Sense of history: capturing and utilizing immaterial values for sustainable heritage protection

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Abstract

In light of the current economic and political climate, the government retreats in many ways, also from the field of heritage protection. Other market parties are expected to step in. This has consequences for the requirements that are set for the overall usability and energy performance and resource use, of heritage buildings.

Currently, the commonly used way of value assessment of listed heritage buildings is not equipped to deal with the new demands. It is restrictive in the changes that are allowed to be made, inhibiting the changes necessary to accommodate new demands on 1) usability, and 2) sustainability. These add to two general issues with the currently used value assessment. Firstly, the method with which value assessments are made hardly takes immaterial values into account. Secondly, the method and its resulting assessment is difficult for designers to use: it lacks handholds on the values that aid design decisions.

In the present study, we suggest limitations of the conventional value assessment method. Instead of only charting the (cultural) historic importance of the material, we focus on the perception of this cultural historic value: the feeling of history that is evoked by the material. Using theory on ‘sense of place’ from the fields of urban and landscape planning and geography, a model for the ‘sense of history’ is proposed, for which the sensory experience is taken as a starting point. This has led to five elements of space that describe the way it is experienced: (1) spatial qualities, (2) material finishes, (3) indoor climate, (4) traces of use and (5) craftwork. The method presents these values in such a way that they can be used directly in the design and decision process, by architect, user and sustainability expert.

Introduction

In the Netherlands, a shift is happening in the way the preservation of listed and non-listed heritage buildings are financed. Where it was common practice that preservation was (co-) financed with government subsidies, the effects of the economic crisis are now felt. The government retreats in many ways, also on the field of heritage protection, and the market has stepped in. This shift has consequences for the demands on listed and non-listed heritage buildings. Usability is now defined by the user, rather than by the restrictions of the building.

With renewed interest in using listed and non-listed heritage buildings, energy performance and resource use become more important too. Given that existing buildings more often than not fail to meet today's, let
alone tomorrow’s, standards on building performance, new ways of thinking about retrofitting sustainability solutions into these buildings are needed.

Currently, the commonly used way of value assessment of listed and non-listed heritage buildings is not equipped to deal with the new demands. It is restrictive in the changes that are allowed to be made, inhibiting the changes necessary to accommodate new demands on 1) usability, and 2) sustainability. These add to two general issues with the currently used value assessment. Firstly, the method with which value assessments are made it hardly takes immaterial values into account. This implies loss of information that could be valuable during the design of an invention. Secondly, the method and its resulting assessment is difficult for designers to use: it lacks handholds on the values that can aid design decisions.

This paper proposes a new value assessment model, grounded in identifying both material and immaterial values of monuments and cultural-historical valuable buildings. The method presents these values in such a way that they can be used directly in the design process as possibilities for design decisions. Furthermore, the method takes into account that the identified values may hold inspiration for contemporary demands on usability and sustainability.

**Background**

Government regulated preservation of heritage and heritage buildings, as it is known in Western Europe, has arisen from the dominant philosophy of history within society as a whole: historicism. The basis of historicism\(^1\) is the thought that no society can completely detach itself from its history, which makes it necessary to have knowledge of this past. This approach stresses continuity, and the importance of a conscious form of care for the heritage. The fundamental attitude of historicism is deeply rooted in Western society since the 19\(^{th}\) century through the works of Hegel\(^2\). The inception of government regulated heritage protection and Historic Buildings Councils is a consequence of that. Clear counter movements to this attitude of historicism within Western society have certainly emerged, like for example the modernist movement that gave rise at the beginning of the previous century, but society as a whole has never completely denied the existence, importance and value of history.

As Professor of Dutch history De Rooy from the Amsterdam University characterized, we can only understand this world, if we look at it as something that ‘has become’. Than we can see that there’s logic in the apparent chaotic and heterogeneous reality. The world possesses a continuity and can be understood from that.\(^3\)

The problem with history is, however, that it is no longer. It has been and one cannot travel back in time to witness what was in the past. We can only try to collect the pieces of evidence that give clues about history, so we can construct our own image of the past. As Wessel Krul, Professor of Modern Art History

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1 This interpretation of historicism differs from the definition commonly used in social sciences. That definition states that the future is unchangeably locked in and defined by history. This definition is less determined and be better interpreted as the ability to learn from previous mistakes.

2 Hegel (1902)

3 Post (2002)
from Groningen University, put it: every age forms its own interpretation of what has been, using the evidence that is at hand.4

This evidence is found in historic material in the form of books, pictures, rituals, but also for a very important part in the historic built environment. Buildings and structures are of great importance for the determination of history because they are, as it were, an unbiased witness. Whereas for instance books are already an interpretation of history by the writer. The information about the past that lies hidden in earth layers beneath the surface aren’t as easy accessible as is the built environment.

In short these are the reasons why preserve heritage, and why the government has taken up the care for our monuments. Because history is important to us and we want to keep it. Being however, that keeping everything is both impossible and undesirable, the problem is to decide exactly what is worth keeping, and what is not. A valuation of the matter needs to be done to know if it is worth keeping, and which parts are especially important. This is of crucial importance because this determines which pieces of evidence of history are being kept for us to compose our sense of history with.

The image of the past that people compute from the pieces of historical evidence that we come across in daily life, is very complex and constitutes partly of conscious knowledge, but also for a large part it is about an overall feeling of foundation, a sense of history. The part of contributing to our conscious knowledge are the interpretations of experts that study the historic built environment and publish history books about it. But exactly what material historic evidence provides society with an overall feeling of foundation, that sense of history, in their daily life is much harder, maybe even impossible, to pin-point. It is hard to define because it is about immaterial things like feelings and thoughts that are evoked by material things, the historic buildings. These form the immaterial value of our monuments.

Problem definition

As argued, one of the most crucial things in heritage preservation is determining why an object needs to be preserved and, if so, what. Which qualities make it valuable for society? These are called the heritage assets, or monumental values. The way the assessment of these values is done and the way in which they are committed to paper, is of fundamental importance for the heritage preservation because it determines the normative framework for the intervention. In the Netherlands, the Dutch governmental department in charge of heritage preservation, has developed a set of guidelines for building historic research and value assessment, in Dutch “de Richtlijnen Bouwhistorisch Onderzoek”5 (RBO). In this paper we focus on the guidelines for the assessment of the monumental values.

The first step of a value assessment, as prescribed by the guidelines, is to determine the scale at which the building will be viewed upon, ranging from the large scale of urban planning to the smallest components, the details. When this has been decided upon, there are five categories of values that describe the field in which the worth of the building for society can lie: (1) general historic values, (2) values for the urban layout, (3) architectonic historic values, (4) constructional historic values and (5) use historic values.

4 Krul (2007): “Elke tijd schept zijn eigen verleden. Dit kan echter alleen wanneer er genoeg materiaal voorhanden is om een keuze te maken.”
5 Hendriks & Hoeve (2009)
The values are then described in text and supplemented with drawings that visually represent the value assessment; only the text of a value assessment often does not serve enough as a handle to be able to judge concrete building or restoration plans. These drawings are plans in which in three colours the height of the values is reflected: blue stands for high, green for positive and yellow for indifferent monumental value.

The RBO are the result of a long process of operationalizing the concept of heritage preservation. This process has been a search for a workable, government regulated monument care practice, which, in our view, has led to a few key elements only being mentioned in subordinate clauses. If so desired, the value of interior finishes and connections between spaces, can be added using symbols. Furthermore, the immaterial values, or mnemonic values, are relegated to the text, after being dismissed as too difficult to put into drawing.6

In this day and age, heritage protection faces two new challenges and two general issues.

The first new challenge that characterizes heritage protection today is the changed and extended usability requirements that need to be met, which often require intensive, drastic alterations to the buildings (e.g. ceiling height, ventilation rates). These alterations are often not permitted, due to the perceived destruction they inflict on the buildings. Secondly, the present demands on the performance of buildings regarding resource use and energy consumption are becoming more and more stringent. Reaching the required level of performance usually calls for major alterations as well (e.g. adding insulation to walls). Moreover, when methods of energy generation or water retention are planned, even more changes are needed.

The first general issue is the following. The translation of an elusive concept like heritage and its preservation into policy and legislation, leads to an inevitable abstraction and simplification of the concept. In our view, the difficulties of making the intangible tangible have led to a focus on the tangible material and a, albeit unintentional, disregard for intangible, immaterial values, the sense of history. This disregard could lead to this specific and very important asset of in existing material not to be recorded and therefore lost.

In the words of architect and phenomenologist Norberg-Schulz: "As a matter of principle science 'abstracts' from the given to arrive at neutral, "objective" knowledge. What is lost, however, is the everyday life-world which ought to be the real concern of man in general and planners and architects in particular."7

This brings us to a second general issue. In our view, there is another purpose of a value assessment, which is not fulfilled by current value assessments. Where current value assessments are made to document the cultural-historic value of a building, they are explicitly not meant to serve as an aid during design of an intervention. As a designer it is therefore hard to get to grips with the values embedded in cultural-historic buildings, or to see the possibilities the building offers for usability and sustainability. This poses a problem when the new use of a cultural-historic building requires a re-interpretation of its value in present times.

In the next sections this paper presents our interpretation of the design brief of interventions in listed and non-listed heritage buildings and proposes a method which allows these requirements to be fulfilled.

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7 Norberg-Schulz (1980): p. 8
The role of the value assessment within the intervention design process

Before presenting our new model to capture the sense of history, we pose our view on how the intervention design is bound by a normative framework: the value assessment, as a specific selection of all properties of the building.

In a given intervention case, the starting point of a design is the renewed interest in using the building. The traditional struggle of heritage preservation has always been meeting usability demands without undermining the value of the heritage building.

As mentioned earlier, pressure on the performance of buildings regarding use of resources (throughout the life cycle of the building) today adds another layer of complexity to the intervention design. The possibilities that can be identified to integrate both usability and sustainability meaningful into the building, are determined by the value assessment. The value assessment is therefore the normative framework within which the usability and sustainability solutions need to be found.

These added requirements have considerably reduced the field of possible design solutions. In our view this is not a desirable situation, and there are two fundamentally different perspectives on its solution. On the one hand, one could say that enlarging the number of design possibilities can be done by assigning less heritage values allowing for more room for usability and sustainability demands.

However, in this paper we argue the opposite. Following the above described model for the intervention design, the design possibilities will be enlarged by assigning more and more specific values, because they serve as starting points for the incorporation of usability and sustainability demands in the design.
New requirements for the value assessment

The new requirements for a value assessment can now be summarised as follows. It should:
- provide a non-exclusive documentation of all aspects of its value, in order to enlarge the range of possibilities;
- provide insight in the sense of history that is evoked by the material;
- provide handholds for the design of an intervention, for architect, user and sustainability adviser.

To start our search for a new way to grasp the true heritage assets, we turn to the fields of urban planning and geography. These fields use the notion of sense of place, or genius loci to describe the intangible aspects of a site. In the following section we go more into depth in to what this notion means and how it is used. Consecutively the notion is converted to our purposes.

Place, Sense of Place and Genius Loci

In urban and landscape design the term 'sense of place' is commonly used as mostly social construct, as in environmental psychology, “by focusing on place meanings and attachment as products of shared behaviours and cultural processes”.

In geography, as defined by Tuan in 19759 "place is a center of meaning constructed by experience", in which experience is "a cover-all term for the various modes through which a person knows his world". "Places are constructed out of such elements as distinctive odors, textural and visual qualities in the environment, seasonal changes of temperature and color, how they look as they are approached from the highway, their location in the school atlas or road map, and additional bits of indirect knowledge like population or number and kinds of industries."

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9 Tuan (1975): p. 151-165
For our purposes we need a framework for analysis to be able to capture this sense of place, so that it can be used in heritage preservation practice.

In 1980, architect Christian Norberg-Schulz, in his quest for a phenomenology of architecture, connects the physical environment to the symbolic meaning, and described 'genius loci' as representing the sense of place people have, understood as the sum of all physical as well as symbolic values in the environment. Norberg-Schulz has introduced a comprehensive framework around his notion of the genius loci, the sense of place.

According to Norberg Schulz "(...) the structure of place ought to be (...) analyzed by means of the categories 'space' and 'character'. Whereas 'space' denotes the three-dimensional organization of the elements which make up a place, 'character' denotes the general 'atmosphere'". Later in his text Norberg-Schulz completes his construct of place by adding the category of 'meaning'. He emphasizes the importance of the connection between these three elements of place, because it is a "qualitative, 'total' phenomenon, which we cannot reduce to any of its properties, such as spatial relationships, without losing its concrete nature out of sight."

Especially interesting is the element of 'character' that Norberg-Schulz introduces, which can be seen as the link between the purely physical (spatial properties) and the immaterial values of the space (meaning). Character, although physical, through sensory perception evokes meaning. Character are properties of the physical that trigger the connection of meaning to physical material.

**spatial structure**

Norberg-Schulz describes space as an 'enclosure' of which the "spatial properties are determined by how it is enclosed. (...) Enclosure primarily means distinct area which is separated from the surroundings by means of a built boundary. (...) The boundaries determine the degree of enclosure (openness) as well as the spatial direction, which are two aspects of the same phenomenon. When an opening is introduced in a centralized enclosure, an axis is created which implies longitudinal movement."

**character**

"The character of man-made place is to a high extent determined by its degree of openness. The solidity or transparency of the boundaries make the space appear isolated or as part of a more comprehensive totality."

Norberg-Schulz also emphasizes the concrete "material substance, shape, texture and colour" to be determining factors for the "environmental character" of man-made place. His description of the texture of the natural environment, the surface relief, illustrates this relationship between surface and character: "[V]ariations in the surface relief determine (...) to some extent its character. Characters such as 'wild' and 'friendly' are thus functions of the relief, although they may be accentuated or contradicted by texture, colour

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11 Ibid.: p. 8
12 Ibid.: p. 58
13 Ibid.: p. 63
14 Ibid.: p. 6
and vegetation. The words ‘texture’ and ‘colour’ refer to the material substance of the ground, that is, whether it consists of sand, earth, stone, grass or water, whereas ‘vegetation’ denotes elements which are added to and transform the surface relief. The character of the landscape is evidently to a high extent determined by these secondary elements.”

(p.15) Character however, depends upon how things are made, and is therefore determined by the technical realization ("building"). (...) A phenomenology of place therefore has to comprise the basic modes of construction and their relationship to formal articulation.

**Norberg-Schulz**

Norberg-Schulz uses ‘meaning’ to indicate the result of the ‘man-place’ relationship. He indicates two main psychological functions that are involved in this: ‘orientation’ and ‘identification’, because “(...) man has to be able to orientate himself; he has to know where he is. But he also has to identify himself with the environment, that is, he has to know how he is a certain place.” Norberg-Schulz uses the term ‘imagability’ as proposed by Kevin Lynch16 to elucidate this concept of ‘meaning’ as “ that shape, color or arrangement which facilitates the making of vividly identified, powerfully structures, highly useful mental images of the environment” 17.

Norberg-Schulz furthermore connects these ‘useful mental images of the environment’ to the understanding of the physical environment, where “[t]he word ‘understand’ here does not mean scientific knowledge; it is rather an existential concept which denotes the experience of meanings.”18

**Space, Character and Meaning**

**Analysis**

We can use this model as a framework to describe that specific sense of place that are the immaterial values of heritage buildings: the sense of history. For this we need to analyse the three elements of ‘space’, ‘character’ and ‘meaning’.

From the theory of Norman-Schulz we can distil five elements of space that can possess certain properties which determine the character of the place: (1) the ‘way of enclosure’, (2) the surface relief of the landscape, (3) the measure of self-realisation, (4) the making and (5) the overall cosmic dimension.

Norman-Schulz introduces his model of ‘place’ to find a phenomenology for architecture, that applies to all natural and man-made environment, where ‘building’ is the smallest mentioned entity and focus is on the scale of the urban and natural landscape. Also, history is only mentioned a very few times, and is never elaborated on.

To translate the model of Norman-Schulz to the smaller scale of the individual building, and specific scope of history, we use the insights of Tuan (1975) on the role of experience in the study of place. The

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15 Ibid.: p. 34-35
18 Ibid.: p. 23
perception of space takes place in consecutive steps, in which through different sensory modes the beholder becomes to get to know and understand it, as Tuan describes: “Experience is a cover all term for the various modes through which a person knows his world. Some sensory modes are more passive and direct than other. With taste, smell and touch we feel as though we are simply registering sensations provoked by external stimuli. With hearing, and particularly with seeing, we seem to be actively exploring the world beyond us and getting to know it objectively. Seeing is thinking, in the sense that it is a discriminating and constructive activity; it creates patterns of reality adapted by human purposes. Even taste, smell, and touch are affected by thought in the above sense: they discriminate among stimuli and are able to articulate gustatory, olfactory and tactual worlds. (...) Place is a centre of meaning constructed by experience. Place is known not only through the eyes and mind but also through the more passive and direct modes of experience, which resist objectification. To know a place fully means both to understand it in an abstract way and to know it as one person knows another.”

Seizing upon this analogy, this process of getting to know a space can be illustrated by the process of how one person gets to know the other. This starts with the ‘first impression’: judging the book by its cover. Physical appearance plays a very important role in constructing the image of the first impression. Another determining factor is their social context, who are the persons friends, or is he connected to? After spending more time together, gradually one starts to observe more, different and detailed physical and mental qualities of the other person. Through conversation one can learn about the past of the other person, which leads to an certain amount of understanding, why the person has become the way he is today.

Combining these two theories has led us to identify the five elements of space, that can possess physical properties, that determine the experienced historical character of the place.

Together with the analysis of ‘space’ and ‘meaning’ this than forms a framework to describe the “qualitative, ‘total’ phenomenon” that is the sense of history of a building.

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<tr>
<th>Character by Norman-Schulz</th>
<th>Character by Franken &amp; Meijer</th>
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<tr>
<td>Way of enclosure</td>
<td>Spatial properties</td>
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<tr>
<td>Surface relief</td>
<td>Material finishes</td>
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<td>Cosmic dimension</td>
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<td>Self-realisation</td>
<td>Traces of use</td>
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<td>The making</td>
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The total experience of place is formed first and foremost by sensory perception, but is deepened by conscious knowledge on ‘how it has become’, because this supports a deeper understanding of the sensory perception. Capturing the experience of place therefore requires a combination of sensory perception and conscious knowledge on ‘how it has become’.

19 Tuan (1975): p. 151-152
Value assessment

According to these categories value of the material can also be assessed, not according to flawlessness and rarity like the value assessment according to the RBO, but on their contribution to (the experience of) the sense of history. As historic facts are the assessment criteria for the other values, they are also assessment criteria for contribution to the sense of history. Many values that are described in traditional value assessments cannot be experienced anymore, because they are not visible, or not in a way that they can be included in the daily use of the building. And therefore do not particularly add to the sense of history of the building. A wooden construction can be historically very valuable, but if it's hidden behind a false ceiling it cannot be experienced.

Value assessment according to the RBO are supplemented with drawings, plans or sections, that depict the height of the assigned value according to a three-colour scheme. Experience doesn’t take place in a mere 2 dimensions; it takes place in (at least) three dimensions. Both the analysis and the value assessment therefore should be put to paper in that way. Sight is maybe the most important sort of sensory experience that we can take as a starting point. Using photographs, all categories but interior climate can be directly depicted, interior climate can be captured in the photographs by using symbols. Photographs are less of an abstraction of reality than drawings, and therefore are better suitable to reflect the reality of the experience.

The colour scheme according to the RBO is used to depict the height of the value, in this case the degree to which a specific part of the building adds to the sense of history.

Elaboration of the categories through a first application of the model

The elaboration of the proposed model and categories for sense of history based on the model of Norman-Schulz for sense of place is done by applying the model to a case, as an example.

Description of the case study object

We describe one of the rooms of café Laros, a listed village café annex dwelling in Velp, the Netherlands. The building belongs to private owners and has, since the closing down of the café in the 1930’ties, only been in use as dwelling. The building is appreciated by both heritage experts and lay man especially because of its sense of history and therefore an interesting test case for our model.

The current configuration of spaces is the result of several additions to the original core of the building, which was built in 1866. The café is situated at the street side of the building, and recognizable by the porch that covers the café terrace. The café is shaped like an L around the dwelling part of the building. The café interior as it was established in 1911 is still completely intact, including the café furniture and beer tap.

As a test case for the model we have consciously chosen not to assess the café, as it’s sense of history is apparent. Instead we chose a room where the sense of history is distinctly felt, but is much harder to pinpoint.
The analyzed room is situated at the back of the building. It was part of the original core dating from 1866, but got its current form in 1975 when some interior walls were removed, and an extra door was added to connect the room directly to the hallway. Before this adaption the room had always been in use as a bedroom, afterwards it became the dwelling’s living room.

Fig. 3 The front façade of the building; the café porch is hidden behind the high hedge

Fig. 4 The café interior facing the tap

Fig. 5 The ground floor plan of the building; the examined room has been indicated
The value assessment

In the images below a photograph of the room and the value drawings are juxtaposed. The photograph is inserted in black and white, to prevent distraction by colours and artefacts in the room. The drawings capture the specific values present in the room. They may be physically represented, like for instance by presence of hatches in 'traces of use', but can also be symbolical, like the entrance of sunlight in 'indoor climate'.

Fig. 6 The living room (Franken, 2011)
Spatial properties

The first category of analysis is ‘spatial properties’, the first element of space which is discerned, that forms the ‘first impression’. These are the main physical properties, together with any striking features and connections to other (interior or exterior) spaces.

Sensory perception of the spatial properties is among other things determined by proportional measurements of the space in relation to the beholder, of the space in relation to itself (e.g. height-width ratio).

The perception is deepened by understanding the why and how of these specific spatial proportions and connections to other spaces, through the history of its use and build.

Fig. 7 Value assessment of the spatial properties (Franken, 2011)

In the living room of café Laros the defining spatial properties for the sense of history are the box-bed and the vista through the doorway a view through the hallway and the kitchen, on to the patio. Presently the house is a single unit, but has a history of housing two or three different families, has led to a specific spatial structure. The two dwelling compartments where separated by the hallway, and the rooms where directly linked to each other. Instead on being conjoining elements, the hallway is a strong border. Through the doorway a view through the hallway and the kitchen, on to the patio is possible.
Material finishes

The second category of analysis is the ‘material finishes’. The material finishes determine to a significant extent the way the spatial properties are perceived. The material finishes can be seen as the intermediary between man and material. In this layer the use of the space is shown, because it has been aged, worn and fouled. Material finishes are often changed by new users, reflecting their taste and ideas in choice of finish. The longer a finishing has been at the surface the more it has been able to absorb the users by aging.

Fig. 8 Value assessment of the material finishes (Franken, 2011)

The material finishes of the space give a very different picture. The walls were insulated and covered with a coarse cement plaster in 1975. The original lime plaster has been lost and replaced for a material that cannot age gracefully. The floor is laid with the original wooden flooring, which has been locally worn, reflecting years of a specific kind of use. The wooden panelling above the box bed has been recently painted, and has not yet aged. However, beneath the surface, previous layers of paint have been kept.
**The indoor climate**

The third category of analysis is the ‘indoor climate’, an important denominator for the sensory perception of space. It evokes a specific sensation through passive modes of perception. It creates a sensory background for the more active modes of perception (e.g. sight and touch).

The amount of daylight and sunshine that enters a room through the course of the day determine the ambiance of the space. The way a room is heated, and the way of ventilation and draught determine the thermal comfort of a room. Sound levels are also part of the indoor climate, are sounds from adjoining rooms or outside very audible, or not? Modern ideas about (thermal) comfort had led to a levelling out of temperature differences through the day and through the seasons. These difference however often are determining for the sense of history.

![Image of a room with large windows oriented on the south, making the light flood in the room. The ceilings and floors aren't insulated, which makes for cold feet in winter and noise nuisance from the upper floor. In summer open doors and windows provide flood ventilation through the house.](image)

**Fig. 9 Value assessment of the indoor climate (Franken, 2011)**

The large windows oriented on the south makes the light flood in the room. The ceilings and floors aren't insulated, which makes for cold feet in winter and noise nuisance from the upper floor. In summer open doors and windows provide flood ventilation through the house.
Traces of use

Old buildings that have been used bear the traces of that use. These traces compose an important part of the immaterial values, because they link directly to former use and the people who made use of the building. Together they form pieces of evidence by which the story of the house and its inhabitants can be composed.

Traces of use also includes furniture. Although not a fixed element in the building, furniture very much adds to the sense of history, for the same reasons as material finishes. In public or communal spaces for instance, certain pieces of furniture can become part of the perceived sense of history of a room or building.

The box bed reminds of a historic way of living. The small door in the top part of the box bed used to function as the way up stairs. This trapdoor opens hides an opening that provided light for a small opening in the cellar beneath the box bed.
Craftsmanship

Many studies show that people appreciate visible craftsmanship. Also craftwork perceived as ‘ornament’ is positively appreciated. The craftsmanship is a visible and touchable connection to the person that crafted it, and this makes it something that people can get attached to. Design can also be a form of craftwork. Craftwork represents the element of space that Norberg-Schulz refers to as ‘the making’: “The ‘how’ of a building comprises a general and particular aspect. In general any building possess a concrete structure which may be described in formal-technical terms, and in particular an individual articulation of this structure. An archetypal building in this sense is a house whose primary structure consists of a ridge-beam by a (gabled) post at either end. Such a house possesses a clear, easily imageable order, which in ancient times helped man to gain a feeling of security.”

Fig. 11 Value assessment of the craftwork (Franken, 2011)

The craftsmanship in this room is represented in the detailing. The joists, visible on the ceiling, break the surface and give direction to the room. The space over the box bed is closed off with wood paneling, effectively adding usable storage space.

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21 Stamps III (1999)
Fig. 12 Concluding drawing: valuation of the contribution of the separate rooms to the sense of history of the whole building (Franken, 2011)

After having analysed using the five categories and valued the different elements of the room on their contribution to the sense of history, a concluding drawing can be made, indicating the contribution of the individual rooms to the sense of history of the whole building and the therefore important connections between the spaces (interior or exterior).
Usefulness of ‘sense of history’

As stated before, the new requirements for a value assessment are:
- provide a non-exclusive documentation of all aspects of its value, in order to enlarge the range of possibilities;
- provide insight in the sense of history that is evoked by the material;
- provide handholds for the design of an intervention, for architect, user and sustainability adviser.

Below we will explain why our model for sense of history, as a contribution to the RBO, can meet these criteria.

Enlarging the range of possibilities

With this method the value assessor, whoever this may be, is forced to look at every detail and every space, not leaving out anything, therefore also not missing chances for starting points for a new design, based on the sense of history of the building. Our method therefore ensures a well-documented heritage value. The RBO is too much focussed on the historical information and too little on the actual historic building mass. In their attempt to be all-including they become too vague and not specific enough, which leads in practice to a neglect of many parts because they are not explicitly mentioned in the guidelines.

Providing insight in the sense of history that is evoked by the material

By using the model of space, character and meaning to describe place, the immaterial values are directly connected to material. Furthermore, sense of history is induced by a spatial experience. Architects by nature design spatial experience. A value assessment according to the RBO delineate ‘what not to touch’, a value assessment of the sense of history describes an experience that should be kept. Therefore the method generates a value assessment that will make a better interpretation of the heritage value possible in intervention designs.

Capturing the experience of a building can also provide an interesting advantage for the heritage building councils judging the applied intervention designs. Members of the reviewing committees (Dutch: Welstands- en monumentencommissie²³) judge plans by the submitted documents (plans, sections and photographs). They are not required to visit the proposed building site. When judging a change in the facade, a drawing of the old and new design is used.

In our view this does not suffice, because e.g. the assessment of an intervention in the facade of a building, should take into account the way the facade is experienced from the outside, by passers-by, but also from the inside by the users of the building. Also, in our view, the outside should not automatically prevail over the inside. A facade should be looked at from both sides.

With our model they can better judge the experience that is evoked in reality, but might not come across on (conventional) drawings.

²³ The ‘Welstands- en monumentencommissie’ is an advisory board, which has a chapter in each municipality. It exists to ensure that new building projects respect the existing fabric. Their verdict on a proposed plan determines the granting of building permits in many cases.
Although most of the walls are old, not all spaces attribute to the sense of history in the same way, so they need to be preserved in a different way.

Providing handholds for the design of an intervention, for architect, user and sustainability adviser

As mentioned before, the experience approach provides better handholds for the design for architects. But also for the users (client, initiator of the intervention) and sustainability experts.

As for the users, people mostly talk about the interior climate (too cold, draughty, ...), the material finishes (too dirty, want new plastering). The spatial properties do not suffice for their demands: the living room is too small, or a connection to the kitchen or the garden is desired. Every user makes its own ‘traces of use’. New craftwork needs to be introduced.

If a sustainability expert is asked to look at a building, he will search for chances and starting points for the fitting of sustainability techniques. These are installations, these have effect on the interior climate, it would be good if they enhance each other. Often techniques need to be fitted into the surface/material finishes. Also traces of use can give starting points for the new use.
Discussion

Sense of history in relation to DuMo

We have presented our model in view of the specific problems that are part of modern day heritage protection. Over the last few years the ‘DuMo’ has been introduced by the government department for cultural heritage, which is a method that aim to solve (parts of) the same problem as our model for sense of history.

DuMo, which is short for the Dutch term ‘Duurzame Monumentenzorg’: sustainable heritage protection, was published in 200824. The reason for developing the method was that the government wanted to perform a GreenCalc+ sustainability check on the buildings that were listed, which is common practice for all other buildings in their envelope. Until then, the GreenCalc+ method didn’t suit listed buildings, because the additional requirements that are set for listed buildings couldn’t be taken into account.

Nibe, the Dutch Institute of Building biology and Ecology, had developed the GreenCalc+ methodology, and was asked to make an adjusted version. The GreenCalc+ tool is an instrument to measure the degree of sustainability of a building, based on ratings for material, energy and water use. To make the GreenCalc+ tool fit for listed buildings, Nibe devised a way to even out the score for sustainability with the historic value of a building. This has led to two indices: one sustainability coefficient (‘Du-coefficient’) and one coefficient for the monumental value (‘Mo-coefficient). Putting these two together gives the DuMo-profile.

Fig. 15 The interplay, or rather lack of interplay, between sustainability and heritage

The interplay between the sustainability coefficient and the coefficient for the monumental value in this DuMo-profile is illustrated in the figure. The calculations that lead to the sustainability coefficient need to be done by professionals from the governmental department for sustainable building, the coefficient for the monumental value needs to be determined by the people specialized in the care for monuments. The guide also offers twenty strategies to improve the GreenCalc+ score, within the restrictions set by the authorities on monument care.

24 Nusselder (2008)
The downside of this method is the lack of true integration between the elements of sustainability and heritage value. The DuMo-method suggests that the conservation of heritage values automatically means that the measure of sustainability is lower. Also, by presenting 20 specific possible interventions, DuMo proposes general solutions instead of promoting tailored solutions. In our view these problems arise from the fact that the conventional method of value assessment is taken as a given.

Policy versus design

The RBO prescribes that value assessments cannot be done by the designer of the intervention. The use of value assessments according to the RBO is as an examination tool. The assessment should therefore be as objective as possible. When the designer of the intervention would do the assessment, it is obvious that the assessment loses its objectivity. Two arguments can be brought against this reasoning. Firstly, the idea of an objective assessment is highly arguable. The interpretation of history and it’s documentation been thoroughly debated as being highly dependent on the interpreter. Therefore an objective interpretation of the history of a building is impossible. Secondly, it can be argued that, by the way the value assessment is used as an examination tool, it can reversely be used as a design tool. This means, however, that a fundamentally different approach to the assessment and its documentation is in order. Our proposed method deals with both of these issues.

By who?

Although we mean the method to be used by anyone involved in the intervention in a cultural historical valuable building, but it can be argued that a value assessment should always be executed by experts. On the other hand, it is the experience of daily use that in our method prevails and lends the intangible values of buildings. In practice, it may prove the best approach to have multiple views of people from different backgrounds to contribute to a single value assessment of one building, to be able to capture all information possible.

"Artists are admired because, to a degree, they can objectify intimate feelings in a painting, a sculpture, or in words. Few people have this skill.” (Tuan, 1975) Architects could maybe fulfil this role, maybe better than historians. Architects are trained to link shape and material to meaning within a whole, these links are important for the depiction of the sense of history.

Conclusion

We proposed a framework within which cultural heritage value can be captured, using a number of categories, following the concept of genius loci used in urban planning. Using the presented tool to document the heritage value and thereby assessing its value, the heritage value is both better recognised and better documented than other, currently used methods. By focusing on the user-experience and its physical and non-physical representatives in a building, leads for both usability and sustainability are found in the existing fabric and can therefore be the basis for the necessary intervention.
The tool is used for the design intervention in café Laros. Although it is used to good result in this project, to prove its workability it is necessary to develop the tool further and use it to assess more buildings. In the words of Norberg-Schulz: "As a matter of principle science 'abstracts' from the given to arrive at neutral, "objective" knowledge. What is lost, however, is the everyday life-world which ought to be the real concern of man in general and planners and architects in particular."  
"Only when understanding our 'place', we may be able to participate creatively and contribute to its history."  

25 Norberg-Schulz (1980); p. 8  
26 Norberg-Schulz (1980); p. 202
References


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