to deal with emergencies and to respond to customer service needs).

Prioritization

Making decisions regarding relative and competing priorities is an important maintenance management process. Prioritizing work is important from functional and cost perspectives in all organizations, but it should also take wider organizational issues into account, such as the impact that condition has on the overall performance of a particular asset (e.g. energy) or the overarching property strategy of the organization (e.g. corporate image). It is important, therefore, to avoid a situation where the approach to maintenance management is driven by a process, especially one that emphasizes optimizing the efficiency of the process, rather than by a clear strategy about the goal that process is serving. In the case of historic buildings, it is important to establish priorities that make cultural significance and, importantly, relative significance motivators of decision making. Prioritization should take the assessment of cultural significance of elements/components and their vulnerability as a starting point, and link this to functional performance and cost issues (as well as the practical aspects of carrying out the work).

Planned maintenance programs can provide cost savings, but they may work against the principle of minimal intervention if they develop a logic and momentum of their own.

For example:

- by nature, repair and maintenance work consists of a number of small jobs. Combining them for economic reasons or other management priorities may result in repair work being undertaken too early or maintenance work being undertaken too late.
- because access costs (for scaffolding, etc.) are high, both financially and in terms of loss of function, this may lead to work being under-

taken that involves unnecessary damage to the original materials, for example if the repair work is undertaken before scaffolding is fully in place.

Another aspect of prioritization comes more directly from the issue of relative priorities. The logic of a conservation plan is that relative significance is attributed to the physical elements of the building or site. It follows that repair decisions should not only take into account functional and technical issues, but also a consideration of where one element might be "sacrificed" (through replacement or early repair) in order to ensure the protection of another element of greater cultural value. For example, a lead roof covering might be replaced or repaired earlier than might be absolutely necessary because its functional role includes the protection of a stone exterior wall or a plaster ceiling which is considered more important culturally.

Condition surveys

An essential element in any management process is the carrying out of inspections which assess conditions, report any problems and decide actions. Effective management can only develop through knowledge of an asset, its problems, needs and the life expectancy of the materials. In a maintenance management system, the important information is the state of the materials, and a condition survey is a snapshot that provides information on physical conditions. Condition surveys involve the systematic inspection of the materials of a building in order to produce or allow for:

- accurate information on their condition.
- an assessment of the extent and timing of future work.
- a foundation for decisions on future planned maintenance programs.
- the opportunity to consider the effectiveness of previous programs.

A good condition survey provides information about the materials that are present in the asset, about their condition, rate of degradation and remaining serviceable life, about the asset's vulnerability (whether, for instance, to the elements, vandalism, mismanagement or to other causal factors of decline), and about critical needs in the foreseeable future in terms of maintenance, protection, repair, adaptation and investment. It also, importantly, takes into account an assessment of relative significance and therefore considers what factors might affect the vulnerability of important areas, and asks such questions as:

Will early intervention/replacement/repair of an element of little or no significance increase the life of an element of high significance?

Could functional changes protect significant but vulnerable materials by, for example, changing the function of a vulnerable area from one of high physical impact to one of a lower physical impact?

(It should be noted though that, while the protection of elements of high significance is clearly important, it may be that those elements are more robust than elements of lesser significance and therefore sometimes more attention needs to be given to these "lesser" elements).

Plaster in high towers is very expensive to repair. It is necessary to periodically thoroughly examine the condition of the plaster. The Stånga church, Gotland, Sweden. *Photo: Joakim Hansson.*

It is important that there be clarity about what information should be obtained from a condition survey. There is a common tendency to collect too much information without being clear about the

purpose, and this can act against clarity and therefore reduce the effectiveness of decision making. In addition to what information is required and the level of detail necessary, it is also important to consider:

- the format in which the information is to be collected and expressed.
- the use(s) to which the information is to be put.
- the manner in which information is to be stored, retrieved and analyzed.
- the nature and details of the other management information that informs, and is informed by, the surveys.

Frequency of Condition Surveys

It is common practice for detailed/major surveys to be carried out every four or five years, and for these surveys to be supplemented by annual or six-monthly inspections (in Sweden, there is a legal requirement for condition surveys to be carried out every six years). Some have suggested that this is too long a period for historic buildings because of the key role that maintenance activity plays in preventing the unnecessary loss of historic materials. Therefore, it is suggested that these major surveys take place every three years, with smaller scale and more focused surveys every year, or perhaps every six months (see also reference to re-inspection below).

Condition surveys should, of course, be carried out on objects and cemeteries, as well as on buildings.

It is necessary for the surveyor carrying out the condition survey to be provided with certain information before she/he proceeds. Examples of the type and range of information which may be required is given in Appendix F

Recommendations for condition surveys

As well as describing the condition of the building, the condition survey report should classify actions needed in terms of timescales, for example:

URGENT

Work required urgently for health and safety reasons, to conform to statutory requirements and/or to prevent imminent damage or to slow rapid deterioration or damage to cultural significance.

ESSENTIAL WITHIN MONTHS OR A YEAR AT MOST

Work essential for health and safety reasons, to conform to statutory requirements and/or because a failure to do so would most likely result in further damage or deterioration and increased cost, or damage to cultural significance.

NECESSARY WITHIN A YEAR OR TWO/THREE/FOUR/ etc. YEARS

Work necessary to keep the asset in good repair and to maintain significance and functionality.

A DESIRABLE IMPROVEMENT WITH NO TIMESCALE

Re-inspection as a response/just-in-time action

Traditionally, condition surveys tend to result in the need for repairs being identified based, broadly speaking, on concerns about functional performance, aesthetic considerations and cost (including the cost efficiencies to be made by combining work projects). Therefore, they often identify repairs as being urgent or specify a period within which they should ideally be carried out based on estimates of remaining life. The danger with this approach is that it may well operate contrary to the philosophical concept of minimal intervention, as it aims to set up a near-automatic process where a rate of deterioration is predicted, a prioritization for action is set (in other words, the task of future repair is allocated to a particular year in the maintenance plan) and then acted upon at that future date, whether or not it is strictly necessary at that time. In other words, the "normal" conceptual approach to surveys is that, once a defect has been identified by inspection, repair will be carried out involving some kind of intervention on the building. Such an "automatic" approach does not necessarily make economic sense for every kind of building; instead, when dealing with built cultural heritage, it increases the risk of historic materials being removed or "lost" unnecessarily. For historic stock, the concept of "just in time" or "little and often" maintenance may be the most appropriate way to manage the risk of premature degradation of the significance encapsulated within the building. Such an approach implies that the frequency of inspections should be more closely tailored to the signifi-

cance and vulnerability of particular elements, materials or objects, and undertaken more regularly when a significant item is nearing the end of its life. This means, in practice, initiating a second tier of surveys through focused re-inspection of non-critically defective or deteriorating materials that have been identified in the previous periodic condition survey, i.e. re-inspection may be the required action rather than automatic repair. By this process, it is intended that essential repairs or replacements of historic materials are deferred until unavoidable, while ensuring that consequential damage to surrounding materials and elements is not allowed to occur. The incorporation of second-tier survey work also helps target precious (and often limited) resources. Similarly, increasing the frequency of targeted inspections of elements near the end of their lives is cost effective and minimizes risk.

Annual/six monthly inspections

These could be carried out by church staff or perhaps by a builder. They should be undertaken in a logical manner (i.e. element by element) and the results properly recorded in a maintenance logbook. It is best to use drawings that can be annotated (plus photographs where appropriate) and descriptive notes.

Role of non-technical staff

Condition surveys should be carried out by suitably qualified professionals. However, outside of the condition survey cycle, the presence of non-technical staff and other users and visitors on a daily basis can provide the maintenance management function with vital information regarding conditions which would otherwise be ignored until a subsequent inspection cycle (or until failure becomes impossible to ignore). Utilizing building users and staff (wardens, cleaners, priests, custodians, congregation members, choir members, security guards etc.) can be extremely valuable. However, such informal information still requires a coordinated strategy to collect, assess, process and store these observations so that they may inform action (i.e. the process is not cost or risk-free).

It should be remembered that listening to and reacting to occupants' observations has value over and above the effect that this might have on the condition of the building because it includes people, values their experience and invites them to make a positive contribution to the protection of "their" cultural asset. This is an important way of helping to develop a widespread sense of "ownership" of built cultural heritage and the protection of its significance.

Maintenance plans and programs

Condition-dependent maintenance is planned and programmed through the information gathered by the major condition survey and the annual inspections, but there should also be a plan for carrying out cyclical maintenance.

This is not the best solution for completing a door lock. A modern detail (now removed) had been added to a medieval iron decoration. The Stånga church, Gotland, Sweden. *Photo: Joakim Hansson.*

Appendix G contains an example of a schedule for cyclical maintenance .

Documentation

Some form of documentation regarding maintenance policy and actions is essential. Useful forms of documentation include a manual which deals with maintenance policies and procedures, and a logbook which records actions and outcomes.

Maintenance manuals

A typical manual might contain:

- extracts from the conservation plan showing how the identification of cultural significance has been re-contextualised and synthesized with conservation principles, and how these inform and direct maintenance objectives and processes.
- a breakdown of the elements of the site showing relative significance (of the various buildings and the elements and components of each building).

This should be supplemented by:

- plans and elevations showing the site and buildings.
- an architectural historical account.
- a description of the materials used in the construction of the buildings.
- an identification of vulnerable points and areas of risk from cultural and functional perspectives, and an analysis of the interaction between the two.
- information on conditions, both general and detailed, which is updated by surveys and inspection.

Maintenance Logbooks

These usually consist of current information on key individuals (and their responsibilities). They should also :

- contain concise instructions on maintenance and inspection routines.
- document actions taken and record work carried out.
- note any defects found.

identify future maintenance actions.

The logbook can also be useful as a reflective document that helps in thinking about what went well and what did not, and so inform future action.

Records and archives

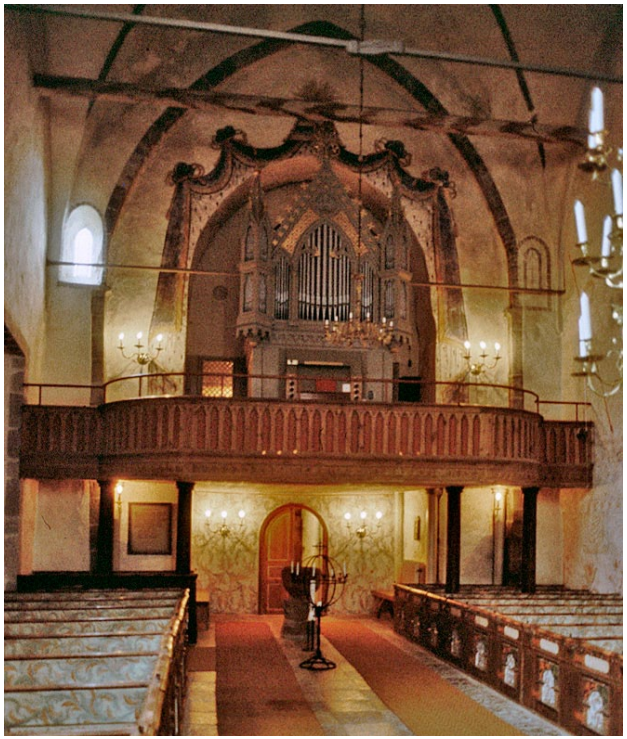
Good information is vital for the effective management of listed buildings. Each organization generates records in the course of conducting daily activities. The recording of processes and actions is important in terms of developing management information and informing decisions. The records concerning church buildings and churchyards are usually planning documents or conservation and maintenance documents.

A general principle put into practice by legislative means is that all the activities that cause alterations to a church building or churchyard must be documented. Before undertaking a conservation program, documentation should be compiled and after the activities a report should be made to show the content and scope of the work. Such documentation is kept in the archives of congregations and relevant governmental bodies. The recording of maintenance processes and activities is also a very important source of information for making conservation and management decisions. For historic buildings, the keeping of proper records of decisions made, their context, and the reasoning behind them is an important conservation principle because the maintenance and repair of materials is part of the story of the historical development of the site or building. Decisions made now, and the reasoning behind the decisions, will also provide future generations with insight into the conservation awareness of current times. Maintenance documents, therefore, are not only management tools but they are also, or should become, important historical records for future generations. They should be kept as part of the permanent record of the building.

Security, e.g. fire, theft and disasters

Fire precautions work at a number of levels. They are taken primarily to protect life, and they do this through trying to ensure effective means of escape, and through a consideration of the performance of materials in the event of a fire, in tandem with active fire precautions (there can be trade-offs between active and passive precautions which are important in respect to issues such as minimal intervention). In protecting materials, fire precautions also help protect the functional and financial assets that the building represents. In the case of built cultural heritage, they also protect the cultural significance of the building. Where there is a conflict

Small fires can cause extensive damage. The Haljala church, Estonia. *Photo: Kaire Tooming.*



The risk of fire can clearly be seen in this picture. A chandelier placed near two carpets is a great risk. Usually this risk goes undetected. The Ekeby church, Gotland. *Photo: Joakim Hansson.*

between fire protection and cultural significance, it is important to take a holistic view of the performance of the building in a fire, and to relate this to such approaches as "fire engineering". It is also important to link the options to the assessment of significance, and therefore consider the extent to which the value of the building will actually be undermined by interference with the materials and/or the aesthetics of the place.

As mentioned above, fire security measures should be primarily designed to save lives and secondarily to save the building. However, very few fires occur when the church is filled with people; most fires take place when the church is empty. There has not been a church fire involving human victims in the Nordic countries since the first half of the 19th century. The most common reasons for fires are pyromaniacs and defects in technical installations and equipment.

To protect churches from fires, there are two important steps. The first is to maintain the technical equipment and keep the standard at a modern and safe level. It is also of importance to consider if all of the electric installations in the building are necessary. A seldom-used church does not need a lot of installations.

The other important step to avoid fires is to observe the surroundings of the church. There should not be junk either outside or inside that can easily catch fire. Doors should be locked when the church is empty and unguarded. It is of great importance to have the church actively under observation. Human observation is the best security measure you can take.

Also, inside the church there is a danger of fire. Candles should be of high quality and used carefully. Unattended candles have many times been the reason for smaller fires.

In the past, lightning was a great problem, but today most churches are equipped with lightning conductors. It is of course of great importance that these are regularly inspected and that all metal parts, such as bells, are connected to them.

There are different kinds of sprinkler systems for fire protection. In most churches, there are **fire extinguishers**. These should be easily accessible, in a way that does not disturb the historical interior. Foam-type extinguishers are safer to use than powder-type extinguishers, in terms of protecting cultural value. Also signs for fire exits can be designed

to fit the interior. These should be designed in co-operation with local fire departments.

A church is usually sectioned off into different fire sections. Between these sections, fire doors, openings and canalization are necessary. When plans for security are drawn up, it is important that items of cultural value are not disturbed or destroyed.

- Using sprinklers in churches requires pipe installations. These are difficult to hide and usually disturb interiors. Sprinkler systems require maintenance and this is sometimes expensive. It should also be considered if there is a need for water or fog-type sprinklers. The inclusion of water systems in historical buildings is always problematic.

There should also be a preventive fire plan. In this plan, items of cultural value should be identified and the position of the most valuable movable objects should be marked. There should also be special equipment for evacuating certain movables, for example stone fonts.

Despite the best precautions, disasters can happen. It is impossible to totally protect a building. After a disaster, it is very important to attend to surviving items of value.

Theft has always been a problem. Communion silver has always been locked up in secure cupboards. Since the Second World War, thefts have become more common. These are of two kinds. The first is the planned theft of important pieces of art. The second is snatching souvenirs from a church, for example pieces of decorations. Pieces of art can be secured by different alarm systems, and smaller pieces can be exhibited in secure cupboards. The easiest way to prevent the theft of small pieces is to lock them up. But it is very difficult to prevent theft by souvenir snatchers. The best way is to guard the interior and secure loose pieces.

There are a lot of different theft alarm systems. The best alarm system depends on the needs of a particular church. What is really needed? The main concern is to protect the most valuable pieces of art. The installation of these alarm systems should be done with care.

A new kind of theft is stealing copper_plates from roofs. This is very difficult to prevent. The only way to prevent it is to have full-time security guards.

Despite the use of security systems for fires, thefts etc., disasters always occur. These may be terrorist attacks, fires, earthquakes or floods. It is very difficult to prepare for the unexpected. Earthquakes occurred during the medieval times even in northern Europe. Due to climate change, floods will become an even more serious problem.

Use and reuse

Perhaps the greatest threat to historic buildings generally comes about when they fall out of use or their present use is no longer viable. In such cases, a new use needs to be found. There may also be situations where it becomes necessary and even desirable to make the existing space more multi-functional, while still retaining the original use. The motivation for introducing multiple uses may be purely economic or it may be that it helps achieve the goals of the organization; for example, churches may want to attract a wider section of the community or develop outreach services.

Another aspect of spatial and functional use involving the assessment of cultural significance is a situation in which it is decided that a particular existing function has a negative impact on the cultural significance of a place, perhaps because of physical wear and tear on materials through intense use, or perhaps a more intangible situation, such as creating an atmosphere which is at odds with the character of the building. The assessment of significance may point to a requirement, or indeed opportunities, to reorder activities or relocate them to other spaces within the site, in order to protect, or hopefully enhance, cultural significance.

Clearly it is necessary to refer to the assessment of cultural significance in making any decisions about functional or spatial changes, enlarging the building or developing a new use. The identification of the relative significance of parts or elements of a building is an important process in assessing the likely impact of change on the cultural significance of a place. It may also be useful to carry out a sensitivity analysis, i.e. to consider how sensitive parts of a place are to intervention or change; it may well be that the most culturally significant parts of a place are relatively strong while elements or spaces that are deemed of lesser, perhaps moderate, significance may be more vulnerable to change.

It is important to consider the needs of the staff. Here the area under the organ balcony is used for making coffee and as a storage room. The Stånga church, Gotland, Sweden. *Photo: Joakim Hansson.*

Fitting the activities and needs of the 21st century into historical churches should be carefully considered. The atmosphere of the interior of this exceptional Nordic renaissance church is disturbed by the children's playground, which is located at the central axis of the building. Kristianstad, the Holy Trinity church, Sweden. *Photo: Kaire Tooming*

Reuse of redundant church buildings is not a new phenomenon. The congregation of the St. Nikolaj church in Copenhagen was dissolved in 1805 and since then the church has served different public functions. Today it is a contemporary art centre. Nikolaj Kunsthal, Copenhagen Contemporary Art Centre. *Photo: Kaire Tooming*

It is also necessary to use conservation principles (see earlier in the guidelines) as a framework for making judgments about the acceptability of functional and spatial changes.

Given the cultural, spiritual, historic and symbolic roles of churches within the landscape and for the local community, it is important that members of the local community are consulted on any proposed changes. In assessing the acceptability of proposed changes in use, it is important to ask a number of questions (which of course may have/should have been included in the assessment of significance), such as:

- What role has the church played for the local community?
- Why is reuse necessary (i.e. why is it not being adequately used at present)?
- Has the church gone through any changes that have been negative in the view of the congregation and the wider community?
- Has the church gone through any changes that have been positive in the view of the congregation and the wider community?
- What changes are desired by the congregation?
- What changes/new uses might be opposed by the congregation and/or the wider community?
- What are the obstacles to proposed new uses?

A general conservation principle is that the original use of a place is the most appropriate one, and cer-

tainly where the use of a place is of cultural significance it should be retained. However, modern-day requirements for a particular original use may be more damaging or intrusive to a place than finding a new use.

If a place is to have a new use, it should be compatible with the significance of the buildings and spaces. Perhaps the most essential judgments about compatibility should be made in relation to, for example, whether the historic materials will be damaged as a result of changes, and/or whether significant spatial layouts will be altered. However compatibility should also be judged on the basis of whether more intangible characteristics, such as atmosphere, may be harmed by the proposals. For many places, the materials may be left intact by changes but the sense of place may be lost: for example, when the significance lies in the activities and the atmosphere they created, and not the building itself. There may also be situations where the proposed new use is ethically, symbolically or spiritually at odds with the original use, for example using a church for housing may be appropriate but using it as a nightclub may not. While finding a new use may be absolutely necessary to the continued use of a place from a financial perspective, if the main, or a major aspect of cultural significance is related to the type of use then clearly this will be problematic.

In allowing for a change in use, the placing of restrictions on future uses should be considered.

English Heritage uses the term "single vessel use" to indicate the most suitable new use. By this they mean one that fits well within the physical space of the church because it has the same functional requirements as the church, i.e. the bringing together of a group of people in one space with ancillary functions allocated to smaller peripheral spaces.

Introducing more uses into a place while retaining the original function is often easily achievable in buildings such as churches because as spaces they are often amenable to community activities, such as meetings, workshops, lectures and concerts. Often such activities can be accommodated with little or no interference to the materials or sense of place. However, issues associated with, for instance , the storage of equipment and materials (such as extra seating) or the poorly thought out additions of audio and other devices can be problematic aspects of what seems at first sight to be a low impact activity. However, such activities can often extend the use of the church building while still retaining its active religious function.

Where the religious function is no longer required or viable, perhaps the most desirable new uses are community uses, because they tend to be low impact in terms of their effect on the space and materials of the building, but also because they fit more closely into the function of a religious building. The problem with such uses is that often they are not financially viable. However, it is often possible to find shared uses which combine more commercial activities (such as offices or studio space) with community functions. These might be regarded as medium impact solutions. Other medium impact solutions include those that interfere least with the materials or space of the building; examples of such functions that have been successful include climbing centers, circus schools and restaurants. High impact solutions may be the least desirable from both religious and heritage perspectives, but they are often the most commercially viable. Reusing churches as housing is often a commercially viable reuse but achieving adequate housing standards often means unacceptable interventions in the spatial qualities of the building.

Some reuses have been achieved by inserting a whole new structure within an original space in such a way that it does not damage materials (minimal intervention), is constructed of modern materials with a modern design (honest intervention) and can be dismantled and removed (reversibility – even though if successful it will became part of the story of the place).

One option is to sell or rent the church to other religious congregations. From a building management point of view, this allows for the sustainable use and preservation of the building. However, the religious and political implications should be carefully considered in each case.

SECTION 3

Delivering and managing the CMP

Getting started

The Conservation Management Plan should be drawn up by experienced heritage professionals. The specialist skills required depend on the nature of the place. As churches and churchyards are complex places, a multi-disciplinary team might be necessary. The specialists involved in the process should have competence in many fields, including conservation, legislation, planning, building archeology, art history and liturgy.

The owner of the place should assemble the team responsible for the compilation of the CMP. This is the body that will set it up, commission the document, involve the right people and read and comment on the draft CMP. The process should begin by identifying and consulting the major stakeholders and interested parties, such as:

- the central body of the denomination
- local community
- National Heritage Board
- community groups
- neighbors
- specialists groups or individuals
- conservation architect

Those who are directly involved in taking care of the church or using it should also be included. This list is not exhaustive and it will vary case by case. The important part of the process is to bring people together and organize information.

For the commissioning of the CMP, this body should put together a brief that generally describes the place and explains the needs of the CMP. The boundaries of the place should be clearly identified by adding a plan to the brief. In addition, all materials relevant to the site must be included in the brief (e.g. measured drawings and inventories). The owners or others responsible for commissioning the CMP should assemble the relevant documents from their own archives and make them available to the specialists who will deliver the CMP.

The compilation of a CMP can be quite a large undertaking. It requires time and funding. It depends on the complexity of the church, the amount of information already available and the level of understanding of the significance of the place (although it should never be assumed that such an understanding is complete).

A good CMP:

- is prepared with the specific place and user in mind
- is concise
- is thorough enough to produce an understanding of the place
- is written in plain language
- is well-structured and easy to use
- includes clear policies that provide useful guidance.

Financing the CMP

A conservation management plan carried out according to these guidelines requires a lot of work, not only from the parish but also from outside experts. Finances have to be secured beforehand. Considering the costs of maintenance and operation over a long time period, the cost of a conservation management plan is generally quite small. It may be convenient to make the plan in conjunction with major restoration projects.

The financing of the CMP is in many cases problematic for small congregations. The biggest problem is fund-raising. The initial CMP, in which all the facts are collected, is the most expensive; revisions are usually much cheaper.

In Estonia, the congregations have to arrange the financing for the CMP themselves.

Communication

The communication aims are to keep all partners informed, and raise the awareness of congregations and local communities about the sustainable management of historic rural churches.

There are internal and external target groups, which are divided according to their interests in the project:

- those whose interests are affected by the issue or those whose activities strongly affect the issue
- those who possess information, resources and expertise needed for strategy formulation and implementation
- those who control relevant implementation

Information should be seen as the starting point for communication, which means delivering the message to the different target groups in a suitable, interesting and understandable way. By doing this, the information becomes knowledge, paving the way for new insights and an increase in interest. There is a strong need to support communication activities in order to show citizens concrete examples and explain where and how the CMP will lead to benefits.

There is a special need to make the aims, means and results of the project well known to different levels of the surrounding society. As important as the results of the CMP are, their impacts will become much more significant if they are communicated to the "outside world" efficiently.

Internal communication is an integral part of the communication plan, as it sets out a clear framework for how the work within the building will be coordinated.

Implementation

Implementation of the CMP often receives insufficient attention; many plans end up as useless paper. There are many groups involved in the maintenance and use of a church. All of them are important and should be a part of the process of creating the CMP. There are different ways of doing this. It is also important to communicate with heritage offices to confirm that none of the aims violate preservation priorities.

The most important groups are the priests, the people working in the church and the cemetery, the board of the congregation, the board of the parish and the members of the congregation.

It is advisable at the beginning of the work to present the aims of the plan to the congregation, which should feel that the initial, or at least the final, plan meets their needs. All concerned parties have to be involved. The leaders of the congregation and the members of the congregation board have the responsibility to involve all other groups in the development of the management plan.

The ordinary members of the congregation are usually a forgotten group. There have been several restoration projects where the average members felt that they were not involved in the process. Another important group is the priests. The priests are very active in taking initiative, often without asking the board of the congregation. The actions of priests usually concern liturgical matters, but these can also lead to big changes in historical churches.

Another important group is the employers of the congregation. They are usually familiar with most of the practical matters, for example where ramps are needed, and where there is a need for lighting. It's important to include their views because they focus on the smooth functioning of the practical daily life of the church.

The writer of the management plan should collect all the facts from these groups and put them together and consider how realistic the requests are. After making a preliminary plan, the writer should present the plan to all groups separately to avoid the risk of neglecting the wishes of some group/groups.

During the process of making the plan, there should be several meetings to implement the aims. Finally, the plan must be presented to the congregation and to all those concerned. The plan must also be approved by the congregation, the diocese and the heritage offices.

The plan must be preserved as a living document. It has to be used in the daily work at the church. Every year the congregation should refer back to the plan, and new concerns should be collected for use in the updating of the plan. It is advisable to update the plan every six years (this is required by Swedish law).

REFERENCES

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Australia ICOMOS 1999. The Burra Charter. Australia ICOMOS. Deakin University,Burwood Victoria.

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APPENDICES

APPENDIX A

Checklist for making an inventory of church buildings and contents

The following is an excerpt from a checklist for that was used for an inventory on Gotland.

Building description
- Main architectural styles
- Main outlooks and forms
- Extraordinary elements of the building (stone masonry, portals, materials, wood carvings, windows, doors, etc.)

Fixtures and fittings (made by a professional)
- Altars, pulpit, benches and balconies (when constructed, styles and sites)
- Wall paintings
- Other parts of fixtures and fittings

Objects (made by a professional)
- Main objects
- The assessment of the objects
- Using a structured list:
  - Altar piece
  - Crucifix
  - Number boards and numbers
  - Organs
  - Objects used for special services such as christenings, communion and weddings
  - Objects used for lighting
  - Textiles
  - Art objects
  - Epitaphs
  - Furniture
  - Musical instruments
  - Clocks
  - Books
  - Older building details
  - Older doors etc
  - Roof decorations
  - Bells
  - Other objects

Technical installations (made by professionals)
- Electrical systems
- Lightning conductors
- Heating system
- Loudspeakers, microphones
- Automatic bell-ringing systems
- Plumbing (toilets etc.)
- Ventilation
- Elevators

Security systems
- Fire alarms, sprinklers, signs and other fire equipment
- Medical equipment
- Burglar alarm system
- Evacuations plans: systems for people and art objects

Items for the disabled
- Ramps
- Elevators
- Signs
- Other installations, for example toilets for the disabled, door openers etc.

Cemeteries (items made by professionals)
- Short history, including main structures
- Inventory of graves, with cultural values
- Walls and fences
- Trees and plants
- Paths and materials
- Memorial lanes
- Other monuments and structures
- Furniture
- Disabled access
- Other buildings
- Technical installations (water supply etc.)
- Information boards (Historical and other information: opening hours etc.)

APPENDIX B

Examples of documentary materials for value assessment

Using these lists involves choosing the best options, according to financial resources, to create a CMP that suits a particular situation.

Primary material

- Illustrations, including paintings. +
- Parish records, for example registrations of births, baptisms, marriages, deaths and burials/ cremations.
- Written material produced by individuals or the organizations who commissioned, designed, built and occupied (and changed) the place over time (correspondence, reports, minutes of committee meetings, specifications of work, contractors' invoices, etc). +
- Personal Letters and diaries
- Census data
- Trade directories
- Newspapers and journals
- Maps +
- Plans and drawings +
- Photographs (including aerial) and postcards. +
- Surveys (including land surveys and existing development surveys)
- Estate records
- Wills and the evidence of bequests of property
- Land registration records, title deeds and mortgage deeds
- Leases
- Inland revenue valuations
- Electoral registers
- Poor Law records, including settlement examinations and orders
- Property terriers
- Records of trades, businesses and professions, including guilds and livery companies
- Licensing of inns and various shops and businesses
- Taxation records, (e.g. seventeenth to nineteenth century window taxes and land tax records)
- Civil and Ecclesiastical Court records, especially those of the Court of Chancery, Criminal and Magistrate Courts, and Quarter Sessions
- Coroners' records
- Archeological excavation and scientific reports+
- List of descriptions, Register of Parks and Gardens, etc.+

+ = the most important sources

Secondary material

Secondary material may include:

- Books and indexes
- Histories
- Architectural commentaries
- Transactions of archaeological societies
- Archaeological and other treatises
- Historic environment records
- Other conservation plans, research and professional reports, dissertations and theses

APPENDIX C

Official sources of documentary material for churches in Sweden and Estonia

Historical information about churches can be found in different archives. To find the important facts to write the history of the church, it is very important to know how the church administration and the administration of the national heritage boards have been organized over time.

The most important archive is, of course, the archive of the congregation. The newer parts of the archive are usually partly stored at the administration office of the congregation, but in many cases most of the older parts of archives are located in national archives and their local branches. In Sweden, the National Board of Heritage includes the Antiquarian and Topographic Archive, situated in Stockholm. This archive contains most documents concerning restorations and documentation of Swedish churches. The National Board, since 1666, has been in charge of documentation and was, through 1994, the state office responsible for items of historical value and state decisions for restorations of churches. In 1995 the county administration boards was assigned these tasks and the National Board now only has overview responsibility. Also, county museums and county administration boards (after 1994) have important archives concerning churches.

The National Archive also contains the archive of the Administration Board of State Buildings. At this office, most of the historical restoration plans have been drawn up and implemented. There is also a large amount of printed literature about churches.

In Estonia, the main archive for documentation concerning the conservation of churches is the archive of the National Heritage Board, situated in Tallinn. The documents collected there come mainly from the period after the Second World War. The archives of congregations can be found in the Estonian Historical Archives and in the central archives of denominations.

APPENDIX D

Examples of value typologies

The Swedish typology model is based on a book written by Axel Unnerbäck and Per Lierud, published by the Swedish National Heritage Board.

Documentary value includes a group of historical-based criteria that are dependent on the knowledge of the assessor. This means that they can change over time, because of new knowledge and different needs of those involved.

- Experience value includes a group of subtle qualities, such as aesthetic and social values.
- Reinforcing motifs for valuation are motifs that reinforce the other values, such as quality, authenticity and pedagogical motifs.

Documentary value, or historical qualities:

- Historic building
- Building techniques
- Architectural history
- Community history
- Social history
- Personal history
- Technical history

Experience value; aesthetic and social:

- Architectural
- Artistic
- Patina
- Environmental
- Identity
- Continuity
- Traditional
- Symbolic

Reinforcing motifs for valuation

- Quality
- Authentic
- Educational
- Rarity
- Representative

Burra Charter (Australia)

The following is a summary from the Burra charter.[1]

Aesthetic: Aesthetic value includes aspects of sensory perception for which criteria can and should be stated. Such criteria may include consideration of the form, scale, color, texture and materials; the smells and sounds associated with the place and its use.

Historic: Historic value encompasses the history of aesthetics, science and society (and therefore to a large extent underlies all of the values). . . A place may have historic value because it has influenced, or has been influenced by, an historic figure, event, phase or activity. It may also have historic value as the site of an important event. For any given place the significance will be greater where evidence of the association or event survives in situ or where the settings are substantially intact than where it has been changed or evidence has not survived. However, some events or associations may be so important that the place retains significance regardless of subsequent treatment.

Scientific: The scientific or research value of the place will depend on the importance of the data involved, on its rarity, quality or representativeness and on the degree to which the place may contribute further substantial information.

Social value: Social value embraces the qualities for which a place has become a focus of spiritual, political, national or other cultural sentiment to a majority or minority group.

English Heritage

The following is a summary from guidelines proved by the English heritage.[2]

English Heritage, 2008. *Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment.* English Heritage. London.

In 2007 English to be added Heritage proposed a "family" of values under headings which it explains as follows:

Evidential: Evidential value relates to the potential of a place to yield primary evidence about a past human activity. [The document subdivides this family heading into "Natural" and "Cultural".]

Historical: Historical value relates to the ways in which the present can be connected through a place to past people, events and aspects of life. [The document subdivides this into "Illustrative" and "Associational".]

Aesthetic: Aesthetic value relates to the way in which people derive sensory and intellectual stimulation from a place. [The document subdivides this into "Design", "Artistic", "Artless Beauty" and "Sublime".]

Communal: Communal value relates to the meanings of a place for the people who relate to it, and whose collective experience or memory it holds. Communal values are closely bound up with historical (particularly associational) and aesthetic values, but tend to have additional and specific aspects. [The document subdivides this into "Commemorative/Symbolic", "Social" and "Spiritual".]

The English Heritage document reinforces the point that we made earlier when it states that these are "not intended as the definitive checklist of heritage values but to prompt comprehensive thought about the values of a place."

[1] Australia ICOMOS (1999) The Burra Charter. Australia ICOMOS.

[2] English Heritage, 2008. Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment. English Heritage. London.

APPENDIX E

Some examples of factors which may affect the vulnerability of the significance of a place

- The poor physical condition of the place (which may require funds but might also be related to poor maintenance management)
- Management of the site generally
- Lack of financial resources and/or lack of certainty, to the extent that there is little ability to plan effectively
- Socioeconomic factors that affect the viability of the site, which might mean that there will be a need to find new uses for the site
- Traffic volumes producing levels of atmospheric pollution that will cause unacceptable levels of deterioration of the materials
- Changes to the natural environment (flood levels, coastal erosion, etc.)
- Loss of context and meaning of the site because of developments taking place which detract from an understanding of and/or the aesthetic value of the place
- Vandalism
- Tourism levels, which are unsustainable because of physical degradation or because of damage to the atmosphere and sense of place
- Insufficient access (generally and for specific groups, such as the disabled)
- Lack of development land for expansion (perhaps to deal with a need to increase visitor numbers or provide for better interpretation facilities)
- Incompatible existing policies or actions of the users which do, or may, detract from the significance of the place

APPENDIX F

Information required for carrying out condition surveys

Those carrying out condition surveys require:

- Previous survey data
- History of major repairs for the preceding 10+ years
- Details of all work undertaken since the previous condition survey
  - Maintenance manual and logbooks
- Maintenance plan
- Site plan
- Accurate floor and roof plans
- Elevational drawings and sections, if available
- The conservation plan, conservation statement, statement of significance or other assessment of the cultural value and special interest of the site
- The current management plan or, if this does not exist, the specific conservation policies that the management organization or building manager applies to the place
- A health and safety plan, identifying known or perceived risks related to the site of which the surveyor should be aware
  - Copy of reports on electrical systems, fire and security systems, heating systems, lightning conductors and emergency lighting .
- Copies of access, fire safety or any other current assessments of the site in use
  - Copy of Access and Disability Audit Report.
  - Copy of Fire Risk Assessment.
  - Copy of Health & Safety Risk Assessment.
  - The church buildings' insurance policy.
  - Inventory of fixtures, fittings and furniture.
- Ecological data on the known presence of protected or otherwise vulnerable species that may be disturbed or damaged during the conducting of the survey inspection

APPENDIX G

An example of a schedule for cyclical maintenance. In case there are national or local standards and guidelines, they should be applied

Reference to be added

CYCLICAL MAINTENANCE	SCHEDULE
Cleaning gutters and drainpipes	every six months
Servicing heating boiler	annually
Testing lightning protection system	annually
Fire extinguisher servicing	annually
Fire and smoke detection system	annually
Portable appliance testing	varies
Electrical testing	every 5 years
Repainting exterior woodwork/metalwork	every 3 years
Removing plant growth from materials	every 3 years

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