## HANDS ON



## SUSTAINABLE AESTHETICS

**Nicolai Bo Andersen.** In sustainable building culture, three factors may constitute a theoretical framework: technical, functional and architectural parameters. In this perspective, to achieve longevity, a building must be technically robust, functionally adaptable and aesthetically durable. But what does it mean when we say that a building is 'classic'. Why is it that even though aesthetic ideals seem to change all the time, some buildings have the capacity to talk to us across temporal distance? It is argued that when a work of architecture become listed, it is because it is able to speak to us aesthetically through temporal distance. It is concluded that aesthetic sustainability is fundamentally a hermeneutic question. In this sense, the work of architecture is aesthetically sustainable when we understand something and ourselves. Some buildings talk to us because they say something true (*alétheia*) about being in the world.



Resources. In traditional economic theory, thinking is linear. Materials are regarded as an unlimited resource, and waste is considered gone when it has left the economic system. Materials are put into the economy where they are processed, and when the products and buildings are outdated the resources disappear from the economy as so-called waste. In this traditional economic thinking, focus is on the economy as such and not the larger material context. If the planet, on the other hand, is considered a closed system where only solar energy is fed from the outside and only low-grade thermal energy leaves, then materials are not an infinite resource and waste is not something that disappears. Energy is exchanged with the rest of the universe, whereas matter remains in the system since nothing is created and nothing is destroyed, only transformed. In this understanding, the finite material resources are continuously degraded with each transformation.

In a circular economy, waste is not considered non-existent but rather a resource in itself that may be part of the system one more time. In the conventional understanding of circular economy, it is a question of rethinking by reducing, reusing and recycling.<sup>3</sup> However, both reusing and recycling material resources require energy and even more resources to be added for each transformation. A more elaborate version of the concept of circular economy advocates a hierarchic list of nine R's: (1) Refuse, (2) Reduce, (3) Reuse, (4) Repair, (5) Refurbish, (6) Remanufacture, (7) Repurpose, (8) Recycle and (9) Recover energy.<sup>4</sup> In this understanding, refusing consumption is better than reusing, which again is significantly better than recycling. In other words, in a true circular economy it is best to keep the resources in the system as long as possible.

In Danish building regulations, only operational energy used for e.g. heating and cooling is considered, whereas embodied energy related to all the life-cycle stages, from the extraction of raw materials to the end of life, does not count.<sup>5</sup> However, recent life-cycle assessment (LCA) studies show that in the lifetime of new buildings, embodied energy accounts for significantly more greenhouse gas emission than operational energy.<sup>6</sup> In a near future with increasing use of low-emission energy coming from wind and sun, the difference will be even more significant. All this point towards a strategy that prioritises '[to] sustain and preserve what is already made, in this case the current building stock, and boost its performance from the perspective of material reuse and energy efficiency.<sup>77</sup> In other words, in a truly sustainable building culture longevity is fundamental.

Sustainability. The concept of sustainability was used for the first time in 1713 by Hans Carl von Carlowitz in his book *Sylvicultura oeconomica, oder haußwirthliche Nachricht und Naturmäßige Anweisung zur wilden Baum-Zucht.*As a reaction to the acute scarcity of timber caused by the heavy exploitation of forests by the mining industry, von Carlowitz described how to balance growth and harvest through the principles of rationalisation, substitution and limitation. Timber should only be cut to the extent that forests could regenerate and ensure material resources for the future. A similar long-term thinking is expressed by Ernst Haeckel who coined the term *ecology* in 1866 using the Greek *oikos* that means 'house' and *-logia* that means 'explanation', i.e. the doctrine of household. Similarly, the word economy is created by combining *oikos* and *-nomos*, meaning 'house' and 'law', respectively, i.e. the description of the rules governing production and consumption of goods and services.

Today, the most common definition of sustainability is presented in the Brundtland Report of 1987, calling for 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs.'9 In continuation of prior descriptions of sustainable development, this definition underlines the importance of focusing on long-term interests, not short-sighted profit. In continuation of the Brundtland Report's understanding of sustainability as compatible with economic growth, different positions call for rationalisation, e.g. through energy efficiency, building insulation and technological development. Other positions call for substitution, e.g. through reusing and recycling by means of circular economy and principles of 'design for disassembly', as outlined above.

However, if the aim is continuous economic growth, the speed of reuse and recycling must constantly be accelerated, effectively resulting in a decrease of product lifespan. <sup>10</sup> The notion of sustainable economic growth, also known as 'green growth', has thus been criticised for being a conceptual contradiction

since the economic system, as described above, is a closed and limited system. Exponential economic growth on a planet with limited material resources is simply not possible. In continuation of this, a possible interpretation of a truly sustainable building culture is limiting the use of resources by conserving as much as possible, preferably in the same amount and quality as the existing. In this understanding, exploitation of the earth's resources may be limited by prolonging the lifespan of buildings through conservation, transformation and restoration. 12

Conservation. In *A History of Architectural Conservation*, Jukka Jokilehto points out that conservation is in fact a cultural question, arguing that '[i]n the pre-modern world, it was part of a process where one learnt not to repeat mistakes, and instead recognised successes, taking these as a reference for further improvement.'<sup>13</sup> In this perspective, practical knowledge has been developed and cultivated through generations in a process of continuation. Classical authors gave particular attention to durability. More than two thousand years ago, Vitruvius argued that '[a]ll these [the art of building, the making of time-pieces, and the construction of machinery] must be built with due reference to durability, convenience, and beauty.'<sup>14</sup> Later, Alberti described his concern for the unnecessary destruction of buildings and the need for maintenance and conservation, crying out: 'God help me, I sometimes cannot stomach it when I see with what negligence, or to put it more crudely, by what avarice they allow the ruin of things....'<sup>15</sup>

Modern conservation theory may be seen as a continuous negotiation between two positions, one arguing for maximum intervention, the other for minimum. 16 As the architect responsible for the restoration of many medieval castles and cathedrals, Viollet-le-Duc argued for the unity of style. 17 According to Viollet-le-Duc, 'to restore a building is not just to preserve it, to repair it, and to remodel it, it is to re-instate it in a complete state such as it may never have been in at any given moment.'18 The ideal of architectural conservation was the unity of the structural and visual style of the building. In opposition to this, John Ruskin argued that stylistic restoration 'means the most total destruction which a building can suffer.'19 To Ruskin every building is a unique creation made by an individual architect in a specific historic context. The specific qualities of the work of architecture situated in time and space can never be repeated, and the building consequently not restored. Instead, the original material that has 'matured' through the passing of time, wear and weathering should be protected as long as possible. In continuation of Ruskin, the Manifesto of the Society for the Protection of Ancient Buildings underlines the importance of conservation, arguing that '[i]t is for all these buildings, therefore, of all times and styles, that we plead, and call upon those who have to deal with them, to put Protection in the place of Restoration.'20 The aim was to conserve the buildings materially and 'hand them down instructive and venerable to those that come after us.'21

In the 20th century, the Venice Charter is considered to be the principal document in architectural conservation. Describing buildings and monuments as imbued with a message from the past it is pointed out that 'The common responsibility to safeguard them for future generations is recognized,'22 thus underlining the importance of a long temporal perspective. The Charter continues by arguing that 'It is our duty to hand them on in the full richness of their authenticity.'23 In continuation of the principles described in the Venice Charter, Sir Bernard M. Feilden reasoned that '...a historic building is one that gives us a sense of wonder and makes us want to know more about the people and culture that produced it. It has architectural, aesthetic, historic, documentary, archaeological, economic, social and even political and spiritual or symbolic values; but the first impact is always emotional, for it is a symbol of our cultural identity and continuity – a part of our heritage.'24 To Feilden, conservation is about preventing decay and ensuring that the meaning of the object continues to be comprehensible.

Just as the values of architecture, as described by Feilden, are multiple, the reasons for conservation are numerous, including personal, social and scientific values. <sup>25</sup> In a Danish context, the law regarding listed buildings and conservation of buildings and built environments allows the Minister of Culture to list buildings or independent landscape architecture of 'significant architectural or cultural-historical value. <sup>26</sup> Some researchers challenge the materialistic understanding of cultural heritage and argue that cultural heritage is ultimately intangible. Criticising the authorized heritage discourse, Laurajane Smith argues that cultural heritage is a cultural and social process that occurs at

particular locations or by undertaking specific actions when values, meanings and identity are created and recreated.<sup>27</sup>

In contemporary conservation theory, sustainability and conservation are considered two sides of the same coin. According to Staniforth as referenced by Muñoz Viñas, the whole purpose of preserving cultural heritage is equivalent to the aim of sustainability, i.e. to 'pass on maximum significance to future generations.'<sup>28</sup> As ways to secure cultural meaning and reduce the use of resources to the benefit of current and future generations, both sustainability and conservation aim at longevity. The question is how may architectural longevity be achieved? Buildings change all the time due to decay caused by physical effects and alterations demanded by change in use, just as changing ideas of beauty seem to cause constant alteration. Using Vitruvius' above-mentioned distinction between durability, convenience and beauty as a framework, it may be argued that sustainable building culture is about achieving technical durability, programmatic usability and aesthetic quality.<sup>29</sup> The question is why some works of architecture quickly go out of style, while others have greater resilience to changing ideas of beauty.

Beauty. While both conservation and sustainability aim at longevity, ideas of beauty seem to change all the time. One may even get the impression that architecture more and more is a question of fashion and that stylistic features change ever more rapidly. In the Orient, beauty was connected to light and shine. The Semitic god Baal, the Egyptian god Ra and the Persian god Ahura Mazda were all personifications of the sun. The Egyptian pharaoh Akhenaton, 'the spirit of Aton', and his wife Nefertiti, 'the perfect', changed the belief of Egyptians from many gods to only one, Aton, the god of the sun. The Pythagoreans founded the classical understanding of beauty as a question of harmony and proportions to the cosmic order, whereas the Greek sophists identified beauty in the concrete, sensuous world. Socrates, on the other hand, believed that beauty was not a physical thing but must be found in what beautiful things have in common, linking beauty to the useful and the appropriate.

For Plato, truth, good and beauty are inseparably linked. The sensuous beauty is relative, transient and changeable, pointing towards the spiritual beauty of the physical world. According to Plato, beauty must be understood as an absolute, eternal and unchangeable idea. For Aristoteles, on the contrary, it is the ideas contained in the physical forms that make things what they really are. Beauty is unity in diversity. In Aristoteles' classic definition, beauty is defined by the fact that nothing can be removed and nothing added. For Plotinus, the founder of Neoplatonism, beauty again had something to do with light. Sensuous beauty was caused by something spiritual in the form itself, the light from the highest god, the One. This understanding grew into the Middle Ages where beauty became a question of divine perfection identifying god with a shining light, a *luminus current*, penetrating the universe.

Until the middle of the 1700s, beauty was regarded as something divine, manifested as an absolute quality. But by the beginning of the modern world, David Hume argued that beauty only exists in the mind of the perceiver and not in the things themselves. And with Immanuel Kant the classic idea of beauty as an objective property was definitely replaced by an understanding of beauty as a subjective product of human consciousness. For Kant, beauty is characterised by disinterested pleasure, universality and regularity. Aesthetic thinking in the mind of the subject is a play between sense and imagination, manifesting itself in a kind of well-being that supports the subject in being realised as a moral creature. According to this perspective, beauty is the symbol of moral good.

Even though the concept of beauty has existed as long as humanity, the concept of aesthetics was founded as late as in the 18th century. Alexander Gottlieb Baumgarten defined *noeta* as the object of logic, whereas things perceived were defined as the science of *aesthetics*. Baumgarten do not consider logic and aesthetics as contradictory, but as two mutually complementary ways to knowledge. For Baumgarten, aesthetics is not just a matter of personal taste, but rather a scientific question; *episteme aisthetike*. Aesthetics is, in this understanding, the philosophy of sensitive cognition identified with the experience of beauty. In a modern understanding, the work of art is no longer a manifestation of an eternal idea or divine order, but rather considered the result of the artist's personal experience. However, the concept of beauty has seemingly disappeared from the vocabulary just as the concept of aesthetics is considered precarious. Today, theories of art and architecture are often inspired

by social and cultural studies, represented by, for instance, Pierre Bourdieu and Michel Foucault. And in art theory, the description of formal language and stylistic features of architecture is in focus, in favour of aesthetic experience.<sup>32</sup>

**Experience.** According to Martin Heidegger, human being (*Dasein*) is always practically engaged in the world.<sup>33</sup> In this everyday ready-to-hand (*Zuhanden*) activity, perception is never isolated but always related to something specific. Through the practical use of equipment (*Zeug*), we understand the material world and the things we use without giving it much thought, just as we continuously test new potentials by making projections (*Entwurf*) based on past experiences. However, if the equipment suddenly breaks, the practical understanding is replaced by an understanding of the equipment as an object. When the everyday relation characterised by practical concern (*Sorge*) is broken, the material world is looked upon with an analysing and objectifying gaze. This present-at-hand (*Vorhanden*) perspective makes us observe the world in a more theoretical and scientific way.

However, both in the ready-to-hand, everyday, concerned activity and in the present-at-hand, analytic objectiveness, the world becomes distant. To Heidegger, our relation to the world is neither just instrumental nor scientific, but also aesthetic.<sup>34</sup> In the eyes of the artist, a pair of shoes is not just ordinary and trivial equipment for walking, just as the picture is not simply a result of an objectivising, scientific description. Rather, art is aesthetic knowledge, but on its own terms 'a becoming and happening of truth.' Art is about beauty, but not in the banal sense of the word, rather as a question of disclosure. To Heidegger '[b] eauty is one way in which truth essentially occurs as unconcealment.' 36

A work of architecture may be understood as a spatial articulation of physical matter.<sup>37</sup> The formal elements used in building may have to do with the form, colour, proportion and material effects,<sup>38</sup> just as rhythm, daylight and acoustic effects are elements in experiencing architecture.<sup>39</sup> Material properties, structural principles and tectonic articulation may allow bodily communication as resonance through sensing or affective involvement, and the produced feeling of identification between the body of the house and the felt body of the perceiver may create meaningful situations.<sup>40</sup> In this perspective, experiencing architecture is not a question of 'understanding' the work logically, just as it is not a question of 'understanding' a piece of music. Rather, the elements of architecture constitute a vocabulary in its own right, which can be communicated aesthetically through sensing and affective involvement. Through the vocabulary of architecture, the architect articulates matter into a meaningful whole, which can be experienced by a perceiver.

Meaning. According to Hans-Georg Gadamer, the work of art is dependent on a process of abstraction. 41 It may be perceived as a 'pure work of art' if the context in which the work is rooted is disregarded. In a process of 'aesthetic differentiation' the work exists in its own right, independent of reference to social, religious or political interests. The positive side to this mode of pure perception is that art is art on its own terms. What is important is how the work works, not external references such as stylistic features, concepts or fashion trends. However, when we look upon a thing, is it never not just characterised by simple perception of what is there, but rather always associated with an understanding of something. Thus criticising the mode of pure perception, Gadamer argues that '[o]nly if we "recognize" what is represented are we able to "read" a picture; in fact, that is what ultimately makes it a picture. Seeing means articulating. '42

To Gadamer, pure perception is an abstraction that reduces phenomena. The work of art is more than just simple perception since its meaning and content are determined by the 'occasion'. When the relation to the world is lost, the work of art loses its meaning because 'only when we understand it, when it is "clear" to us, does it exist as an artistic creation for us. '43 In this perspective, a building is never just a work of art. A spatial arrangement of pure formal elements or only material effects would make no sense since our understanding of what we perceive is closely dependent on how the work is related to the world. At best, the pure work of architecture would be no more than stage design or a 'Potemkin village'.

Using the concept of play, Gadamer understands the work of art not just as a question of pure perception but rather as 'an event of being—in it being appears, meaningfully and visibly.'44 When a play or a piece of music is per-

formed, the play reaches presentation through the players. Similarly, experiencing architecture is the coming-to-presentation of the work through the participation of the perceiver. Experiencing a work of architecture is neither just characterised by sensuous stimuli nor is it a material manifestation of an eternal idea or divine order. The meaning of the work is not an objective property of the thing itself nor a purely subjective question. Rather, in the work of art, presentation is an ontological element in which the presented experiences an increase in being by being experienced. The picture (*Bild*) is not just a copy (*Abbild*) but a re-presentation of the original (*Urbild*) as the 'specific mode of the work of art's presence is the coming-to-presentation of being.'<sup>45</sup> In this perspective, aesthetic experience is not a question of subjective taste or personal opinion but an event in which a world is coming to presentation.

**World.** The Parthenon, located at the Acropolis, is the archetypical example of an architectural synthesis between matter, place and use. According to Heidegger, '[a] building, a Greek temple, portrays nothing.'<sup>46</sup> Rather, the work of architecture 'sets up a world', and in this 'setting forth' '[t]he rock comes to bear and rest and so first becomes rock; metal comes to glitter and shimmer, colors to glow, tones to sing, the word to say.'<sup>47</sup> In the Parthenon, blocks of marble are erected against the downward pull of gravity, creating a place for worship on the highest point on top of the city, close to the sky. The Acropolis is a built manifestation of human dwelling on Earth, and in this gesture '[t]he work lets the earth be an earth.'<sup>48</sup>

As a coming-to-presentation of being, the work of architecture is never isolated but always part of a context. Physical matter is articulated on a specific location at a specific time in accordance with material properties and static and tectonic principles in order to create space for human inhabitation on this earth. A work of architecture is never defined by just pure perception or formal elements, rather it always belongs to a specific place in time and space. To Gadamer, a work of architecture extends beyond itself in two ways, 'as much determined by the aim it is to serve as by the place it is to take up in a total spatial context.'<sup>49</sup> By adding something new that fulfils a purpose in a town or in a landscape, the building presents an increase in being and thus it becomes a work of art. If, on the other hand, the building is separated from the use and the place, it loses its meaning and becomes a vague shadow of itself.

However, in a rapidly changing reality, physical matter as well as use and place change all the time. John Ruskin points out that 'imperfection is in some sort essential to all that we know of life. It is the sign of life in a mortal body, that is to say, of a state of progress and change.'50 To Ruskin, original material, traces of craftsmen's tool and the result of wear and weathering is what gives the building character. In fact, 'in all things that live there are certain irregularities and deficiencies which are not only signs of life, but sources of beauty.'51 Similarly, the Danish architect Johannes Exner understands buildings as living organisms, '[t]hey are born, they get ill, they are cured, they grow old, they die.'52 The identity of the work of architecture is not just defined by its condition at birth but also conditioned by the physical effects of weathering and changes caused by alterations during a lifetime.

Just as physical matter changes, so does use. In fact, the only thing architects can be sure of is that functions change. Describing what happens after buildings are built, the American writer Steward Brand argues that '[a]n adaptive building has to allow slippage between the differently-paced systems of the Site, Structure, Skin, Services, Space plan and Stuff. Otherwise the slow systems block the flow of the quick ones, and the quick ones tear up the old ones with their constant changes.'53 If a structure is planned for a specific programme, it will most likely be demolished when functions inevitably change. According to Brand, rather than planning for a fixed program, 'scenario planning' must allow room for an unknown future if buildings should be built to last. Similarly, the context of a work of architecture is in a constant process of change. The Danish landscape architect Sven-Ingvar Andersson describes significant landscape relations in a Bruegel painting as 'in the centre', 'on top of', 'in middle of', 'at the edge', 'at the bottom', 'inside' and 'in a niche'.<sup>54</sup> According to Andersson, the whole reason we may say that a building rests beautifully in the landscape is that we understand it in relation to its surroundings. However, just as the building in itself is always changing, so are the surroundings. According to Perez de Arce, this constant transformation is not a problem as towns need permanence as much as they need transformation, pointing out that change balanced with permanence is a quality to buildings and cities.<sup>55</sup> In this perspective, it is not only the experience of the work of

architecture that is new for each coming-to-presentation, it is also the context to which the work is related that is changing all the time. The work of architecture is in itself constantly changing with regard to physical matter, use and place, just as it is continuously coming to presentation through the perceiver.

In the coming-to-presentation, something that was not there before presents itself as something: a world is set up. And when the presented work of art is clear to us, we understand it. Heidegger points out that the German word for space (*Raum*) has its etymological origin in clearing. <sup>56</sup> The word clearing (*Lichtung*) means making light, which at the same time is making space within a boundary, i.e. to make place for the light to come in *and* making clear, i.e. to shed a light on something. Referring to Plato, Gadamer points out that '[t]he beautiful is of itself truly "most radiant" (to ekphanestaton), <sup>57</sup> arguing that the beautiful is something that emerges as 'one out of a whole'. In this perspective, the work of architecture is the clear coming-to-presentation of a complex content in an ever-changing reality.

**Tradition.** When we experience something, we understand what we experience and what we do not know based on what we already know. We never start from scratch but always from a specific place and time in history. According to Gadamer, prejudice is the way in which this knowledge is manifested in the individual as tradition. In this understanding, prejudice constitutes the historical reality of the individual and forms the horizon that frames what we already know. However, the horizon is not static. When we understand something, our horizon is widened in the meeting with the horizon of the new. Thus, 'understanding is always the fusion of these horizons supposedly existing by themselves,'58 where what we already know is widened into a communion with the new. In this way, reaching understanding is a transformative process in which a new truth is constituted as an increase in being.

In continuation, tradition is not static but must be constantly affirmed, embraced and cultivated, even changed. In fact, tradition constitutes an element of freedom, effective in all historical change. Even though the history of architecture and ideas of beauty seem to change all the time, some buildings have the capacity to talk to us across temporal distance. To Gadamer 'it remains irrefutable that art is never simply past but is able to overcome temporal distance by virtue of its own meaningful presence.'59 A classic work of architecture is not classic because of an eternal idea or divine order. Rather, a work is classic because it is continuously relevant and constantly open to new interpretations. The period in which the building is constructed gives meaning to the work of architecture, just as historic buildings represent ideas of their age. The work may be understood on many levels and interpreted in multiple ways. Generations may have different sensitivities, and ages may have different physical manifestations, which are subsequently referred to as styles. However, architecture only based on stylistic features or fashion trends may not be relevant for long. The work of architecture that is only tied to a specific place in time is not able to be meaningfully re-presented and will at best be a shallow tourist attraction, empty of the complexity of the work of art.

The classic seems raised above the ever-changing style and taste of a period. It describes something significant that is enduring and independent of fashion and trends. The classic work has a timeless quality in which 'the duration of a work's power to speak directly is fundamentally unlimited.' 60 The work of art continuously adds something new to the world by re-presenting the complexity of the content each time anew. In a certain sense, '[a] classical work of literature is one that can never be completely understood.' Due to this polysemic quality, the classic work of architecture is richer than what may be experienced at first, just as the work of architecture may be more 'intelligent' than the architect. The classic work of architecture suggests that there is more to be understood. What comes to presentation through meaningful inner correlation and understandable outer relations is a totality of meaning that may be repeated across temporal distance because the work has a power to speak that is fundamentally unlimited. The classic work of architecture is the continuously clear coming-to-presentation of a complex content.

**Sustainable Aesthetics.** As pointed out above, the work of architecture may be preserved for many reasons: architectural, historical, social, among others. And the strategies of conservation are multiple, ranging from minimum intervention (Ruskin) to maximum intervention (Viollet-le-Duc). As ways to secure cultural meaning and reduce the use of resources, the aim of both sustainability and conservation is longevity. 'Sustainable building culture' may be

interpreted as limiting the use of resources by conserving as much as possible, preferably in the same amount and quality as the existing. It is about achieving technical durability, functional adaptability and aesthetic quality, aiming at giving buildings a long life to the benefit of current and future generations. In a globalised and emancipated world, meaning is not static. Personal taste and ideas of beauty seem to change all the time. However, in a hermeneutic, phenomenological perspective, as presented above, aesthetics is not about stylistic features, subjective taste or fashion trends, just as the experience of architecture is not an absolute value judgement.

Aesthetic experience is not a matter of subjective opinion, just as it is not just a question of sensuous stimuli. Rather, experiencing architecture may be understood as an event taking place between the perceiver and the work, an event in which a world is coming to presentation. Through the vocabulary of architecture, a complex content is articulated into a meaningful whole. Since presentation is an ontological quality to the work of art, the work is always new to our experience. In this sense, the work of architecture is renewed through our participation every time it is experienced. When architecture happens, we understand something and our horizon is widened. What we understand is material matter articulated in a meaningful synthesis with place and use. Even though the formal elements of architecture may be regarded as a meaningful material language in its own right, the meaning of architecture ultimately depends on its relation to its context.

While pure perception or sensuous stimuli – whether characterised by the pleasure of the familiar or the pleasure of the unfamiliar<sup>62</sup> – may allow an emotional connection to the object, only meaningful aesthetic experiences make continuous connection possible. For a work of architecture to remain meaningful across temporal distance, the work must possess not only a formal, inner correlation between material quality, tectonic articulation and spatial character but also understandable outer relations. In a truly sustainable building culture, the architect must make sure that the inevitable future change in physical matter, spatial context and lived life does not reduce but rather en-

> 2015); Albert Algreen-Petersen, Søren Bak-Andersen and Christoffer Harlang, eds., Robust Reflections on Resilient Architecture (Copenhagen

13 Jukka Jokilehto. A History of Architectural Conservation (London: Routledge, 2017), p. 1 14 Vitruvius, Ten Books on Architecture (Cam-

GEKKO Publishing, 2017).

bridge: Harvard University Press, 1914), p. 17 15 Leon Battista Alberti, On the Art of Building in Ten Books (Cambridge: MIT Press, 1988), p. 320. 16 See, for instance: Nicolai Bo Andersen, 'Transformation og restaurering', in Om bygningskulturens transformation, edited by Christoffer Harlang and Albert Algreen-Petersen (København: GEKKO Publishing, 2015), pp. 30-39.

17 Eugene Viollet-le-Duc, Restaurering, edited by Vagn Lyhne and Kristian Berg Nielsen (Aarhus, Arkitektskolen, 2000).

19 John Ruskin, The Seven Lamps of Architecture (New York: Dover, 1989), p. 184.

20 William Morris, 'The Manifesto of the Society for the Protection of Ancient Buildings', 17 December 2014, http://www.spab.ong.uk/what-is-spab-/ the-manifesto

22 'International Charter for the Conservation and Restoration of Monuments and Sites (The Venice Charter 1964)', Icomos, 18 December 2014, http:// www.icomos.org/charters/venice\_e.pdf

23 Ibid. 24 Bernard Melchior Feilden, Conservation of Historic Buildings (Oxford: Elsevier, 2003), p. 1. 25 According to Michalski as referenced in: Salvador Muños-Viñas, Contemporary Theory of

Conservation (Amsterdam: Elsevier, 2005).  ${\bf 26}$  'Bekendtgørelse af lov om bygningsfredning og bevaring af bygninger og bymiljøer', retsinformation dk, accessed 23 November 2019, https://www.retsinformation.dk/Forms/R0710.aspx?id=199864#id72fbc2b6-e111-4ec0-b211-2a41a55fe197

27 Laurajane Smith, Uses of Heritage (Abingdon: Routledge, 2006).

28 Salvador Muños-Viñas, Contemporary Theory of Conservation (Amsterdam: Elsevier, 2005), p. 195. 29 Nicolai Bo Andersen, 'The Necessary, the Appropriate and the Beautiful', in Robust – Reflections on Resilient Architecture, edited by Albert Algreen-Petersen, Søren Bak-Andersen and Christoffer Harlang (Copenhagen: GEKKO Publishing, 2017), pp. 40-57 30 See, for instance: Dorthe Jørgensen, Skønhed: en engel gik forbi (Aarhus: Aarhus Universitetsforlag,

hances architectural meaning. Similarly, the conservation architect must make sure that not only material matter is preserved but the whole meaning of the work of architecture, including its relation to physical context and lived life.

As pointed out above, the formal elements of architecture may themselves hold a potential in an aesthetic sustainable architecture. Bodily communication as resonance through sensing or affective involvement may create meaningful situations that may inspire us to take better care of the world's resources. 63 However, sensuous stimuli and affective involvement do not make a work of art in themselves, just as usefulness and physical location do not make a building a work of architecture. To qualify as a work of architecture, the spatially articulated physical matter must convey meaning given by the architect, and be able to be re-presented when experienced by the perceiver. And for a work of architecture to be aesthetically sustainable, it must continue to be meaningful every time it is experienced.

On a technical level, a building may be repaired, reused or recycled; on a functional level, a structure may be converted to accommodate a new use to be sustained, and on an aesthetic level beauty may be a sustainable parameter. 64 The aesthetic sustainable work of architecture has the timeless quality of the classic and, as such, greater resilience to changing ideas of fashion. It is a work characterised by being a *clear* articulation of a *complex* content and able to be *continuously* experienced aesthetically. In other words, the aesthetic sustainable work of architecture has a capacity to stay meaningful with regard to matter, use and place – even if the world seems to change all the time. It may be continuously re-presented across temporal distance by being experienced each time anew, reaching a renewed state which may be even more durable than the so-called original. It is not dependent on stylistic features, subjective taste or fashion trends. Rather, in the aesthetic sustainable work of architecture, we continue to understand something and ourselves when architectural meaning happens through our participation. The aesthetic sustainable work of architecture has the power to continuously say something true (alétheia) about being in the world.

2006) and Umberto Eco. On Beauty. A History of a Western Idea (London: Seeker & Warburg, 2004). 31 Alexander Gottlieb Baumgarten, Reflections on Po etry (Los Angeles: University of California Press, 1954).

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Page 31, figure 1: A building may be preserved for multiple reasons. The Gudhjem Line station buildings designed by Aage Rafn and Kay Fisker 1915-16 may continuously be experienced as clear and complex works of architecture and may as such potentially be aesthetically resilient. Photo, Victor Boye Julebæk

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## Hands On The Value of Building Culture

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