

Adaptive Re-use in Conservation. On balancing monument and architectural values

Non Peer-reviewed author version

AUGUSTINIOK, Nadin; PLEVOETS, Bie & VAN CLEEMPOEL, Koenraad (2020)
Adaptive Re-use in Conservation. On balancing monument and architectural values.
In: Amoeda, Rogerio; Lira, Sergio; Pinheiro, Cristina (Ed.). Proceedings of the 7th
International Conference on Heritage and Sustainable Development, p. 279 -288
(Art N° 28).

Handle: <http://hdl.handle.net/1942/34042>

Adaptive Re-use in Conservation.

On balancing monument and architectural values.

drs. N. Augustiniok

University of Hasselt, Hasselt, Belgium & University of Liège, Liège, Belgium

dr. B. Plevoets & Prof. dr. K. van Cleempoel

University of Hasselt, Hasselt, Belgium

ABSTRACT: In the discourse on preserving architectural heritage, adaptive re-use is getting more acknowledged as a feasible strategy in transforming built heritage. Considering that buildings need to adapt to new circumstances to play an active role in contemporary society again, architectural interventions of varying degrees are required. The basis of the decision-making process is an assessment of values which help to provide a common language and a scientific foundation. Value systems primarily refer to the building's significance as a testimony to the past and the present desire to conserve it. Comparing relevant publications (including Riegl's 'Modern Cult of Monuments') and International Charters on heritage conservation to prominent case studies, architectural values are examined alongside monument values to reflect future concerns of the built environment.

This paper is part of a PhD thesis investigating the assessment of values in adaptive re-use projects and their reflection in legislation on the example of Belgium.

1 INTRODUCTION

Adaptive re-use as a concept aims on striking a balance between classical monument conservation and contemporary architecture - between the already existing and the vision of our future environment. Aware that everything contemporary today will be historical in the future, there is a potential risk of a monument-saturated world. The preservation of monuments as a government instrument is challenged simply because of the rising number of monuments, declining staffing and financial resources. Even once listed, the buildings remain in a constant competitive situation for their economic efficiency and the subjectivity of public opinion.

The re-use of buildings is not a modern invention as, throughout the centuries, buildings have been constructed, destroyed, reconstructed, changed or extended to adapt to new uses or architectural trends. Building on the notion of Peter Zumthor that every new building intervenes in a particular historical situation (Zumthor, 2017), every architectural design process is concerned with an analysis and an evaluation of the existing built environment. Conversely, every alteration of an existing building is concerned with the assessment of architectural values. In particular, recognising that the decisive factor in the success of their conservation is the satisfactory adaptation to current economic, technological and ecological standards, without sacrificing their key characteristics. However, in the field of architecture and architectural theory, axiological questions play only a subordinate role (Wirth, 1994). They are often not verbally expressed (Kruft, 1986), which makes it difficult to include them into an overarching framework.

Despite the recognition of adaptive re-use as a decisive strategy (Plevoets et al., 2019) in monument conservation, its respective intentions are not yet deliberately reflected in the general

value discourse or policies of monument conservation. Architectural interventions or restoration works are often based on the principles of the Venice Charter from 1964 to 'be distinct from the architectural composition and must bear a contemporary stamp', 'integrate harmoniously', and only remove what is of 'little interest' (ICOMOS, 1964). The current value assessments primarily focus on the building's past, while the present is characterised by a strong will to conserve the intangible values and their material evidence.

Leading to the development of the preservation of monuments as an independent field apart from architecture, was the increasing criticism towards the historicism practice at the end of the 19th century. Historicism was in favour of the concept of a building over its material conservation, and its restoration works consequently aimed to restore a stylistic unity. Two of the most prominent critics, John Ruskin (1819-1900) and William Morris (1834-1896), initiated the primarily theoretical discussion of conservation versus restoration. In 1903, Alois Riegl (1858-1905) published his thoughts on the evaluation discourse in the 'Modern Cult of Monuments'. Riegl initially drew up this text as an introduction to a draft of the legal reorganisation of the Protection of Monuments in the Austro-Hungarian Double Monarchy. It is not only the 'first systematic analysis of heritage values and a theory of restoration' (Jokilehto, 1999), but also the first to emphasise on the changing perception of historic buildings by the observer over time. By clearly distinguishing between the perception in the past (past values - age, historical and intentional commemorative value) and in the present time (present values - use, relative art and newness value), Riegl highlights the creation of values. They are not intrinsic to the building, but are attributed by the observer out of a specific context and, hence, can change. Whereas Araoz accordingly notes that values are a 'vaguely shared set of intangible concepts that simply emerge from and exist in the ether of the communal public consciousness' (Araoz, 2011), this intrinsic characteristic - their constantly shifting nature - is an unused potential of values. Furthermore, Riegl's dialectic model of values that have harmonising or conflicting relationships which influence the restoration strategy offers the possibility to be expanded.

Today values are not only established as a tool to differentiate between buildings that are worth being preserved and those that are not, or whenever intentions to alter a listed building ask for an assessment (Wirth, 1994). They are also included into legislation as listing criteria (Clarke et al., 2019) and are part of a statement of significance. As such, they describe the current state of a monument or the reasons for its listing. In turn, this enables the owners to take advantage of state subsidies, both financial and technical. Since owners are not necessarily familiar with the field of monument conservation, there is a need to discover the potential of historic buildings and get guidelines regarding possibilities to adapt to new requirements.

Accordingly, the following research question is investigated:

Against the background of the temporality and shifting nature of values in general, how can the future development of monuments and thereby the protection of their heritage assets be outlined and guided by balancing monument and architectural values?

This paper explores the theoretical foundations regarding the application of values in adaptive re-use projects in architectural conservation. It is part of a PhD thesis on the assessment of values and their current reflection in legislation using the diversity of the Belgian context as an example. The analysis of established scientific literature in the field of conservation as well as architecture, International Charters on heritage conservation and notable examples led to the findings.

2 VALUES – SCOPE AND CHALLENGES

The rather abstract term 'value' is omnipresent in our daily lives. It describes the monetary price of a particular good, is representative for appreciation and quality, and can be used as a norm for orientation and evaluative comparison. The concept is borrowed from the fields of moral philosophy and economics from the 19th century. Hence, its meaning varies, depending on the field and ranging from imaginary to material value. Values are a judgement, and the process of value creation is situated in the context of the interaction of society, the individual and the objects that are valued. Consequently, values can be assigned, but also re-assigned, changed or even

discarded (Wirth, 1994). Important for the understanding of values is their context - historical, spatial, socio-cultural and regarding the observer's background. According to this, the meaning and value of the built environment needs to be reflected by each generation anew (Hubel, 2011). In return, the study of values enables for an understanding of a society's state of the art and their perception of monuments.

The scope that values currently occupy in the conservation process are summarised by the Getty Conservation Institute as: 'Decisions based on values permeate typical conservation processes, from the identification of places to be protected to ongoing decisions about conserving and managing sites, to justifying the relevance of heritage conservation as a form of public policy, to evaluating long-term policy effects on society and the environment' (Avrami et al., 2019). Accordingly, we can distinguish five main aims for the application of values in the discourse on the preservation of monuments:

1. Decision-making tool (what needs to be preserved - what does not)
2. Providing a 'lingua franca' - a common language and dictionary
(Communication within the conservation discourse)
3. Argumentation vis-à-vis other actors involved
4. Argumentation vis-à-vis community (increasing demand for a participatory process)
5. Providing a theoretical basis (scientification of the Preservation of Monuments)

The detailed and nuanced discussion within the conservation field has shown that the use of values while offering a wealth of opportunities entails particular challenges. Monuments are the tangible testimonies to our history and culture of the past (Hubel, 2011). As such, they are subject to concrete transformation tasks that expose the difficulty to determine the priority, scale and scope of values. Especially, buildings that underwent several building stages raise the question which time layer is given priority and which parts of the existing fabric can be sacrificed in favour of necessary alterations. The connection of theoretical questions and their implementation into practice is one of the main challenges for the conservation field ever since. Riegl, in his position as the general conservator for the Imperial and Royal Central Commission for the Investigation and Preservation of Monuments, aimed for the balance of theory and practice. Reports of the numerous on-site visits to investigate the artefacts in person by the conservators were discussed and published (Bacher, 1995). Later, Cesare Brandi (1906 - 1988) formulates his value theory of 'aesthetic and historic *Istanze*' (entity/ claim) and three principles of conservation practice (Jokilehto, 1999). In the late 1960s, Raymond Lemaire and Piero Gazzalo described the concept of 'integrated conservation', reflecting their efforts to adapt the existing conservation approaches to their practical experiences (Houbart, 2016). Even though theory and practice are connected, they are usually studied separately (Falser et al., 2008) and challenge the transition from theoretical principles to guide the decision-making of a conservation strategy.

3 OUTLINE – VALUES IN ARCHITECTURE VS. CONSERVATION

In architectural theory, Krufft identifies two opposing approaches regarding the assessment of values: a 'retrospective theoretical reflection that reconstructs, justifies and abstracts the built environment' and one 'providing programmes and demands that architecture must fulfil' (Krufft, 1986). The original function of architecture is to satisfy humans material and immaterial needs (Wirth, 1994). Providing shelter from the environmental impacts and creating an inspiring space for society's activity are often used examples. The traditional distinction between functional, technical and aesthetic aspects are based on the Vitruvian concept of *utilitas*, *firmitas* and *venustas* (Norberg-Schulz, 1977). Building on this concept was Norberg-Schulz, who defined the architectural totality as 'a building task realized technically within a style', thereby defining three dimensions: building task, form, and technics (Norberg-Schulz, 1977). Christopher Alexander, on the other hand, defines the design problem as 'an effort to achieve fitness between two entities. The form in question and its context. The form is the solution to the problem; the context defines the problem' (Alexander, 1974). Considering that recent publications on

architectural values name a large number of values such as aesthetic value, social value, environmental value, traditional value, gender-based value, economic value, novel value and mathematical/ scientific value (Ukabi, 2015), the complexity of the architectural design task becomes apparent. Therefore, it is not surprising that, in contrast to the preservation of monuments, axiological questions are less discussed in the field of architecture.

Regarding the use of values within the field of heritage conservation, the Getty Conservation Institute outlines that ‘the conservation field is rooted in heritage values, the core historic, artistic, aesthetic, and scientific qualities and narratives that form the basis for the very existence of the heritage conservation field’ (Avrami et al., 2019). Since the advent of the debate on values, many different approaches have been investigated and published. In general, the discussion developed from a material-based assessment limited to individual buildings to a context-related evaluation including also intangible assets, such as socio-cultural values, and later to a strong focus on economic considerations.

The Venice Charter from 1964, the first internationally recognized guideline for the preservation of monuments, in Article 9 declares that the aim of restoration is ‘to preserve and reveal the aesthetic and historic value of the monument’ (ICOMOS, 1964). The Declaration of Amsterdam from 1975 later expands the scope to include groups of buildings and their surroundings, and mentions ‘integrated conservation’ to preserve all values of the architectural heritage (ICOMOS, 1975). The Nara Document on Authenticity from 1994 contained a further inscription of values into their explicit cultural context. It underlines the importance of values by stating that ‘Conservation of cultural heritage in all its forms and historical periods is rooted in the values attributed to the heritage’ (ICOMOS, 1994). In addition to the two traditional values, aesthetic and historical, new values were formulated to reflect the role of heritage as part of the cultural identity and development of a community (Araoz, 2011).

Moving away from the ‘traditional values’ was Timothy Darvill in 1996, by distinguishing use and non-use value for historic buildings. The use-value involved the benefit (the financial gain) from using a cultural resource today (for example for scientific research) and as a generator for tourism, education and society. The non-use value included existence value and option value with the latter implying the value cultural properties will have in the future (Fredheim et al., 2016). The strong economic orientation overshadowed the forward-looking approach of incorporating potential values that a historical property could have in the future. Also focusing on the economics of cultural heritage, the Getty Conservation Institute started an extensive value evaluation program in 1995. Therein, economist David Throsby also differentiates between a ‘use-value’ and a ‘non-use value’, intending a direct, indirect or optional benefit for the community. This benefit is generated by the amount a community is willing to pay for their heritage (Throsby, 2002).

Starting from the two primary meanings of the notion ‘value’ - the economical and the cultural - Feilden and Jokilehto distinguish cultural values (identity, relative artistic, technical and rarity value) and the contemporary economic value (economic, functional, educational, social and political value) (Fredheim et al., 2016). Defending the economic approach was also Randall Mason in stating that ‘economic valuing is one of the most powerful ways which society identifies, assesses, and decides on the relative value of things’ (Mason, 2002). He further defined the socio-cultural values, including historical, symbolic, social, spiritual and aesthetic values, and the economic values, including use (market) value and non-use (market) values.

Throughout the development of the value debate, a strong focus remained on the building’s existence as a testimony of the past, on their documentary value to conserve how past generations lived and build for the future. Fredheim & Khalaf identify a lack of transparency in the decision-making process as a difficulty of the value-based approach. By proposing a framework to communicate value judgements, they highlight that typologies need to reflect the relation of assessments of significance in the past to those of the present (Fredheim et al., 2016). Developing their model of investigating future uses in the light of potential future values, Riegl’s value system of monument values is now re-examined alongside architectural values to detect possibly useful values for an adaptive re-use project.

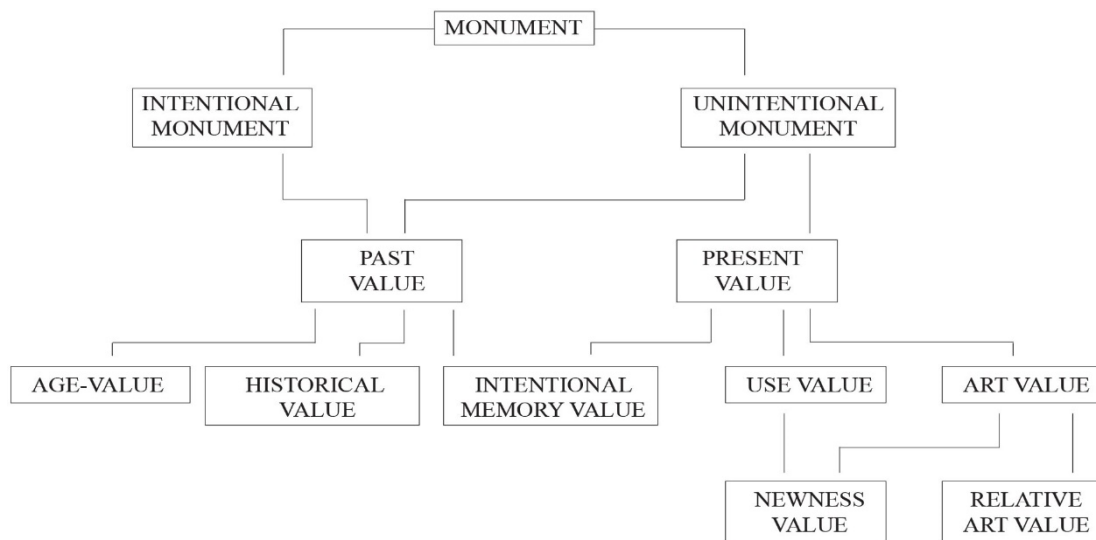


Figure 1. Alois Riegl, Monument values 1903, translated from Heinz Horat (Horat, 1996)

4 PAST VALUES

Since Riegl observes that the preoccupation with the past is a basic need for humans in which they identify themselves as a part of the evolution chain (Hubel, 2011), monuments can be considered as real and accessible evidence of this past. The past values in Riegl's analysis can also be translated as 'memory values', reminding of the monument's origin and development in the past. The historical value is probably the least discussed past value as it is scientifically accredited and requires art historical knowledge to be recognised (Riegl, 1982). It acknowledges the monument as a historic document representing a particular stage of development of a human-made structure. The 'more faithfully a monument's original state is preserved, the greater its historical value' (Riegl, 1982) and the merrier information can be gained from the monument. Human intervention is therefore needed to preserve the current status for future generations. Any alterations to the design should be avoided as the monuments risks to lose its credibility as an original document (Riegl, 1982). In contrast to this, the age value, an emotional value, can be understood by everyone and is inherent in every human-made structure, which reveals through its patina or traces of decay that it existed a particular time before the present moment. In the observer it evokes an emotional value reminding him of past times and enabling him to retrace the marks of age and impermanence. The age value prohibits any intervention in this natural cycle of becoming and passing away (evolution and decay). Therefore, it leads to ruin and final dissolution in agreement with John Ruskin accepting the physical end of a monument: 'The cult of age-value, then, stands in ultimate opposition to the preservation of monuments' (Riegl, 1982). The two competing values are generally in inverse proportion to each other; the higher the historical value, the lower the age value (Riegl, 1903).

Current trends in the conservation practice show an increasing appreciation of Riegl's age-value. The several historical layers of a building with all their traces of the past often referred to as 'scars' are being preserved as they vouch for the authenticity of the monuments. The Neues Museum in Berlin is a publicly often highlighted example that is nevertheless controversially discussed in professional circles. Originally built from 1841 until 1859, designed by Friedrich August Stüler, the museum was reconstructed by David Chipperfield Architects in collaboration with restoration architect Julian Harrap and reopened in 2009. Wherever possible, the original structure was repaired, but no destroyed painting or decoration has been recreated. In this way, the architects managed 'not to stifle the evidence of the ruin and allow the building's history to continue to emanate from its walls (Harrap, 2009). An irregular patchwork of new and old surfaces now provide the background for the exhibited pieces of art. Although the overall

philosophy was to retain all layers of the building as part of its history, some interventions that had not been part of the original design were now removed. The Greek courtyard, for example, spatially survived the years of destruction and neglect. Nevertheless, the floor was opened again to reintegrate the basement into the level above, reconstructing the situation before the construction works from 1919 until 1923. In that same period, the Exedra (an apsis like building part) on the southern wall of the courtyard had been removed and therefore was not part of the building just before the war. Now, the architects reintroduced the shape, interpreting it in a modern architectural language with modern material - exposed concrete (Berghorn, 2016). The architect thereby decided to return to a supposed original condition by using new materials which makes it difficult for the observer to distinguish from which time layer the intervention stems. Although the architects justified their decision with 'a difference between an archaeological and an architectural approach' and a 'necessary measure in restoring a sense of harmony to the disjointed museum structure' (Harrap, 2009), this is an inconsistency in the overall philosophy.

The commemorative value is the third of Riegl's past values. Originally, this value 'has been determined by the makers' in the case of intentional monuments 'while we have defined the value of the unintentional ones' (Riegl, 1982). Human intervention is needed to counter the effects of natural decay and keep the monument in its original and intentioned state.

5 PRESENT VALUES

Starting again from the analysis of Riegl, the present values relate to the perception of monuments in this day and age. The newness value acknowledges the appreciation of everything new and completed as an allegory for the universal preference of youth over old (Riegl, 1982). This condition is only achieved at the moment of the completion of a building. Accordingly, only human intervention, striving for perfection of the original state, can aim at repeating it by altering, adding, reconstructing or overpainting existing structures. The newness value is thus a direct opponent of the age value. As described in the case of the Neues Museum, today, there are more and more attempts to find a compromise between the age and the newness values. The effect of the atmosphere ('Stimmungswirkung' as Riegl called it) is playing an essential role in this aspect as the traces of age-value are recognised as evidence of past times and the becoming and passing away. Apart from practical and functional considerations, Diez summarizes that the main challenge in the architectural conservation is to rescue 'the authenticity of the recent past' while 'producing at the same time the excitement of the new' (Diez, 2012).

The relative art value recognises that the appreciation of aesthetics changes over time while underlining the relativity of values in general. Its necessity originated from Riegl's studies on art history. By releasing art history from personal taste, he laid the foundations for art history to become a recognised science (Bacher, 1995). The motto 'to every age its art' that prevailed Riegl's time (Riegl, 1903) and that resulted in his definition of the modern 'Kunstwollen', is still applicable today. The creation of a new form is expected as a representation of the current society. In 1985, the Granada Convention (ICOMOS, 1985) addressed the importance of contemporary architecture as 'our age's contribution to the European heritage'. Regarding the use of an architectural language within a historical context, the 'Resolution of the Symposium on the Introduction of Contemporary Architecture into Ancient Groups of Buildings' (ICOMOS, 1972) already stressed the need for appropriate use of 'mass, scale, rhythm and appearance and the avoidance of any imitations'. Designing in an already existing structure means to join buildings from different times which inevitably causes more difficult problems on the design and technical level. The analysis of the existing built environment can thereby inspire the redesign regarding, for example, the constructive strategy or choice of material (Brooker et al., 2014). In the past, architectural movements were often based on precise values that were expressed by specific architectural elements. However, the architectural landscape of the 21st century is characterised by a pluralism of architectural styles reflecting the diversity of the underlying architectural values. Therefore, it is more difficult to achieve a broad acceptance for one particular architectural style. Architecture is part of the public environment and, hence, part of the public

discourse as society becomes its perceiving, judging, and sometimes even, decision-making audience. The architectural style is, of course, largely dependent on the responsible architect and his value set, educational background, personal experiences and his way of translating a design solution into an architectural form. However, architects are dependent on other professionals to realise their ideas, in particular for their technical skills, the workload and the financial resources. Accordingly, architecture is a collective process. For the architect, the design process is finding a compromise within the changing framework constraints given by the client, the building task and the environmental context.

With rapid changes occurring in the environment, economic pressure and dwindling natural resources, topics such as energy consumption, cradle-to-cradle and recycling are crucial considerations. The environmental impact of buildings, and the building process in general, have been addressed and technological developments are intending to improve that. Despite the re-use of buildings being an environmentally sustainable development itself, the change of activity within the building also affects the building's performance. The approach of environmentally responsive architecture aims to get independent of mechanical systems of environmental control (Hawkes, 2002) and instead work with nature and not against it. This requires the understanding of how historic buildings were supposed to work (e.g. arrangement of rooms accordingly to their use throughout the day) and how materials work overtime. The trend towards a return to local building traditions, materials and their respective manipulation is closely related to the topics of sustainability and the identification with the local built environment. Architecture refers to its topographical location, to surrounding buildings and other landscaping elements (Norberg-Schulz, 1977), but also the social and cultural context it is situated in. The use of the material will impact on the form, the execution and the performance of the building. The material choice is decisive for the aesthetic and functional solutions, as well as the ability to integrate into its surroundings, in a harmonising or contrasting way. In addition to the physical environment, architecture is also shaped by the immaterial environment. Building processes (design development, execution works, maintenance) are driven by efficiency and economic terms, local traditions or the strive for innovation.

Riegl's use-value prioritises the usability of the monument and acknowledges adaptations as necessary: 'an old building still in use must be maintained in such a condition that it can accommodate people without endangering life or health - any hole or leak must be repaired immediately' (Riegl, 1982). Although the finding of a viable contemporary use is the safest way of ensuring the building's conservation physically, it is a controversially discussed topic. While the Venice Charter (1964) argues that new uses are 'desirable, but must not change the lay-out or decoration of the building' (ICOMOS, 1964), the Granada Convention (ICOMOS, 1985) aimed at encouraging 'the use of protected properties in the light of the needs of contemporary life and the adaptation when appropriate of old buildings for new uses'. Regarding the choice of the new use, required adaptations need to be considered, as building codes and regulations, although with restrictions, must be met (such as emergency exits, the width of stairs and doors, daylight requirements). These specifications are further complicated as buildings are often serving more than one function (e.g. public library to accommodate books, providing meeting spaces and cafés). The overall 'functionality' of a building is measured at the fulfilment of general user demands, like orientation (entrances, circulation), accessibility and technical requirements (individual comfort - light, acoustics, heating).

6 POTENTIAL - INTENDED VALUES

'Designing means, to a large extent, understanding and ordering' as Zumthor rightly said (Zumthor, 2017). At the same time, architecture is a creative process that actively alters and redefines its context and has the power to transform a space into something completely new. Wirth describes architecture as an expression of 'real social conditions, a means of consolidating them, and sometimes even influencing them in a changing way' (Wirth, 1994). That implicates a strong interrelation between humans and their built environment. Humans are the

designer of the built environment and at the same time, the user of it. Architecture psychology explores the effect of built environments on humans' experience and behaviour which enables, in turn, to conclude the designs of these environments.

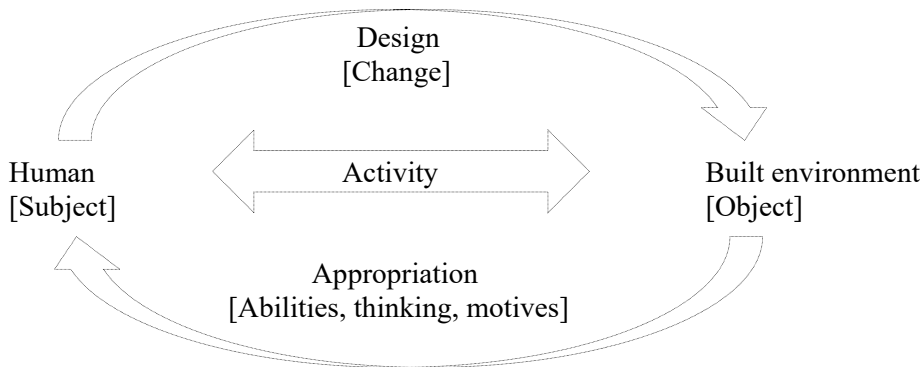


Figure 2. Ring structure of human activity, translated from Richter after Leontjew, 1977 (Richter, 2006)

On the one hand, the phenomenon of appropriation and assimilation of people to their environment is one of the basic claims of architecture. A building itself affects its surroundings, for example, by giving identity to a place. By distinguishing between public, semi-public and private areas through architectural elements, the use of spaces is regulated. On the other hand, this influencing potential of the built environment also implies the responsibility that architects carry regarding their impact on the overall social life process (Wirth, 1994). Although the future perception of the buildings that we build today, based on our present values, can only be presumed (Schrijver, 2015), their potential influence must be considered and consciously used.

The temporality of evaluations certainly represents the most considerable difficulty in argumentation for the use of values in the design processes (Schrijver, 2015). In turn, it opens up opportunities to deliberately change the perception of a particular monument. Especially in cases of so-called 'uncomfortable monuments' (Scheuermann, 2010) this approach has been successful. Buildings of past regimes (e.g. architecture of the National Socialists in Germany) were removed from their ideological context by introducing them to new uses (e.g. public museum) and new possible value assignments (e.g. educational value). The unwanted value assignments are balanced out by new positively annotated values, trying to neutralize and dis-empower their former intended meaning. By not demolishing these buildings but preserving them, a tangible document remains, which can be used to retrace history.

A change in the built environment is inevitable. Even a non-intervention by humans will result in a change of the buildings and consequently of the values they present. Brand examined that the individual layers of buildings are changing at a different speed. Sorted by the speed at which they change from slower to faster, he defined the following layers: site, structure, skin, surface, space plan and staff (Brand, 2012). Considering the values' temporality and shifting nature, the same difference in the rate of change can also be observed for them (see table 1).

Table 1. Brand's (Brand, 2012) layers contrasted to a selection of values regarding their change over time

| Brand | Change | Values |
|------------|--------|---------------------------------|
| Site | Slow | Historical value |
| Structure | | Intentional commemorative value |
| | | Relative art-value |
| | | Socio-cultural value |
| Skin | | Sustainability |
| Surface | | Age-value |
| | | Context-value |
| Space plan | | Use-value |
| Staff | Fast | Newness-value |

The influence of physical change on values has already been investigated by Feilden (Feilden, 1988). Differentiating between several degrees of intervention, he concluded that to some extent, the impact can be predicted and, further, that some values are easier to preserve than others (Taylor et al., 2008). Historic England's Conservation Principles also acknowledge the existence of 'opportunities to reveal or reinforce values' (Historic England, 2008) and see the definition of values as a prerequisite to manage change. Accordingly, the relationship between alterations to the built environment with its effect on the represented values, and in return, their impact on the buildings tangible and intangible surrounding is decisive. A conscious management of value shifts in the future depends on the identification of desired values and their decisive factors in relation to the building.

7 CONCLUSION

Society preserves and uses what it values. It evaluates objects differently, the more it learns about them. Understanding the reasons behind its evaluation is, therefore, essential to the conservation practice. Values allow for an interdisciplinary and even public discourse about the evaluation of historical monuments as they represent different actors and viewpoints. In return, the study of values enables for an understanding of a society's state of the art and its perception of monuments. The value dispute as a representative of the constant societal, cultural, political, economic and environmental changes shows that it is timeless and relevant, yet demands a continuous revision. Adaptive re-use projects need a different value assessment than the traditional conservation practice offers at the moment. In order to aim for a self-sustaining, sustainable and long-lasting transformation of our historic environment, their adaptation to modern and future requirements is necessary. Thereby, it is evident to use a combination of monument values and architectural values. Riegl's thinking model of weighing past and present values to gain a basis for the conservation strategy needs to be extended by explicitly including future or intended values. Using the potential of architecture to change the perception of a building and its context intentionally enables to manage change and imagine the future. Every design process is influenced at different stages to different levels by varying factors and values. The current architectural design aims at finding a sustainable and ecological solution to a building task on a functional and aesthetic level, based on and responding to its environmental and socio-cultural context. The fundamental underlying principle is represented in the concept of an architectural design - in the essence of a building. As a result of the research, the assessment of values regarding their impact on the future of a building opens up new perspectives for their development. Consequently, new questions arise: How can such an assessment of future values look like? Can a strategy be derived from an analysis of different adaptive re-use projects? Could that framework be also used for future projects, or even be incorporated into legislation to help with decision-making also for non-protected historic buildings?

Acknowledgement:

This research project is funded by the Research Foundation Flanders (FWO) [G050519N].

REFERENCES

- Alexander, C. 1974. *Notes on the Synthesis of Form*. Cambridge, Mass: Harvard University Press.
- Araoz, G. 2011. Preserving heritage places under a new paradigm. *Journal of Cultural Heritage Management and Sustainable Development*. 2011(1): 55-60.
- Avrami, E., Macdonald, S., Mason, R. & Myers, D. (eds). 2019. *Values in Heritage Management: Emerging Approaches and Research Directions*. Los Angeles: The Getty Conservation Institute.
- Bacher, E. 1995. *Kunstwerk oder Denkmal?: Alois Riegls Schriften zur Denkmalpflege*. Wien: Böhlau.
- Berghorn, F. 2016. *Kontrast oder Verschmelzung?: Bauen mit Ruinen heute*. Berlin: Logos Verlag.
- Brand, S. 2012. *How Buildings Learn: What Happens After They're Built*. London: Penguin Books.
- Brooker, G. & Stone, S. 2014. *Rereadings: Interior Architecture and the Design Principles of Remodelling Existing Buildings*. London: RIBA Enterprises.

- Clarke, N., Kuipers, M., Stroux, S. 2019. Embedding built heritage values in architectural design education. *International Journal of Technology and Design Education*. 2019:1-17.
- De la Torre, M. (ed.). 2002. *Assessing the Values of Cultural Heritage*. Los Angeles: Getty Conservation Institute.
- Diez, F. 2012. Heritage. In Crysler, C. G., Cairns, S. & Heynen, H (eds), *The SAGE Handbook of Architectural Theory*. London: SAGE.
- Falser, M., Lipp, W., Tomaszewski, A. 2008. *Conservation and preservation, interactions between theory and practice in memoriam Alois Riegl (1858–1905). Proceedings of the International Conference of the ICOMOS International Scientific Committee for the Theory and the Philosophy of Conservation and Restoration. Vienna, Austria, 23–27 April 2008*. Firenze: Polistampa.
- Feilden, B.M. 1988. A short introduction to the conservation of cultural property in Europe. In Rosval, J.(ed.) *Air Pollution and Conservation: Safeguarding our Architectural Heritage*. Amsterdam: Elsevier.
- Fredheim, L. H. & Khalaf, M. 2016. The Significance of Values: Heritage Value Typologies Re-Examined. *International Journal of Heritage Studies*. 22 (6): 466–81.
- Harrap, J. 2009. Freezing the ruin. In Chipperfield, D. et al. (eds), *Neues Museum Berlin: By David Chipperfield Architects in Collaboration with Julian Harrap*. Köln: König.
- Hawkes, D., McDonald, J. & Steemers, S. 2002. *The Selective Environment*. London: Spon Press.
- Historic England. 2008. *Conservation Principles, Policies and Guidance*. London: English Heritage.
- Holtorf, C. 2007. What Does Not Move Any Hearts - Why Should It Be Saved? The Denkmalpflegediskussion in Germany. *International Journal of Cultural Property*. 2007 (14): 33–55.
- Horat, H. 1996. Alois Riegl: der moderne Denkmalkultus. *Zeitschrift für schweizerische Archäologie und Kunstgeschichte*. 53 (1996): 61-78.
- Houbart, C. 2016. Towards an “integrated conservation”: the contribution of R.M. Lemaire and Piero Gazzola during the first decade of ICOMOS (1965-1975). In Szmygin, B. (ed.), *Heritage in Transformation. Cultural Heritage Protection in XXI century. Problems, challenges, predictions. Heritage for Future*. 1 (3): 117-124.
- Hubel, A. 2011. *Denkmalpflege. Geschichte, Themen, Aufgaben*. Stuttgart: Reclam.
- ICOMOS. 1964. *International Charter for the Conservation and Restoration of monuments and Sites (the Venice Charter)*. Venice: ICOMOS.
- ICOMOS. 1972. *Resolution of the Symposium on the Introduction of Contemporary Architecture into Ancient Groups of Buildings*. Budapest: ICOMOS.
- ICOMOS. 1975. *The Declaration of Amsterdam*. Amsterdam: ICOMOS.
- ICOMOS. 1985. *Convention for the Protection of the Architectural Heritage of Europe*. Granada: ICOMOS.
- Jokilehto, J. 1999. *A history of architectural conservation*. London: Butterworth-Heinemann.
- Kruft, H.-W. 1986. *Geschichte der Architekturtheorie: von der Antike bis zur Gegenwart*. München: Beck.
- Martin, B. & Wood, C. 2013. *Practical Building Conservation: Conservation Basics*. Farnham: Ashgate.
- Mason, R. 2002. Assessing values in conservation planning: methodological issues and choices. In De la Torre, M. (ed.), *Assessing the Values of Cultural Heritage*. Los Angeles: Getty Conservation Institute.
- Meier, H.-R. 2013. Wertedebatten und Wertelehren in der Spätmodernen Denkmalpflege: Hierarchien versus Pluralität. In Meier, H.-R., Scheuermann, I., Wendland, U., Sonne, W. (eds), *WERTE. Begründungen der Denkmalpflege in Geschichte und Gegenwart*. Berlin: Jovis.
- Norberg-Schulz, C. 1977. *Intentions in Architecture*. Cambridge, Mass: MIT Press.
- Plevoets, B. & Van Cleempoel, K. 2019. *Adaptive Reuse of the Built Heritage: Concepts and Cases of an Emerging Discipline*. Abington: Routledge.
- Richter, P. G. 2006. Architektur und Psychologie. In Fleischmann, K. (ed.) *Wolkenkuckucksheim. Heft 1: From Outer Space: Architekturtheorie außerhalb der Disziplin*. www.cloud-cuckoo.net
- Riegl, Alois. 1903. *Der moderne Denkmalkultus, sein Wesen und seine Entstehung*. Wien, Leipzig: W. Braumüller.
- Riegl, Alois. 1982. The Modern Cult of Monuments: Its Character and Its Origin, trans. Forster, K. W. & Ghirardo, D. *Oppositions*. 25 (Fall 1982): 21-51. Princeton: Architectural Press.
- Scheuermann, I. & Meier, H.-R. 2010. *DENKmalWERTE. Beiträge zur Theorie und Aktualität der Denkmalpflege. Georg Mörsch zum 70. Geburtstag*. Berlin, München: Deutscher Kunstverlag.
- Schrijver, L. 2015. Design for Values in Architecture. In Van den Hoven, J. et al. (eds.), *Handbook of Ethics, Values, and Technological Design: Sources, Theory, Values and Application Domains*. Dordrecht: Springer Netherlands.
- Taylor, J. & Cassar, M. 2008. Representation and intervention: The symbiotic relationship of conservation and value. *Studies in Conservation*. 53 (1): 7-11
- Throsby, D. 2002. Cultural capital and sustainability concepts in the economics of cultural heritage. In De la Torre, M. (ed.). *Assessing the Values of Cultural Heritage*. Los Angeles: Getty Conservation Institute.
- Ukabi, E. 2015. Conserving the Architects’ Jewel in the 21st Century. *Architecture Research*. 5 (1): 10-15.
- Walter, N. 2013. From Values to Narrative: A New Foundation for the Conservation of Historic Buildings. *International Journal of heritage Studies*. 20 (6): 634-650
- Wirth, H. 1994. *Werte und Bewertungen baulich- räumlicher Strukturen, Axiologie der baulich- räumlichen Umwelt*. Alfter: VDG.
- Zumthor, P. 2017. *Architektur denken*. Basel: Birkhäuser.