



The Role of Visitor Centres in UNESCO Designated Sites

6 - 8 October 2019, Bamberg, Germany

Report of the Second Regional Workshop for Europe

2019 | Interpretation of Heritage and
Education for
Sustainable Development



United Nations
Educational, Scientific and
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Regional Bureau
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in Europe

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Bamberg World Heritage Visitor Centre by Linus Lintner

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INTRODUCTION

The definition “**Visitor Centre**”, used within the present framework, refers to any kind of organized service with front-desk activities, the main purpose of which is to facilitate the presentation, interpretation and/or visit of UNESCO designated sites. This concept includes a broad range of different structures, sometimes carrying different names (e.g. “interpretation centre”, “information centre”, “house”, “World Heritage site centre”, etc.).

Although the name “**Visitor Centre**” may imply a focus on visitors as main target group, this definition was taken as reference because of its wide use, while assuming that the role and services of such centres should also be aimed at other key stakeholders, starting from local communities.

Participants in the Bamberg workshop by Jürgen Schraudner © Bamberg City Archives



2nd Regional Workshop for Europe
The Role of Visitor Centres in
UNESCO Designated Sites

Bamberg, Germany
6-8 October 2019

What is this report about, and who is it for?

This document presents a summary of the contents and main outcomes of the second regional workshop for Europe on “The Role of Visitor Centres in UNESCO Designated Sites”, which took place in Bamberg (Germany) on 6-8 October 2019. The meeting was organized by the UNESCO Regional Bureau for Science and Culture in Europe, in cooperation with the City of Bamberg – Bamberg World Heritage Office, the University of Bamberg, the German Commission for UNESCO, and Interpret Europe.

The workshop was part of an inter-sectoral initiative launched in 2018 by the UNESCO Regional Bureau for Science and Culture in Europe, with a first regional workshop in Palermo (Italy)¹ to support the exchange of knowledge and develop capacities on how to improve the contribution of visitor centres to the management of UNESCO designated sites, with special focus on World Heritage properties, Biosphere Reserves, and Global Geoparks.

The workshop placed particular investigative focus on the actual and potential contribution of Visitor Centres

to Education for Sustainable Development through heritage interpretation. Accordingly, this report offers insights into the Visitor Centres’ functions and experience with regards to heritage interpretation as well as a set of recommendations for the existing and future Visitor Centres.

The report is mainly aimed at professionals in Visitor Centres servicing UNESCO designated sites, at their parent institutions and partners, and at whomever is seeking advice on improving the management of existing Visitor Centres in UNESCO Designated Sites. Furthermore, this report is also envisaged to serve as an eye-opener and point of reference for local authorities and/or other actors planning to establish new Visitor Centres in their respective sites.

¹ UNESCO (2018), *The role of visitor centres in UNESCO designated sites: report of the first regional workshop for Europe*: <https://unesdoc.unesco.org/ark:/48223/pf0000369983>

Background

As part of its mission to build peace, eradicate poverty and foster sustainable development through education, science, and culture, UNESCO has developed a system of different but complementary “designations” that recognize the role and value of specific cultural and natural assets in contributing to this mission. These designations include the World Heritage, the Biosphere Reserves, the UNESCO Global Geoparks, as well as others that are not covered by the scope of the present report.

Despite their different institutional and operational frameworks, UNESCO designated sites are all called to act as laboratories of initiatives that enhance the management and safeguarding of cultural and natural resources, while having a direct transformative impact on and of communities and visitors. The sites are thus expected to contribute to UNESCO’s mission of peace and sustainable development in alignment with the United Nations Sustainable Development Goals (SDGs) and the 2030 Agenda.

To support the achievement of common objectives, the sharing of knowledge and the definition of innovative solutions, the UNESCO Regional Bureau for Science and Culture in Europe has developed a set of inter-sectoral and interdisciplinary activities bringing together different kinds of UNESCO designated sites from all over the region. This innovative approach is central to improving the experiences developed at local level by different designated sites, investigating how they contribute to sustainable local development within their different contexts, functions, and roles, and providing them with opportunities to develop capacities and reinforce networking and cooperation.

Within this framework, and building on the increasing demand to explore the role of Visitor Centres in UNESCO designated sites, the UNESCO Regional Bureau for Science and Culture in Europe took the initiative to organize the first regional workshop for Europe on this subject, which took place in Palermo, Italy, on 30 September – 2 October 2018. In the first workshop, the following subjects were identified as main focus areas for Visitor Centres in UNESCO designated sites:

- **Interpretation of heritage and education**
- **Community engagement and community-oriented services**
- **Tourism sustainability and visitors’ management**

As part of the first workshop’s conclusions², participants recommended UNESCO continue supporting similar initiatives to facilitate the exchange of experiences among Centres, to further develop their capacities, and to provide guidance for the establishment of new Centres as well as facilitate their role in sustaining UNESCO’s and its designations’ core values by providing them with contents and tools to convey appropriate messages.

The second regional workshop in Bamberg was launched in order to further explore the role of Visitor Centres in UNESCO designated sites in the interpretation of heritage and in education, as one of the three main focus areas identified. Specifically, the objectives of the workshop were to advance common

² For more information, see the final report of the Palermo workshop.

and individual knowledge on the subject and stimulate critical thinking, provide an opportunity for networking and peer-to-peer exchange and inspire participants to take future action.

Participants in the workshop were representatives of Visitor Centres from 26 designated sites from 21 countries in Europe, selected through a call for applications. The workshop was organized by UNESCO, through its Regional Bureau for Science and Culture in Europe. The City of Bamberg hosted the workshop, in cooperation with the Bamberg World Heritage Visitor Centre, the University of Bamberg Competence Centre for Heritage Sciences and Technologies, the German Commission for UNESCO and Interpret Europe as a technical partner. The organisation of this series of workshops was made possible thanks to the annual contribution of Italy to the UNESCO Regional Bureau for Science and Culture in Europe.

This report of the Bamberg workshop has been released to communicate the outcomes of the workshop to interested audiences, with the intention to raise awareness on the actual and potential role of Visitor Centres in heritage interpretation and education, providing advice for existing and future Visitor Centres and laying the ground for future activities at regional and global level.

How is this report structured?

The report consists of three chapters that present the workshop's concepts, findings and recommendations as discussed by participants during the two sessions of the workshop.

Chapter 1 and Chapter 2 summarize the key messages conveyed in the keynote speeches delivered by the resource persons and the main results of facilitated discussions and group exercises in the two knowledge-sharing sessions which respectively focused on:

- Mirroring UNESCO's learning and teaching concepts in heritage interpretation at UNESCO Designated Sites
- Challenges and opportunities of using information and communication technologies (ICTs) in heritage interpretation

The last chapter puts forward a set of recommendations for existing or new Centres to better perform their core function of heritage interpretation, with emphasis on how to:

- Reinforce the link between people's understanding of heritage and of UNESCO human values through value-based, inclusive, and participatory approaches to interpretation
- Enhance the effectiveness and sustainability of the use of ICTs tools in heritage interpretation

CHAPTER 1

How can heritage interpretation at UNESCO Designated Sites mirror UNESCO's learning and teaching concepts?

by Diana Büttner, Bamberg World Heritage Office



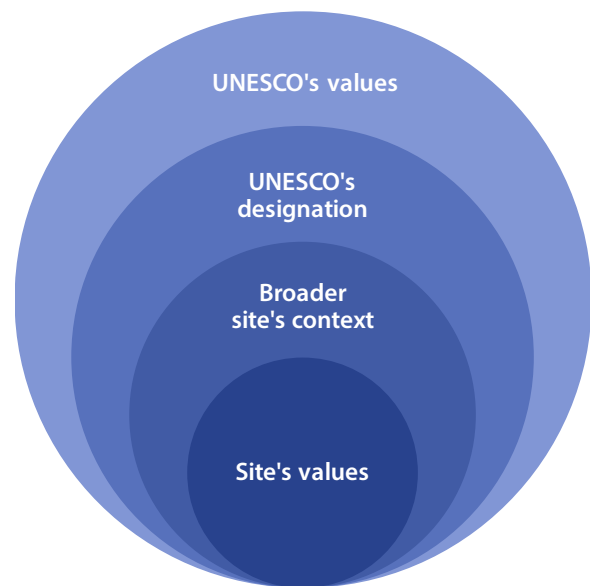


Figure 1 Value levels in UNESCO designated sites
Source: UNESCO 2019: 22

The Bamberg workshop triggered thinking on how visitor centres can use heritage interpretation in a way that such sites become more meaningful to people, working to foster values at multiple values (Figure 1), including:

- the values for which the sites obtained the UNESCO designation
- the sites' broader social, economic, and environmental context
- the related Designations' concept and objectives
- the basic values underlying UNESCO's mission.

Furthermore, the workshop discussed how heritage interpretation can support some of UNESCO's own learning concepts and methodologies, such as Education for Sustainable Development (ESD) and Global Citizenship Education (GCED), and how – in turn – such concepts can help to improve heritage interpretation at site level, considering Visitor Centres at UNESCO designated sites as ideal laboratories in which to develop good practices.

To this end, and using a mix of presentations, front lectures, site visits, structured and free discussions, the workshop intended to:

- introduce heritage interpretation and UNESCO's key learning approaches through presentations and hands-on exercises with special attention on values and frames;
- consider challenges and opportunities when trying to transfer the approach of value-based heritage interpretation to different Visitor Centres and to different media;
- discuss how to involve the heritage community (including local people) as co-creators of interpretive services;
- reflect upon the concept of the Bamberg World Heritage Visitor Centre and invite workshop participants as representatives of visitor centres to contribute with examples how these concepts (or parts of them) are already in place at their sites.

1.1 Keynote*

Heritage interpretation and the present significance of the interpretive approach

In the opening of the first working session, the basic concepts and requirements for contemporary heritage interpretation were presented, along with a presentation of UNESCO's concepts related to Education for Sustainable Development (ESD) and Global Citizenship Education (GCED).

In 1871, the word "interpretation" had been first connected to natural heritage by the conservationist John Muir³. Its basic principles were introduced in the 1950s, especially through the work of Freeman Tilden⁴.

Heritage interpretation is known as a tried-and-tested approach to connect people and places. Through interpretation, people can link heritage experiences to historical facts as well as to their personal concerns, gaining deeper meaning for themselves. How people can be encouraged and enabled to make this link in a non-formal learning context is what heritage interpretation is all about. It turns heritage experiences into sources of inspiration and creativity.

Heritage interpretation is based upon four qualities:

- offering paths to deeper meaning
- turning phenomena into experiences
- provoking resonance and participation
- fostering stewardship for all heritage

The search for meaning is one of the strongest drivers in life⁵. Primarily, contemporary heritage interpretation helps us to understand a site. However, it can also support people in finding meaning for themselves, as it can encourage personal growth by enabling reflecting upon the values and frames that can be linked to this site. Heritage sites are no longer places telling just one story but places to provoke changes of perspective by exchanging different stories.

The meaningful experience of a site can encourage people to consider how to meet present challenges of unsustainable and peace-threatening development. Meaningful interpretation can go beyond understanding the significance of a site in its historic, cultural or ecological context. It does not only foster

John Muir, 1871

“ I'll interpret ... to get as near to the heart of the world as I can. ”

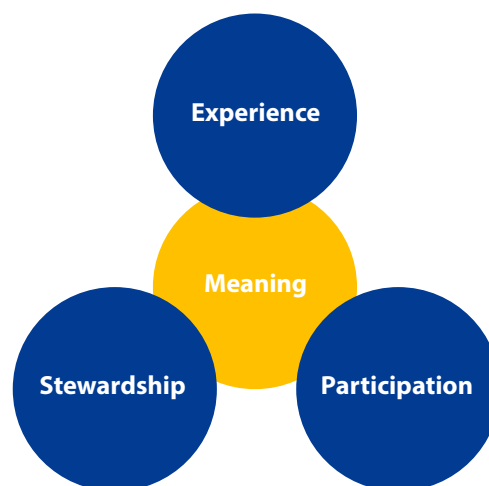


Figure 2 The interpretive triangle

Source: *Interpret Europe 2017*: 10

the link between an individual and a site; the life of an individual person in itself can become more meaningful. If interpreting heritage happens in a way that is truly relevant to the person and his or her own needs, it can therefore also help to enable the individual to master our common future.

Competent interpretive training helps site managers and specialized staff to transfer such findings into different fields of activity such as planning, writing or guiding.

* This text is an abstract from the presentation by dr. Thorsten Ludwig, which opened the first session of the workshop.

³ Wolfe, L. (1978) *The Life of John Muir*. Madison: The University of Wisconsin Press, 144

⁴ Tilden, F. (1957) *Interpreting our heritage*. Chapel Hill: University of North Carolina Press

⁵ Frankl, V. (2004) *Man's search for meaning*. London: Random House

Where does the approach of meaning-making link to UNESCO's key concepts?

By opening non-formal settings to reflection upon core values and frames – such as rule of law, freedom of speech, peace and sustainability – heritage interpretation can help to meet some of the most critical challenges that confront human civilization⁶.

Today, heritage interpretation actors shall seek to adapt the interpretive approach to the challenges of the 21st century. UNESCO designated sites, such as World Heritage Sites, Biosphere Reserves or Global Geoparks can play a prominent role in this regard. As their status makes of them flagbearers of the values underlying UNESCO's mission, they are called upon to serve as learning sites to:

- protect and enhance cultural and natural resources
- communicate and uphold the values that UNESCO stands for
- develop educational approaches supporting both.

UNESCO learning concepts such as Education for Sustainable Development (ESD) and Global Citizenship Education (GCE) should be considered more strongly when developing heritage interpretation and interpretive training in UNESCO designated sites. In many cases, they can be connected to the sites' cultural and natural values, and abstract concepts can best reach the wider public if they are experienced first-hand during an exchange around local ecologies and communities.

■ Education for Sustainable Development (ESD)

ESD "empowers learners to take informed decisions and responsible action for environmental integrity, economic viability and a just society for present and future generations. [...] What ESD requires is a shift from teaching to learning"⁷, providing lifelong learning opportunities for all.

An important role in learning for sustainability play social justice values⁸, including:

- basic human needs
- intergenerational equity
- human rights
- democracy

To be put into place, ESD also requires an appropriate methodology. Key pedagogical approaches of ESD⁹ are:

- learner-centred approach
- action-oriented learning
- transformative learning

Accordingly, guiding and interpretation at heritage sites is different, if it embraces ESD methodological principles, by means of tools and services that may include:

- experiential learning
- storytelling
- values education
- enquiry learning
- appropriate assessment
- future problem solving
- learning outside the classroom
- community problem solving

For example, Interpret Europe's training and certification create a link to those requirements, based on experiences from the Parclnterp project¹⁰. This project aimed to include ESD into heritage interpretation and had one UNESCO Biosphere Reserve among its testing sites and has the objective to turn site visit experiences into a transformative learning opportunity.

⁶ Lehnes, P. (2017) 'What do populist victories mean for heritage interpretation?' In *Spring Event 2017 – Proceedings*, ed. by Interpret Europe Witzhausen: Interpret Europe: 68-92

⁷ UNESCO – United Nations Educational, Scientific and Cultural Organization (2017) *Education for Sustainable Development goals: learning objectives*. Paris: UNESCO Education Sector: 7

⁸ UNESCO – United Nations Educational, Scientific, and Cultural Organization (2010) *Teaching and learning for a sustainable future*: http://www.unesco.org/education/tlsf/mods/theme_gs.html

⁹ UNESCO – United Nations Educational, Scientific and Cultural Organization (2017) *Education for Sustainable Development goals: learning objectives*. Paris: UNESCO Education Sector

¹⁰ Ludwig, T. (2012) *Quality standards in heritage interpretation*. Werleshausen: Bildungswerk interpretation

Transformative learning aims to empower learners to question and change the ways they see and think about the world in order to deepen their understanding of it^{11,12}. The educator is a facilitator who empowers and challenges learners to alter their worldviews. The related concept of transgressive learning¹³ goes even one step further: It underlines that learning in ESD must overcome the status quo and prepare the learner for disruptive thinking and the co-creation of new knowledge.

■ Global Citizenship Education (GCED)

While UNESCO focused on ESD during the Decade Education for Sustainable Development 2005-2014, GCED was introduced in 2014 as “one of its key education objectives for the next eight years (2014-2021)”¹⁴. GCED is understood as a “framing paradigm [...] for securing a world which is more just, peaceful, tolerant, inclusive, secure and sustainable [...] moving beyond the development of knowledge and cognitive skills to build values, soft skills and attitudes among learners that can facilitate international cooperation and promote social transformation”¹⁵.

Therefore, GCED seeks to foster universal values such as justice, equality, dignity and respect and intends to deal simultaneously with personal, local, national and global identities. UNESCO designated sites are outstanding places to reflect upon this since they allow for the consideration of heritage sites against a wider background, and not as evidence to reassure people’s own political or religious convictions.

GCED requires a climate that is open both to participatory approaches fostering cooperation and conflict resolution and also to crucial ideas such as peace and human rights.

How to combine these different concepts?

UNESCO designated sites offer people the opportunity to admire the wonders of the world and to learn more about not only the places they visit or they live in but also other places, other ways of life, and the many values thereby associated. Accordingly, at these sites, heritage interpretation should consider multiple dimensions: starting from the site’s specific values, to the site’s broader territorial and socio-economic contexts, to the

Comment by a workshop participant

“ It was amazing to find out how heritage interpretation can connect concepts such as peace and sustainability through authentic objects to each site. ”

related UNESCO designation’s programme/Convention, and finally to values underpinning UNESCO’s mission and programme.

How can these different dimensions be connected in and through heritage interpretation? And how can interpretation help to foster peace and sustainable development, through ESD and GCED? Two paradigm shifts seem especially necessary:

- **moving from experts interpreting for people, to enabling people to do their own interpretation; and**
- **engaging heritage communities in defining values and in heritage interpretation.**

¹¹ Slavich, G. M. and Zimbardo, P. G. (2012) ‘Transformational Teaching: Theoretical Underpinnings. Basic Principles, and Core Methods’. *Educational Psychology Review*, Vol. 24, No. 4, 569–608

¹² Mezirow, J. (2000) *Learning as transformation: critical perspectives on a theory in progress*. San Francisco: Jossey-Bass

¹³ Lotz-Sisitka, H., Wals, A. E., Kronlid, D. and McGarry, D. (2015) ‘Transformative, transgressive social learning: rethinking higher education pedagogy in times of systemic global dysfunction’. *Current Opinion in Environmental Sustainability*, Vol. 16, 73–80

¹⁴ UNESCO – United Nations Educational, Scientific and Cultural Organization (2014) *Global Citizenship Education*. Paris: UNESCO

¹⁵ UNESCO – United Nations Educational, Scientific and Cultural Organization (2014) *Global Citizenship Education*. Paris: UNESCO

Both trends should shape the definition of learning concepts and processes at UNESCO designated sites, determining the way that heritage interpretation narratives, tools and services are defined and implemented.

In short-term learning experiences with visitors, values can hardly be "taught", and the aim cannot be to "lecture" people. However, different from many other settings, most heritage sites offer the opportunity to experience values and to engage in casual exchange through subjects that can be related to everyday life but are distant enough not to touch the daily political business. Hence, it is critical to consider how human values can be included into interpretive services.

This also requires specific **capacity-building** for all relevant stakeholders, as an integral part of the overall site management system, including for actors such as permanent and seasonal workers, volunteers, private tourist guides, other related business operators, civil society actors, as well as site management authorities and decision makers.

What role do mental frames play in fostering UNESCO's human values?

Whether heritage interpretation at UNESCO-designated sites can support UNESCO's human values depends on the way that it deals with narratives around heritage. According to the linguist George Lakoff, "narratives are frames that tell a story"¹⁶. Such mental frames include surface frames and deep frames.

For example, the idea of "home" might be described by mentioning an armchair, a table or a cabinet. While the list of furniture remains at the surface, in fact "home" has a far deeper meaning which is linked to values. The same is true for all terms that might be called universal concepts¹⁷, including, for example, solidarity, tolerance, freedom and peace. Universal concepts might not mean the same to all people but they are relevant to all people, independent from their origin or socio-cultural background.

Including mental frames when dealing with interpretation can allow one to consider both the universal value of a UNESCO designated site and the human values at the very heart of UNESCO. However,

quite separately from simply providing information, framing an experience for others means to take responsibility towards the heritage phenomenon as well as towards the people. (Figure 3)

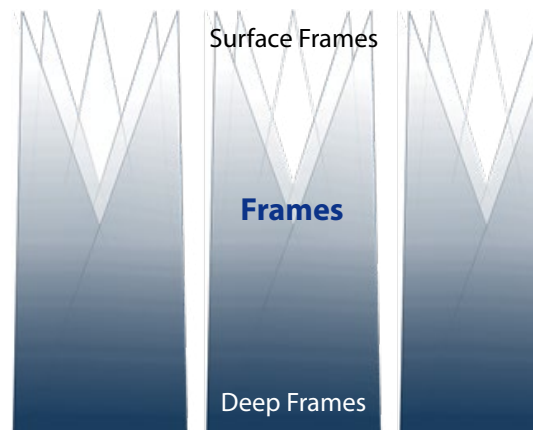


Figure 3 Surface frames and deep frames
Source: Darnton and Kirk 2011: 78

Lakoff¹⁸ explains the process of framing with the example of the "war on terror", launched in 2001 after the attacks on the World Trade Centre in New York. "War" is a deep frame which implies on its surface armies, battles, victims and maybe victory. It includes processes that are usually unacceptable such as killing people. However, these processes go without saying, once the frame has been accepted. An alternative frame to "war", such as "crime", would have implied different concepts (Figure 4):

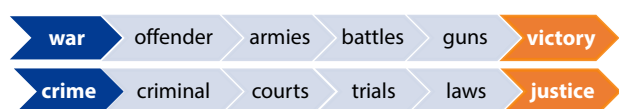


Figure 4 Mental frames and their consequences
Source: Visualization of an example brought up by Lakoff 2008

What we can take from this example is that:

- using mental frames can have a tremendous impact
- different frames can be used to interpret the same site
- through these different frames, different goals may be achieved

¹⁶ Lakoff, G. (2008) *The political mind*. New York: Penguin

¹⁷ Brown, D. (1991) *Human Universals*. New York: McGraw-Hill

¹⁸ Lakoff, G. (2008) *The political mind*. New York: Penguin

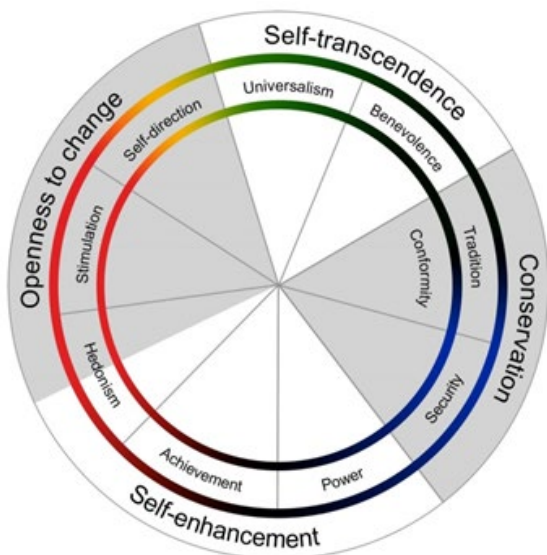


Figure 5 Schwartz' value circle
 Source: based on Holmes et al 2011:16

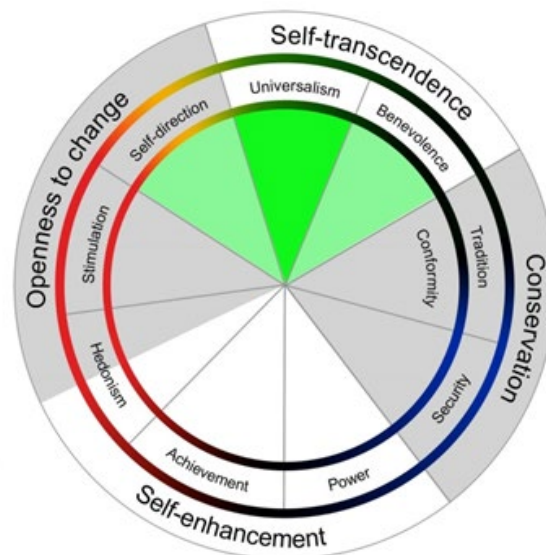


Figure 6 Spillover effect
 Source: based on Holmes et al. 2011 following Schwartz 1992

The stories we offer to people do not only trigger frames that put heritage into context; they can also serve to strengthen (or weaken) specific values. One of the most extensive international studies on human values has been done by Schwartz¹⁹ based on previous work of Rokeach²⁰. Schwartz found that across virtually all cultures of the world, the complete set of values does not differ very much. Any one individual is usually driven by all these basic values in varying degrees; the values are universal. He also found that values appear in relation to other values and therefore all values can be arranged in groups resulting in a "Value Map"²¹. A reduced representation of this map is the value circle (Figure 5).

According to Schwartz, "one basis of the value structure [i.e. the value circle] is the fact that actions in pursuit of any value have consequences that conflict with some values but are congruent with others"²². "The closer any two values in either direction around the circle, the more similar their underlying motivations; the more distant, the more antagonistic their motivations"²³. "For example, pursuing achievement values typically conflicts with pursuing benevolence values. Seeking success for self tends to obstruct actions aimed at enhancing the welfare of others who need one's help. But pursuing both, achievement and power values is usually compatible. Seeking personal success for oneself tends to strengthen and to be strengthened by actions aimed at enhancing one's own social position and authority over others"²⁴.

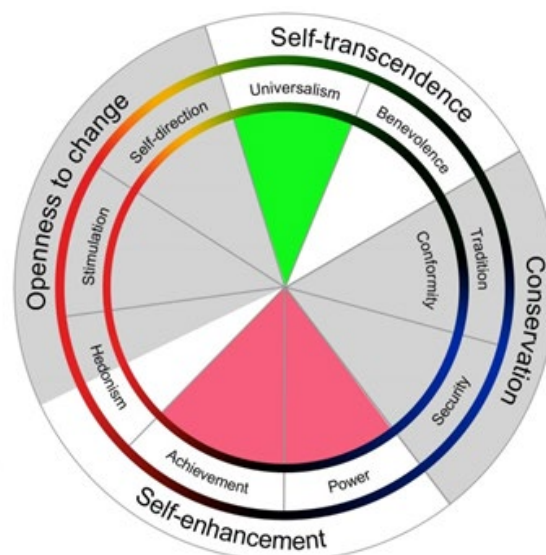


Figure 7 Seesaw effect
 Source: based on Holmes et al. 2011 following Schwartz 1992

¹⁹ Schwartz, S. H. (1992) 'Universals in the content and structure of values: theory and empirical tests in 20 countries'. In *Advances in Experimental Social Psychology* (Vol. 25). ed. by Zanna, M. New York: Academic Press: 1-65

²⁰ Rokeach, M. (1973) *The nature of human values*. New York: Free Press

²¹ Holmes, T., Blackmore, E., Hawkins, R., and Wakeford, T. (2011) *Common cause handbook*. Machynlleth: Public Interest Research Centre

²² Schwartz, S. H. (2012) *An overview of the Schwartz theory of basic values*. Jerusalem: The Hebrew University of Jerusalem

²³ *Ibid.*

²⁴ *Ibid.*

There are two axes running through the value circle:

- a near-vertical axis from more self-transcending values (within the value groups "universalism" and "benevolence") to more self-enhancing values (within the value groups "power", "achievement" and partly "hedonism")
- a near-horizontal axis from more change-based values (the value groups "self-direction", "stimulation" and partly "hedonism") to more conservation values (such as "security", "conformity" and "tradition")

Comparing Schwartz' study to other assessments of values – Inglehart, Rokeach, and Triandis (2010),²⁵ Inglehart and Thomas (2011),²⁶ or Inglehart and Hofgreffe (2015)²⁷ – does not show any significant contradictions. The basic arrangement of the value circle is also in further agrees with the World Value Survey (2018)²⁸, that would locate materialism in the security sector and postmaterialism in the universalism sector^{29, 30}.

In order to answer the question of how interpretation at UNESCO-designated sites can strengthen human values cherished by UNESCO, two effects that were observed within the value circle are especially relevant: the spillover effect and the seesaw effect³¹.

1. The **spillover effect** occurs, for example, people who practice universalism values also start to employ the neighbouring value groups of self-direction and benevolence. This is true for each value group around the circle. (Figure 6)
2. The **seesaw effect** can be observed when emphasizing power and achievement values weakens the opposing universalism values, such as solidarity and peace. Again, this occurs to all value groups within the circle. (Figure 7)

To juxtapose learning experiences at UNESCO-designated sites against this background provides new challenges and opportunities.

While, in general, value-driven attitudes are quite stable, the relevance of single values might change during a lifetime, depending on if and how these values are triggered. Values can be triggered by several factors, including the perceived positive or negative consequences of acting according to them. Learning experiences at heritage sites can therefore not be perceived as isolated from an individual's personal

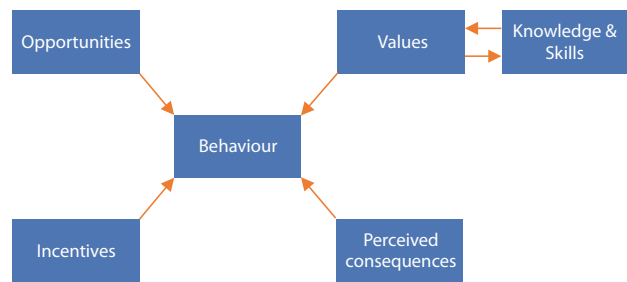


Figure 8 Framework model for environmental action

Source: based on Fietkau and Kessel 1981

environment. (Figure 8)

Only knowledge, skills and values can be influenced directly through learning. While formal assessment systems primarily focus on the acquisition of competences (knowledge, skills and attitudes) in order to train people for specific job opportunities, non-formal learning at heritage sites is usually not limited by such requirements and is therefore free to trigger exchanges about human values.

It is not insignificant that many global values supported by UNESCO are placed around the value group of "universalism" in Schwartz' value circle. According to

²⁵ Mujtaba, B., Manyak, T., Murphy, E., and Sungkhawan, J. (2010) 'Cross-Cultural Value Differences of Working Adult Gen X and Gen Y Respondents in Thailand'. In *The International Journal of Management and Business* (Vol. 1, No. 1). ed. by Russ, M. Silver Spring: The International Academy of Management and Business: 36-62

²⁶ Bartsch, C. and Strack, M. (2011) 'Gemeinsamkeiten und Unterschiede der Kulturvergleichsansätze der World-Value-Map von Inglehart, des Wertekreises von Schwartz und der Kulturstandards von Thomas'. In *Perspektiven interkultureller Kompetenz*. ed. by Dreyer, W. and Höbner, U. Göttingen: Vandenhoeck & Ruprecht

²⁷ Hanke, K. and Boehnke, K. (2015) *Werte und ihre Bedeutung im Coaching*. In *Handbuch Schlüsselkonzepte im Coaching*. ed. by Greif, S. et al. Berlin: Springer

²⁸ Inglehart, R. (2018) *Cultural evolution*. Cambridge: Cambridge University Press

²⁹ Wilson, M. (2005). *A social-value analysis of postmaterialism*. In *The Journal of Social Psychology*, 145. London: Taylor&Francis: 209-224

³⁰ Strack, S., Gennerich, C., and Hopf, N. (2008) 'Warum Werte?' In *Sozialpsychologie und Werte – Beiträge des 23. Hamburger Symposions zur Methodologie der Sozialpsychologie*. ed. by Witte, E. Lengerich: Pabst: 90-130

³¹ Holmes, T., Blackmore, E., Hawkins, R., and Wakeford, T. (2011) *Common cause handbook*. Machynlleth: Public Interest Research Centre

the seesaw effect, it is not useful to foster value groups such as "power" and "achievement" if the aim is to strengthen universalism. However, some heritage sites and historic buildings are prone to such interpretation as other narratives are not considered or less appealing. In fact, many tourists are attracted by stories of power and even cruelty, and local communities may also feel empowered by recalling times when their site might have been much more influential. These are challenges that professional heritage interpretation at UNESCO-designated sites needs to consider.

The relationships among values are also mirrored by a rather timeless model: the value rectangle³². Following this model, for example, conservation is seen as a "sister virtue" (Aristotle) of openness, and one should value the positive tension between both since it can lead to engaged dialogue. On the other hand, confronting opponents with the accusation that they are driven by non-values would lead to negative tensions and open opportunities to populist leaders. (Figure 9)

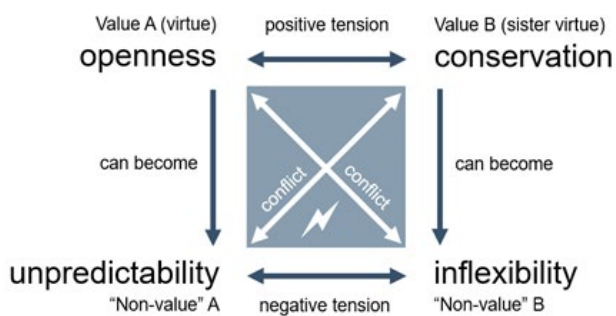


Figure 9 Value rectangle

Source: based on Helwig 1965

These findings call for an interpretive approach that is focused on personal meaning, considers different values and frames, and is characterized by facilitation and mediation. Instead of being places telling a single story, UNESCO-designated sites should foster exchanges about different perspectives in order to "build a sense of togetherness among disparate people"³³. The goal is to understand different perspectives and learn about other views:

- People listen to others to understand how their experiences shape their beliefs
- People accept the experiences of others as real and valid
- People appear to be somewhat open to expanding their understanding of the issue

- People speak primarily from their own understanding and experience
- People work together toward common understanding³⁴

UNESCO designated sites could play a key role in creating and disseminating best-practice examples that could then affect other places around the world. However, this requires a thoughtful and appropriate use of methods and media, which in turn calls for specific training and capacity-building.

³² Helwig, P. (1965) *Charakterologie*. Stuttgart: Ernst Klett

³³ Schircht, L. and Campt, D. (2007) *Dialogue for difficult subjects*. New York: Good Books:19

³⁴ Schircht, L. and Campt, D. (2007) *Dialogue for difficult subjects*. New York: Good Books:10

1.2 Group Exercises

Exercise 1 Detecting values for a peaceful and sustainable future

Participants took part in an exercise that was first developed for a workshop organized by the Common Cause network³⁵ and based upon Schwartz' work on universal values³⁶. Each participant received a copy of a long list of universal values and were asked to individually mark three values that would be most helpful and three values that would be least helpful to fostering a peaceful and sustainable future. After the lists were collected the markings were transferred into a "value map" which depicted the values in relation to one another. For example, social power is mapped close to wealth because many people who value wealth also value social power, while for the same reason, social power and equality are mapped further apart. As previously mentioned, the value circle is a reduced representation of the entire value map.

The result of above-mentioned exercise was that most participants saw the values they deemed to be less helpful to foster a peaceful and sustainable future in the lower part of the value map/circle around the value group "power", while those they deemed to be helpful were concentrated in the upper part, around the value group "universalism".

It is interesting to note that, generally, replications of this exercise yield similar results, regardless of the origin and socio-economic background of respondents. In particular, self-transcending values are mostly considered as leading to peaceful cooperation and to a more sustainable future, while political systems are organized around power and achievement values.



Comment by a workshop participant

To see UNESCO's human values as the roof or umbrella under which all UNESCO-designated sites should operate, was essential. ”

³⁵ Holmes, T., Blackmore, E., Hawkins, R., and Wakeford, T. (2011) *Common cause handbook*. Machynlleth: Public Interest Research Centre

³⁶ Schwartz, S. H. (1992) 'Universals in the content and structure of values: theory and empirical tests in 20 countries'. In *Advances in Experimental Social Psychology* (Vol. 25). ed. by Zanna, M. New York: Academic Press: 1-65

Exercise 2 How could a medieval pile shoe trigger universal values?

For many centuries, timber has been an important resource in the construction of buildings. Some types of wood are durable when not exposed to oxygen. For this reason, timber piles have been used as piling foundations below groundwater level, such as in Venice and Amsterdam. This also occurred on the islands on the Regnitz river in Bamberg, where the pointed end of long timber piles were fitted with iron shoes, to expedite anchorage into the ground. One of those ancient pile shoes was recovered during construction works for the new World Heritage Site Visitor Centre in Bamberg and placed in the middle of the seminar room as an original heritage object around which the exercise was organized.

Prior to the exercise, participants received an introduction on universal concepts³⁷. Universal concepts are concepts that are meaningful to almost all people around the world, independent from their social or cultural context. There are many such concepts, including family, home, death, freedom, and care. Some of those concepts were introduced and participants were broken into small groups and asked to which universal concepts could be connected to that medieval pile shoe in order to make it meaningful to people who may not be immediately interested in pile shoes, construction works, archaeology, etc.

Participants came up with the following ideas on what that pile shoe could stand for:

- Mastering challenges and finding solutions (ingenuity)
- Create stability in an unstable environment
- Create a space for living in harsh conditions

Subsequently, participants were invited to recount stories about how the pile shoe related to each of these three concepts, proving how close those concepts could relate to everyone and how effectively they “spoke” to them.

Comment by a workshop participant

“

To look ‘behind’ a heritage object in order to search for meaning behind the facts was the best exercise and an eye-opener.

”

The exercise demonstrated that heritage interpretation is not just about organizing facts according to subject areas (e.g. Medieval mills in Bamberg, or expanding the town along the river) but instead about elaborating and presenting information around meaningful ideas to ensure that they are relative to the people’s own world and inner self. Participants found that this worked best when they stuck to the very object (i.e. the pile shoe) and to their stories about it, and did not look at it “from a distance” by categorizing it, or include facts that were distracting because they had nothing to do with that story. Organizing facts around meaning is different from many formal learning approaches.

³⁷ Brown, D. (1991) *Human Universals*. New York: McGraw-Hill

Exercise 3 Looking at Bamberg World Heritage Centre through interpretive eyes

While the old town of Bamberg was inscribed as UNESCO World Heritage in 1993, the Bamberg World Heritage Site Centre did not open until 2019. Today, its exhibition consists of three parts, each corresponding to the different components of the World Heritage property, providing information on:

- the city on the seven hills, crowned by churches which includes Bamberg Cathedral
- the island district at the River Regnitz wherein the visitor centre is based
- the market gardeners' district with its urban horticulture

Immediately after the opening session, participants enjoyed a guided tour through the new Visitor Centre. They were subsequently asked to divide into three groups, with each group focusing on one part of the exhibition. They were asked to have a look at the exhibition, consider some of the following questions and come up with a strong idea around which a single exhibit object could be organized:

- Can we link the subject to a universal concept?
- What different perspectives on the subject could we offer?
- Is there any original object that could be experienced?
- Is there a strong story or big idea behind that we could bring up?
- Through this object, can we refer to heritage in other parts of the world?
- Can we use this to link the past to the future?
- How can we get visitors in exchange with each other?
- Can we encourage visitors to relate to their daily lives?
- Is there a way to involve local people?

Comment by a workshop participant

“

It was critical to understand the relation between different levels of values around UNESCO designated sites and to experience how the interpretive approach can help bringing those levels together. ”

Participants introduced their results to the plenary and discussed different approaches, resulting in a lively debate that proved the relevance of the subject to participants' expectations from the workshop.

1.3 Conclusions

Participants agreed that:

- Being part of a UNESCO network of sites means joining an international community with a common cause, aligned with UNESCO's mission and fundamental values.
- World Heritage, the MAB programme, and the UNESCO Global Geoparks programme share the duty for their designated sites to engage with education and awareness, leveraging local cultural and natural assets through appropriate communication measures. This duty should form the core mandate of the Visitor Centres at such sites, and inspire their activities.
- In order to better perform this role, Visitor centres in UNESCO designated sites should move from heritage presentation as a one-way communication process to heritage interpretation as a 2-way process with a view at linking the provision of basic information on the sites with the universal subjects and values that inspire UNESCO's mandate, based on direct experience.
- Accordingly, Visitor Centres should develop their capacities with regard to heritage interpretation, in the sense of reinforcing relevant knowledge, skills, resources (human and financial), ethics, tools and contents, including through specialized training. Capacity building efforts should include permanent and seasonal workers, volunteers, tourist guides, other related business operators, civil society actors, as well as the site management authorities and decision makers (and least in terms of awareness raising).
- Heritage interpretation in UNESCO designated sites should engage different community actors as co-creators, in order to encourage local people to take ownership, trigger the exchange of different points of view about why heritage is important, activate critical and self-critical reflection on different narratives, to better align them with UNESCO's core values and a deeper understanding of sustainable development.
- Educational tools already developed by UNESCO, such as Education for Sustainable Development and Global Citizenship Education, which can help to advance the Centres' efforts with regards to heritage interpretation. Accordingly, Centres should engage in mastering those tools and using them regularly, consistently and effectively in their heritage interpretation activities.
- Heritage interpretation should be an integral part of a site's management strategy. In general, management plans should also serve as tools to create an interpretative framework for the management of complex assets.
- Visitor Centres should be able to address different target groups (visitors and local communities; adults and children; superficial and in-depth engagement levels; etc.), as part of a coherent interpretation strategy.
- UNESCO sites can be lighthouses to set standards on heritage interpretation for other heritage sites.
- Whether heritage interpretation in UNESCO designated sites can support UNESCO's human values depends on the way that it deals with narratives around heritage.

CHAPTER 2

Using Information and Communication Technologies (ICTs): challenges and opportunities

Exhibition in Bamberg World Heritage Visitor Centre by Linus Lintner



Information and communication technology (ICT)

refers to technologies that provide access to information through telecommunications. ICT covers both the hardware (the equipment/devices) and the software (the computer programmes in the equipment), including computers, mobile phones, digital cameras, satellite navigation systems, electronic instruments and data recorders, radio, television, the Internet, wireless networks, and other media.³⁸

In the past few decades, ICT has provided society with a vast array of new communication capabilities. The advent of the Internet delivered unheard-of quantities of information to people. The evolution of the Internet from Web 1.0 to Web 2.0 (also known as Participatory Web or Social Web) offered individuals the tools to connect with each other worldwide and to become producers and users of content. Innovation in digital technologies and mobile devices offers individuals a means to connect anywhere anytime where digital technologies are accessible.³⁹

UNESCO recognizes the potential of ICT to complement, enrich and transform education for the better and has been working on enhancing the understanding of the role that such technology can play to accelerate progress toward Sustainable Development Goal (SDG) 4 of Quality Education. As noted in the Preamble of Qingdao Declaration⁴⁰, equitable and inclusive access to quality education for is imperative for building sustainable and inclusive knowledge-based societies.

Meanwhile, the role of ICT in the preservation and exploitation of heritage is also widely recognized. At the EU Digital Day 2019, the Declaration of Cooperation on Cultural Heritage⁴¹ was launched with the visions to facilitate 3D digitization of cultural heritage in Europe, to enable re-use of digitized culture resources to foster citizen engagement and spill-over in other

sectors, and to enhance cross-border cooperation in the pan-European region and reinforce cross-sector partnerships between culture and tourism ministries and organizations.

Standing at the intersection of education and heritage conservation, heritage interpretation can benefit from the application of ICT in terms of quality content production, effective information dissemination, efficient service provision, etc. In this regard, Visitor Centres in UNESCO designated sites are called on to seize digital opportunities to better conduct their mission of heritage interpretation and, in the meantime, be aware of the implications and challenges of using ICTs.

³⁸ UNESCO – United Nations Educational, Scientific and Cultural Organization (2018) *ICT Competency Framework for Teachers*: 68

³⁹ Van Weert, T. J. (2006). *Education of the twenty-first century: New professionalism in lifelong learning, knowledge development and knowledge sharing*. *Education and Information Technologies*, 11(3), 217-237

⁴⁰ UNESCO – United Nations Educational, Scientific and Cultural Organization (2015) *Qingdao Declaration: Seize Digital Opportunities, Lead Education Transformation*. <https://unesdoc.unesco.org/ark:/48223/pf0000233352>

⁴¹ CoE – Council of Europe (2019) *Declaration of cooperation on advancing digitisation of cultural heritage*

2.1 Keynote*

To date, ICT has been widely used in many key nodes of the “Heritage Chain”⁴² such as preservation, conservation, research and presentation.

For **diagnostic, research and preservation** purposes, digitization technologies, such as laser scanning, photogrammetry and 3D modeling, prove powerful tools in terms of the measurement, recording, documentation and virtual reconstruction of built heritage. This is especially useful to preserve the knowledge of heritage artefacts, museums, monuments, documents and sites threatened by nature disasters, pollution, mass tourism, deterioration over time, terrorism and vandalism. With the aid of digital manufacturing technologies like 3D printing, the collected data sets of heritage can also be used to produce fragments of heritage for restoration and to make scale replications for presentation.

When it comes to heritage **interpretation**, ICTs can help to stimulate curiosity, increase effectiveness and create immersive experiences for visitors. When combined with advanced ICTs such as Audio-visual media, Holography, Panorama, Augmented Reality (AR) and Virtual reality (VR), the digitalized heritage resources can be re-used to develop educational products like documentaries, animations, games, and mobile applications to present heritage in a more comprehensive, engaging, and fun way. For example, in an educational VR game set in a historic city, people might better understand the evolution of urban fabric over time and experience the lifestyle in ancient times with virtually reconstructed monuments and the

animation of living scenes embedded in the virtual world.

Moreover, ICT is crucial to increasing **heritage accessibility** for current and future generations, for leisure, study or working purposes. Developing virtual tours can help relieve the pressure on some over-visited destinations or in sites where access is restricted due to safety, security or conservation reasons. Online access and social media promotion activities may increase the visibility of minor sites and broaden their potential target audience. Additionally, using multi-media, multilingual tools developed by ICT can help extend the range and level of engagement by overcoming the languages barriers and physical disabilities.

ICT can also serve as monitoring and measurement tools for sites, supporting the collection and analysis of visiting data in order to optimize visitors’ **management** and to improve the visiting experience.

Despite all the opportunities ICT can bring about to facilitate heritage interpretation and relevant activities, **ICT is not a panacea**. Using ICTs has **restrictions and (overt and hidden) costs** which should be taken into consideration together with its benefits.

* *This text is an abstract from the presentation by prof. Mona Hess, which opened the second session of the workshop.*

⁴² *Zan, L., & Baraldi, S. B. (2013). The heritage chain management. General issues and a case study, China. Journal of cultural heritage, 14(3): 211-218*

First and foremost, a virtual visit cannot replace the authentic on-site experience. While it may prove effective in recording visual (e.g. spatial, locative, color) characteristics of a site, ICT is not able to fully capture and reproduce the “aura”⁴³ or “genius loci” (i.e. the spirit of a place)⁴⁴. Both of the two concepts “aura” and “genius loci” highlight the unique existence of the authentic object/site and the intangible dimensions contained in its original presence, which can be perceived by multiple senses of the audience (e.g. sight, hearing, smell, touch, taste) and may vary from person to person due to their diverse background, experiences, history knowledge, collective and personal memory, etc. Capturing the unique atmosphere of a place, involving its tangible and intangible aspects, is crucial for meaning-making interpretation, which aims to link the perceptive and thinking processes of the audience and this poses a complex and difficult challenge for the assisting technologies.

Secondly, **using ICT can be costly**. Digitally bringing historic sites back to life sounds exciting but there are notable gaps between discourses and the reality. The effect of most pervasive foundational technologies may not be satisfactory enough while the state-of-the-art technologies could be prohibitively expensive. Considering that presentation/interpretation is the “final product” of the “Heritage Chain”, the total cost of quality presentation products/services involves not only the cost of the presentation devices and their maintenance and upgrading, but also the investment in the previous recording, modeling, research etc. phases for the contents production and in the technical training for staff.

Thirdly, the **effectiveness of a representation is not necessarily associated with its precision**, such as the resolution of an image. With the advanced ICTs available, there is a tendency for photorealistic or even hyper-realistic representations to be considered as easier to understand. However, the most accurate image may not recall the “aura”/“genius loci” due to it being too concrete or eye-catching and taking up the space for personal feeling, imagination and thinking.

On the contrary, sometimes the unique atmosphere of the place might be recalled with the use of literal representations, or hand drawings, which stimulate audience’ curiosity and sensitivity.⁴⁵

This phenomenon reminds us that it is necessary to maintain a balance between the objectivity of forms and the subjectivity of experiences related to the place. We should pay attention to the real “effectiveness” of using ICT for heritage interpretation, especially in terms of recalling the “aura”/“genius loci”, establishing emotional connection, and ultimately arousing resonance in universal values. In other words, we should keep in mind that heritage interpretation should not only convey factual information but should also realize place-making, meaning-making, and value-making.

In addition, **using ICT tools is better accompanied with on-site experience whenever possible** and the role of traditional/“low-tech” measures like narrative, face-to-face interaction should not be underestimated and laid up.

All appropriate **technologies** to support heritage interpretation should be **identified and integrated in accordance with their specific conditions, being complementary to each other** to enhance the effectiveness, efficiency, and sustainability of the whole system.

After all, ICT is a promising tool but not the purpose per se.

⁴³ Benjamin. W (1935) *The Work of Art in the Age of Mechanical Reproduction* (repr2001). In: Thomas J (ed) *Reading images*. Palgrave, Basingstoke: 62–75

⁴⁴ Norberg-Schulz C. *Genius Loci: Towards a Phenomenology of Architecture* (1979)[J]. *Historic Cities: Issues in Urban Conservation*, 2019, 8: 31

⁴⁵ Kepczynska-Walczak, A., & Walczak, B. M. (2013, September). *Visualising» genius loci «of built heritage!*. In *Proceedings of the 11th Conference of the European Architectural Envisioning Association, Envisioning Architecture: Design, evaluation, communication: 23-28*

2.2 Group Exercises

Participants were divided in three groups and group discussions were organized around the following three sets of questions:

1. Which ICT tools do exist? Which ICT tools do you use in your Visitor Centre?
2. How are these ICTs used in your Visitor Centre? What goals are following? How efficient are those tools?
3. What are the potentialities and criticalities of ICTs in the context of Visitor Centres/heritage interpretation/education? What is your vision for new developments and functionalities of ICTs?

Exercise 1 Which ICT tools do exist? Which ICT tools do you use in your Visitor Centre?

Participants identified a variety of existing ICTs and the supporting infrastructures/devices in the input, process and output phases as per their knowledge and experiences. Among these ICTs, the widely used tools in their Visitor Centres include screens and projections for introductory videos, touchscreens for interactive introductions, audio guide for self-guide, web and social media for promotion purpose, mobile applications and QR codes to ease the access, etc.

ICTs

Audio
Sound shower
Video
Animation
Projections
Holograms
NFC (Near-Field Communication)
Bluetooth
3D scanning
3D printing
Virtual Reality
Augmented Reality
GPS (Global Positioning System)
GIS (Geographic Information System)
.....

ICT devices / infrastructure

Output & Connection

Radio
Speaker
Screen
Projector
VR glasses
Cinema
Desktop
Laptop
Tablet
Touch tablet
Beacon system
Smartphone
Mobile application
Website
QR code
.....

Input & Processing

Camera
Drone
3D scanner
3D printer
Computer
Software
.....

Exercise 2 How are these ICTs used in your Visitor Centre? What goals are following? How efficient are those tools? Is there any measurement?

ICTs and the usage in Visitor Centres were identified as follows:

- **Videos, films, screens and projections** are usually used at the beginning of tours, as an introduction to the site. Despite not being overly interactive, they can be used to create an atmosphere and to present the process of construction, production, etc. Language barriers, contents and spatial requirements are some of the issues to be considered when deciding to use these tools.
- **Webpages** provide visitors with information, image and other resources. In particular, Social Media is used to share developed contents with a broader audience, to increase the visibility of Visitor Centres and their activities, and to attract potential visitors.
- **Touchscreens** are used to present maps, pictures, texts, timelines, animations/stories etc in an interactive way. They can provide educational games, create an engaging experience, supply choice-based info, and can be used to explore ancient art in detail.
- **Mobile applications** can increase accessibility to information if used properly.
- **Audio Guide** is used for self-guiding, which is popular among independent visitors. It can provide additional explanatory information in various languages and offer narrative guide along planned tour routes in the site.
- The **Sound Shower** is a contained audio delivery system ideal for directing high performance audio, such as music, messaging, broadcast audio or special effects to an exact spot or small area. This technology creates an immersive experience for visitors.
- **Augmented reality (AR)** is an interactive experience where real objects and environments are enhanced by computer-generated information. Virtual models and presentations created through this technology can be useful to engage visitors, adding extra layers of information. It can be also used outside Visitor Centres for education activities.
- **Beacons** are small wireless transmitters able to send signals to smart devices, such as smartphones and tablets and make them perform actions when close to a signal projector. This Near-Field Communication technology is used in Visitor Centres for sharing information with visitors when they are close to certain spots, providing interpretation to the specific exhibits.
- **3D scanning** is the process of analysing objects or environment in order to collect data on its shape and appearance, such as colours. Then data can be used to make digital 3D models. This ICT is useful to create database for research and to present inaccessible places.

ICTs are applied to:

- Enhance the quality of the contents
- Raise effectivity and efficiency of interpretation
- Improve accessibility to contents
- Overcome language barriers
- Ease visitors' management
- Attract visitors' attention
- Increase visibility of the site
- Reduce consumption of resources and be more environmentally friendly

Most of the ICT tools were considered effective and efficient by participants. It was noted that the quality of contents and the usability of software largely determine the efficiency of technologies. **The efficiency of ICTs can be measured by:**

- Sales records of supporting devices
- Dwelling time of visitors
- Observation of visitors' behaviours
- Visitors' feedback

Exercise 3 What are the potentialities and criticalities of ICTs in the context of Visitor Centres/ heritage interpretation/education? What is your vision for new developments and functionalities of ICTs?

Potentialities:

Accessibility
Attraction
Preservation

... ..

- Achieve virtual accessibility for all, especially when physical visits are limited due to conservation reasons, carrying-capacity of sites, geographical inaccessibility, time restriction of certain events, the physical disabilities of audiences, etc.
- Be powerful tools to attract and impress visitors through providing novel, lively and immersive experiences.
- Preserve lasting memory for future generations by digitalizing all the heritage and establishing open-access repository.
- Revive the past in the virtual world through digital reconstruction.

Criticalities:

Quality
Cost
Authenticity
Reliability
Security

... ..

- Quality contents lie at the heart of heritage interpretation with technologies being supporting tools.
- Cost of the purchase, maintenance and upgrading of hardware and software and the hiring and training of capable personnel during the whole project cycle is crucial to its economical sustainability.
- Illustration of assumptions, inferences and imaginations in the case of a virtual reconstruction of no-longer existing heritage could be misleading if there is no sufficient and effective clarification.
- Possible technical failures undermine the reliability of the high-tech tools.
- Virtual experience cannot replace authentic experience for the former not being able to capture many intangible attributes of a heritage site which only exists in its unique original presence.
- Risk of possibly reduced interpersonal interaction should be aware.
- Concerns over the issues of ethics, data security and human rights are rising alongside the penetration of ICTs in educational activities.

Visions:

Intelligent
Powerful
Joyful
Engaging
Affordable
Sustainable

... ..

- AI is expected to be applied to provide fully customized interpretation services, catering to the diverse needs of all ages, backgrounds, personal preferences, etc.
- AR is considered promising in enhancing direct experience, allowing the authentic context of a site to be overlaid with explanatory information in forms of narrative audio, digital 3D, etc.
- VR is envisaged to generate real “time travel” experience in the Centres with hyper-realistic, 360°, and multi-sensory representation and portable devices.
- The potential of ICT in visitor management and overcoming language barrier should be further explored. For example, software could be developed to inform visitors about the best time to visit certain spots and to translate narratives into any language needed.
- ICT is expected to be more engaging and interactive to collect data and feedback from visitors and also to facilitate exchanges among visitors, interpreters, local communities, etc.
- While being more powerful and intelligent, ICT tools are also expected to become more affordable, interoperable, reliable and thus sustainable.

2.3 Conclusions

Using ICTs in visitor centres poses challenges and opportunities that are to be dually considered when deciding on the tools and its use. In particular:

Opportunities:

- Virtual/augmented reality can bring added value to the direct experience in terms of information, understanding, stimulating curiosity, etc.
- Through virtual access, ICTs can help respecting the carrying capacity of sites (reducing pressure due to direct visits) or allow appreciating inaccessible sites.
- ICTs, besides being very powerful tools for diagnostic, research and conservation purposes, can help collecting and analyzing data to improve visitors experience and facilitate visitors management.
- ICTs can help extending the range of approaches to facilitate universal access, in terms languages, levels of engagement, etc.
- ICTs can help reducing the ecological footprint of sites, contributing to environmental sustainability (e.g. reducing printed materials, using renewable resources, improving mobility efficiency, etc.).

Challenges:

- ICTs have overt and hidden costs that can undermine their sustainability (related to purchase, maintenance, upgrade, supplies, training, etc.). Their effectiveness also depends on the quality of contents and hardware, which also can be very costly.
- Virtual/augmented reality should accompany the direct experience whenever possible, and not replace it. Exclusive virtual experience does not allow for effective heritage interpretation, being that the latter is based on human interaction and 2-way communication.
- ICTs are to be used if and when necessary, and decisions on their choice and use should be taken at the end of the interpretative planning process, as a consequence of it, in a need-driven rather than technology-driven approach
- Possible consequences on the local labour market are also to be considered, i.e. the use of technology should ideally create new opportunities, rather than provoke the loss of jobs.

RECOMMENDATIONS

Being part of a UNESCO network of sites means joining an international community with a common cause, aligned with UNESCO's mission and fundamental values. Designated sites such as World Heritage properties, Biosphere Reserves, and Global Geoparks are all called upon to uphold and communicate those values, including through combining heritage interpretation with Education for Sustainable Development, also serving as lighthouses for other heritage sites.

The duty related to education through value-based heritage interpretation should form the core mandate of the Visitor Centres in UNESCO designated sites and inspire their activities. Visitor Centres are thus recommended to:

- **Work on multiple value layers.** In UNESCO designated sites, heritage interpretation should consider multiple dimensions: starting from the site's specific values, to the site's broader territorial and socio-economic contexts, to the related Conventions/Programmes, to the universal values underpinning UNESCO's mission to foster peace and sustainable development.
- **Adopt integrated approaches.** Visitor Centres at such sites are called upon to test and develop educational approaches through value-based heritage interpretation, by combining heritage interpretation theory and practices with other educational concepts and tools already developed by UNESCO (e.g. Education for Sustainable Development and Global Citizenship Education).
- **Engage for exchanging.** Like other educational activities with the ambition of social transformation, heritage interpretation in UNESCO designated sites requires an interactive and participatory approach, moving from a one-way communication process to a two-way interpretation dynamic, allowing for self-interpretation and value-exchanging. In this context, the definition of a site interpretation strategy should serve as opportunity for the Centres to engage a variety of stakeholders as co-creators (e.g. visitors and local communities; different age groups; different interests and capacity of engagement), with a view at triggering exchange of perceptions of values around heritage and their own life, as part of an inclusive, participatory, open-ended process.
- **Facilitate and mediate for possible transformation.** In such non-formal learning context of heritage interpretation, Centres should be able to facilitate and mediate free discussions around heritage, providing tailored narratives in response to different perceptions of values expressed by different groups or audiences. If dealt with wisely, narratives can service as a powerful tool for arousing resonance or self-critical reflection, to better align with universal values that UNESCO stands for, such as peace and sustainable development.
- **Invest in capacity building.** Developing knowledge and skills of staff on heritage interpretation should be a priority for Centres, as a continuous activity assigned with adequate financial and human resources. This applies first of all to and the overall heritage interpretation methodologies, but also to related competences in terms of community engagement, visitors management, using ICT tools, etc. Whenever possible, training should be extended to volunteers, local community, tourist guides, and other relevant stakeholders.

Participants expressed their wish that UNESCO continues this initiative with other regional workshops, covering the remaining two focus areas identified in 2018 i.e. **visitors management**, and **community engagement**. The **financing/economic sustainability** of the Centres was also proposed as a possible additional subject.

When deciding on using ICT tools for its activities, Visitor Centres should take both the opportunities and challenges into consideration. This requires that Centres:

- **Focus on contents and apply technologies when necessary and appropriate.** Decisions on the choice and use of ICTs should be taken at the end of the interpretative planning process, as a consequence of it, in a need-driven rather than technology-driven process. In addition, technologies need quality contents in order to be affective, and contents development requires adequate consideration in terms of planning and budgeting (including for capacity-building).
- **Preserve resources and open access.** Digital resources, such as photographs, 3D data of structures and topography, and testimony audios, generated during the interpretive projects should be preserved properly for future research, conservation and interpretation activities. Whenever possible, Centres are suggested to join in open-access digitalization platforms at local/national/regional/global level in order to contribute to and benefit from resource-sharing.
- **Aim at engaging and exchanging.** Centres should make the best of ICTs to increase the target visitors on-site and/or reach broader audiences from a distance, depending upon specific circumstances of their carrying-capacity, geographic accessibility, conservation needs, etc. Ideally, ICT products or services should trigger and facilitate exchanges among visitors, staff, local communities, etc. rather than reduce interpersonal interaction.
- **Monitor effectiveness.** It is important for Centres to be aware whether and how the envisaged added value of using ICTs is generated in practice. The monitoring and evaluation activities should focus on multiple dimensions, such as the effectiveness of ICTs in communicating information, deepening understanding, and generating emotional connection, and can be done by day-to-day observation, feedback survey, statistical analysis, and other suitable measures.
- **Plan for sustainability.** Considering the sizeable overt and hidden cost of using ICTs related to supplies, maintenance, upgrade, training, etc., long-term exploitation strategies of ICT should be in place to enhance the Centres' financial sustainability. Practical measures, such as combining with economic "low-tech" tools and reusing digital resources, should be identified to control the cost and maximize the benefits.

ANNEXES

- 1 | Programme
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Annex 1

Programme

Day 1 | Opening Session

6 October 2019

Venue Bamberg World Heritage Visitor Centre
(Untere Mühlbrücke 5, Bamberg)

18.00

Welcome addresses

- City of Bamberg, Mayor Dr Christian Lange
- UNESCO, Jonathan Baker, Head of Science Unit, UNESCO Regional Bureau for Science and Culture in Europe
- Centre for Heritage Conservation Studies and Technologies / University of Bamberg, Prof. Paul Bellendorf
- German National Commission for UNESCO, Secretary-General Dr Roland Bernecker

18.35

Keynote: Communicating World Heritage – a Guide for World Heritage Information Centres by Carolin Kolhoff, German National Commission for UNESCO

18.50

Presentation of the programme by Matteo Rosati, Programme Specialist, UNESCO and Thorsten Ludwig, Managing Director, Interpret Europe

19.15

Tour through the exhibition with Patricia Alberth, Site Manager

Day 2 | **Work Session 1**
7 October 2019

Venue University of Bamberg, Centre for Heritage Conservation Studies and Technologies

Facilitator Thorsten Ludwig, Interpret Europe

09.00 **Keynote: How can heritage interpretation at UNESCO Designated Sites mirror UNESCO's learning and teaching concepts?**

10.00 Information and interpretation in the exhibition of the World Heritage Visitor Centre (groups reflecting individual exhibits)

11.00 Presentation and discussion of the results of the group work

12.15 Exchange of experiences with key elements of heritage interpretation (plenary)

14.30 The role of values and frames in engaging people at UNESCO designated sites (presentation involving the exercise introduced before the lunch break)

15.15 Exchange about ways how engagement with UNESCO's shared values is encouraged (or could be encouraged) at the participants' own sites (work in pairs)

15.45 Flashlight circle introducing each idea in one sentence and placing it on the board

16.30 Wrap-up

18.00 Public discussion on Visitor Centres at the University of Bamberg (optional)

Day 3 | **Work Session 2**
8 October 2019

Venue University of Bamberg, Centre for Heritage Conservation Studies and Technologies

09.00 **Keynote: Using information and communication technologies (ICT): challenges and opportunities**

Prof. Mona Hess, Chair for Digital Heritage Technologies, University of Bamberg

10.00 Group work

12.00 Presentation of group work results and discussion

14.15 Guided tour through the World Heritage site of Bamberg (Anneke Groot)

15.45 Visit to the information centre of the former Benedictine monastery St. Michael

17.00 Presentation and discussion of the instant report / conclusions

Annex 2

List of participants

Table 2.1 List of participants to the workshop

No.	Participant	Role/Organization* *if different from the Centre	Visitor Centre
1	Alexandru Andrasanu	Director of the Hațeg Global Geopark	Hațeg (UNESCO Global Geopark; Romania)
2	Serenella Capelli	Visitor centre manager	Copper Coast (UNESCO Global Geopark; Ireland)
3	Nikoloz Chaduneli	Educational Programme Specialist / The Great Mtskheta Archaeological State Museum -Reserve of National Agency of cultural heritage preservation	Historical Monuments of Mtskheta (World Heritage; Georgia)
4	Read Gasimov	Chief of Staff, City of Baku	Walled City of Baku with the Shirvanshah's Palace and Maiden Tower (World Heritage; Azerbaijan)
5	Susanne Hauer	Junior World Heritage Coordinator / City of Regensburg	Old town of Regensburg with Stadtamhof (World Heritage; Germany)
6	Nicholas Hotham	Head of External Relations, Edinburgh World Heritage	Old and New Towns of Edinburgh (World Heritage; United Kingdom)
7	Liliana Ivancenco	Chief of Department for Internal and International relations	Danube Delta (Biosphere Reserve; Romania)
8	Damijan Jaklin	Mayor, Municipality of Velika Polana	Mura River (Biosphere Reserve; Slovenia)
9	Christopher Jones	Regional Visitor Operations Manager	Heart of Neolithic Orkney (United Kingdom)
10	Tiiu Kreegipuu	Coordinator of Educational Activities, University of Tartu Museum (Estonia)	Part of the transnational World Heritage property "Struve Geodetic Arc"
11	Michalis Lychounas	Archaeologist / Curator; Hellenic Ministry of Culture	Archaeological Site of Philippi (World Heritage; Greece)
12	Javier Navarette Mazariegos	Head of Service for Public Use in Protected Areas / Regional Ministry of Environment and Land Use Planning of Andalusia	Sierra Norte de Sevilla (UNESCO Global Geopark and Biosphere Reserve; Spain)
13	Joana Mikulska	Manager of Visitor Centre; City of Vilnius	Vilnius Historic Centre (World Heritage; Lithuania)
14	Rachel Peltier Muscatelli	Head of Research and projects department	Pont du Gard (World Heritage; France)
15	Monika Pravdova	Head of Tourism and Marketing, Kutná Hora	Kutná Hora: Historical Town Centre with the Church of St Barbara and the Cathedral of Our Lady at Sedlec (World Heritage; Czech Republic)

16	Kirsten Reichert	Head of visitor's service	Naumburg Cathedral (World Heritage; Germany)
17	Ivana Rojko	Expert associate for education, interpretation and promotion; Mura-Drava Regional Park (Croatia)	Part of Mura-Drava-Danube transboundary Biosphere Reserve
18	Savvas Vasileiadis	Guide	Mount Olympus (Biosphere Reserve; Greece)
19	Kirsi Saeter	Communication and Information advisor	Røros Mining Town and the Circumference (World Heritage; Norway)
20	Konstantina Theofylaktou	Officer	Troodos (UNESCO Global Geopark; Cyprus)
21	Clare Tuffy	Manager, Brú na Bóinne Visitor Centre	Brú na Bóinne - Archaeological Ensemble of the Bend of the Boyne (World Heritage; Ireland)
22	Davor Vodopija	Professional associate, Idrija Mercury Heritage Management Centre	Mining site of Idrija (Slovenia) as part of the transnational World Heritage property "Heritage of Mercury. Almadén and Idrija"
23	MariaElena Zammit	Principal Curator, Prehistoric Sites, Heritage Malta	Ħal Saflieni Hypogeum (World Heritage; Malta)

Other participants

No.	Name	Role/function	Sector	Institution
24	Patricia Alberth	Head	World Heritage Office	City of Bamberg
25	Pauline Göhmann	Assistant		
26	Paul Bellendorf	Professor	Centre for Heritage Conservation Studies and Technologies	University of Bamberg
27	Rainer Drewello	Professor		
28	Carmen Enss	Research Assistant	Chair for Heritage Sciences	
29	Mona Hess	Professor	Chair for Digital Heritage Technologies	
30	Carolin Kolhoff	Head of World Heritage Department	German Commission for UNESCO	
31	Jonathan Baker	Head Science Unit	Regional Bureau for Science and Culture in Europe, Science Unit	UNESCO
32	Matteo Rosati	Programme Specialist	Regional Bureau for Science and Culture in Europe, Culture Unit	
33	Thorsten Ludwig	Managing Director	Interpret Europe	

Annex 3

Map of participating Visitor Centres



Figure 10 Map of participating Visitor Centres

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