

the PUBLIC

 Reinwardt Academy
Amsterdam University of the Arts

Heritage Reader **1**

THE PUBLIC

Heritage Reader No 1



Reinwardt Academy
Amsterdam University of the Arts

Credits

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Foreword

We are happy to present the Reinwardt reader *Heritage and the Public*, the first one of a series to be brought out by the Reinwardt Academy in the coming years. Since 1976 the Reinwardt Academy has trained students to become museum and heritage professionals. The educational programme follows current changes in the heritage field and developments in thinking about heritage. Students are trained by a team of some 25 permanent lecturers, surrounded by a flexible layer of many guest lecturers, often practicing experts from the field.

The body of knowledge, the total amount of knowledge and experience, is great, but has to date not been laid down in publications. With these readers we wish to record the relatively undisputed knowledge we work with at Reinwardt Academy. When we developed the Reinwardt Research Programme 2011-2015, *Heritage on the cutting table*, we found that the Academy's lecturers had long cherished the desire to know more about each other's professional fields. By publishing these readers we not only fulfil this wish, but we also establish cross-links between different specialisations.

While the curriculum once focused solely on the museum, since 2002 we have focused on heritage in general. The heritage world is in motion; there is a far-reaching de-institutionalisation underway. Interesting developments are also taking place outside museum walls. In teaching practice, however, the museum still plays a major role. The fact that most of the examples in this booklet come from institutions does not mean that they are the focus here. In the final chapter concerning the media, this institutional bias is noticeably less pronounced. Topical issues - such as the fact that volunteers are now rapidly evolving into pro-ams or the emergence of communities - are left aside. These are dealt with by live teaching.

In this reader we present ideas shared within the curricular specialisation *The Public*. In preparation of this volume, we have worked collaboratively, held open discussions and critically discussed its content with an expert group from the sector. The contributions deal with existing and ready knowledge, required for graduation. They consist of a main text complemented by frameworks, examples, reflections, dilemmas and suggestions for further extension. For students the reader should work as a reference tool rather than a textbook, as a *vademecum* rather than a syllabus. We hope this reader proves useful for the heritage sector itself; primarily for middle management of museums, archives and institutions dealing with monuments, archaeology and intangible heritage. To that end it has also been discussed with various museum consultants.

We would like to thank the members of the Academy's *Public* section for their enthusiastic and professional contributions, both written and spoken. This also applies to colleagues who have in the meantime left the Academy, such as the esteemed Leontine Meijer - van Mensch, and the – relative – outliers who kindly shared their insights and opinions with us, such as Annette Gaalman and Theo Thomassen. We are extremely grateful to Director Teus Eenkhoorn for making these Reinwardt Readers possible in terms of human resources and finance.

Riemer Knoop,
Professor of Cultural Heritage, July 2015

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Ruben Smit

1

Any study about 'the public' should start with defining and problematizing the concepts and terms used. What do we mean by words such as 'education' or 'public' and how are they viewed in other countries?

Introduction

- 1 Terms and frameworks
 - 2 The Enlightenment, nationalism, and moral elevation
 - 3 Mediating as a discipline
 - 4 New Museology
 - 5 Continuity and renewal
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I Terms and frameworks

First of all, the word *education*, the almost self-evident task of education officers in museums. Education has Latin roots *e-* and *ducere* that mean 'lead out of' or 'lead upwards'. This implies a top-down relationship, which fits within formal education but seems less appropriate in the open network world of informal learning. In the English-speaking world *education* is being increasingly replaced by the less problematic *learning*. In this regard, the Australian researcher Lynda Kelly noted a visitor's comment: 'Education is someone doing it to me, while learning is me doing it myself.' In Dutch, the word *leren* (teach) is even felt as onerous, having to do with schoolmasters and pointing fingers. In German, the word *Bildung* is used which translates as formation or maturation. The British call it – in a more specific context – Audience Development¹ and they tend to focus on non-visitors: audiences who must be tempted to partake in the uplifting qualities of heritage. The word *public* has limitations, too. Public refers both to the general – *publicum* is Latin for 'general' or 'of the people' – and to 'adult', the Latin *pubes*, in which we recognise the word puberty. If we look into the first meaning, general or public, the opposite also comes to mind: private, closed, locked or non-public. When we talk about the public, we mean both the visitor and the non-visitor and both are discussed in this reader. As heritage conservation and accessibility are often financed by public funds, heritage should then after all be accessible for as many groups as possible. Accessibility is also a nice neutral term for making something available, which in turn sounds more neutral than education. The 'public' is in this sense therefore 'visitors', although visitors convert very quickly into guests; someone who drops by and is welcomed in a physical environment. A spectator perhaps? Possibly, but that fits in less with contemporary paradigms of knowledge being shared rather than transferred. In this context, we prefer to speak of participation and participants - people who meet as equals in a network. The distinction between a professional and an amateur is starting to disappear. More and more, especially in digital network environments, but also in our heritage world, so-called Pro-Ams, professional amateurs,² come to the foreground. These are lay people who operate independently, often at a high professional level. In archival research, for example, they open up archive information and help each other find their way. They are extremely valued by professionals. In English the public is often called a user, a bit

clumsily translated into Dutch as *gebruiker*. The Flemish no longer speak of visitor guidance but of working with visitors. It's different with archives: the core of the public is, notably, called 'user'. Only when it comes to expanding the use of archives is there talk of the 'public'.

The role that education officers often play in heritage institutions is what the British have long called audience advocates. The staff member is the gadfly, guarding the interests of the visitor (a derivative of the Latin verb meaning 'to see') and enforcing the principles of hospitality and public service. But of even more importance is ensuring the physical, social and intellectual accessibility of such a public institution. This access is regulated by law in many Anglo-Saxon countries. All in all, this terminology is indicative of a limited insight into how people gain knowledge and inspiration. Nowadays, 'doing' is considered just as important as looking or listening.

2 The Enlightenment, nationalism, and moral elevation

The importance of audience awareness is clearly stated in the Reinwardt Academy Course Book:

*'Audience is the touchstone of how a heritage institution functions: without public, heritage is dead. The Reinwardt Academy understands the public as the visitors to heritage institutions and heritage users. Specifically, these are actual visitors, virtual visitors, potential visitors, non-visitors – as they can still become visitors, visitors from the past and those of the future. But also the (voluntary or not) employees of the institution itself are seen as audience. In the specialisation 'The Public' we will have a look who the audience is, what their expectations are, how we can involve the public in heritage, how and what the public learns from heritage and what the interaction is between heritage institutions and the audience.'*³

That is quite something. If this text was read out half a century ago in a museum or other heritage institution, it might have resulted in an annoyed shrug or, at best, a smirk: 'What?! Pay attention to the public?'. So something seems to have happened since then. If we took a big step back in time, we would see that starting from the Enlightenment, various circles and societies were engaged in knowledge acquisition and sharing, but also that it had a limited range. It was centred around tiny inner-circle communities of educated people who liked to be invited to visit each

¹ In 2004 developed as a concept by The Arts Council of England: www.artscouncil.org.uk/media/uploads/documents/publications/phphu98yI.pdf.

² Leadbeater, Ch., and P. Miller, *The Pro-Am Revolution. How Enthusiasts are Changing Our Economy and Culture*, London: Demos 2004, see www.demos.co.uk/files/proamrevolutionfinal.pdf?1240939425.

³ Van Asseldonk, N., et al. (ed.), *Bachelor Cultureel erfgoed. Studiegids 2014-2015*, Amsterdam: Reinwardt Academie, 2014, 31-32. www.ahk.nl/fileadmin/afbeeldingen/reinwardt/Studiegids/Studiegids_Cultureel_erfgoed_14-15.pdf.

other to get acquainted with each other's collections and hear the latest news about their private research or the expeditions they funded. Arts and culture (out of which the concept of heritage would later develop) remained for a long time the playing field of well-to-do gentlemen (and sometimes a lady or two). The audience of the first public museums (1471 Capitoline Museums in Rome, 1677 the Ashmolean in Oxford, 1727 Kunstkamera in St. Petersburg, 1753 British Museum in London, 1755 Archaeological Museum of Naples, 1784 Teylers Museum in Haarlem) was based on the peer-to-peer principle. They originated from private collections; in the museums listed above, these belonged to – sequentially – the Pope, Elias Ashmole, Peter the Great, Sir Hans Sloane, King Charles IV of Naples and Pieter Teyler. The aspiring visitor often had to send a letter to the managing curator requesting him to be allowed to come and have a look. This was answered (with some delay) by a return letter with an invitation indicating the date and time of the suitable tour by the respective director or chief curator. The tour would generally be limited to the part of the collection that the curator in question was responsible for.

A great democratisation of public access to the institutionalised world of what we now call heritage took place in the nineteenth century. The industrial revolution enabled millions of people to be transported by ship or train at an affordable price. The success of the first world exhibition resulted primarily from the fact that it could be reached relatively quickly and easily. The Great Exhibition of 1851, held in a huge (metal and glass) greenhouse in London's Hyde Park, attracted six million visitors, a third of the total British population in those days. They gaped at such innovations as steam pressure rollers and water closets. The proceeds from the ticket sales were used to fund the construction and equipping of (amongst other institutions) what is now the Victoria & Albert Museum, the Science Museum and the Natural History Museum.

Nationalism

The French Revolution quickly led to the foundation of the Musée du Louvre (1793), which changed its function from the Royal Palace to a people's palace of fine arts. Development of the people, both in the sense of public education as nation building, was a driving force for the establishment of national museums. The increasingly literate population, fuelled by the nationalist press, was supposed to feel strongly English, German, French or British. The Rijksmuseum, now in Amsterdam, was initiated by the Dutch King

in 1809, as part of his nation-building project. The museum received its current building in 1885, with its underpass literally serving as a gateway to and from the city. The museum today is still loyal to its original role, namely a national fine arts gallery and a national history museum in one.

The increasing power of civil politics sought, in the absence of an autocrat, for symbols and grand narratives to bind the people. As European powers locked each other in an arms race on the continent itself, a lot of energy moved to colonial adventures. In the second half of the 19th century, Empire Building was the motto with Britain and France in the lead, having virtually divided Africa and launched a land grab in the Middle and Far East. After the bankruptcy of the VOC (United East-Indies Company – a private merchant syndicate), the Netherlands began to rule Indonesia harsher than ever. King Leopold of Belgium made Congo (Zaire) his private source of profit. Russia had its own 'Wild East' in Siberia and Central Asia. Even the United States, that generally preferred to leave these kinds of things to private initiative, changed its practices at the end of the nineteenth century by first helping the Philippines chase out the last Spaniards in order to subsequently retain influence there. It's not for nothing that most ethnological collections in Western museums originate from this period of expansive colonialism. The Staatliche Museen, concentrated on the Museum Island in the heart of Berlin, are the direct result of German unification.

After the Prussians had won the 1870-71 war against France, they claimed their place on the world stage. Wilhelm II sighed: 'We also demand our place in the sun'. Although in his eyes the British Museum and the Louvre had the finest pieces, the German Kaiser would at least acquire the largest pieces for his Pergamon Museum. Schooling led to increased literacy among the population and nationalist feelings, fired up by the booming tabloid press, were the ideal fuel for the establishment of institutes for 'self-confirming' national heritage.

Moral elevation

Parallel to the growth of the working class, movements appeared that aimed to uplift the people morally. First it was socialist parties that launched a civilizing process with reading rooms, choral societies and excursions to museums. In England, however, it was the conservative aristocracy who committed themselves to elevating the proletarians. For example, the National Gallery got its present building on Trafalgar Square through a parliamentary ruling that it be established within

walking distance from the East End (where workers lived), and not further west with cleaner air for the art as the collection custodians desired. The Victoria & Albert Museum got its electric lighting installed as early as 1878 to let the working class enjoy art and design after work, i.e. in the evening.⁴

Inside these museums, there was initially little regard for visitor education. But there were some founding fathers who looked after the welfare of the visitors. For one, Henry Cole set up a tearoom at the Victoria & Albert Museum, the first museum ever to get one. The restaurant, beautifully decorated by William Morris, was equipped with hot air ovens that baked affordable pies. This enabled the workers, who could only come after their working hours, to try out the art after an invigorating and affordable meal.

3 Mediating as a discipline

There were many enlightened minds who were committed to a broad accessibility of museums. For example, the flamboyant George Brown Goode from the Smithsonian Institute surprised the British Museum Association in 1895 by stating that museums should commit themselves to the needs of the general public, and that – moreover – this effort will never be finished. Because, as he said:

*'A finished museum is a dead museum, and a dead museum is a useless museum. Many so-called museums are little more than store houses filled with the materials of which museums are made.'*⁵

It was therefore the museums' solemn duty to neatly explain to the public (= interpretation, mediation) what was to be shown in an attractive and orderly way. For the time being it was sufficient for the public museums just to be open, although on request a tour was sometimes offered. Manor houses and town houses were in most cases privately owned and not open to the public. Archives only remained accessible to professional researchers. For a breakthrough in visitor education we need to take a step outside, literally. Was it not Jacobus P. Thijsse and Eli Heimans who took the 'knowledge of nature' outside, leaving the school desks behind? As early as 1893, Heimans published a field handbook called *Living nature, a guide to education in the knowledge of plants and animals in elementary schools, especially in large cities*, with the Sarphati Park in Amsterdam as a place for illustrative education.⁶ Their joint set of publications was launched in 1894 with the

series *On Butterflies, Flowers and Birds*. Thijsse's *Verkade Albums* became famous and spread all over the country. It is no coincidence that the two men were responsible for *Natuurmonumenten*, the Society for the Preservation of Natural Sites (1905). The word *monumenten* (monuments) was specifically selected to refer to the direct relationship people have with heritage, namely nurturing and protection. Nature had long been regarded as something outside of man and therefore hostile, but after a century and half of industrialisation it suddenly received a status that deserved protection. The immediate reason for the establishment of the society was the situation around the Naardermeer (a marshy lake that threatened to become a landfill for the city of Amsterdam). The society managed to prevent this by purchasing the area in 1906. Similarly, the National Trust was founded in England in 1895 for the care, conservation and use of 'areas of natural and outstanding beauty'. The National Trust, in contrast to *Natuurmonumenten*, also dealt with built heritage such as mansions and castles, and movable heritage in and around them.

Even if we look at the phenomenon of 'working with audiences' from a more professional perspective, we remain in the world of nature. One of the great sources of inspiration in the field of visitor learning and education is, in fact, the book *Interpreting Our Heritage* (1957) by Freeman Tilden, who was employed by the U.S. National Park Services. His manual was initially supposed to help the rangers of those national parks to familiarise the audience with what they see in the park. We would now call it environmental education, or nature- and eco-education.

At the same time, Tilden inspired countless professionals around the world who felt inclined to pursue the tasks and missions of visitor education. Again the key word was protection. Tilden's motto was: 'Through interpretation, understanding; through understanding, appreciation; through appreciation, protection'. Tilden's book has been read and used by countless audience and education officers in other heritage institutions ever since.

4 New Museology

We are making another leap in time. From the seventies, the role of educational work in museums became increasingly important. This emancipation is closely linked to the professionalisation of the various functions within the museum 'system'. At the end of

⁴ www.vam.ac.uk/blog/tales-archives/let-there-be-light-illuminating-van-nineteenth-century

⁵ Brown Goode, G., 'The Principles of Museum Administration' [1895], in Kavanagh, G., *Museum Provision and Professionalism*, Routledge, 1994, 44.

⁶ Heimans, E., *De levende natuur, een handleiding bij het onderwijs in de kennis van planten en dieren op de lagere school in het bijzonder voor de grote steden*, Amsterdam 1893.

the nineteenth and in the early twentieth century it was the curator who was responsible for all functions within the museum. The starting point for his or her professionalism was scientific knowledge of a particular part of the collection. However, the seventies saw a growing demand for professionals who had other knowledge, too. This professionalisation took place in collection management, general management, marketing and preservation, but especially in the field of education. It coincided with an international debate on the social role of museums and particularly on reaching (and later involving) a wider audience. It was mainly non-Western countries that took the lead in it. This modernisation movement is referred to as 'New Museology'. An important feature of this movement is a strong focus on society, reflected in a maximum societal involvement in what museums collect and the way they present it. In the museum world, the desire for further professionalisation manifested itself in the creation of ICOM CECA (Committee for Education and Cultural Action) in 1964. The Dutch Museum Association was quick to follow with the setting up of an Educational Services Working Group in 1969, thereby recognizing the importance of visitor guidance. It focused primarily on continuing education and knowledge exchange. In the years that followed, an increasing shortage was felt of trained employees, resulting in the Leiden municipality taking the initiative to found the Reinwardt Academy (1976), which, however, had a much wider focus than visitor interpretation. Over the past forty years, New Museology as a modernisation movement has influenced museum and their practices all over the world. Of course, not all museums implemented these views in equal measure, but the role of education within an institution is often a good indicator of the degree of implementation.

New Museology: three key questions?

New Museology revolves around three key questions:⁷ representation, access and participation. How is cultural diversity in society portrayed and who determines this? Is the museum fully accessible in the physical sense but also in terms of content delivery? For example, how comprehensible are wall texts? To what extent do various groups within society take part in decision-making, particularly to do with representation and access? The latter involves ensuring that the audience feels involved, and that's where education obviously plays an essential role. Of the three pillars of New Museology, it is participation that has developed the most in recent years. This

development is intrinsically linked to the high participatory potential of digital media. It's for a reason that we speak of 'Museum 2.0', which refers to the ways museums are trying to use participatory possibilities of the digital domain. The key concept here is user-generated content: it is the users that, as participants in a specific community of interest, deliver content. This blurs the traditional distinction between producers (the museum curators) and users (the audience). After all, everyone has specific knowledge, complementary in different ways and levels. Successful participation is perhaps more an additive result than a goal in itself. Indeed, participation begins with a wide-ranging and appealing museum collection (representation and access). These new insights have undoubtedly changed the role and self-image of museum professionals. Over the years, the museum professional has increasingly become someone working with various communities and target audiences. Together they generate meaning. The ideal 'museum professional 2.0' facilitates and helps others in the process of meaning making between object and visitor, and between the institution and the audience. Participation may have many shades and nuances; it is ultimately the museum professional 2.0 that takes the crucial decisions. It would be naive to think that this is not part of professional work, but it is equally important that a museum is transparent and does not create false expectations. Participatory strategies and questions about accessibility and representation are especially relevant when preparing an exhibition and updating the collection. That is not always easy, but if participation takes place with the museum professional in a moderating role, then a sort of *contact zone*⁸ can occur. This notion, introduced by James Clifford and Mary Louise Pratt, gives us the opportunity to see the museum as a platform for dialogue and also, perhaps more importantly, for expressing contrasting views. In museological theory, the concept of museums as a contact zone has been seen as a direction for the future for a while. Indeed, in the newest museological discourse museums increasingly become places of social dialogue.⁹

New Archival Science, archives as heritage

A similar story, but laid down in legal frameworks, can be told about archival science. Once archives were a by-product of society, which functioned in an increasingly written form. Starting from the thirteenth century, the Netherlands saw a growing need to systematically keep administrative files. These primarily concerned

⁷ Van Mensch, P. and L. Meijer-van Mensch, *New Trends in Museology*, Calje: Muzej novejšje zgodovine, 2011.

⁸ Pratt, M.L., *Imperial Eyes: Travel Writing and Transculturation*, London: Routledge 1992; Clifford, J., *Routes: Travel and Translation in the Late Twentieth Century*, San Francisco: Harvard Press 1997.

⁹ Marstine, J. (ed.), *The Routledge Companion to Museum Ethics. Redefining Ethics for the Twenty-First-Century Museum*. Abingdon: Routledge, 2011.

inheritance and justice, but governance issues were also laid down. This development continued until the French period. The appointment of the Archivist of the Batavian Republic in 1802 is seen as the start of the Dutch archives. The first archivist, Hendrik van Wijn, collected as many archives of Holland's central authorities as possible from before 1795. During the century that followed, the profession developed from a historical auxiliary science into an independent discipline. It was based on the standard method of inventorying archives, guided by the 'origin principle' (*respect des fonds*). It was assumed that the archivist was the custodian of the integrity of records. Partly due to recent developments in information and communication technology that role has changed. The archivist as custodian is no longer enough. Society's and individuals' behaviour appears to be more unpredictable and irrational than expected in classical thinking about archives. Everyone is an archivist, because everyone produces archival material. In the past, archiving was the work around a physical and, above all, completed entity, which formed the trigger for administrative action. Today we speak of 'process-related information'. In making archives accessible, the approach has shifted from collection-orientated to user-centred. In this regard, being aware of subjectivity is indispensable. An archivist should help present-day users understand an archive collection from its inception and only then pose their research questions. This is because archive records and the collection thereof (what is preserved, and how & why we make it accessible) are susceptible to multiple interpretations. According to Theo Thomassen, former director of the Reinwardt Academy and emeritus professor of archival science at the University of Amsterdam, it is the archive users themselves who should make this interpretation.¹⁰ The archivist is no longer impartial and objective in the accessibility process; he/she constructs and interprets the archive. This is actually changing archives into heritage collections. Once we stop considering archive records and collections as objective sources, they are just heritage.¹¹

5

Continuity and renewal

In today's landscape of working for and with audiences in heritage, several things stand out. On the one hand, there are subjects that are continuously evolving and on the other hand, there are trends that seem completely new and unprecedented. There is, however, one clear constant over the last four decades: formal education and schools. Either attracted by

the institutions themselves or pushed by politicians, schools have found their way to heritage institutions: from zoos to archives, from historical city museums to art galleries. In the past the approach used in relation to education was mainly supply-oriented; however, demand is now taking centre stage. In recent decades heritage institutions have started to focus on the public and visitor services are more important than ever. Exhibitions are taking ergonomics into account, cafes and restaurants are offering the opportunity to relax, and museum shops are there to stay, for impulsive souvenir purchases or for looking through well-selected reference books. For families, the range of treasure hunts, discovery backpacks and multimedia guides is enormous. Numbers and types of guided tours are growing. In addition, there are public events with workshops, lectures and other activities. Some events have even outgrown themselves, such as the popular Museum Night(s), evenings aimed at young adults that may reduce the museum to no more than a cheerful backdrop.

On the other hand, there are genuine new developments. The digital world is turning everything on its head. Now that digitised collections are available 24/7 on the internet, access to collections is no longer limited to just physical encounters. Archives' websites are being visited more frequently than their reading rooms. Their sites provide access to archive files and, increasingly, to scans of the records themselves (besides material that was *digitally born*). To see the original documents, though, you still have to go to the actual institution. The same is true for museums - here, too, the number of virtual visits has exploded, but the authentic experience is (for now) only possible during a physical visit. The challenges for educators, both in and outside the institutions, are increasing. Users have become more vocal and demanding and the separation between experts and amateurs is fading, as previously mentioned. There is a perceptible growth in international cultural tourism. Besides knowledge sharing, museums are also engaged in knowledge generation by means of crowdsourcing. In an ever more urbanised society with growing numbers of (international) footloose citizens, there are more discussions about identity than ever, held in an increasingly sharp tone. Who does heritage actually belong to? Who determines what should be added to collections and what should be disposed of? Who chooses and who is chosen? The twin processes of inclusion and participation are at work here, which require constant attention and critical reflection.

1

¹⁰ Thomassen, T., 'Van evenement naar structuur. Ordenen en beschrijven in de eeuw vóór de Handleiding', in Horsman, P.J., F.C.J. Ketelaar and T.H.P.M. Thomassen, *Tekst en context van de Handleiding voor het ordenen en beschrijven van archieven van 1898*, Hilversum: Verloren 1998, 21-98.

¹¹ See Th. Thomassen's inaugural oration, *Archiefwetenschap, erfgoed en politisering*, Amsterdam: Vossiuspers, UvA 2011.

2

Ruben Smit **Heritage and Target Audiences**

Most heritage institutions no longer consider the care and study of collections to be their only tasks. Especially important now is how audiences create meaning with it, and preferably as wide an audience as possible. But what is a wide audience? In more traditional marketing, audience is segmented according to demographic and socio-economic characteristics such as income, age, place of residence, gender, etc. This offers some help, but is still unsatisfactory for the heritage world.

- 1 Segmentation and visitor needs
- 2 Visitor identities
- 3 Seven types of visitors
- 4 Lifestyle segmentation

I Segmentation and visitors' needs

The last few decades have seen growing use of models that examine psychosocial motives to see what moves people and makes them tick. These would concern, for example, any deeper wishes you might cherish, or feelings of sympathy or disgust you might have, and any intrinsic motivations which might unconsciously affect you. In recent years, of course, there has been a real hype about web behaviour and the use of social media. With every click you make, Facebook, Google and iTunes collect information about your preferences, interests and buying habits. Finding the fastest and perfect match between a product and a buyer, or data-mining as it is otherwise known, is big business. At any given moment a provider can make you a customised offer. Your smartphone always 'knows' where you are and can pinpoint something of interest to you in your vicinity. However ironic we may be, it is always nicer when an offer actually meets our wishes. And, should the offer exceed expectations, well so much the better.

2 Visitors' identities

John Falk and Lynn Dierking, leading researchers from the U.S., go a step further and speak of 'visitor identities'¹² in relation to profiles of visitors to heritage institutions such as museums, zoos and aquariums. Identity is not a simple subject. Whole studies are devoted to it (think of anthropology, sociology and psychology). What inner and outer characteristics do others see in you, and how do they react to them? What moods determine your behaviour and what (religious) beliefs do you have that influence that behaviour? What small and large power relationships are you exposed to and how do you react to them? What is your sexual orientation? Where do you come from and to what extent does this determine your personal growth and make you into the person you are now? What talents did you discover in your early years and to what extent have they determined the pathway you have chosen? In short, what are the cultural backgrounds that make you who you are? Falk does not neglect these questions, but notes that these are the determining factors of your identity. Falk calls it 'Identity' with a big 'I'. Falk, however, also discusses our ability to control our behaviour. In psychological terms this is called self-regulation. Self-regulation presupposes that as a human being you set goals. These goals ensure that you take a few mental steps first before you take them in reality. In this way you can monitor the appropriate steps (if you don't take them, you'll only get cross with yourself) and

also evaluate the steps taken (reflecting and adjusting them as needed). Thus you form a self-directed identity that helps you achieve what you are striving for and vice versa – if what you aimed at is achieved – reaffirming who you want to be.

This is an identity you can play with - you can assume a role. In Falk's words: 'We can act who we are, so we can be who we act.' Falk refers to this as 'identity' with a small 'i'. In relation to a visit to a heritage institution, then it's about the role you assume. Have you come here as the parent of a child, as the child of a parent, or as equal friends? Are you the one who initiated the visit or have you been brought along? Are you a new or a returning visitor?

3 Seven types of visitors

After years of visitor research, in which Falk included long-term memories retained after a visit, he distilled seven visitors' identities based on this 'identity' with a small 'i' (see Figure 1).

- 1 *Explorers* are triggered by curiosity, in a broad sense. They are particularly open to things that arouse their interest and their desire to find out more about them. 'I like to watch the Discovery Channel, I think it's great fun. And in this museum I hope to also come across things I don't know. I don't often know beforehand what it will be, but when I see it, I'll know it interests me and I'll delve into it there and then.'
- 2 *Facilitators* are socially motivated – they want their companions to enjoy, play or get familiarised with the offering together. Think of grandparents who bring their grandchildren to a science centre: 'I'm here for my grandson, who has a strong interest for everything that has to do with boats. Personally, boats don't say anything to me, but if he is having fun, I'm happy.'
- 3 *Professionals/hobbyists* feel a strong substantive relationship with the heritage institution, based on their hobby or profession. They want to find out more or they want to share their knowledge. These are the Pro-Ams who can be used as volunteers or guides: 'I've got an aquarium with tropical fish, too. I actually want to expand, I'm buying a larger aquarium and I've come here to get ideas.'
- 4 *Experience Seekers* are drawn by the collection's reputation, or else by the fact that the institution is a major tourist attraction. They seem to be mostly driven by sensation. They want to be able to say that they have been there. For example, think tourists, day-trippers and passers-by who believe that if you're there anyway you should have a quick look. The Eiffel Tower and the Mona Lisa are good examples: 'Well, we are from Boston and

¹² Falk, J., and L. Dierking, *The Museum Experience Revisited*, Walnut Creek: Left Coast Press, 2013, 47-52.

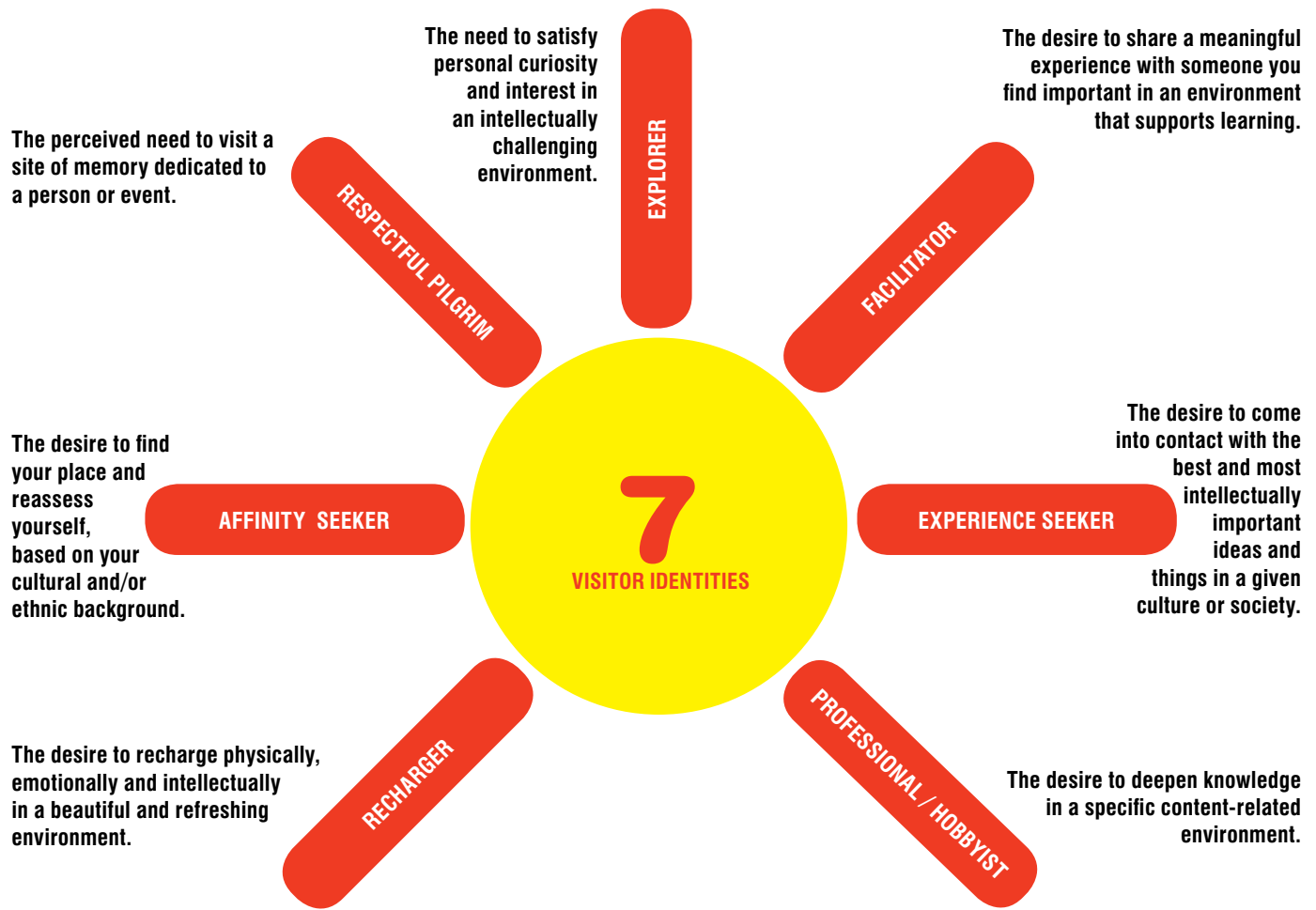


Figure 1. Visitors' identities according to Falk

we are on a two-week city trip to Europe. We just got a highlight tour through the Louvre and we are now going to the Musee d'Orsay, truly amazing!

- 5 *Rechargers* seek peace and space for contemplation. The heritage institution is seen as a place to regain your breath, time away from the hustle and bustle of everyday life. A place to refuel and reflect: 'I love modern art. It puts you in touch with the unthinkable. This not only gives me peace, but also comfort.'
 - 6 *Respectful Pilgrims* are guided by a sense of duty; they want to honour someone whose life or collection the museum is dedicated to. They visit out of a sense of social or historical consciousness and for a *touchdown*: 'This military cemetery with all these young men lying there row after row, touches me and makes me more aware of the freedom we live in nowadays.'
 - 7 Finally, *Affinity Seekers* visit a monument, a site of memory or an exhibition because it affects their personal identities. 'Being African American, this exhibition does something to you. You get in touch with your roots and remember things you forgot.'
- By responding to visitor identities, heritage institutions

can meet visitors long-cherished wishes. A highlights tour for the Experience Seeker, a special children's programme that facilitates discovery learning for the parent and child, a quiet place with space for rest and contemplation for the Recharger or a place with in-depth information and a peak behind-the-scenes for the Explorer.

4 Lifestyle segmentation

Motivaction, a Dutch marketing agency, uses lifestyles as a way to distinguish target groups and thus find a better match between supply and demand. The agency developed a matrix (see Figure 2) which divides society in economic groups (vertical axis) with a low, middle or high status, subsequently intersecting them with a three-way division in key values (horizontal axis): the traditional value of preserving, the modern value of possessing and indulging, and finally the postmodern value of (self)developing and experiencing.

After continuous market research since 1997 and after having processed the results in a dynamic (but

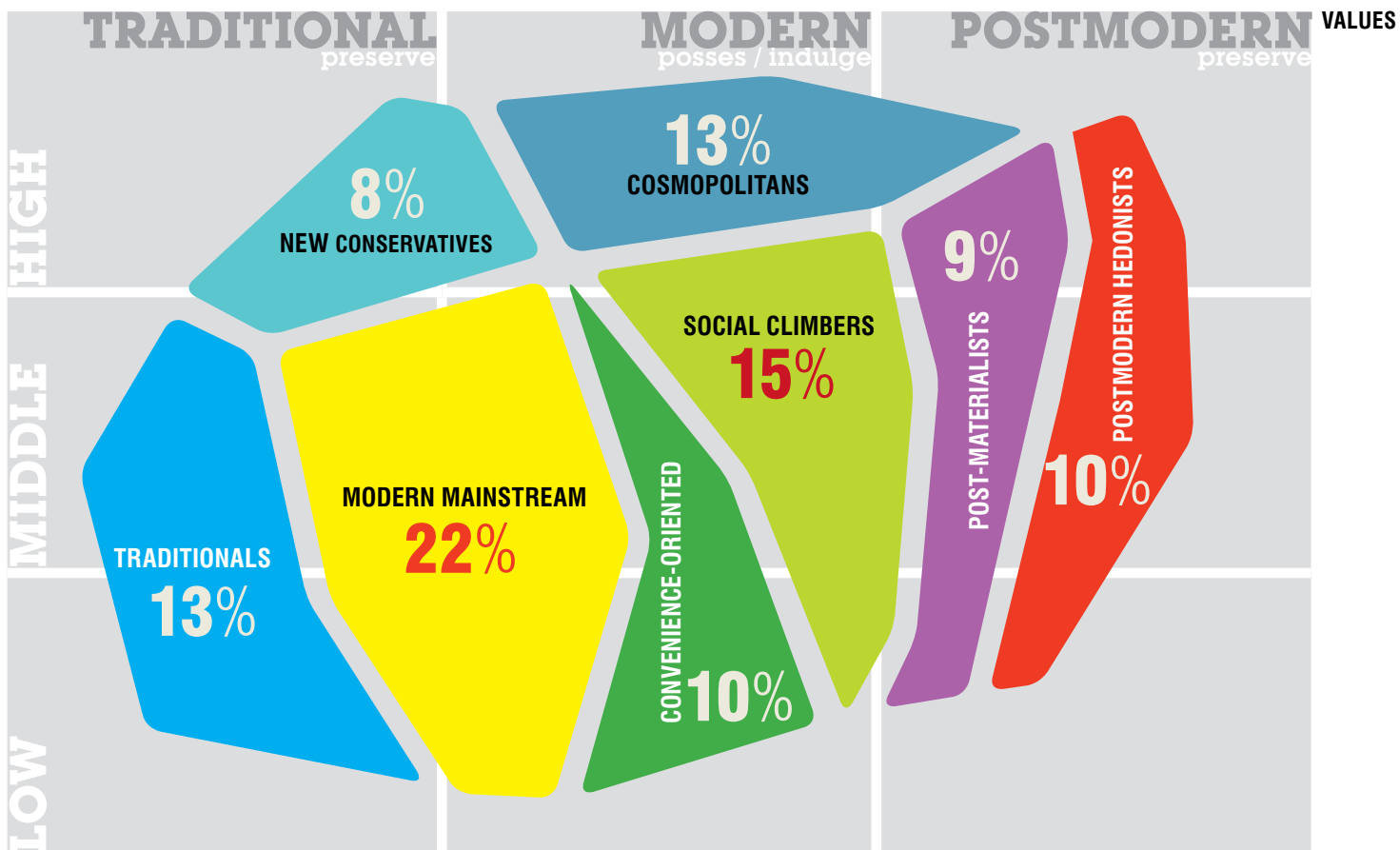
closed) database of 23,000 respondents, Motivation distinguishes the following eight circles in Dutch society.¹³

- 1 **Traditionals.** This authority-sensitive group represents about 15% of the population. They are focused on the family, socially involved in volunteer work, conservative and frugal. Having a day out – if at all – they focus on something around cultural history, such as visiting a castle or a monument.
- 2 **Modern Mainstream.** This status-sensitive group covers about 20%. They are conservative, but appreciate comfort and are quite self-centred. In addition, they visit intellectually-accessible mass events and would rather go to a theme park than a museum.
- 3 **Convenience-Oriented.** About 10% belong to this group of impulsive consumers who like quick comfort. They daydream of a pleasant life and would rather watch TV or surf the Internet than undertake a cultural outing.
- 4 **New Conservatives.** This growing group (8%) are well-to-do people. They are hierarchy-minded and status-oriented. In their free time they focus on exclusivity.

Their cultural visits are conditioned by the desire to reconfirm their elite status in society.

- 5 **Cosmopolitans.** These are cultural omnivores, self-proclaimed global citizens who just as easily go to a debate night as to a festival of world music (13%). They appreciate crossovers in culture (music, food, art). They like challenging and participatory cultural expressions.
- 6 **Social climbers.** Status-sensitive and ambitious career tigers (14%). In their free time they look for kicks and thrills that will earn the approval of their peers, or shopping or a day of go-cart racing, for example.
- 7 **Post-Materialists.** A small group of idealists (9%), primarily active in the social or cultural fields. They are service-oriented and socially responsible, resulting in doing some volunteer work. Development, participation and self-performing are important elements of their cultural life.
- 8 **Postmodern Hedonists,** adventure seekers on the fringe of cultural life (10%). They are impulsive and are always looking for new challenges, preferably in festival settings. Been there, done that is their credo.

Figure 2. Mentality model according to Motivation



STATUS

¹³ www.motivaction.nl/en/mentality: the website provides background information on the breakdown into groups as well as an online test to check whether your self-image matches the group you are associated with. Please note that by participating in the test you make your data Motivation's property.

Now that visitors and heritage users are at the centre, it is even more important to understand the experiences and perceptions arising from contact with heritage. This chapter focuses on that experience. How are visitors informed prior to the visit? What expectations do they have? What are they confronted with? And can these experiences be extended after their visit?

Ruben Smit Experiencing Heritage

3

- 1 Visitor experience as a starting point
- 2 Falk & Dierking: three contexts
 - 2.1 The personal context
 - 2.2 The social context
 - 2.3 The physical context
- 3 Pine & Gilmore: experience design
 - 3.1 Progression of economic value
 - 3.2 Ingredients of an experience
 - 3.3 Design features of an experience
 - 3.4 Criticism of experience design

I Visitors' experience as a starting point

Falk and Dierking, mentioned earlier in this booklet, were the first to take the visitor as a systematic starting point. Their research into visitors and their experiences spans three decades.¹ They depict the visitor experience in a handy model (see Figure 3 which is based on the assumption that the visitor experience consists of three overlapping contexts: the personal, the social and the physical. The secret, of course, lies in the overlap. The place where these three contexts intersect is where the ultimate, personally-coloured visitor experience emerges. However, also the dimension of time plays a role here. What happens before, during and after the visit? Although Falk and Dierking speak of visitors to museums, they also emphasise that this applies to all sorts of heritage institutions. A large part of their research was conducted in zoos and aquariums.

2 Falk & Dierking: three contexts

Falk and Dierking's model gives exact specifications of the three contexts. Points of special attention, described below, are identified within each context.² These are based on a free-choice learning environment, such as an exhibition, which is different from a formal learning environment such as in the classroom. That premise is maintained throughout the text below, but the argument also applies to other environments than exhibitions where knowledge-transfer takes place. The personal, social and physical contexts are described separately.

2.1 The personal context

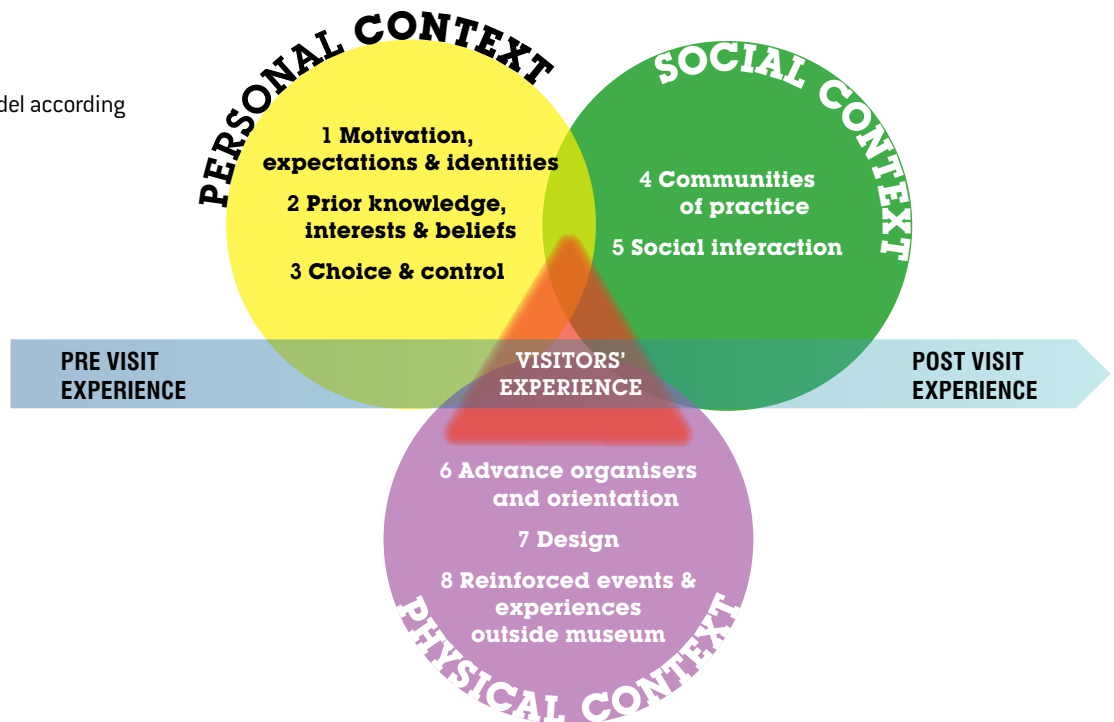
Falk and Dierking start their analysis of visitor experience with the visitor's private world: the personal context (the far left sphere in Figure 3). This refers to the sum of individual biography (the life story), psychology (the unconscious and conscious desires and expressions) and character (the mood) that ultimately makes a person into a personality (think of identities, interests and beliefs).

The personal context is characterised by three factors:

- 1 The first one is concerned with personal motivations and expectations. All visitors bring a number of experiences and expectations with them: about the subject, the institution and their own place in the world. Doering and Pekarik studied this phenomenon, calling it Entrance Narrative.³ They classified different presumptions that visitors bring along with them when entering an institution. For example, there are basic frameworks, i.e. the entire constellation of how visitors see and construct the world. Then there is a prediction of what awaits them during their prospective visit, coloured by the basic frameworks and all the information the visitors have (un)consciously collected about the institution. Finally, there are the accumulated experiences, emotions and memories that support this notion. By using personal stories, making affective connections and by providing interaction that gives room for their own interpretations, you can positively influence and thus the satisfaction of visitors. Therefore it is important to know your visitors.

3

Figure 3.
Visitors' experience model according to Falk and Dierking



¹ Both are professors of Free-Choice Learning at Oregon State University. Their main works are: *The Museum Experience* (1992); *Learning from Museums. Visitor Experiences and the Making of Meaning* (2000); *Identity and the Museum Visitor Experience* (2009); and *The Museum Experience Revisited* (2013), all Walnut Creek: Altamira Press.

² The following text is based on Chapter 10 of *Learning from Museums*, 2000, 177-204.

³ Doering, Z.D., and A.J. Pekarik, 'Questioning the Entrance Narrative', in *Journal of Museum Education*. 21/3, 1996, 20-23.

- 2 The second factor is prior knowledge, existing interests and personal principles. Successful learning in heritage environments occurs when 'hooks' are used to allow visitors to connect new information to their existing personal knowledge. Visitors consciously and unconsciously search for recognisable elements about who they are, what they are curious about and what excites them. To develop learning experience for a handful of like-minded people is feasible; to design a programme for thousands of individuals, each with their own quirks, is virtually impossible. One solution to this problem is differentiation: providing information at various levels. This is possible by means of additional tools (such as a treasure hunt with drawing materials or an audio tour for families) or, for instance, a separate children's discovery route in an exhibition. The more visitors can actively participate and add something personal (at individual level) to an exhibition or event, the greater the impact. Think of a wall of reflection where you can add your comments on response cards. To internalise a (learning) experience, emotional involvement is imperative.⁴
- 3 The third key factor in the personal context is having choice and control over what, how, where and when something is learned. Heritage institutions offer informal learning environments where content is presented in a playful way (free-choice learning). Visitors have plenty of room for self-directed learning. This is one of the biggest advantages of this form of knowledge acquisition. However, the tone and form of the offer should be inviting - coercion or tight control will have the opposite effect. Falk and Dierking conclude their section on the personal context with a set of recommendations that are in line with George Hein's constructivist learning theory (see below, Chapter 4.1):
- Start the visitor experience before the visit begins. Create a positive expectation, but make sure it matches what's being offered.
 - Establish a link to visitors' daily lives and make sure they feel a personal connection to the information.
 - Take learning styles and learning strategies into account and offer visitors clear choices; offer multiple departure points matching different levels and interests, and create recognisable layers so that visitors can choose between various levels of depth and complexity.
 - Build on prior knowledge, but also give the visitors the tools to enrich their knowledge, attitudes and behaviour.

- Provide learning experiences that match visitors' needs, dignity and self-respect.
- Use emotion (humour, open endings, questions rather than answers, human interventions) and fun – there is no positive free-choice learning without fun.

2.2 The social context

The second domain that colours the visitor experience is the social context (the far right sphere in Figure 3). There are two distinct parts to it: on the one hand, the socio-cultural background of visitors (communities of practice); on the other, the social reality they come into contact with at the heritage institution - who have they come with, what other visitors do they encounter and how does the staff of the host organisation attend to them? These poles can be elaborated as follows. One pole in the social context consists of communities of practice - a term that deserves explanation here. Learning may be an individual process, but it takes place in a rich social environment. People develop into mature human beings – with their own dialects, values and ideas – within the framework of family, relatives, neighbours, friends, a religious (or non-religious) community, schoolmates and colleagues. All those social settings are communities of practice. Besides similarities in social class, there are also regional or country-specific similarities. You might be an Amsterdammer in the Netherlands, but a Dutchman in the European Union. What matters is that every group has its own socio-cultural conventions and codes. These are perfectly clear for the immediate group members, but outsiders might find them much more difficult to decipher. If you grow up from an early age within such a community of practice, you are often unaware of decoding culturally specific knowledge. Learning goes smoothly. The ease of learning in such communities of practice has not escaped the attention of heritage institutions. For example, more focus is now being paid to intergenerational learning. Family programmes, hands-on rooms and even special exhibitions and tours are being developed for (grand) parents and (grand)children. In this case learning from and with each other occurs more or less automatically. Children are explorers and take the older ones along with them, whereas older people with their greater experience can often provide context for children. Heritage institutions have also traditionally focused on formal education groups. There are programmes, often called heritage and/or museum education, for children in primary education all the way up to university

⁴ Neurological research shows that the limbic system of the brain filters information by relevance; to avoid overloading, this part of the brain quickly selects what is worth memorizing and what can be quickly forgotten. Emotional regulation also takes place there. It seems plausible that events that are emotionally laden will be remembered.

students, in which the learning process (before or after the visit to the heritage institution) is extended by pre- or post-visit lessons (see Chapter 5). The heritage institution, then, is one link in the learning chain, supplemented by learning at the school or in physical or virtual outdoor space. Other communities of practice serviced by heritage institutions include participants on newcomer or integration courses and participants on reminiscence programmes for the elderly or people with Alzheimer's and their partners. Such programmes are offered, for example, by the Stedelijk Museum and the Van Abbemuseum.

Perhaps the most dramatic explosion of communities of practice relating to heritage has taken place on the internet. All sorts of people with shared interests, hobbyists, special interest groups, local residents, politically interested persons: they can all be found (and find each other) on internet sites. Social media connects them quickly and accurately around themes such as biodiversity, the collection of late 19th-century tin toys and the like. Interestingly, the professional and amateur worlds connect seamlessly here. Indeed, it is often not known whether someone is engaged in something professionally or out of love. Heritage institutions are increasingly using social media – partly because the Pro-Ams (professional amateurs) world of enthusiasts represents such a fantastic source of knowledge that institutions can greatly benefit from.⁵

The other pole is the social context of the visit itself. People influence each other during learning and discovery processes. The social context during a visit is created by fellow visitors and museum staff. It matters when a museum's galleries are very busy or whether there are lots of schoolchildren and families with small children or, conversely, lots of elderly people. Visitors also watch each other during the visit. They look for examples of behaviour or search for places where it's busy (and more than likely also very interesting) and wait for the moment to experience that part of the presentation themselves. It also makes a difference whether you visit an exhibition with your little nephew or your best friend. Social interaction, in other words, is a strong determinant of the heritage experience.⁶

How can heritage institutions influence the social context? The Louvre in Paris restricts the number of tours by third parties to ensure that individuals are not

crowded. Increasingly, such tours are conducted with a transmitter and headphones for the participants, so the tour guide can share the story without raising his or her voice. The Museon in The Hague traditionally schedules school visits in the morning, so that individuals can make their visits in the afternoon in greater tranquillity. The Science Museum in London has for similar reasons introduced *Lates*: adult only nights on the last Wednesday of the month for visitors aged 18 and older. Adults can indulge themselves with hands-on displays without being frozen out by children (or the angry parents of those children).⁷ The museum staff set the atmosphere, too. What is the contact like when buying a ticket, how is the cloakroom service? Are the staff at the information desk customer friendly? Are the attendants strict guards or do they have a role in hospitality towards the visitors? Is the tour guide open to questions in the group or does he or she rattle off a standard story? Is the service in the cafe cordial or indifferent? Hostile behaviour towards customers can ruin the overall experience, regardless of the remarkable objects in the beautiful displays. An enjoyable reception can, however, make the visitor happy. The Stedelijk Museum in Amsterdam runs the *Blikopeners* ('Eye Openers') programme, in which young people are commissioned by the museum to guide visitors with a disarming look at art, telling them stories about the collections.⁸ To optimise this social context, Falk and Dierking offer a range of tools here, too:

- Create presentations to be used by several people at the same time, both socially and physically.
- Promote social interactions instead of hindering them.
- Invest in people: personal guidance is often more effective than innovative technology.
- Inspire dialogue, even after the visit (pose provocative questions for the road).
- Create situations in which experienced visitors such as (grand)parents can help others.

Visitors' rights

In the Anglo-Saxon world, hospitality is treated with more emphasis than elsewhere, perhaps due to a commercial mind-set. At any rate, already Napoleon allegedly complained about the shopkeeper mentality of the English.⁹ Hospitality is a basic disposition which is taught to staff that come into contact with visitors both in front of and behind the scenes. There's a world of know-how behind it, traditionally applied by for-profit organisations such as the hotel industry. The American

⁵ A good example is www.geheugenvanoost.nl. The reason for creating the website was an Amsterdam Museum exhibition about the city's East district, but since then it has for years been autonomously used for and by the local residents as an exchange and identity platform.

⁶ The French sociologist Bourdieu (1930–2002) called this social distinction a pillar under 'cultural capital.'

⁷ www.sciencemuseum.org.uk/visitmuseum/plan_your_visit/lates.aspx.

⁸ www.stedelijk.nl/educatie/blikopeners/wat-doen-ze.

⁹ 'L'Angleterre est une nation de boutiquiers' (England is a nation of shopkeepers).

museologist Judy Rand offers a handy list of rules. Under the provocative title *Visitor's Bill of Rights* she calls on heritage institutions to make serious efforts to increase hospitality. To make visitors feel at home, the following rule should be observed: 'Make me feel welcome. Friendly, helpful staff ease visitors' anxieties. If they see themselves represented in exhibits and programmes and on the staff, they'll feel like they belong.' Equally true: 'Accept me for who I am and what I know. Visitors want to be accepted at their own level of knowledge and interest. They don't want exhibits, labels or staff to exclude them, patronize them or make them feel dumb.' The next section touches upon the foundations of every visit: 'Meet my basic needs. Visitors need fast, easy, obvious access to clean, safe, barrier-free restrooms, fountains, food, baby-changing tables, and plenty of seating. They also need full access to exhibits.'¹⁰ However, these kinds of lists with their 'Ten Commandments' only make sense if you actively apply them in the organisation and promote them from time to time by training and by checking the results with ghost-visitor reports.

2.3 The physical context

The third decisive context for the visitor experience is the physical context in which the heritage manifests itself (the lower surface in Figure 3). Falk and Dierking see three main features: advance organizers, i.e. the things that prepare visitors for their visit; the actual orientation, routing and pacing in the building (and its physical quality), the design and quality of the presentation; and, finally, the events or things that ensure a prolonged visit experience.

1. 'Advance organizers' is a concept from educational psychology, developed in the sixties to prepare students for their learning task: a roadmap that gives you an idea of what to expect.¹¹ Learning outcomes prove to be considerably higher if attention is paid to expectation management. Online advance organizers offer numerous opportunities for heritage: background texts, promotional videos, podcasts with stories told by scientific staff and multimedia tours or apps that can be downloaded. Practical information such as opening hours, accessibility, parking and the entrance fees, remains essential. It sets the expectations. Some institutions offer a short introductory film at the entrance to prepare visitors. The Museum of London used to have an introductory exhibition 'How to visit this museum', which got visitors ready for their visit. There is a danger here, however, of encouraging museum-fatigue before the visit has even started, whilst others just want to be surprised.

2. Orientation, routing, pacing and information mapping are basic concepts in the world of exhibiting. They also apply to the layout of monumental buildings with complicated visitor streams. Orientation often begins at home: how can you travel there, by car or public transport? It is therefore important to coordinate signage with the provincial or municipal authorities (and check it). But there is more to orientation. Upon approaching the building, the architecture can sometimes impress a visitor, from bombastic neoclassical to intimidating postmodern. Does this building do anything for me? Here, too, reference points and signage can reduce the stress - colourful facade flags sometimes do the trick or an open facade with a view of the entrance area (where are the tickets sold, where's the information desk, the wardrobe, the museum shop and a cafe?). Once in the building, routing is of paramount importance. Visitors waste a lot of energy on orientation and dilemmas at intersections (what am I going to miss if I turn left or right?). Good marker and cleverly placed landmarks on sightlines help, especially when corresponding to the iconography of, for example, the map. Connecting corridors should ideally be neutral and functional, without exhibits. Pacing is a term that describes changes of tempo and tension distribution. Light, colours, seating, the ergonomics of walking and gaze direction all play a role in creating a rhythm in visitor flow. Think of a stream: when there is a blockage in the stream, water accumulates and passes by the blockage with acceleration. The same happens with island presentations in narrow walkthrough halls. Visitors throng in front of them and walk quicker past them, accelerated by the pressure from behind. Pace alternation keeps visitors fresh. Variation in colour, light and the functions of spaces helps, as well as resting points. The Jewish Museum in Berlin has a small espresso bar halfway through the linear routing; time for rest and refreshment before continuing the visit.

Information mapping is the system of text and iconography (pictograms) to lead the visitor – intellectually and physically – through the building. It's not just about the text system (such as A, B and C texts: see below, Chapter 6.1.3) but explicitly about their placement. Captions, for instance, should preferably be placed to the left of an object, because we read from left to right (and vice versa when the writing direction of your language is opposite) and our eye movements will lead us each time from the

¹⁰ See informal.science.org/images/research/VSAa0a0x9-a_5730.pdf.

¹¹ Ausubel, D.P., 'The use of advance organizers in the learning and retention of meaningful verbal material', in: *Journal of Educational Psychology*, 51, 1960, 267-272. See www.kuleuven.be/icto/bv/bvbank/woord.php?defid=26.

text to the object. It is important that the information system supports the visitor and has a certain degree of predictability. The design, quality and level of maintenance of the institution have, of course, a major impact on the visitor. For many visits it all starts and ends with the toilets. Make sure they are clean! Even if your collection is top-notch, your staff is friendly and your temporary exhibition is state-of-the-art, unclean restrooms will influence the visitor experience negatively. And, according to the hospitality industry, a negative experience is re-told at least five times at birthday parties, whilst a good experience is told no more than three times. Online, for that matter, this happens even faster.

- 3 The extended visit experience also provides opportunities to anchor a positive experience. The museum shop plays an important role here: a card or a nice notebook functions as a souvenir. Every time you see or use them, your thoughts slide automatically to the visit you once made. No wonder museum stores are strategically placed at or near the exits. In some large institutions you see satellite museum shops at the exit of temporary exhibitions. Impulse buying can be done right away. Aside from physical memorabilia, new media also offers good opportunities to extend the visit experience. Today visitors are encouraged to make and share selfies (without a selfie stick), a follow-up to the Near Field Communication (NFC) chips in rings or bracelets enabling visitors to have a personalised experience. Later they can re-experience it by e-mail (think of the magic ring of the Institute of Image and Sound or the Poppy Bracelet of the In Flanders Fields Museum).

Falk and Dierking offer a range of tools to improve the physical context, too:

- Make learning environments as rich as possible, preferably multisensory, meeting the visitors' learning needs and styles.
- Provide clear learning objectives and make sure your offer fits the visitors' knowledge and skills.
- Try to make the offer literally limitless: refer to websites, magazines, books and/or documentaries.
- Ensure optimum hygiene, comfort and safety.
- Train your staff to help optimise the visitor experience.
- Know your visitor! Conduct research amongst your visitors: front-end, formative and summative (see Chapter 7).

Falk and Dierking's conceptual model visualises the visitor experience in three relevant contexts

(personal, social, physical) but also in time: pre-visit, visit and post-visit (orientation, actual experience and memory). Repeat visitors are wiser: an experienced museum-goer knows that you have to make choices, and abandons the ambition to see everything in one visit in a large institution like the Louvre or the Rijksmuseum.

Contextual interaction between the user and the archive

In an archive setting, guidebooks and manuals are available for guidance of a physical visit to the reading room. If desired, visitors can also be guided by an archivist. The main difference between a visitor to a reading room and a website visitor is that the latter is anonymous. The disappearance of the registrar as an intermediary creates *disintermediation*, to be repaired on the internet.¹² Here users can answer three questions they could previously ask the reading room staff: 'Where should I search? What should I ask? What is this?'¹³ The mere provision of digital access to archives (digitised or digital) is not sufficient to answer a (new) user's questions. These are issues that are dictated by the specifics of the process-related archiving system.

The interaction between the user and the digital archive has been the subject of many studies. Andrea Johnson created a model mapping the contextual interaction between the user and the archive.¹⁴ In order to increase the interaction, in the transition from *technology-pushed* to *user-pulled*, the interaction should proceed from the user's behaviour.¹⁵ Johnson distinguishes the technical context, the socio-cultural context, the language context and the user's motivation to find what he or she seeks. One can also have a look at the service provided by an archivist to someone doing archival research, as explored by Elizabeth Yakel.¹⁶ Two processes meet: the archivist is making things available and the user is doing research. From the archivist's perspective, this encounter is the last step in the process: he has arranged, selected and interpreted, while for the researcher it is the beginning. This important encounter has increasingly moved away from the physical reading room to the virtual research environment, the internet. A very special source of knowledge and insight is lost when the archivist cannot explain his or her own intervention.

3 Pine & Gilmore: experience design

Entering the City Archives of Amsterdam and descending to the basement of the former bank

¹² Johnson, A., 'Users, Use and Context: Supporting Interaction Between Users and Digital Archives', in: Craven, L. (ed.), *What Are Archives? Cultural and Theoretical Perspectives: a Reader*, Farnham: Ashgate 2008, 152.

¹³ *Ibidem*, 151-153.

¹⁴ *Ibidem*, 155 and 165.

¹⁵ *Ibidem*, 149.

¹⁶ Yakel, E., 2003. 'Impact of Internet-Based Discovery Tools on Use and Users of Archives.' *Comma* 2/3: 191-200.

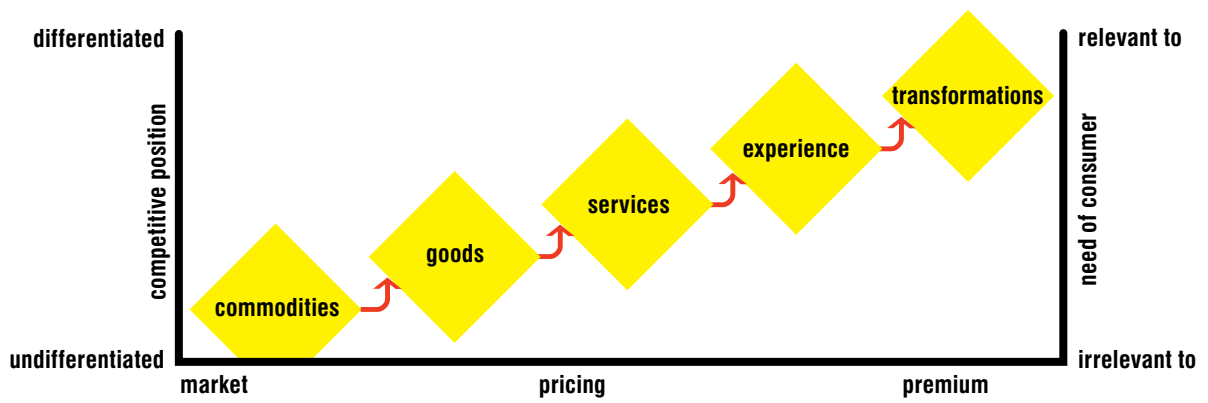


Figure 4. Principle of economic increment of value according to Pine-Gilmore.

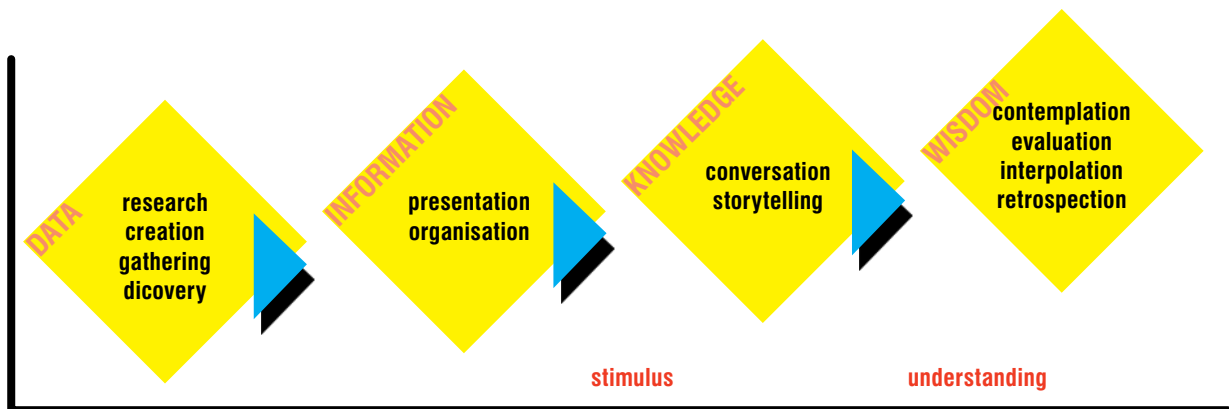
building you will find yourself in a treasure trove. In the half-light of the vaults under the De Bazel building, old drawings, city maps, contracts and letters glimmer like lanterns. Embedded video and audio clips support the material. You can experience something similar in the City Archives of Utrecht or in De Verdieping, the special exhibition space of the National Archives in The Hague. A few decades ago it would have been unthinkable that important institutions like archives would venture into the field of experience design. In museums, this form of multisensory presentation is an older tradition, but even there, experience-focused presentation is booming. In the Railway Museum, Utrecht, you find yourself in a nineteenth-century mining village, or you are catapulted through fantasy landscapes in a kind of rollercoaster with moving 3D chairs. In the Maritime Museum in Amsterdam, signs warn visitors that the Sea Voyage multimedia experience is not suitable to persons prone to epilepsy. And the Institute for Sound and Vision in Hilversum does not wish to be associated with a 'dusty museum', but wants to be known as a real experience. What is it with all these experiences?

3.1 Progression of economic value

Economists Joe Pine and James Gilmore introduced the concept of the Experience Economy over two decades ago.¹⁷ They examined something that basically constitutes the 'progression of economic value', or the adjustment of a product so that it matches the user's desires and dreams more closely. If you do it well, they reason, you can simply make more money. People appear sensitive to a well-packaged and identity-conferring emotion.

The classic example is the story of a handful of coffee beans.¹⁸ When freshly picked, they are barely worth anything. Growth of economic value results from burning, grinding, packing the coffee beans, and offering them for sale at the supermarket. All these actions increase the product value. From a pack of coffee sold in the shop for € 2.50, lots of cups of coffee can be brewed at home, which per cup barely cost more than a few cents. But the same cup of coffee at a station kiosk costs two Euros. Coffee in a grand café with tasteful decor, a selection of international newspapers, magazines and Wi-Fi is

Figure 5. Principle of societal increment of value according to Shedroff



¹⁷ At the end of the 20th century the economists Pine and Gilmore made a sharp analysis of the experience economy, *The Experience Economy - Work is Theatre, Every Business a Stage*, Boston: Harvard Business Press, 1999. It hit like a bomb and was read not only in the world of trade and retail but also in that of culture and heritage.

¹⁸ Ibidem, 1-3.

offered for € 3.50. And a cappuccino steamed by a skilled barista, while you are sitting in the centre of Florence on the Piazza della Signoria overlooking the Uffizi, will cost you as much as eight Euros. But if you're getting the spring sunshine for free and you're sitting there with the love of your life, who cares?

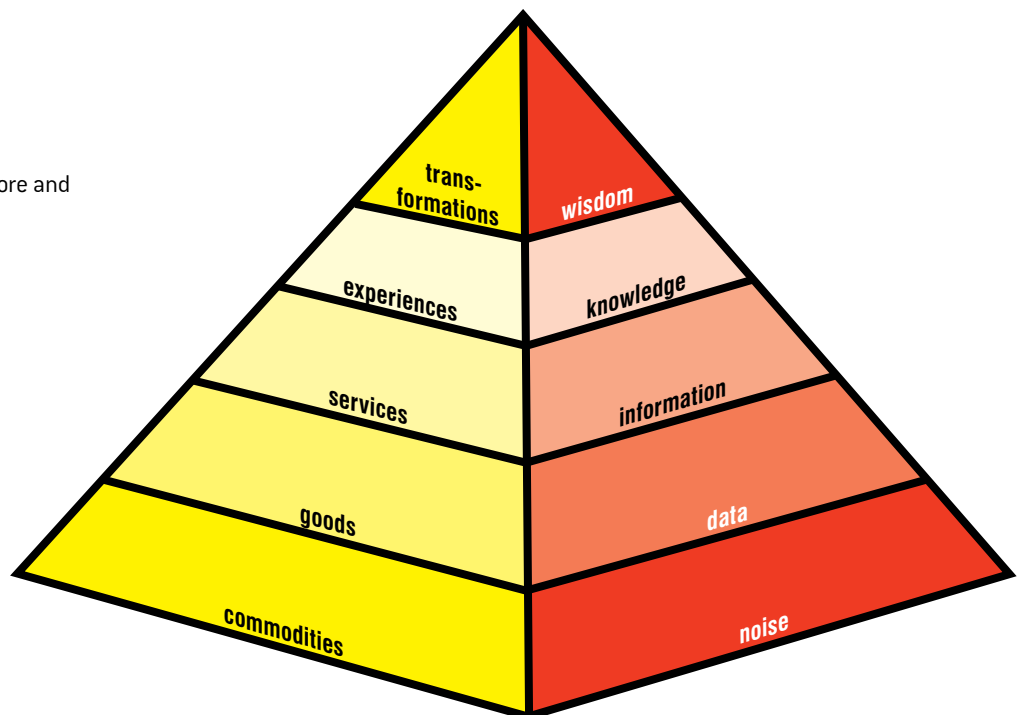
The product is the same, a cup of coffee, but the conditions under which it is consumed change every time. The diagram (see Figure 4) shows that the better you meet the users' needs, the more money you earn and the stronger your competitive position becomes. The chart can also be read as a model of economic progress. Raw materials include freshly caught fish, mined iron ore or picked coffee beans (barter economy). Products are the result of the first adaptations: fried fish, a kitchen knife or a cup of coffee (industrial economy). Services are the things or actions you get in addition: a plate, cutlery, a table and a chair for you to eat fish plus adequate service, a two-year warranty when you purchase the knife, or the cup of coffee you buy at a kiosk on a bleak platform (service economy). Experience comes in the specialty restaurant with its fine surroundings, overlooking an old harbour, while the fish is expertly filleted under your nose and the sommelier recommends a crisp white wine. The knife is sold in a specialised cutlery shop during a demonstration afternoon with a Japanese cook preparing sushi. The coffee has been discussed above: the Experience Economy.

The transformation of information into knowledge

Transformations are the highest step in this economic satisfaction of needs. This explains the success of health institutions, and the cult-like hype around Apple: the users of devices carrying the apple-with-a-bite logo imagine themselves to be smarter, more creative and more interesting than others (transformation economy). Ideas of experience guru Nathan Shedroff connect well with this.¹⁹ He translates Pine and Gilmore's materialist model to a more spiritual version. Now the focus is on the transformation of information. It develops from unreadable data to something that can ultimately be considered as wisdom (see Figure 5). Raw data, such as that resulting from research, is generally unreadable for ordinary mortals. For the data to become information, context and interpretation need to be added. But information on its own is often flat and impersonal, and quickly forgotten. Take information-dense sites like metro.co.uk, nu.nl or the free newspapers you leaf through in the train – afterwards there is little left. As a rule, knowledge is wider than information, and can be applied to a wider range of issues. Knowledge is characterised by a more personal nature. It is acquired through the exchange of ideas in conversation or while reading specialised literature (you are in a silent dialogue with the author). Telling and listening to stories is also a prototype of knowledge propagation. Finally, wisdom is obtained through deep reflection, evaluation and weighed interpretation.

3

Figure 6. Comparison of Pine-Gilmore and Shedroff.



¹⁹ Shedroff, N., *Experience Design 1*, Thousand Oaks: New Riders Publishing 2001; www.experiencedesignbooks.com/EXP1.1.

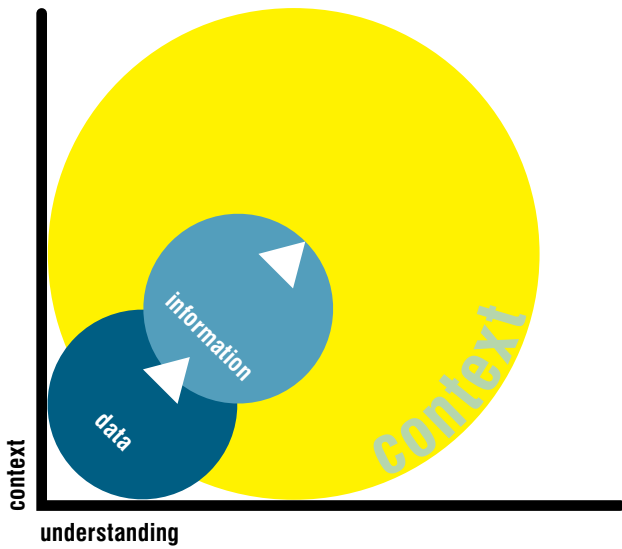


Figure 7. Relation between context and knowledge [1].

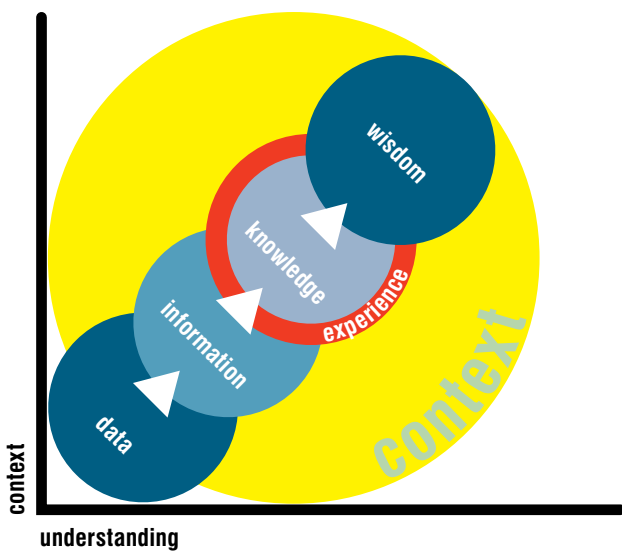


Figure 8. Relation between context and knowledge [2].

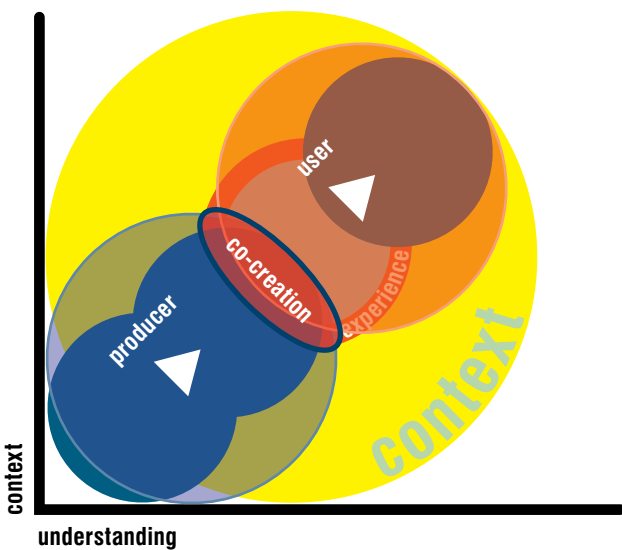


Figure 9. Relation between context and knowledge [3].

These ideas can be combined in a pyramid model where Pine and Gilmore's terminology is related to that of Shedroff (see Figure 6). Commodities are compared with noise, goods with data, the provision of information is at the same level as the provision of a service. It's clear at a glance that an experience can be a richer learning tool when knowledge acquisition takes place. At the top, transformation correlates to wisdom.

But there are limits. Every experience is, in the end, personal. The provider of an experience gives prerequisites, but users will create the experience themselves to their own degrees and depths. The next series of figures show this process clearly step by step. As already noted, data as such is difficult to understand because of the lack of context. By providing context (the green circle in Figure 7) data becomes more organised and a form of transmissible information emerges. An analogy with an exhibition is obvious. For a layman, the collection in storage often looks like more or less unreadable data. Once order and context have been provided, understanding will result.

The next step is to convert information into knowledge. But real knowledge as a product is not transferable. Knowledge must be developed by the user, even though the process of knowledge building can be stimulated. You can encourage curiosity and the desire to learn more. That works best, says Shedroff, if you make the learning experience rich and multisensory, turning it into an experience where the user takes over the initiative. The user organises his or her own unique (learning) experience. An experience is therefore always a semi-finished product. The producer designs the content, but it is the user who will derive their own experience from it. Later on, the user may come to deep and valuable insights that we recognise as wisdom.

It is clear that the provider in the green circle and the user in the pink circle have their own responsibilities. The producer of the experience can stimulate or manipulate things to a certain degree, but must above all release his grip.

Ideally, the co-creation should take place on the border between the producer and the user (the purple ellipse in Figure 9). Here the visitors take over the baton from the producer. They create their own unique experience,

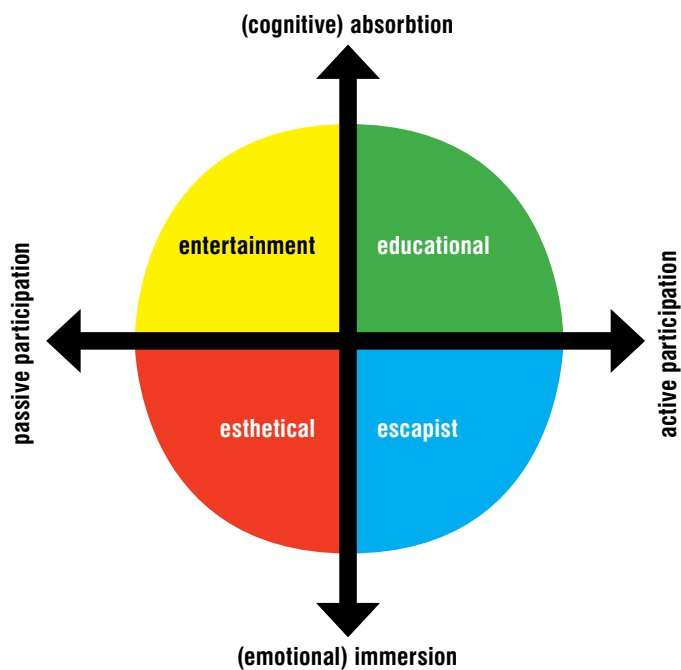


Figure 10. Experience analysis according to Pine and Gilmore.

maybe add something to it (or make something else out of it, who knows?), and share it with each other. Providers of experiences often want to be complete. But in this way they are closing off the experience by not allowing any imagination or exploration by the users. A too-closed format can incite enthusiasm in some people, but with others it leads to resentment due to a feeling of being excessively controlled. In fact, any surprises are then either ruled out, or, if there at all, they are too obvious.

3.2 Ingredients of an experience

What makes an experiential presentation so attractive for visitors? The English word *experience* can be rendered in Dutch by two words: *ervaring* and *belevenis*. An *ervaring* (in German: *Erfahrung*) seems to be a deeper expression of the phenomenon than a *belevenis* (in German: *Erlebnis*), which is a bit more on the surface. *Belevenis* comes to you from outside, whereas a perfect *ervaring* is experienced deeply in your body and soul.

Falk and Dierking capture the heritage experience in three contexts: personal, social and physical (see Figure 3). They recognise that it's a complex neuropsychological process, where emotion plays an important role. An experience is the individual result of sensory impressions that get awarded an emotional label. Physiologically, your entire body is in close relationship with your brain. All sensory impressions such as smell, sight, hearing, touching

and taste are embedded in the limbic system and recorded in memory. That is the part of the brain involved in emotions, memory, learning, motivation, reminiscences and sexual behaviour. The countless impressions you get are tagged with the speed of light: nice or nasty, beautiful or brutal, tricky or trustworthy. In terms of sheer survival, it's useful: the millions of impressions you get must lead to the best possible physical, psychological and social functioning. Being human you must evaluate new situations every time, and you do that on the basis of countless experiences that preceded them. But it has to happen quickly. Otherwise you are going to run away if you see a blackbird, for example, unless you know that the garden bird will do no harm. Whereas it is better to (carefully) escape at the sight of a wild grizzly bear.

In Figure 10 Pine and Gilmore show what makes a good experience. The vertical axis shows the bandwidth between rational processing (cognition, top) and emotional immersion (bottom). The horizontal axis shows the degree of involvement, passive on the left and active on the right. As a human being, you are always moving between these poles: sometimes you are almost physically touched by emotion or disgust, at another moment you are able to coolly analyse what you are facing. This creates four areas of experiencing: entertainment, educational, aesthetic, and escapist. In the domain of entertainment, Pine and Gilmore say, you are passive and information mainly arrives through your head. A film presentation or a short theatrical performance in an exhibition are good examples. You are a spectator and you can peacefully absorb the story. Experience within the aesthetic domain is more of a total experience which gets into your heart and soul. As a rule, you undergo it in peace and quiet. You are sitting, feeling, looking at and enjoying the things around you. It is the design and colour scheme of the exhibition that you are charmed by. The educational domain is the part where active engagement is needed. That is about the rationalisation of what you experience, the active processing of information and your desire to understand it. You're watching and comparing and you're placing what you see in the context of, for example, geography or history. The escapist domain also requires active participation, but mostly it takes place in a complete staging. By actively participating you can lose yourself for a moment, emerging in a different time or in a different place: the so-called flow experience (see also Section 4.2.5). Finally, Pine and

Gilmore argue that a good experience covers all four domains. This so-called 'hot spot' is represented at the heart of the model.

Independent research confirms Pine and Gilmore's findings. Perhaps we can analyse what constitutes a good experience even more deeply? For that purpose, visits to exhibitions, theatre performances, designer shops and events should be systematically examined for their experience value. The following set of characteristics can be of help.

3.3 Design features of an experience

We are going to look closely at the elements of exhibition design, but this subject will be discussed in more detail in another Reinwardt reader. The reason we also touch upon it here, is the importance of audience advocacy: becoming aware of heritage presentations from the perspective of the user/visitor. We follow Shedroff's system.

Shedroff states that content should be the starting point in all types of experience design. The content of a story, the background of a collection or a historical site are the source and the motor of design. Without content, an experience is only entertainment. Furthermore, three disciplines are of interest: sensory design, information design and interaction design. By applying them to a greater or lesser extent you ultimately shape the experience.

Sensory design

Sensory design refers to creating environments that affect as many senses as possible. A good experience is to a great extent a multisensory one. It's important to see whether the experience scores well in that respect or not.

Sight: see the overall design, but pay special attention to the detail. Are they carefully finished off or bungled? Things that are broken, dirty or inferior are by definition unacceptable. Many experiences are shrouded in darkness. It is for a good reason that the term *black box* is often used. But is there a chance to see daylight from time to time? Nothing is so fatiguing as a succession of experiential displays set up in complete darkness.

The Groninger Museum has found a good solution to this type of museum fatigue which can be caused by a succession of individual objects highlighted

in semi-darkness. In one of the rooms there are alcoves in the corners, screened by walls; places with comfortable benches offering great views through a large window. You see ducks and other waterfowl at eye level swimming in the museum's canal. Experience the daylight, just do nothing and empty the mind and you'll get recharged for the next round through the museum.

Hearing: listen to the sounds in the experience. Multiple sounds are often used in narrative exhibitions: how do they relate to each other? Is it harmonious or a cacophony?

In the Tropenmuseum, Amsterdam, lots of audio-visuals and background noises enhance the atmosphere. If there are a lot of people in the museum, the sounds and noises support the atmosphere. However, if you walk around it when there are few visitors, the din is striking and creates a slightly haunted atmosphere.

Touch: what materials are used in the exhibition design and how do they fit the theme? Are there opportunities to feel the materials the collections are made of? *The Geffrye Museum in London shows a succession of middle-class interiors. Between the rooms there are places for texts and explanations. Tactile transmission is used extensively here. You can feel the fabric that the upholstery is made of, slide your fingers along strips of wallpaper, read the facsimile newspapers and sit in replicas of chairs. Have a look with your hands!*

The sense of touch offers unprecedented contact with forgotten memories. In reminiscence programmes for seniors with memory loss, taking an object from the past, a hand coffee grinder for example, can sometimes wake up a world of memories.

Smell: subtle application of scent can be very effective as it is a sense strongly connected to your memory. Scents can affect you tremendously and 'a whiff of the past' can take you emotionally back in time.

Taste: just like smell, taste is difficult to offer regularly in the more traditional forms of heritage presentation. Museum events might be a solution here. *A lot has been thought and written about taste and smell, such as in In Search of Lost Time by Marcel Proust (1909-1922) or the recent bestseller Perfume by Patrick Süskind (1985). Scents are stored in the*

long-term memory. You smell something and you feel an emotion you cannot identify. Only when you dig deeper into your memory, do you realise that the scent evokes a memory. This could be an event, but also a mood or a feeling from your childhood. Memory psychologists speak of the 'Proust phenomenon'. Proust lets his protagonist experience an intense feeling of joy he cannot explain when he dips a cake, a madeleine, into lime blossom tea and eats it. It turns out later that this cake reminds him of his happy childhood.²⁰

For conservation reasons, museums are reluctant to use volatile fragrances, to say nothing of tastings. Museum events might sometimes be an option. A Friday-night visit to the Van Gogh Museum with music, a story told by a curator and some cheering tannins after the glass of red wine, does give a different viewing sensation when appreciating the southern French landscapes. The caterer of Hampton Court Palace (London) used to offer small tasting dishes on the menu prepared according to recipes in cookbooks from the time of Henry VIII. The public found them bland – not spicy or salty enough and, for our tastes, not sweet enough. Not a commercial success, but great in terms of content!

Information design

Information design means paying attention to the structure, context and presentation of data and information. Articulating the theme of a presentation allows you to keep better control of the design process, and the result will be more understandable for the public. A method that helps here is describing the theme in one key sentence, preferably a stimulating core message of three or four words. The most famous core sentence used in many Hollywood productions is: Boy meets girl.

When designing the presentations for the Institute of Image and Sound (Hilversum), the design teams used the four-word sentence method. One of the presentations was about special effects in the world of television. As the visitors were supposed to play an active role, the team used the core sentence 'I can do magic.' It helped the multidisciplinary team keep the focus. It was about special sound, light and film effects such as green screen, but by keeping the visitor (the 'I') in mind and by actively formulating the theme (I can do magic,) an interactive presentation was created that enabled the visitor to discover by independent manipulations how things work in the world of special effects.

Harmonise and eliminate

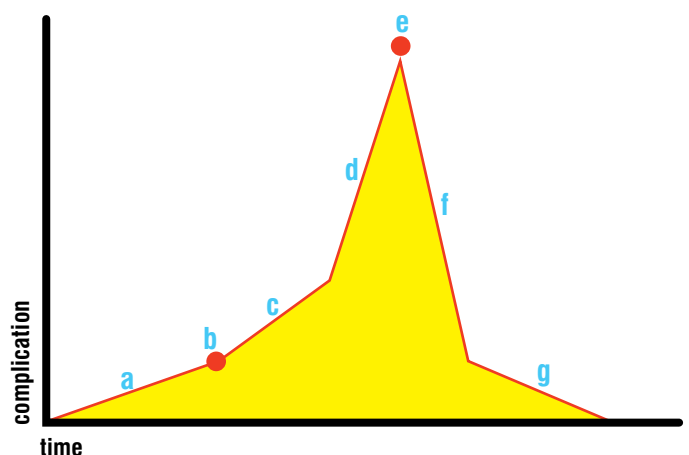
Two additional notions are important here. Emphasise whatever strengthens the core of the story, and eliminate 'noise' – a proven method in successful mainstream theatre production. You can partly achieve harmonisation by design interventions, such as the choice of materials and colours. Eliminating is more difficult but still do-able. Bright-red fire extinguishers, required by fire inspection services, can be violently discordant in the design but may sometimes be replaced with aluminium-coloured specimens with a small but recognizable red fire logo. The exit light boxes indicating escape routes can also be an unnecessary distraction. A blue light instead of bright white would be just as visible, but less striking. If there is a lot of multimedia playing in the exhibition, ensure harmonisation of sound recordings. Most professional organisations illuminate the exhibits with great care. Make sure you light the interpretation, too. There's nothing more annoying than seeing the text plates and not being able to read them due to the lack of proper lighting. Besides illuminating the objects, it is equally important to properly light any functional pathways.

Memorabilia

The things that you can casually take along and that reinforce or recall a memory. Who hasn't experienced that perfectly round pebble found on a riverbed and taken along as a proof of the perfect trip? Back home, the pebble works as a time-machine. The cool smoothness in your palm takes you in your mind right back to that moment. A lot of heritage has a material quality and most institutions offer the opportunity to take a simple souvenir with you. A nicely designed entrance card can

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Figure 11. Narrative dynamics in time according to Pine and Gilmore.



20 www.sciencemuseum.org.uk/visitmuseum/plan_your_visit/lates.aspx.

be a start. The possibilities seem unlimited; sometimes there is a difference between the style of the products sold in the museum shop and the institution's image.

A good story

Much heritage has a tangible nature, but what makes heritage special is often the story of or about the material evidence. People have been telling each other stories since time immemorial. A classic story has a standard structure that unfolds over time with changing plot complexity [see Figure 11]. It starts with the *mise-en-scène* where the protagonist (the 'hero' of the story) appears on the stage, often in a tranquil setting [a]. This is the point when the purpose of the story is clarified. Now the plot can start to unfold. An antagonist comes in [c], who can drastically interfere with the storyline. These interventions are the so-called plot points [b and e]. At each point the story can take a step back or a real turn. As a rule, the tension increases in the beginning, continuing until the culmination [e] of the story is reached, the moment when the inevitable happens. This is followed by the resolution [f], and the adrenaline level drops back to normal [g].

An example of a good story can be seen in the Natural History Museum in London, in the permanent exhibition on dinosaurs. You start on the ground floor in the twilight of a long gallery. You need to climb a high-tech stainless steel bridge extending over the entire length of the exhibition. When on the bridge, you are facing dinosaur skeletons and models on your left and right, eye to eye. Labels explain what they ate, weighed and whether they lived in a group. As you enter the bridge you can hear grunts and snarls; on coming closer, you can also hear a storm rumbling. From behind a semi-circular wall at the end of the bridge you can now hear cries of the public. The visitor procession slows down. There's suspense. Behind the wall there is a lifelike T. rex robot in an open diorama. The monster wags its tail, raises its head and lets out terrifying cries. It snorts through its nostrils, its reptilian eyes move around and from time to time it gasps unexpectedly, trying to reach the crowd behind the railing, who quickly jump away. Only then does the actual exhibition begin, trying to answer the question: 'Do dinosaurs look like the animals of today?' This is evaluated on the basis of the most recent insights. At the end of the exhibition the question is repeated a few times on banners. At the exit there is a display case with a sleeping baby

dino. You see its belly going gently up and down as it breathes quietly. Sometimes an eyelid trembles or a paw moves...

The storyline in an exhibition is related to the routing and arrangement of plot points in the exhibition space. Setting up a good drama in an exhibition requires an almost linear design that is contrary to the principles of free choice and of free learning. Nevertheless, a narrative can be created by staging and changing colour schemes, and by playing with forms and light intensity around the presented displays. An exhibition often combines different narratives presented at the same time. It offers opportunities for telling mini-stories. *A classic example of such a small narrative is one more presentation at the London Natural History Museum, this time explaining the ecological cycle. In six mini-dioramas we see the life of a rabbit. First the animal eats grass, then we see it getting old and ill, dying and finally decomposing. The minerals from the composted rabbit nourish the growing grass that is again nibbled at by a young rabbit. We hear a small dialogue in the audio explanation. A girl tells her mother what she sees when the lights go on sequentially in each of the display cases. Her mother provides explanation and interpretation. At the end, the child is so excited that she exclaims: 'That's brilliant, let's recycle another rabbit!'*

	undergo passively	participate actively	determine interactively
reflex	1	4	7
habit	2	5	8
involvement	3	6	9

Figure 12. Relation between action and intensity.

Interaction Design

The term interaction design is used for a design guiding the user through space and time in varying degrees of involvement. It is a kind of double matrix in which action and intensity are combined [see Figure 12]. The vertical axis represents the degree of involvement. This axis runs from almost knee-jerk responses [just having a look out of politeness], via normal involvement that suits your temperament, up to strong commitment that almost takes you out of your normal routine. The horizontal axis

shows the participatory action you are invited to perform. That goes from passive, via active and up to interactive. If the visitor is only tempted into throwing a cursory glance and he does not have to do anything, he is at level 1. But if he is up to his ears in a programme and can largely decide what to do by himself, then level 9 is reached. By being aware of the level of commitment and participation that the design offers, you can shape the experience.²¹ By the way, it would be wrong to say that one form is preferable over another, it is the change itself that offers opportunities to create a rich environment for the visitor experience. Compare it to walking on a plain with a horizon that never comes closer, accompanied by a grumpy old man incessantly babbling, or an adventurous city walk with a new perspective or different spectacle around every corner where you decide where the next bit of information will take you using a multimedia app.

3.4 Criticism of experience design

There has been a lot of criticism, and there still is, of experience design and its superficiality in particular. The trajectory that the experience economy followed in recent decades was filled largely with mistakes. There was an abundance of experience-oriented presentations knocked together in pursuit of commercial gain. Many of them turned out to be made of cardboard and did not quite live up to expectations. Consequentially, a pattern of self-destruction soon emerged, as many of the experiences were seen as fake by customers, like the Holland Experience in Amsterdam, a sadly failed tourist attraction once located next to the Rembrandt House. The consequences are easy to guess: a razzle-dazzle of fake experiences [for which, incidentally, there is quite an audience, as proved by the Amsterdam Dungeon]. French philosopher Baudrillard himself sniffed: ‘... the world itself, with its inclination for cloning, has already turned into an interactive performance. A sort of amusement park for ideologies, technologies, works, knowledge, death and even destruction. All this is likely to be cloned and resurrected in a juvenile Museum of Imagination or a virtual Museum of Information.’²² But even without existential criticism, we see that consumers have become more discerning. Most refuse to deal with fakes anymore and have developed a healthy allergy against counterfeiting. This is expressed in daily life by a growing preference for real things and a search for authenticity. Think of the increased focus on safe, organic food, the rediscovery of forgotten vegetables, the revaluation of local

is what it says it is	real fake	real real
is not what it says it is	fake fake	fake real
	is not true to itself	is true to itself

Figure 13.
Real/Fake matrix after Pine and Gilmore.

products, the preference for real-life encounters. But fake never sleeps: what is a farmers’ market doing in Amsterdam’s Old-South district? And is every village going to rediscover its own folk costume?

As originators of the term Experience Economy, Pine and Gilmore wrote a second book with the telling title *Authenticity*.²³ The fake/real matrix in their book is especially interesting for us here. This is a twofold opposition combining the degree of sincerity of the provider with the degree of authenticity of the product offered. Pine and Gilmore think that as a provider you should stay close to your origins, otherwise you lose your credibility. On the other hand, they state that if you say you offer something, you should also provide it.

Have a look at their dual matrix. Heritage institutions that collect, preserve, interpret and educate are part of an old tradition. They are true to themselves and their authentic collections are exactly what they are, namely real. Their Real Real is as good as gold. The Gemeentemuseum in The Hague shows the real *Victory Boogie Woogie* by Mondrian and the museum is what it says it is. But heritage institutions can also play with it. The Natural History Museum in London shamelessly shows a fake dinosaur. They therefore fall into the domain of Fake Real. The dinosaur is phony, but the intention behind it – to let the visitors experience what kind of animal it could have been – is real. This fits seamlessly with the educational mission of the museum. Sometimes it is better to use replicas than real objects: think of hands-on knowledge transfer that couldn’t be done with an original object for conservation reasons. In the Rijksmuseum’s educational workshops there is a copy of the painting *The Jewish Bride* by Rembrandt, made with a 3D printer, enabling visitors to feel the micro-relief of the canvas for themselves and thus experience how thick Rembrandt’s paint layer was.

²¹ Funnily enough, this analysis doesn’t say anything about the form in which these are elicited. Media guru Marshall McLuhan (1911-1980) distinguished between hot and cool media, with high (film) or low (telephone and television in its time) intensity. Cool media requires more effort and imagination of the observer and is thus more effective than hot media, he argued.

²² Baudrillard, J., ‘Disneyworld Company’, *Liberation*, March 4, 1996.

²³ Pine, J., and Gilmore J., *Authenticity: What Consumers Really Want*. Boston: Harvard Business School Publishing, 2007.

Conversely, it is clear that Real Fake can considerably affect the perception of authenticity. Warwick Castle (UK) presented an evocation of a Royal Visit sometime in 1898. Hall after hall was filled to the brim with authentic furnishings, in perfect *fin de siècle* style, dedicated to the evening when Crown Prince Edward visited the castle. But according to some reviews, the visitors' attention was completely distracted by the Madame Tussauds' wax dummies, thereby reducing the authentically-styled rooms to mere decors.²⁴ From a heritage perspective, Fake Fake is to be avoided at all times, although double fake can sometimes be appreciated, this time for its campness. Some would say Holland Village in Nagasaki (Japan) offers a suitable example of this.

If we look again at the core model of 'good experience' with the four elements of entertainment, education, aesthetics and escapism, then heritage institutions appear to be strong in offering educational experiences designed to be aesthetically pleasing. Entertainment and escapism don't always seem to fit well, with associations from the world of pleasure and amusement parks. Social geographer Tuan makes you think twice, however, when he speaks of the 'hyper-reality' of created experience, in contrast to the daily grind: 'It is daily life, with its messy details and frustrating lack of definition and completion – its many inconclusive moves and projects twisting and turning as in a fitful dream – that is unreal. Real, by contrast, is the well-told story, the clear image, the well-designed architectural space, the sacred ritual, all of which give a heightened sense of self – a feeling of aliveness.'²⁵

²⁴ A Tripadvisor reviewer writes on 09-10-2012: 'Visited here many years ago and it was interesting. Then Madame Tussauds took it over and turned it into... well, a wax museum tourist trap. Outrageously priced parking, funky wax figures, terrible 'ghost' things in tower, even pumping in horse dung smells in the lower stable area. Ugh! Save your money. Go to Kenilworth Castle which even though mostly destroyed is historical, very interesting, and hasn't been junked up for the (silly) tourists.' www.tripadvisor.nl/ShowUserReviews-g186400-d195569-r142383686-Warwick_Castle-Warwick_Warwickshire_England.html.

²⁵ Tuan, Y.-F., *Escapism*, Baltimore: Johns Hopkins University Press, 1998, 7.

4

As previously indicated, the terms 'learning' and 'education', and the concept of heritage itself are all interpreted in different ways by various actors in the heritage field. We make a distinction between learning as personal development and learning as a result of formal education. In this chapter we first consider ways in which knowledge is created, mostly from a constructivist approach, and what it means for audience work in the heritage world (4.1). We then outline, in general, a number of educational psychology theories and applications important for heritage presentation (4.2). We conclude with an outline of the current role of heritage in regular education (4.3).

Heritage and Learning Ruben Smit

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I George Hein's constructivist learning theory

Late last century, the American George Hein (1932)³⁹ developed an interesting model covering learning and knowledge transfer in museums. Hein uses the constructivist learning theories of developmental psychologists like Jean Piaget, John Dewey and Jerome Bruner.⁴⁰ Hein's model helps to understand what learning is, how knowledge is acquired and how heritage institutions can open up their content. Hein brings two questions together - one focuses on what knowledge is (epistemology: theory of knowledge); the other is about learning, looking at how people learn (educational psychology).

1.1 Theory of knowledge and learning

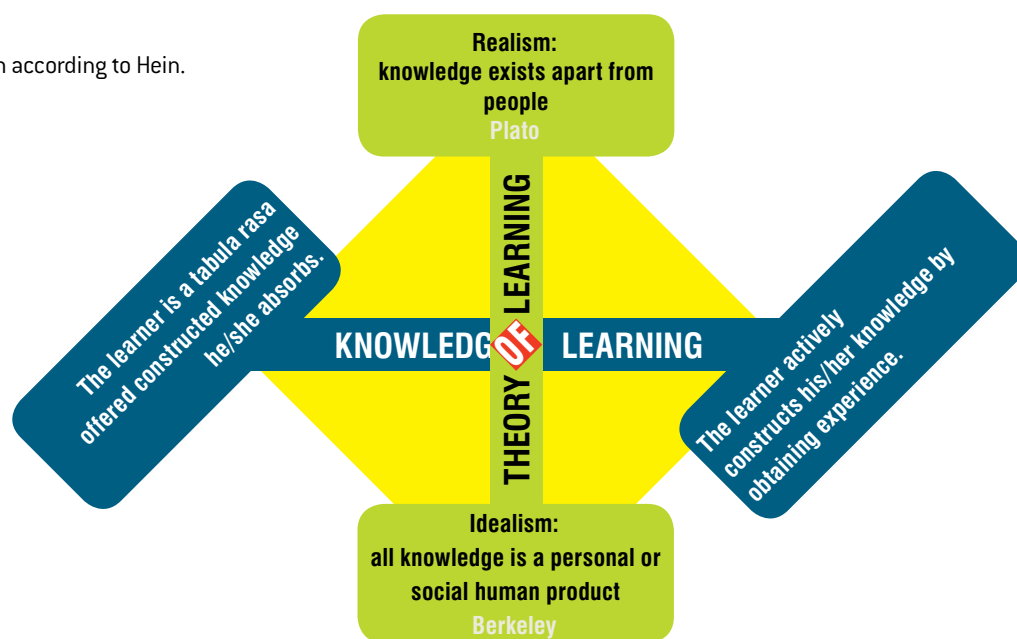
The following model (see Figure 14) brings these two questions – what knowledge is and how people learn – together, providing a handle on how information about heritage can best be made available.

On the vertical axis are two opposing epistemological views. At the top is the view that all knowledge exists in reality outside of man. It supposes a body of irrefutable knowledge that can be discovered and grasped through research, experimentation and deep study. It is mankind's duty to investigate, describe, understand and capture this firm knowledge. Such thinking reflects the classical philosopher Plato's doctrine, taking the universal good, truth and beauty as a premise. Knowledge is an absolute objective given that exists outside of people.

Conversely, at the bottom of the axis is the notion that no matter how you look at it, all knowledge is ultimately a human construction. Even the laws of nature are, at the core, human descriptions of a possible reality. This view is consistent with the radical ideas of the 18th-century Irish philosopher George Berkeley, who said that all visible reality depends on human perception. There is no object without a subject. Human perception not only colours the observed – according to Berkeley, the object does not even exist unless it is observed by people. In this approach, all knowledge is a subjective human product.

The horizontal axis is that of learning theory. Left is the notion that learning brings the best result by a gradual, scholastic approach. The learner is the proverbial 'blank slate.' The omniscient knowledge provider hands over structured knowledge little by little. Through repetition, exercise, reward, punishment and scrutiny, the learner ultimately gets wiser and more intelligent. The knowledge provider transmits canonical knowledge to the learner. The learner demonstrates his or her progress and the growth of understanding by replicating the transferred knowledge. The right side of the same axis represents the notion that optimal learning takes place when the learning ability of individuals is activated. Knowledge and insight grow by independent and investigative observation, selection, interpretation and acquirement. This is a highly active, self-directed learning process leading to the activation of highly individualised, in-depth knowledge.

Figure 14.
Learning and knowledge diagram according to Hein.



³⁹ George E. Hein is emeritus professor of museology and education at the Lesley University, Cambridge (MA): www.george-hein.com.

⁴⁰ See Chapter 4.2.3 'Learning from and with heritage' in this reader.

1.2 Four types of learning and knowledge transfer

In the next step, Hein introduces four types of learning and at the same time four types of knowledge transfer (see Figure 15). The model below visualises them in four colour sections. Clockwise – starting lower left – they correspond with behaviourist, authoritarian, discovery and constructivist types of learning.

Behaviourist learning

In the first option, bottom left on the diagram (purple), knowledge is a brainchild actively constructed by people. Content is offered in a systematic and organised way, little by little, with solid learning objectives in mind. There is frequent repetition of information: text B starts with the core of the previous text A. Learning gives satisfaction because ‘good’ understanding is rewarded. Hein calls it behaviourist learning. Information is strictly organised and communicated at different levels, for example with texts for adults and an extra ‘children’s path’ with active and play learning. Exhibitions following this principle often use a mix of information transfer means and multimedia: objects are interspersed with interactive displays, instructive texts are supplemented by screens with movies or games.

The advantages of this model are the challenge and liveliness. With its activating, quiz-like approach competitive-minded people feel challenged. Visitors feel motivated because rewards can be offered at any level. Exhibitions are often lively because of the

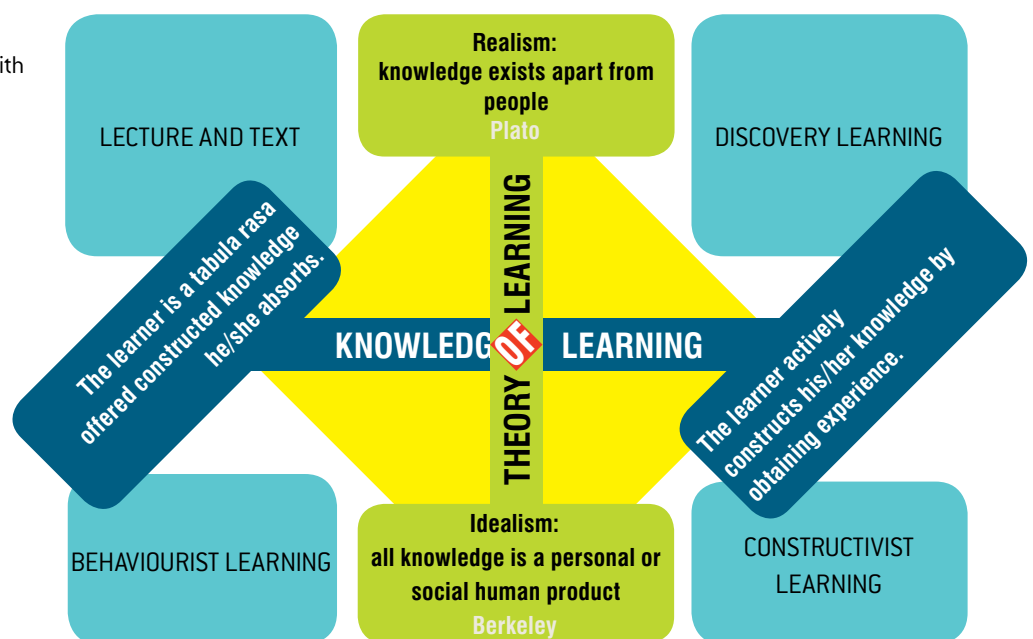
diversity in forms of information and the interaction offered. Tours are a combination of supply-driven stories and demand-driven interaction (with a reward if you know the correct answer).

There are disadvantages, too. Behaviourist learning works best when acquiring action-oriented knowledge and thus when learning or enhancing skills. Car riding lessons are strongly behaviourist. The question is whether this form of learning, with its preference for unambiguous answers, fits into the informal learning environment of heritage. At exhibitions you see questions on clapboards with the ‘right’ information provided by the institutions under them. Such interaction is not always deep, nor does it reflect the often multiple nature of heritage. Visitors should also be motivated by the story offered. Lack of interest in the subject results in the visitors finding the presentation design and interface more interesting than the content.

Lecture and text learning

The second option is represented in the top left of the model. Here, knowledge is based on researched and factual truth, while the learning process is best when knowledge is structured and transferred little by little. Hein calls this Lecture and Text Learning: the classic academic way of transferring information. Hierarchy is present both in form and content. The museum as a knowledge institution offers its expertise top down. Collections and thus story lines are arranged according to the Enlightenment principles of chronology (time

Figure 15. Learning and knowledge diagram with transfer styles added, after Hein.



as the linear ordering principle), qualification (the separation between high and low art) or taxonomy (types and classes). Information is presented in an undifferentiated way, through unambiguous and anonymous texts in a strict order (A, B and C texts). Tours are supply-oriented and are conducted by experts who divide knowledge into bite-sized chunks. In the organisation of the institution, a hierarchy is clearly visible, too. Curators and directors are at the top whereas attendants in blue police-style uniforms are underneath.

There are advantages to this model. Many visitors are used to this method of presentation. The schoolmaster talks and all you need to do is pay attention. It is a relatively inexpensive way of working, with just an expert curator recording his or her expertise as exhibition text or text in the catalogue. A designer makes sure the whole thing is properly presented. No hassle with museum education officers, new media specialists, focus groups, participatory discussions and so on. The disadvantage is that little account is taken of the visitors. Their own learning styles, learning needs or prior knowledge are not relevant to the institution. The chances of 'firing' over the heads of visitors are actually quite large. Differentiation in additional (educational) programmes can only be achieved when they are tailored to different audiences. First timers can get intimidated by the strongly language-based and abstract character of the information. People with a lower level of education training will soon feel excluded.

Discovery learning

The third option is shown in the upper right one. Here too, knowledge is seen as a relatively proven and indisputable fact. However, the heritage institution assumes here that visitors would prefer to acquire that knowledge by discovering and actively trying it out. Hein calls this discovery learning. Information is offered through experimentation and active learning. Visitors master the knowledge playfully and by trial and error. Demonstrations of working devices or visual models take centre stage, but there are many hands-on opportunities. These are often robust exhibits with knobs and handles to get things started or displays where the user can build or independently experiment. These interactive displays respond to the manipulations of the user. However, the results are fixed: water boils at 100 degrees Celsius at sea level, light passing through a prism is split into all the colours of the rainbow.

The benefits of a strategy that adopts discovery learning are clear. Due to its interactive nature, visitors can steer their own learning. This promotes the intrinsic motivation to learn. The active aspect can often literally be seen and heard at the exhibitions: it is alive with activity, visitors are busy interacting with the presentations. The atmosphere is informal and playful. Mutual and intergenerational communication takes place almost automatically.

But there are also disadvantages. As interactive presentations often explain complicated processes, long introductory texts are needed which are not always read. As much as visitors are busy acting or playing, they often limit themselves just to pressing buttons or pulling levers. Whenever anything happens as a result of that, or if the display changes, the visitor walks away happily searching for a new presentation without asking themselves why something happened or changed. Or it's because you failed to read the introductory text and it's incomprehensible. Therefore, many visitors seem to be busier with hands-on than with the equally essential 'minds-on'. To solve this dilemma, intermediaries often walk around helping awkward visitors to understand the presentation, slowing down too noisy visitors or encouraging shy ones. This kind of display is often very expensive to make, the style of the interface ages quickly and requires frequent cleaning and maintenance. Nothing is so unappealing as a shabby and dirty exhibition with some displays out of operation.

Constructivist learning

The fourth and final variant of learning is located at the bottom right of Figure 15. Knowledge here is the sum of everything and heavily dependent on peoples' own perceptions: a construction of the mind. Heritage institutions that take this as a point of departure, want visitors to take responsibility for their learning, a process that is largely determined by personal background, interests, gender, education level and more. Learning takes place contextually and is determined by social and cultural backgrounds. Constructivist learning is fluid, has variable results and, because it's the visitor who's making the choices, has a non-linear learning process. Learning is holistic, touching the physical, personal and social realities, and is therefore the deepest part of the rest of life. Learning is, according to constructivist learning theory, something like a heartbeat – you cannot turn it off.

These are the main characteristics of constructivist learning:

- Learning is both an emotional and a rational activity and a social process that you do with others.
- Substantial learning is intrinsically motivated by your innate problem-solving ability, and is thus a self-enforcing process; while learning, you come across new issues you also want to solve.
- Knowledge is the direct result of your own learning.
- You need (prior) knowledge for further learning and, conversely, new knowledge must fit with existing knowledge; what you learn aligns on existing knowledge or is rejected because it does not reflect what you already knew.
- Accommodating (adopting new knowledge and therefore replacing old knowledge) occurs much more slowly; it is like making new paths in an old landscape.
- Everyone learns in their own way, a few examples are given below (Chapter 4.2 - after Kolb, Gardner and Claxton).

1.3 Applications

The above notions about learning and knowledge offer heritage institutions important starting points for choosing new ways of presentation, at least for Western European audiences.⁴¹ At the Reinwardt Academy we generally proceed from the importance of the fourth, constructivist method of dealing with visitors. This means:

- Offer information at multiple levels and from multiple viewpoints and visions.
- Avoid a strictly linear route with a clear start and a conclusive end.
- Provide a variety of starting points, crossings and rest points in an exhibition, where visitors can accelerate or retrace their steps.
- Make it clear who the information providers are, and increase opportunities for visitor reflection.
- Ask reflective questions rather than straightforward ones. Offer a 'dialogic' approach encouraging visitors to talk to each other. Seek connections with their personal and social knowledge.
- Hein advocates shifting focus from content (which is there anyway) to user. To ensure your information offer matches your visitors, you have to understand their characteristics and needs. You should therefore have access to a rich repertoire of styles and designs.

An exhibition or programme that meets these requirements challenges visitors with multiple perspectives and offers a wide variety of presentation

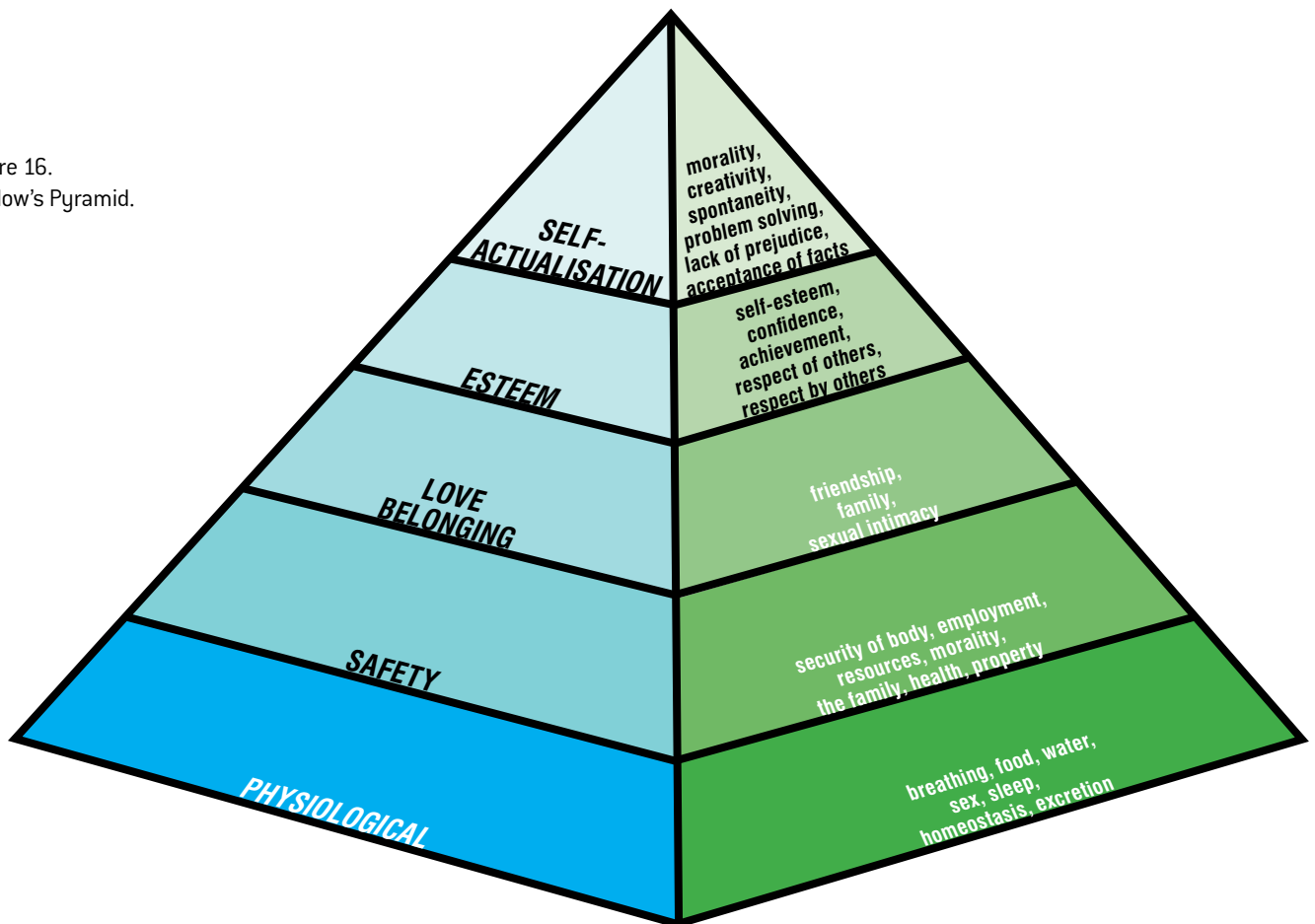
means addressing visitors in a personalised way. New media offer excellent opportunities here because it can accommodate variety and level differentiation. Museums offer more and more constructivist exhibitions and programmes. The Dolhuys in Haarlem as a whole is a good example, as is the exhibition *Who am I* in London's Science Museum. The permanent exhibition in Continium Discovery Centre in Kerkrade, the Netherlands, is constructivist in nature. The National Maritime Museum in Greenwich designed a constructivist educational programme in which school students look for objects that confirm or contest open questions; they were provided with tablets carrying an object recognition app that gave access to extensive background information, challenging them to find both a set of objects that confirms the statement and a set that challenges it. Later on a discussion was held with classmates about the various pros and cons.

1.4 Paradoxes and other issues

No matter how beautiful constructivist learning may appear, it contains a dilemma, too. If it is true that people build and design their own knowledge, which is, moreover, largely based on existing knowledge, an old 'incorrect' idea may also block new, 'correct' information. In other words, the accurate new information is not allowed access because the old misinformation is so firmly anchored. Hein takes the visit of a group of American Orthodox Christian youth to the U.S. Holocaust Memorial Museum in Washington, DC, as a striking example. The story of the industrial extermination of millions of Jewish citizens, homosexuals, Sinti, Roma and mentally-disabled people is laid out in no uncertain terms. This is done with a series of heart-rending presentations, in which highly personalised transfer means are used. Visitors get a real-life Identification Card (*Ausweis*) based on a real person as an entry ticket; in the course of the exhibition more biographical data is revealed about the victim. The finale is the murder of the person that the visitor has by that time already identified with. After the visit, a journalist interviews the youngsters. They are affected and are searching for words. In fact, they cannot handle it. When asked if to reflect on how things could go so wrong under the Nazi regime, an awkward silence sets in. Then one of the young people suggests hesitantly that the problem of the Holocaust would largely not have occurred if Jews had just been Christians. And because the Jews did not accept Jesus as their Saviour, they called this fate upon themselves. An answer that others also agreed with –that, if the

⁴¹ In other cultures and traditions there are mixed views about the constructivist nature of knowledge and the autonomy of the visitor. Think of countries with a communist state tradition; or the Mediterranean with different relationships between state, knowledge and heritage; or areas with a strongly religious public discourse.

Figure 16.
Maslow's Pyramid.



Jews had been Christians, the Holocaust would never have occurred. Perhaps this dilemma is unavoidable, since people will keep on creating their own realities. This can, however, lead to very questionable thoughts, and even complete nonsense.⁴²

A few other conclusions. The idea that there is a one-to-one learning effect in exhibitions is controversial. Knowledge and learning are part of a slow process, certainly not an instant product. In a free-choice learning environment, there are numerous variables that influence learning.

Indeed, visitors decide for themselves why and when they come, with whom they do so, what their tempo is and how long the visit will take. Furthermore, it's legitimate to ask if it's right to measure the impact of a presentation directly after the visit - new information must be given time to sink in, sometimes the penny drops much later, perhaps whilst watching a documentary on TV or reading a book or an article. Learning takes time.

Further reading:

- Hein, G., *Learning in the Museum*. London: Routledge 1998.
- On george-hein.com there are publications and videos. Very interesting are Hein's lecture from 2010 in

Denmark: vimeo.com/10259346, and his chapter on constructivism in MacDonald, S. (ed.), *A Companion to Museum Studies*, Oxford: Blackwell Publishing 2006, 340-352 [Museum Education]; www.george-hein.com/downloads/MuseumEdBlackwellHein.pdf.

2 Other approaches in learning psychology

We owe George Hein a better understanding of the relationship between the way people acquire knowledge and the way heritage content is offered. Below we will supplement it with some educational psychology approaches that can be used to present heritage. Psychological theories of Kolb, Piaget, Bruner, Vygotsky, Gardner, Csikszentmihalyi, and Claxton will be reviewed. But we will start with peoples' basic needs placed by Maslow in a hierarchical order.

2.1 Maslow's Pyramid

Abraham Maslow (1908–1970) was the founder of humanistic psychology⁴³ and developed a theory about what motivates you as a person. He took as a point of departure a fixed set of psychological and biological needs and arranged them in a hierarchical order (see Figure 16).

⁴² The same paradox can be seen with the 'spreading of democracy'. If you find that people in free elections may vote for whoever they want, then you must accept that undemocratic types can come to power. That was true of Hitler, and that goes for Egypt, the Palestinian State and even for some movements in the Netherlands.

⁴³ See inter alia <http://infed.org/mobi/humanistic-orientations-to-learning>.

Maslov was very definite about the order. Every next level, he said, can only be entered if the conditions of the underlying one are met. You can only realise your potential when you have something to eat, you feel safe, you are loved and appreciated. That all sounds plausible but there is criticism, too. There are many situations in which people skip levels or sacrifice their own selfish course for others. A culture has emerged, particularly in the West, where parents disregard their own needs in favour of their children.⁴⁴

Let's do a quick skim of the levels and link them to visiting a heritage institution.

Physiological needs such as hunger, thirst, sleep, relaxation and sex must be met before starting the next level. A wardrobe to hang your coat and bag, clean restrooms to go to the toilet or to drink a sip of water and also seating at strategic locations in the building, form the basis of a good visit to a heritage institution. Safety needs: people prefer a predictable and orderly world. Think of museum facilities where visitors can orientate themselves well and feel safe. Routing and escape routes must be in order.

The need for love and belonging makes people seek warm and friendly relationships. The current orientation of exhibitions towards families as a key target audience results in spaces designed especially for them. It is also essential to train your front of house staff to treat visitors well and have a welcoming attitude.

The need for self-respect leads to the desire for and the dedication to perseverance, competence and pursuit of mastery. It requires self-confidence, independence and a commitment to reputation and prestige. This means that if you want your visitors to assume ownership for your heritage environment, it must be open and challenging but not intimidating, in a cognitive or social sense.

Self-realisation is the ideal where you actually deploy and realise all your potential. This also means that you should not make the challenges in a display too easy. Your task is to stimulate and challenge your visitors and offer more depth for regular visitors with additional programming such as lectures and 'glimpses behind-the-scenes'.

2.2 David Kolb's Learning Cycle and Learning Styles

Another way to approach learning is that of the American organisational psychologist David Kolb (1939). In 2006 the Dutch Museums Association

published an application of his ideas to museum work.⁴⁵ Kolb brings two characteristics of learning together: learning as an active process (in a 'learning cycle') and a number of learning styles where people seem to feel comfortable (doing, reflecting, thinking and deciding).⁴⁶

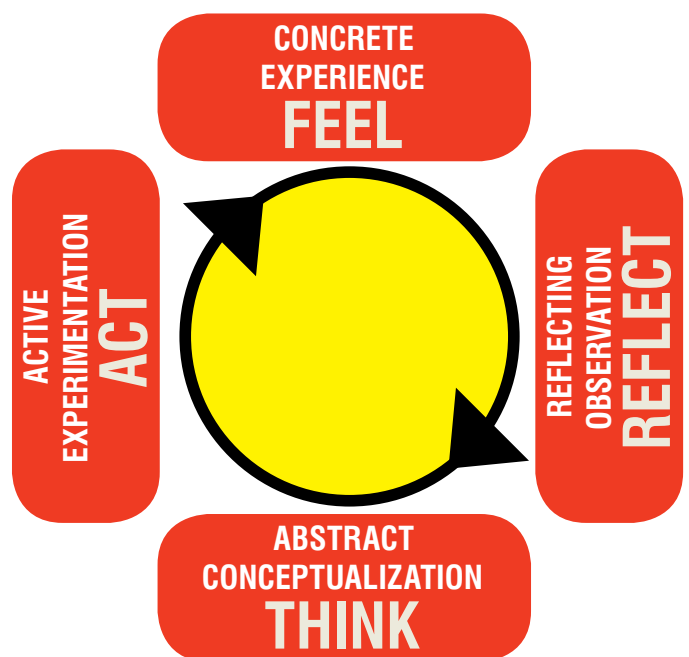
The learning cycle (see Figure 17) is based on the practice of learning. Knowledge is acquired in your daily life where you are continuously picking up experiences. There are two axes of tension: one between testing (active experimentation) and reflecting (reflective observation), the other between the experience felt (concrete experience) and cognitive thinking (abstract conceptualisation). These domains are at the ends of the two axes in the figure below.

Kolb further assumes that learning is a dynamic and active process. The cycle he outlines can be seen in the model as coloured arrows that make up the learning circle.

- 1 You start to do something – you burn your fingers on a hot woodstove.
- 2 This action gives you a direct – sensory and emotional – experience; you feel pain and you're angry because you were so stupid that you burned your fingers on the stove.
- 3 You reflect on that experience; you shouldn't have done two things at once: writing a WhatsApp message and throwing a block of wood into the fire.

4

Figure 17.
Learning cycle according to Kolb



⁴⁴ Cf. e.g. Delfos, M., *Ontwikkeling in vogelvlucht*, Amsterdam: Harcourt Book Publishers 2005, 63.

⁴⁵ Hoogstraat, E., and A. Vels-Heijn, *De leertheorie van Kolb in het museum. Dromer Denker Besliser Doener*. Amsterdam: Museumvereniging, 2006.

⁴⁶ www.aboutlearning.com/what-is-4mat.

4 Then you link the first reflections to existing knowledge, by doing so you make an abstract concept of the experience: first, you know that fire is hot and burns things, iron conducts heat, your skin has been burned through the heat and a blister has formed. Second, multi-tasking is not for you.

5. With that weighed knowledge you can enter again into a new experience.

Thus, the learning circle is closed and almost automatically a new cycle is started. It is a perpetual-motion machine of active, experiential (knowledge) development.

The circle sets out four preferred learning styles: doers (accommodators), dreamers (divergers), thinkers (assimilators) and decision makers (convergers).

A preferred learning style is the way of learning you feel most comfortable with. That often happens automatically. For example, you might be a dreamer who adopts a wait-and-see policy before starting, whilst your best friend, a doer, is already impulsively starting a new job. Thinkers want to first deliberate about it and weigh up the best options before they begin. While decision makers quickly proceed to implementation based on rational considerations. It is not surprising that quite a number of 'Kolb tests' have been developed to create the best project teams in organisations. Indeed, a team consisting only of doers will probably shoot off all in directions, while a group of thinkers may take action too late – if ever. But beware: your preferred learning style does not determine your whole being. Anyone can exhibit all learning styles. Kolb believes that, with age, having gained more learning experience, you are increasingly able to deploy a specific learning style for a particular type of job.

For any given learning style you can connect the heritage offer to fit in with the user.

- Doers are focused on experimentation and experience. The question that appeals to them is the 'if' question. They are focused on new experiences, want to be involved in something and love suspense and diversity. They like competition and that implies taking risks. Information should be short and concise, and preferably offered in a spectacular way. Real-life cases and hands-on interpretation are appreciated. The doer works mainly intuitively.
- Dreamers are contemplative and experiential. The question that appeals to them is 'why.' They are

all about imagination and personal stories. Their imagination is stimulated by multiple and varying perspectives; the design should be colourful and have multiple textures. They are focused on feeling and fantasy. A more poetic interpretation is appreciated. Dreamers are subjective in their selection and valuation.

- Thinkers are analytical and contemplative, they prefer 'what' questions. They are focused on facts and concepts. They find theoretical schemes and consistency important. Background information should preferably be both conceptual and in-depth. They relish intellectual challenges and prefer to listen to an expert. Trite as it may sound, they love beauty, logic and precision.
- Decision makers are focused on no-nonsense results and are stimulated by 'how' questions. They like functional design and the functionality of a presentation. They are focused on efficiency, and hence the validity and applicability of information. They like diagrams and models that give them a quick overview. They want to deploy their problem-solving skills in a rational and practical way. They appreciate technical aids but also enjoy explanations how something works. Decision makers want to put theories to the test.

Kolb's learning model sounds plausible, but it has been criticised, too. For one, Kolb's learning cycle might be too linear. Learning is often chaotic and spasmodic. How often haven't you made a hasty decision based on a one-time experience that you later wish you had thought about more!

There is more criticism. In fact, Kolb's model is often used as a blueprint without a backward glance. For example, when designing labels for an exhibition the stereotypical learning style characteristics are hastily applied, losing sight of the fact that people are complex and recalcitrant. For example, the Victoria & Albert Museum in London leaned heavily on the characteristics of the four learning styles while remodelling the British Galleries. Research on visitors' preferred learning styles showed, to the surprise of observers, that the so-called thinkers actively got to work with interpretation resources actually designed for doers, and vice versa. Nothing more fickle than people. But the overall average stay duration at the V&A's exhibition exploded. It appears that if you link the subject of the presentation (e.g. construction) to a way of presenting based on an appropriate learning style

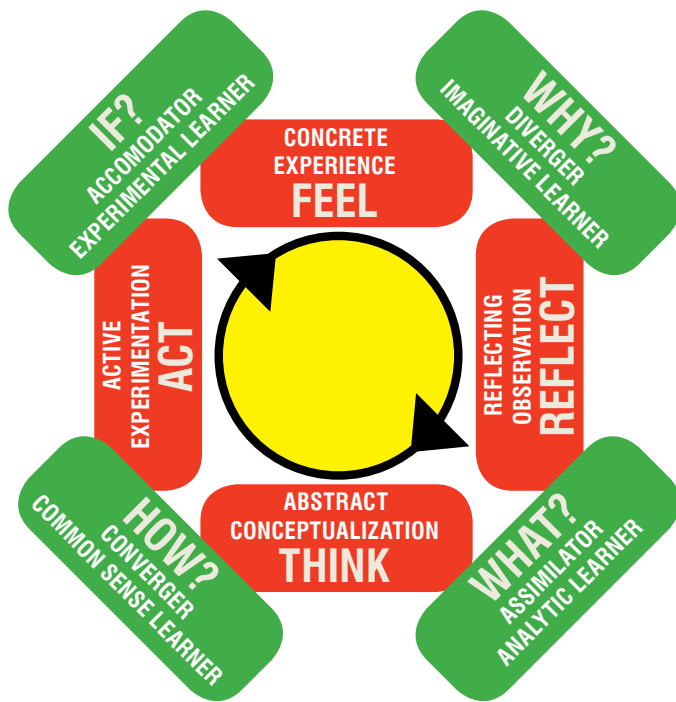


Figure 18. Learning cycle according to Kolb with preferred learning styles.

[with construction, learning by doing would suit best], you can increase attention-span and the duration of stay. While previously visitors had raced through the exhibition in twenty minutes, with the Kolb set-up visiting time increased to a whopping three hours. The rich and diverse presentation of the content was highly appreciated.

2.3 Developmental psychology according to Piaget, Bruner and Vygotsky

We summarise below the work of some developmental psychologists important for learning practices with and about heritage.

Piaget

Swiss researcher Jean Piaget (1896–1980) is regarded as the founding father of developmental psychology. Fascinated by the language development of his two sons, he devoted his professional life to the study of development stages from very young children to young adults. He offers two viewpoints that are relevant here: children growing into adulthood progress through developmental stages, and a notion that acquiring knowledge falls into categories (schemata) that encompass content.

The first notion describes four distinct stages in a child's development:

- 1 0-2 year olds are in the sensorimotor stage. A baby explores its surroundings in a physical way: smelling,

tasting, grasping, listening. The importance of this way of learning in early life is evident from the strong memories that are evoked by smelling forgotten smells or tasting a lost flavour in older life. In visual perception, there is no object permanence in this early stage. Only things the baby sees exist. As an adult when you hide your face behind your hands, you really vanish for the shocked baby, but what a joy when your face becomes visible again a second later.

- 2 2- 7 year olds are, according to Piaget, in their preoperational stage. The world is there for them, because 'grass grows so that if I fall, I won't hurt myself too much.' Think of distraught parents who are in a supermarket with a frantically screaming 'pubertal toddler'. Much nicer is language development in which fantasy still offers absolute realities. This includes symbolic representation: a banana box is a car, dolls are real, as well as a dog drawn in a picture book, bedtime stories are an absolute necessity. Through language development, earlier childhood memories mainly fed by the senses disappear. The brain starts to work in a more complex way, the image of self and the egocentric worldview give way to empathy.
 - 3 7-11 year olds are, according to Piaget, in the concrete operational phase. The child begins to reason logically and to capture the world into symbols. One can now count with numbers instead of an abacus, read words instead of letters. Information is taken in at once. A child can divide the world into categories or, as Piaget calls them, schemas. These are models that enable one to process more data faster. This age group is characterised by the image of an inquisitive child that tries to understand the world by asking questions, conducting little experiments and reading about it.
 - 4 11-15 year olds are in their formal operational stage. Abstract thinking is developing further. A young person who is in this stage starts to think hypothetically. This phase of meta-cognition enables young people to think about thinking. They can put themselves in other people's shoes, they focus their attention on their peers. This stage of life is crucial. Your worldview often becomes different from that of your parents, resulting in adolescent collisions. It's an age when you are overwhelmed by great moral feelings with sometimes behavioural effect (the omnivore becoming a vegetarian...).
- The second insight offered by Piaget focuses on the way our brains deal with new information: assimilating and accommodating. Assimilating is adding knowledge layer after layer. You see something, recognise it, and thus reconfirm what you know every time. These

become 'standards'. This is essential, because you would go mad if you were to experience the millions of impressions (smells, sounds, images, touches, tastes) you are continuously confronted with as brand new. By categorising them into groups, you are able to filter out irrelevant information. Accommodating runs counter to it. This is the sudden realisation that breaks through making old knowledge fade; it's the 'Eureka!' feeling. As a young child, you learn to quickly incorporate a lot of new information (assimilate) as well radically revising knowledge (accommodate). As you get older the capacity to accommodate decreases. That's why older people are often so stubborn, even if they are wrong. Piaget's ideas fit well with the insights we have about constructivist learning. Existing knowledge embedded in schemata increasingly assimilates by the reaffirmation of what you already know. It's the kind of knowledge you unconsciously start to cherish as 'truth'. That's why it takes so much energy and emotion to accept new knowledge. The annual debate about the racist element in *Zwarte Piet* (Black Pete), the coloured assistant of *Sinterklaas* (the Dutch Santa Claus) is a good example.

Bruner

The American Jerome Bruner (1915)⁴⁷ advised the Kennedy administration on reforming the U.S. education system, then largely based on reward and punishment. His most important contribution to learning with and from heritage is the theory of the spiral curriculum. This is similar to Piaget's developmental stages, but much looser. Bruner sees continuous learning as contextual and practice-oriented. He sets out three forms of learning (enactive, iconic and symbolic) that are a combination of how we learn by doing, as well as how we represent realities.

- 1 In the Enactive Mode (1-3 years of age), we learn by doing. Some things are only learned by actually doing them (swimming, cycling, skating). In the heritage world we are also busy doing: manipulating, touching and feeling.

- 2 In the Iconic Mode (4-7 years of age) objects are conceivable and visible without active manipulation. Pictures suggest ideas. We can recall things we have seen before. In an exhibition, for example, we tend to look at shapes and images and try to make concrete analogies.
- 3 In the Symbolic Mode symbols are independent of their physical references. Language liberates us from the material world. We can imagine the thinkable, the conditional and the philosophical. In an exhibition we are reading and listening, using different abstractions (charts and graphs) to understand things.

Bruner notes that we actively deploy all three forms of learning. During the practical learning process, we mentally climb up and down what he calls the 'learning spiral' (see Figure 19): from the enactive mode via the iconic mode to the 'higher' symbolic mode and back. A successful learning environment provides physical, visual and intellectual stimulation. All three are used, although the symbolic mode is not always achieved. It is striking that heritage is usually presented by forms that match the iconic and symbolic modes. The enactive mode is often limited to children's exhibitions or fieldwork activities in nature and environmental education. Interactive media, digital or not, offer a new dimension, but there is still much more to be achieved in that field.

Vygotsky

Russian educational psychologist Lev Vygotsky (1896–1934) stressed learning as a social process.⁴⁸ This fitted well with soviet ideology in his lifetime, although his ideas only became better known in the West after the fall of communist Russia. He was mainly concerned with questions about the way families operate as learning units or how peer education can be used in informal learning environments. Vygotsky introduced the concept of the 'zone of proximal development.' When you absorb new study

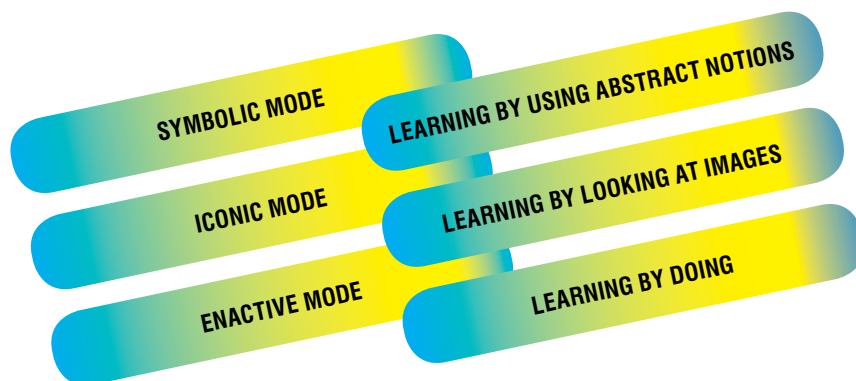


Figure 19.
Bruner's Learning Spiral.

⁴⁷ For background information see <http://infed.org/mobi/jeromebruner-and-the-process-of-education>, an interview in *The Guardian*: www.theguardian.com/education/2007/mar/27/academicexperts.highereducationprofile and www.tla.ac.uk/site/Pages/RfT.aspx.

⁴⁸ For background information on the 'zone of proximal development': www.ibe.unesco.org/publications/inno07.pdf.

⁴⁹ Gardner, H., *Frames of Mind: The Theory of Multiple Intelligences*, New York: Basic Books 1983. His own compact summary is handy: <http://howardgardner01.files.wordpress.com/2012/06/in-a-nutshell-minh.pdf>; for a thorough overview of his work see <http://infed.org/mobi/howard-gardner-multiple-intelligences->

material, at some point you reach the edge of your knowledge and capacity. You then find yourself in the 'zone of proximal development', a twilight zone where the things you can still understand and manage, start to merge with the material you need help from others with. The new material is just a bit over your head and you are at risk of quitting. However, intrinsic motivation to carry on can be stimulated if you are offered help in taking the next step to climb the knowledge mountain. This can be achieved by social interaction with an instructor, parent or peer (the blue smileys in Figure 20). This trusted figure acts as a stimulating intermediary and possesses more knowledge on this subject to help you effectively.

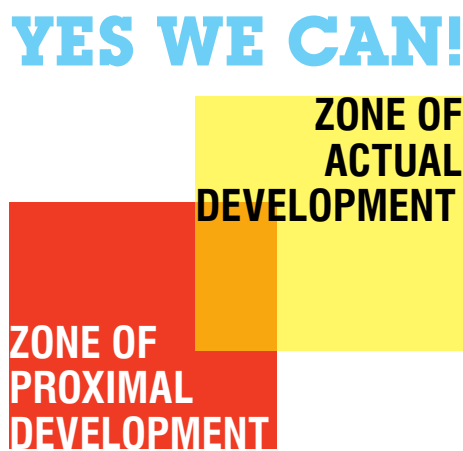


Figure 20. Zone of proximal development, after Vygotsky.

If, as a heritage institution, you want to stimulate visitors to enter their 'zone of proximal development', you need to have insights into their prior knowledge. That's why a brief introduction round is so important for a tour guide. Who do you have in front of you and what do they already know? Vygotsky's theory fits seamlessly into the domain of guided visits. A good tour guide helps visitors overcome their uncertainties and lets them experience in, say, an interactive tour, that there are new worlds out there to be discovered. Peer education fits in here, too, based as it is on helping each other to take the next step in the acquisition of knowledge or skills development.

2.4 Multiple Intelligences

There is a lot of opposition to standardised IQ tests, which compare people one-dimensionally and often focus on linguistic and mathematical skills. Howard Gardner (1943) made a plea for other types

of intelligence, when he published his seminal book *Frames of Mind* (1983) in which he unfolded ideas about 'multiple intelligences'.⁴⁹ For Gardner, intelligence is very practical: it is the quality to solve problems or devise things that are perceived as valuable at least in one cultural environment. Intelligence is not a fixed entity for him, such as the ability to learn certain knowledge by heart and reproduce it, which focuses mainly on language and arithmetic skills.⁵⁰ Gardner contrasts between different types of intelligence. Here we're listing eight types, including suggestions for stimulating visitors in museums and other heritage contexts.

1 Visual-Spatial (two- and three-dimensional)

The ability to perceive and reproduce spatial forms and images, to manipulate images mentally and to create new mental images. You see the world accurately and can recreate or transform it, like a sculptor or a pilot. Activities to include: looking at art, interpreting images, drawing, mind mapping, distinguishing patterns, designing, organising colour schemes, inspiring active imagination, playing with building blocks. Possible teaching methods in a heritage institution:

- Drawing, sketching, building replicas
- Flow charts, mind maps
- Suggestions of ways to improve the architecture and furnishing
- Changing the exhibition colours and design elements

The Big Draw is a British initiative to encourage visitors to draw, held in October. The objects to be drawn are studied intently and rigid eye-hand coordination is activated. Its success is demonstrated by hundreds of thousands of visitors, annually participating in the UK in this widely supported event. The initiative (<http://www.thebigdraw.org/>) has spread now to 28 countries (Netherlands: www.campaignfordrawing.nl).

2 Musical-rhythmic and harmonic.

The ability to derive meaning from musical patterns, rhythms and sounds and to create and reproduce them. You are sensitive to pulse, tone, melody and rhythm, like a composer. Use activities with CDs or sound recordings, ambient sounds, recitals, whistling, humming, singing in tone, percussion instruments, rhythmic and tonic patterns, musical composition.

and-education. The article 'Open Windows, Open Doors' by Davis, J., and H. Gardner in: Hooper-Greenhill, E., (ed.), *The Educational Role of the Museum*, London: Routledge, 1999, 44-52, is indispensable for placing Gardner in a heritage context.

⁵⁰ As Alfred Binet originally captured this capacity in the formula: intelligence is equal to 100 times the test result of the mental age / real age. So if a girl of 10 demonstrates the intelligence level of a 13-year-old, she has an IQ of 130, i.e. $100 \times (13/10) = 130$.

Possible teaching methods in a heritage institution:

- Rhythm and music
- Rhythm in images
- Music and visual rhymes
- Make the sounds of nature (rain, thunder, sea, wind)
- Unleashing creativity through sound and rhythm

The presentation of Mondrian's work in The Hague's Gemeentemuseum culminates in the unfinished painting *Victory Boogie Woogie*. Mondrian lived in New York in his last years and visited several jazz clubs there. If you take the design language of New York City – with its skyscrapers and grid of streets and blocks – combined with the rhythmic and sometimes staccato sounds of jazz, you get a completely different sensation when viewing Mondrian's work. You can even make a jazz-like composition as a group when you walk past the paintings, accompanying the three primary colours and the black and white lines and blocks in his paintings with tapping, clapping, stomping, tongue clicking etc. in a certain rhythm.

3 Bodily-kinesthetic (motion)

The ability to use one's own body, from the fine motor skills to manipulate small objects to 'total' body control, as in dance. You are able to use your body appropriately such as an athlete or a dancer does. Use role-playing activities, physical gestures, drama, physical exercise, body language and dance. Possible teaching methods in a heritage institution:

- Drama, role play, mime
- Dance and movement
- Games with physical activity (e.g. Twister)
- 'Energisers' but also 'downshifters'

In the Fitzwilliam Museum in Cambridge secondary school students are challenged to critically review scenes in romantic 19th-century paintings. Because the museum visit is also prompted by literature studies, students are challenged to see the painting as a film still. They have to write a mini script on the spot, share it with each other, edit it and subsequently enact it as a short drama.

4 Interpersonal (focused on other people)

The ability to distinguish between different individuals and detect their moods, motivations and temperaments; the ability to communicate well with other individuals. You understand people and relationships, like a salesman, politician or a teacher. Learning through brainstorming, group projects,

division of responsibilities, sensing what others want, giving and receiving feedback. Tapping into each other's collaboration abilities. Possible teaching methods in a heritage institution:

- Working together
- Puzzles that can only be solved with others
- Observing other visitors
- Brainstorming sessions in a group
- Perception games
- Learning styles and problem solving

5 Verbal-linguistic (language oriented)

The ability to understand spoken and written language. A sensitivity to the meanings of words and the various functions of language. You are sensitive to the meanings and order of words, like writers and poets are. Activities to be used: hearing, listening, word improvisation, discussion, tongue twisters, humour, reading aloud, silent reading, documentation, creative writing, games, journalism, poetry. Possible teaching methods in a heritage institution:

- Guiding each other
- Performing text analysis
- Composing and telling stories
- Translating from one's mother tongue language into English
- Writing film scripts or radio plays
- Conducting interviews

6 Intrapersonal (deep self-knowledge)

The capacity for self-reflection and awareness of one's inner world. The quality to distinguish one's own feelings and to see them as motives for one's own actions. You have such a clear view of your own emotional life that you understand yourself and others well, like a psychologist.

Activities to be used: emotional processing, silent reflection, strategic thinking, concentration skills, philosophy and centring exercises. Possible teaching methods in a heritage institution:

- Self-reflection and introspection
- Stillness and contemplation
- Open questions concerning personal opinions, feelings, ideas,...
- 'Emotion and atmosphere' identification and sharing.
- Assigning meanings: philosophical, religious, spiritual

The education department of Museum Ludwig in Cologne together with psychology students developed a tour of artworks selected on the basis of psychoanalytical interpretation. In addition to regular

art historical tours, visitors – who eagerly seized the opportunity – could also take a psychoanalytical tour conducted by these students.

7 Naturalist intelligence (biology and ecology)

The ability to distinguish between different natural phenomena and to classify them in detail. You understand the secrets and subtleties of nature, like a naturalist.

Activities to be used: the outdoors, the natural world, charting environmental changes, observing wildlife, keeping a logbook. Possible teaching methods in a heritage institution:

- Finding and recognising animals/plants (in artefacts)
- Detecting material qualities
- Performing sustainability research
- Collection handling: 'blind' touch and recognition
- Intensive observation and study (drawing and writing)
- Outdoor activities

An environmental education programme is run on the Dutch island of Texel, bringing young people to a quiet dune area. Stripped of smart phones and other electronics, they must individually seek a place where they are located far enough from each other to barely keep visual contact. If they drift towards each other, they are separated again. The goal is to identify yourself with the place, to find peace and to become silent. It takes some time to overcome the internal unrest, but once it happens, it goes smoothly. You find yourself staring at the slight movements of the marram grass and the little sand streams running off the slope of the dunes. The surf in the distance, the cry of a seagull flying overhead, the sun on your skin or drops of rain falling on you. Finding inner space and finding yourself at the same time. Consideration is also given to slow movement in the art sphere too.⁵¹

8 Logical-mathematical (abstract reasoning and calculations)

The ability to reason in both a general and precise way; to mentally manipulate numbers and symbols; to handle and apply abstract concepts. You are able to reason, you can discern patterns and logical constructs, like scientists do. Suitable activities: tasks with abstract symbols and formulas, graphs, numerical sequences, calculating, deciphering codes, solving problems.

Possible teaching methods in a heritage institution:

- Performing cause-and-effect reasoning
- Calculating visitor capacity

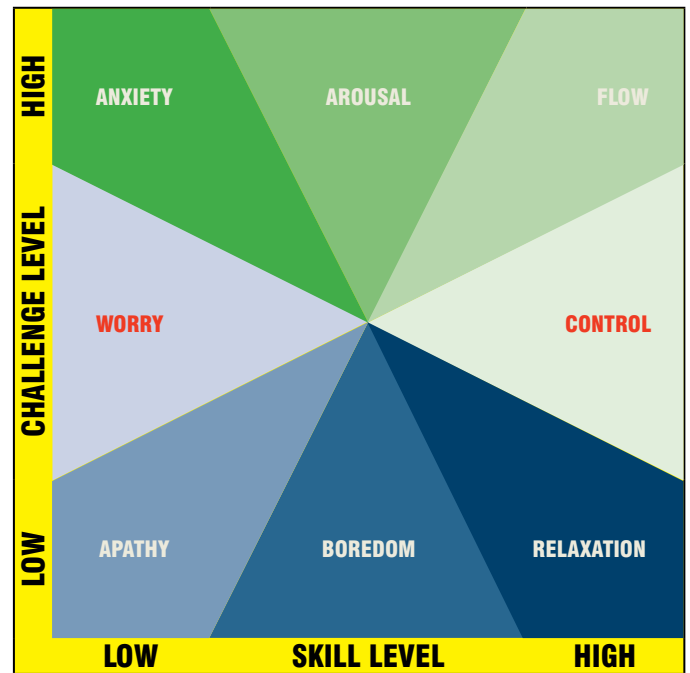


Figure 21.
Relation between challenge and competence according to Csikszentmihalyi.

- Redesigning a room according to floor load capacity
- Creating graphical representation of data
- Calculating relative humidity and temperature
- Making an analysis of representation

2.5 Flow and Intuitive Learning

There are two more important thinkers who relate to learning and dealing with heritage. While Gardner offers alternative routes that transcend traditional 'intellectual' learning, Csikszentmihalyi and Claxton provide visions of enthusiasm and emotion.

Csikszentmihalyi

Hungarian-American psychologist Mihalyi Csikszentmihalyi (1933) marvelled at the ease with which one sometimes performs certain tasks.⁵² Time is forgotten and sometimes even the environment whilst your thoughts and actions take flight and you feel completely in your element. Csikszentmihalyi calls this state 'flow' and sets out a number of conditions under which it occurs.

First, the challenge should be reasonably high as you should feel motivated to get started. Too low a challenge quickly leads to boredom. Moreover, the effort required should really place demands on your abilities and qualities, physically or intellectually. If

⁵¹ Slow Art Challenge, an experiment in which you are challenged to look for an hour at a single work of art: www.kunstbeeld.nl/Kunstbeeld-lanceert-Slow-Art-Challenge.html.

⁵² An excellent chapter about the essence of flow in a heritage context: Csikszentmihalyi, M., and K. Hermanson, 'Intrinsic Motivation in Museums: Why does one want to learn?', in: Hooper-Greenhill, E. (ed.), *The Educational Role of the Museum*, London: Routledge 1999, 146-160.

the high challenge and the high skill effort coincide, a situation is created which can lead to flow (the centre in Figure 21).

Other conditions are linked to *homo ludens*. To start the 'game' and get in the flow, you need clear goals ('I want to win'), clear rules ('the ball must be hit over the net') and immediate feedback if you go astray ('you hit the ball into the net or out'). Furthermore, your incentive and perseverance must be strong so that your intrinsic motivation gets a boost. This flow model is widely used in the gaming industry. Games adjust the challenge to the player's skills. The better you get, the higher the level on which you play. Rules and feedback are also clear ('you need to shoot down all the space monsters otherwise you're dead'). Conditions of flow with heritage may arise by incorporating game elements or posing challenges which closely follow the wishes, dreams and thoughts of the user. Knowing the user is therefore imperative to design the right challenge.

Claxton

Guy Claxton (1947), a renowned British developmental psychologist, is interested in lifelong learning, particularly in the conditions under which it occurs or is made possible. His answer to the question of how learning can be defined is as follows: 'Learning is what you do when you don't know what to do.'⁵³ He has written books on curriculum development, learning strategies and creativity development. Here we briefly look at his approach to how people in real situations apply their knowledge and skills to find solutions. He speaks of a 'Learning Toolkit', a kind of mental first-aid kit.

The four elements that people use of Claxton's first-aid kit are:

- 1 Intellectual capital: one's language abilities, brainpower and reasoning, in order to make analyses, share them with others and deepen the discussion.
- 2 Immersion in the environment: researching, exploring and experimenting with materials in and from the environment; intensive use of space and genuine resources are needed.
- 3 Intuition: here you focus on your inner compass. Claxton uses the notion of bodily cognition: you put off your opinions, you observe by feeling and without judgement, and you are guided by your intuition: 'This is fun, this I don't like, that attracts me.' By using it, you can examine reality in an open, exploratory way and listen to body signals: waves of happiness that give

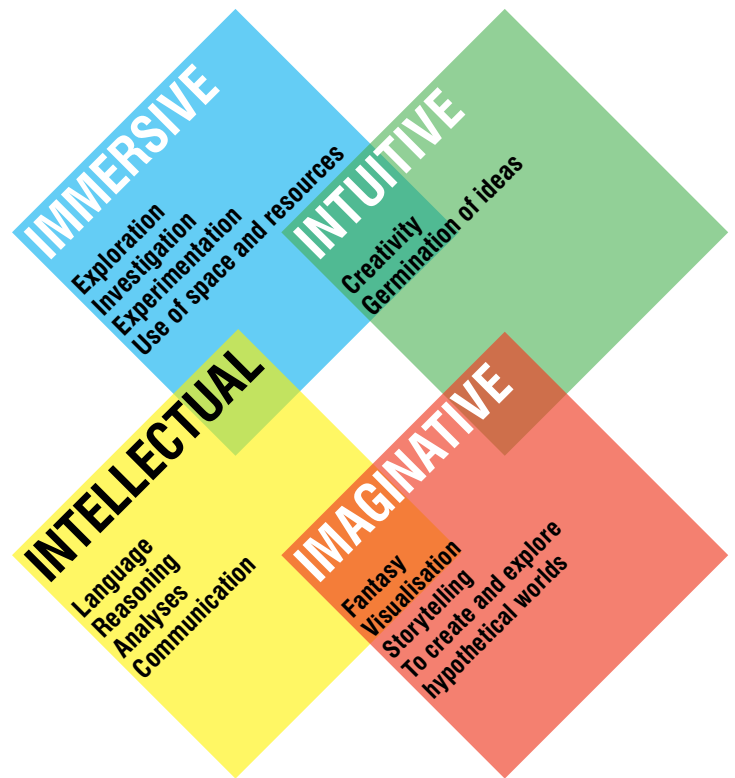


Figure 22.
Claxton's Learning Toolkit.

you goose bumps, or sudden chills of horror. Hovering on the brink of sleeping you sometimes get the best ideas and openings to creativity.

- 4 Imagination: it allows you to think the unthinkable. Many top sports athletes visualise their actions before actually performing them (musicians too). They neurologically run through the paths in the brains, so the actual action gets smoother. This is the power of your imagination: to literally see something with your inner eye, entering hypothetical worlds and inventing contours of stories to tell them again. The power of imagination is one of the secrets of charismatic leadership.

Interestingly, Claxton did not have heritage in mind when he released the learning kit, but there is a very clear relationship between the learning strategies of the toolkit and the elements in a physical or virtual exhibition of heritage collections and the stories connected to them (constructed by the visitor).

⁵³ Used in a workshop of Inspiring Learning for All: www.inspiringlearningforall.gov.uk/export/sites/inspiringlearning/resources/repository/Workshop_activities.doc.

Heritage and Formal Education

Arja van Veldhuizen

5

- 1 Cultural education and heritage education: terms and concepts
- 2 Cultural education in the Netherlands
- 3 Best practices
- 4 Tips & tricks

School groups have traditionally been an important target audience for museums. Government policy, at least in the Netherlands, has long played a major role here, which has resulted in the last fifteen years in more attention for education in other heritage sectors, too. Recently, Dutch government has shifted its focus and introduced budget cuts to the cultural sector making the relationship between heritage and education change again.

When I was 10, I did a tour of gable stones in the city centre with my class. This was a real eye opener for me. I had often been in town with my mother to shop for clothes and so on, but I had never looked higher than the shop windows! Extraordinary, actually. Now I saw all those facades, all different, with gable stones referring back to merchants and crafts from earlier times. I had never realised that those houses had had such a long history and that this city had existed for so long. My city.

Heritage can serve as a powerful learning environment for education. On the condition that schools and heritage organisations know each other and that schools see the added value of cultural education. A professional heritage educator knows, therefore, how education is organised, and what happens in daily school practice. He or she takes into account educational frameworks, methods, didactics and curricula, and organisational matters such as budget, timetables, lectures, occupations as well as travel possibilities and restrictions. The educator must develop educational products that connect seamlessly with the students and with their playful and difficult sides. If that succeeds, teachers see how much heritage sites can contribute to their own educational goals and, more importantly, students experience how inspiring and enriching these can be.

The only thing I can recall from the spirited presentation of the educator from the Rijksmuseum about their broad collections was his last sentence about what some students had remembered a few weeks after their museum visit: 'Oh, that's the time Mark had to vomit in the bus.'

1.1 Cultural education and heritage education: terms and concepts

In the Netherlands as in many Western countries, 'cultural education' as seen by the government is traditionally described as 'all forms of education in which culture is used as a goal or as a means.' In many schools cultural education is used as a goal: 'We're going to paint because we think it's important that children acquire these skills.' But it can also be used as a means of developing social skills, for example, or for stimulating emotional development. In the Dutch case of cultural education, there is a distinction between arts education, heritage education and media education.

Arts education is a collective term for educational activities in the following six arts disciplines:

- Theatre: visiting performances, classroom drama, musicals
- Visual arts: painting, drawing, visiting art museums, sculpture, art history
- Music: playing an instrument, singing, making music, visiting concerts and musicals
- Dance: classroom dancing, visiting a show
- Literature: reading, going to the library, reading aloud, a writer in the classroom
- Audio-visual education: film, photography and video

Heritage education includes learning with and about heritage. In practice, the subject is often confused with history. Heritage is always about traces of the past, traces which we find worth preserving for the future. Such significance is assigned by a certain group of people and granted through engagement in the present. This assessment differs from more objective approaches, such as required in the subject of history where students learn to judge with a historical distance.

Heritage can have meaning on several levels:

- Personal heritage may be about your family tree, inheritance, things that are close to you and can therefore be addressed in the early years of primary education.
- The heritage of your surroundings is about the history of your village or city and can be a good addition to subjects such as history and geography.
- Collective heritage is about your country's heritage (or world heritage: that of humanity) and, in addition to the subjects of history and geography, connects with social science.

The Erasmus University Rotterdam has studied how heritage education can contribute to new shared historical knowledge.⁵⁴ Various perspectives on the past were identified and heritage education was found to be a way of looking at one's own culture. Students learn to work with the dimensions of time, space and meaning and are stimulated in three ways: sensory (smell, see, feel, hear and taste), affective (emotions, feelings) and cognitive (thinking, reasoning). They are encouraged to assign personal meanings, thereby developing a certain historical awareness.

In the Netherlands, we mostly use 'heritage learning' to teach students to look from multiple perspectives. Elsewhere, we see it also used to strengthen the identity of a country or group. Historical events are used in this way to celebrate a shared past.

⁵⁴ Grever, M., and C. van Boxtel, *Erfgoed, onderwijs en historisch besef. Verlangen naar tastbaar verleden*. Hilversum: Uitgeverij Verloren 2014.

At international gatherings, therefore, the Dutch perspective concerning heritage education often requires a bit of explanation.

Archive education is the odd man out here. Unlike museum or heritage education, archive education is mainly about the 'what' question. The user is given the opportunity to interpret the content of an archive by looking at it from a double perspective: the history of its origin and the order laid down by the archive maker. 'What is the value of the information I have found?' is, therefore, the most important question. Heritage value concerns an archive collection, whilst exhibition value is attributed to individual archival documents. The distinction between these two values and gaining understanding of an archive organisation are the most important goals of archive education.

Media education is an even broader concept. Broad, because it is about so many types of media, such as cinema, photography, radio, books, sources, newspapers, the Internet and social media. And wide, too, as in the goal of preparing students to be knowledgeable, critical and active in a complex, volatile and media-intensive world:

- Knowledgeable/capable: How does it work?
- Critical: Is what I'm hearing true?
- Creative: Can I use it somehow?

Within education the concept of 'media literacy' is common, dealing mainly with the first two aspects (a knowledgeable and critical use of media). This is also important for dealing with heritage resources. Libraries are often partners for schools when it comes to media literacy.

The distinction between art, heritage and media education may appear clear, but in practice both the cultural sector and education struggle with the question of what is meant by 'cultural education.' As far as museums are concerned, the answer depends on the nature of their collections. For example, art museums fall under arts education and historical museums under heritage education, whilst a 17th-century cityscape has both historical and art historical value. And where would you position the Museum of Communication?

Traditionally, arts centres actively support art education in almost all Dutch provinces and larger cities. These centres often coordinate cultural education too. For art disciplines this was obvious, but the centres often had no expertise in heritage or media areas. In practice, therefore, heritage was sometimes treated as one of the many subdivisions of arts education, which did not always correspond to heritage education's own objectives. Media education

Figure 23.
Various forms of cultural education.

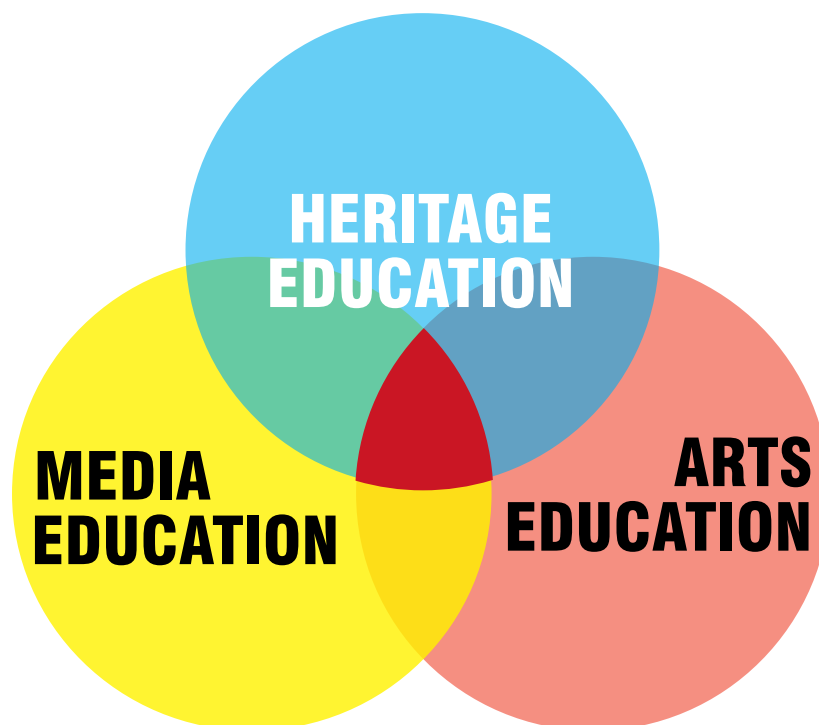




Figure 24. Symbols used in education for the ten periods according to the Canon of Dutch History.⁵⁶

was even more difficult to incorporate, so it rarely got its own place either. Media art is often included in audio-visual or visual arts.

1.2 Cultural education in the Netherlands

The Dutch education system is difficult to explain to people outside of the country. There is little central regulation because of the constitutional freedom of religion and, therefore, of school education. As a result, there are all kinds of schools, with a large variation in curriculum content – and thus also in the place and form of culture/heritage education.

The education field itself is becoming increasingly diffuse, with a growing number of school types, which is partly due to the demands of an ever more competitive market. Teaching methods are also becoming varied, so that, for example, in the subject of history, the same periods are discussed in different study years. Sometimes methods are given up entirely and education is thematically organised. Extra attention has recently been turned to gifted students, with more and more schools working with honour classes.

Education content and the role of culture in it

In terms of content, government imposes requirements on education, but uses broad frameworks. For primary and secondary education, twice 58 core learning outcomes have been formulated, with schools being free how to achieve these within the available hours and within the inspection regulations. For 'heritage learning', the core learning goals of 'Artistic Orientation' and 'Orientation on You and the World' are particularly relevant. For cultural providers, publishers and schools alike, curriculum frameworks are provided by independent advisors. These also include a 'heritage curriculum'.⁵⁵

What place does culture education take in all those key skills and competences? Dutch primary and secondary educations differ from each other in this regard. Cultural education is a familiar concept in primary schools. Heritage education falls into this category, as explained above. In 'World Orientation', schools pay attention to heritage, whether or not it can be linked to environmental education or not. Teachers can use heritage education instead of learning materials and in addition to it.

Cultural education in secondary school is very different. 'Culture' is part of a subject introduced in 1999/2000 to familiarise school students with culture and cultural institutions. In lower level secondary education, students are also taught art subjects such as music, dance, drama and visual subjects (manual work, drawing, textile work and audio-visual education). Heritage does not really have a place in the curriculum, but can be addressed within History, Geography or Citizenship, or, depending on the teacher, be taken under Cultural and Artistic Formation.

Collaborating and networking

In practice, after two decades of attempts to seal the gap, education and the cultural sector are still two different worlds with their own goals and their own jargon. Financial stimulus-per-student impulses have resulted in cultural education being explicitly on the agenda of school organisations, while at the organizational level, there is now at least one internal culture coordinator at each school, tasked with coordinating and stimulating everything in the field of culture within the school, supplemented by training programmes, local networks and a detailed national website.⁵⁷

⁵⁵ See www.examenblad.nl for programmes per school type and subject.

⁵⁶ oud.digischool.nl/gs/community/canonartikel.htm.

⁵⁷ www.cultuurcoordinator.nl.

What have all these efforts resulted in? Australian professor Ann Bamford conducted research into it. In her report to the Dutch Parliament 'Networks and Links: Arts and Cultural Education in the Netherlands' (2007), she concludes that Dutch cultural education is more advanced than cultural education in other countries.⁵⁸ Internal culture coordinators have proven to be a success and local providers and intermediaries influence the quality of student experiences in a positive way. However, she also points to the vulnerability of cultural education, as it is still insufficiently rooted in the core business of schools.

Local or regional art menus, cultural programmes, 'Museum & School' programmes (or whatever they are called locally) are increasing. Often there is one coordinating party, the local arts centre, for example, or someone from the municipality. This is carried out in consultation between representatives from education and cultural sector representatives. In such arrangements, a number of practical matters need to be taken into account:

- economies of scale because the same structure applies to a large number of schools;
- alleviating the burden for schools and institutions through central coordination, sometimes including bus services;

- the certainty that every student comes into contact with culture annually. Even if an individual teacher is less culturally-minded, the class participates because it has been planned across the school.
- continuity: once schools join in, they do so for years. This makes it profitable for cultural providers to invest in new programming.

These types of arrangements work very smoothly, are popular in education and therefore successful. But they leave little room for schools that want to consciously cultivate culture within their education. In other words, these schemes are more concerned with option 1 schools than those of options 2 and 3 (see Figure 26). Cultural providers often benefit from the collective programmes; in some museums, these programmes provide more than half of all school visitors. But the dependency from the coordinating organisation can be suffocating. Because of these collective programmes, it is extremely difficult to introduce other programmes at schools. Recently, many local cultural programmes have also been under pressure due to budget cuts.

Cultural education policy has now taken the next step. With a national programme 'Cultural Education with Quality' (CmK), government wants to anchor cultural



Figure 25. Three scenarios for cultural education from Hart(d) voor Cultuur, 2003.

⁵⁸ <https://www.rijksoverheid.nl/documenten/rapporten/2007/11/13/rapport-netwerken-en-verbindingenarts-and-cultural-education-in-the-netherlands.html>.

education both in education and in cultural institutions. CmK programmes now run in all provinces and major cities in an effort to challenge schools to see cultural education not as something extra, but as a means of stimulating children's personal development. Precisely at a time when public opinion and the school inspection are putting so much emphasis on literacy and mathematics, on 'return-based learning,' there is a need for teachers to also develop the other sides of students. Creativity is a key concept here: if cultural education can contribute to children's creative ability, they learn to think in a more flexible and solution-oriented way, and acquire the 21st century skills needed to deal with the ever-changing society.⁵⁹

Culture in the Mirror

The new 'Cultural Education with Quality' programme builds on the 'Culture in the Mirror' research programme.⁶⁰ In this study, cognitive scientist Barend van Heusden from Groningen University looks at the way cultural education relates to education as a whole and to students' developmental stages. What can a child do at what age? How can children not only experience culture, but also reflect on what it means to them? What skills should they develop to be able to reflect? And what resources (media) should they master in order to do this?

Addressing these issues calls for a better cooperation between cultural providers and education. You need to check if a topic is really relevant to education and connects with the developmental stage of the target audience. Cultural providers (museums) should look at the way students reflect upon a topic in different media (media skills). Both parties must respect each other's interests and goals and formalise their agreements in written documents.

Many cultural providers, especially those in the arts, are enthusiastic about 'Culture in the Mirror' and its theoretical framework. This has to do with a need for the recognition of the importance of cultural education. However, the extent to which schools are actually going to work on the basis of this programme in the coming years is hard to predict, though all involved admitted, in 2012, that even just thinking together about the place of culture in education was of enormous added value: 'I am now much more aware of what I do and why.' 'This is about one's vision of education as a whole.' 'Cultural education is not just an add-on anymore, it works as part of the core curriculum.' For the cultural sector, and therefore for

heritage organisations, the roles are being reversed: it's not what schools can do with our offer, but how we as cultural partners can contribute to the education and to the cultural and creative development of children using our unique qualities and expertise. Schools expect from us something that teachers cannot provide.

1.3 Best practices

What does a student's 'heritage experience' look like? Many educational programmes feature a visit to a museum or heritage site between pre- and post-visit lessons at school. Good preparation makes a real difference. If students already know some of the context, there is less need to transfer so much information on site and the most can be made of the special learning environment that heritage affords. In the post-visit lesson, students can reflect on their experiences so that the circle of the learning process is completed. As an educator, how do you choose the best structure to a visit? A whole range of techniques and didactic methods opens up, mainly derived from museum education. Here's a selection (for more information about guiding, see chapter 6.2).

Quest / worksheet

For museum education purposes, routes or other forms of written material are usually provided with assignments. Students actively get started working on them. These are useful for teachers because they know exactly what to expect; useful for the institutions because they can thus serve relatively large numbers of students. Making scavenger hunts is a separate skill, though. The secret lies in variation, both in the forms of questions and answers. They should preferably be as visual as possible and always tested beforehand.

After brief instructions by the archive officer, I helped him to get each group in their starting positions. As their teacher, I know the children the best. As soon as they arrived there, they started working immediately – you see that they're used to it at school. They were completely involved, they forgot everything around them. The changeover went smoothly. The assignments really activated the students and were not a 'copy your neighbour' activity. Really well done by the archive! I walked around so that groups who were stuck could carry on. They know that we will do more with it at school tomorrow, and this is motivating them today.

⁵⁹ See also: kunstzinnigeorientatie.slo.nl/samenhang/21eeuw.

⁶⁰ A project of the University of Groningen and the Foundation for Curriculum Development (SLO): www.rug.nl/cultuuronderwijs/projecten/cultuur-in-de-spiegel. See Van der Hoeven, M., et al., *Cultuur in de Spiegel in de praktijk. Een leerplankader voor cultuuronderwijs*, Enschede: SLO 2014 (www.slo.nl/downloads/2014/cultuur-in-de-spiegel.pdf/download).

As far as worksheets are concerned, British educator Talboys advises abandoning them, unless you are very good at them.⁶¹ Everything must be really well thought through and evaluated in advance, based on visitors' perceptions and reference frameworks and including all practical preconditions. The finished product must be absolutely flawless. Perhaps this is why the worksheet is considered to be the museum educator's masterpiece: if you can do it well, you have mastered the craft.

Written materials are not very popular with heritage professionals as it is often seen as old-fashioned and not goal-orientated enough. Nevertheless, after guided tours, this is the most common tool for school visits. The luxury of an intermediary in the form of a person or multimedia tools is not always possible, and therefore, in practice, most educators also produce written material.

Doing

Doing something is very popular in education. It increases student involvement and the chances that the content will stick. A classic form of 'doing' that is still popular with art museums is the workshop. This is usually preceded by a tour of the museum. But 'doing' can happen in a variety of ways, including in a programme in the gallery: from photography, roleplay and drawing to working with models, digital games and so on. Be careful that it doesn't become too light-hearted and that the students really understand what they are doing. It must be meaningful in terms of content.

Immediately after the introductions the class split up into the seven groups that the teacher had made. As a mother, I also joined a group. We started with brushing copper in the old kitchen. When the bell rang, we went to the old school where a volunteer taught the children to write on slates. So we went over all those things that children did a hundred years ago. Washing the 'full' diapers was particularly hilarious. You saw that the children suddenly understood how much work it used to be. You don't think about it usually, do you?

Expert method

In the expert method, students deepen their content knowledge of a particular theme. Each group tackles a different sub-theme. Then they switch with one group always taking the role of the expert. In this way, they guide each other at the heritage site. This also works very well for (city) walks.

Use of new media

Both pre- and post-visit materials are increasingly digital. Most schools have digital whiteboards and are keen to show learning material from heritage organisations directly onto the smart board, including images, videos, links and other sources. They also let students work independently on computers or tablets. For the culture providers with sufficient educational budgets and know-how, this offers innovative possibilities, from WebQuests and games to direct contact through Skype. New media can also be deployed during the visit, possibly as part of a broader programme. Some archive institutions offer programmes using multi-touch tables. With smartphones (Bring Your Own Device) students can make videos for immediate use in subsequent discussions.

Immersion in special presentations for children

Children's museums such as Villa Zebra, Tropenmuseum Junior, the Children's Yard in the Open Air Museum, the Dick Bruna House and the Children's Museum of the Jewish Historical Museum have been around for a while. The target audience is usually children up to twelve or so visiting with their school class or family. However, this approach can also work well for secondary education, as seen in the Wonder Rooms of the Gemeentemuseum The Hague. In recent years, more presentations have been specially designed for children – for example, the Small Orphanage of the Amsterdam Museum, the Junior section of the Dutch Resistance Museum or the exhibition for pre-schoolers 'Matje & Roosje' in the National Maritime Museum. Functionality for school groups is usually the starting point in the basic design of all these presentations, allowing the educator to use a much wider repertoire of methods and formats to captivate children.

Test, test and test again. I learned that in practice. I'm not going to spend such a long time anymore perfecting my content to only find out that the children don't see the same thing in that object as I do. Or that they are really distracted by the installation around the corner. If you try and understand how they look, you'll alter your programme ideas, without getting bogged down in your assumptions. Ultimately you'll find it easier to attain what you wanted to accomplish with these children.

Success factors

What makes a visitor programme successful? It's a combination of factors. Just as with all museum experiences and other forms of experiencing heritage, some factors are outside the educators' sphere of influence. For the part that they can influence, the programme must be solid in three ways:

- 1 Content (is it true to the goals, is it meaningful?)
- 2 Organisation (time format, materials used and all other logistics)
- 3 Interaction with and connection to the students.

This is a handy format to use when evaluating programmes; the three items all affect each other and all three need to be in tune with each other.

1.4 Tips and Tricks**Busy busy busy...**

Getting in touch with schools takes time. Teachers are often busy and a museum project is just one of many things on their to-do list. A combination of mailing and calling often works best. When teachers get to know you, you will notice that they respond faster.

Too expensive...

Many schools find programmes in museums or other heritage sites quite expensive. This is understandable when you realise that your contacts often have limited budgets. Keep in mind that the organisation of financial responsibilities may differ from school to school. When cultural visits are not included in the annual budget, the relevant teacher must ask for permission and budget for every excursion. Transportation is, amongst other things, usually the biggest expense item.

Timetables

Schools are restricted by timetables, particularly in secondary education, so groups can only come at certain times. Including a museum visit in the timetable is not easy, as lessons for other classes need to be cancelled. There are schools with more flexible weekly schedules or those with 'project weeks' in which all cultural activities can be concentrated. Primary education is also bound to schedules and here it's important that children are back in good time before their parents arrive at school to collect them.

Preparation in class

Many educators get frustrated when teachers omit the pre-visit lesson. You end up standing there with students who know nothing, whilst you were

expecting to build upon the introduction they had at school... heritage educators therefore need to be able to react quickly and flexibly to not fall at the first hurdle.

Order

Museum educators often assume that the school supervisors will keep order, so they can focus on the content. This usually goes well. However, there is always one group in ten that are a problem. Such is life – it might be helpful to agree expectations in advance with the accompanying teachers or parents. Make clear that you are working together.

Testing and tracking

All too often the museum educator needs to have a school programme ready on the opening day of the exhibition. It's not actually possible to run a pilot of the programme because the exhibition is only just finished. There will always be things that you couldn't have predicted (lack of space for groups, an object that has not been installed), wording that is understood just that bit differently, work methods that do not yield the expected result. Dress rehearsals are common in the theatre world, so why not in our sector?

Human factor

As well-prepared as you might be (all tested and everything), you only have a limited influence on the way a museum lesson is perceived by students. This depends, amongst other things, on people, such as the attitude of the schoolteachers and – unless you do it yourself – the quality of the person who welcomes and guides the class. One guide might be better than another.

Priority or not?

Education has long been recognised as a core museum task and most museums are increasingly acting accordingly. This gives educators in museums more scope, though in other heritage sectors it is more challenging. In most archives, education is something that happens in addition to core tasks. In one archive it might be embraced, whereas in another, they want to cut back on it. Monuments can't always welcome large groups of students. In organisations where physical school visits are difficult, there are great opportunities for digital learning materials, as is evident in the archive sector.

The latest Museum Education Trends Report found that adults, both individually and in groups, have overtaken education as a target audience for museum education.⁶² The focus is now wider - museum educators are now responsible for websites, other digital media, events, community projects and are part of exhibition teams. Most museums cannot allow themselves the luxury of having multiple

education officers. The museum educator, therefore, is expected to know everything. Is this realistic? The demand for generalists, jack-of-all-trades, is at loggerheads with the necessity to specialise in certain educational target audiences. Whatever the case, in the context of 'Cultural Education with Quality' (primary) education in museums should invariably be in the spotlight.

⁶² Hagedaars, P. (ed.), *Museumeducatie in de praktijk: trendrapport museumeducatie 1997-2007*, Utrecht: Cultuurnetwerk Nederland, 2008, 22: '... today, adults are the main target audience. These are interested laymen, experts, amateurs and seniors. Second

place is taken by children between six and twelve and young people over twelve (individuals). [...] Educational activities are least of all aimed at migrants, people with disabilities and children under the age of five.'

Encountering heritage objects and sites in museums, archives or outdoors has a sensory aspect as well as a cognitive one. What is it about, why is it important, what meaning can, may or should I attach to it? In this sense, there is room for transfer of both information and tools for appropriation. Classically, this occurs by offering explanations, or, as it was called in the museum world a century ago: providing information. This gives you access to the contexts of objects and collections: their origin, the intentions of creators, and information about their accession, including possible reasons for why they became heritage. Materials that can help you to figure out your own opinion. Here we review the two most common means of information transfer: texts and tours.

Fieke Tissink **Heritage and interpretation**



- 1 Texts
 - 1.1 The problem of the label
 - 1.2 The ideal museum text
 - 1.3 Structure: A-B-C
 - 1.4 The reader and the writer
- 2 Guided tours
 - 2.1 Interaction
 - 2.2 Learning through questioning: from Socratic conversation to peer-to-peer
- 3 Theatre and Living History Jan Sas
 - 3.1 Features of museum theatre
 - 3.2 Practice
 - 3.3 Living History



FIG. 10. *Object.* — A Renaissance crucifix lying on the bottom of a floor case, and bearing an incised design. The observer was asked to describe the design. *A.* — The figure of Christ.



II. MUCH BENT

FIG. 11. *Object.* — A fragment of ornament lying on the bottom of a floor case. *Q.* — What does the pattern on this fragment represent? *A.* — A group of five persons dancing.



FIG. 12. *Object.* — A cast of the Venus of Melos. The observer was asked to read the label on the pedestal.

I Texts

You still see large volumes of text on exhibition walls, mainly because the museum curator still has a lot to say. The visitors are given a lot of information to read, but do they, at least in the Netherlands, really want this?

1.1 The problem of the label

You come to a museum to look, enjoy, experience, research, listen, make associations, and imagine. And to learn too, to get information, for which texts are indispensable. However, a museum is not the ideal reading environment; as a visitor you have to stand whilst reading which is not particularly comfortable. You stand and you stroll. The light is usually directed at the object and not on the text. The font is often small, especially for the older museum visitor. The text placement is usually not ideal for the user either, perhaps because some directors do not wish art to be disturbed by 'extras'. Also, the visitor is often not alone; she is with other people in a museum gallery, and surrounded by noise.

As early as a century ago, Benjamin Gilman (1852–1933), Secretary of Boston's Museum of Fine Arts, noted this problem.⁶³ In addition to chapters on lighting and museum fatigue, he devoted a chapter to 'The problem of the label'. In a photo series Gilman shows the causes of museum fatigue: the visitor must adopt very uncomfortable positions to view an object or

to read a text. One of the pictures shows a museum visitor kneeling in front of a display: the text is only readable in this position.⁶⁴ Ridiculous as it may be, but almost a hundred years later, we still have not solved the problem of the text label. Below are some guidelines to follow, adjust or improve – onwards and upwards to the ideal text and placement of the text label.

1.2 The ideal museum text

Look & understand

Start at the object. Museum text writers are lazy - too lazy to go to the museum floor and look at and investigate the object. Naturally you have seen the 'Night Watch' so many times that you know there is a girl walking between those civic guards. Even so, go back to the gallery before you start writing. Put yourself in the visitor's shoes. What do you notice when you look at the painting? What would the visitor want to know? Make an accurate visual analysis of the object and use this as the starting point for the text. If you take looking as the point of departure, you can establish a direct relationship with the reader. You can connect knowledge to visible things. An unusual detail can offer opportunities for giving background information and a clear relationship between the text and the object stimulates the visitor's powers of observation. He/she is encouraged to look, which is precisely what museum employees want to happen: let the visitor look and understand.

⁶³ Gilman, B.I., *Museum Ideals of Purpose and Methods*, Cambridge: Boston Museum of Fine Arts 1918. Image: <https://www.edwardtufte.com/bboard/images/0003Wj-9181.jpg>.

⁶⁴ Ibidem, 260, photo 17.

Captivate me

After a visual analysis, the author should turn to literature. What has been written about the object, about the theme? Determine the content and the perspective. Not everything can be included in the text: therefore select and filter. What story do you want to tell (or, as agreed, what the storyline will be) and what message can you convey with this specific object? Determine the key message and communicate this in the first part of the text. Visitors do not always read the entire text - even if they bravely start at the beginning, they don't often get to the end, according to the research by Toringa and Harterink for the Dutch Museum Association.⁶⁵ It's the writer's task to seduce the reader. Grab readers by the lapels and shake them awake. Look! I have something to tell you. Therefore, come straight to the point.⁶⁶

1.3 Structure: A-B-C

In 2014, the Rijksmuseum invited British philosopher Alain de Botton to get people to look differently at the objects in the museum, and to think differently about museums in general. He did so by using hundreds of big yellow Post-it notes. His confrontational comments and reflections were not appreciated by everyone, but they certainly made for a richer and more vibrant environment.

But what story do you tell and when? How do you structure a museum text? Or better still: how do you share the information you have and the story you want to tell about the exhibition? Most museums use the ABC system⁶⁷ which offers textual information in layers.

Texts A are the main titles or general introductions. Texts B are theme or group texts, usually shorter. There is a consensus for A texts to have a maximum length of 200-250 words with texts B being 150 words on average. Texts C (also called labels or object texts: captions, text plates) refer to separate objects, or compare two objects with each other. The C text, of maximum 100 words, consists of factual data: maker, title, material, year, lender et cetera, perhaps with a narrative section providing additional information. It is important that the A, B and C texts refer to each other and have a clear interconnection. In text B, an object

can be announced in advance so that people are more focused when they get to see it. Text C subsequently narrates and explains.

This way of providing information creates layers that allow visitors to decide how deeply they want to delve into the material. This multi-layered experience is not only created with gallery and object texts. Good visitor guidelines means making conscious choices: what should be told when, where and how? Information can also be provided by means of an audio or multimedia tour, a guide book or a tour guide. It is important for visitors to have a clear idea where to find which information. In our postmodern times, there is also room for less directive text systems - combinations of fonts and text sizes mixed with multimedia and images. In addition to 'factual' museum texts, also consider literary fragments, poetry and quotes from correspondence or diaries. This creates not only a feeling of freedom but also the opportunity to present a more varied vision.

1.4 The reader and the writer

Of course, the reader as such does not exist. Yet, from Toringa and Harterink's research, some ideas can be distilled about the museum reader. Visitors do want to read, but not everything. They make a choice, with texts that are directly linked to objects – the C-texts – being read first. However, texts are not always read from beginning to end. At about two-thirds, many readers stop reading. Furthermore, the average visitor appears to spend two thirds of his or her time looking, and the rest reading. At the beginning of an exhibition, the enthusiastic visitor reads a lot of labels, but that decreases as the exhibition progresses.⁶⁸

The author

What implications does this have for the text author? As said before, you should start with the most relevant message and proceed from the special to the general and not vice versa. Link the text to the object and stimulate looking. This is what most visitors come for in any case: to have a look. Do not say too much about things that cannot actually be seen in the gallery. The text should encourage better looking and an understanding of the exhibition. Tell the story in understandable steps, short and concise. And

⁶⁵ Toringa, J., and A. Harterink, *Tekst bij beeld. Verslag van een onderzoek naar teksten bij schilderijen*, Amsterdam: NMV 2000, 7; and www.tekstbijbeeld.info/werk.html.

⁶⁶ See the 'Weird Guys' exhibition by writer and biologist Midas Dekkers, *New Church*, Amsterdam, 2003; Dekkers, M., *Rare Snuiters*, Amsterdam/Antwerpen: Uitgeverij Contact, 2003. The opening text was 'Previously all foreigners were flat'. See also the work of advertisement maker Paul Mertz: Mertz, P., *Pak me beet. Voer me verder*, [2007], or www.paulmertz.nl/werk/Boekje%20Paul_010707.pdf.

⁶⁷ Jongejans, C., et al., *Om een lang verhaal kort te maken. Schrijven en vormgeven van teksten voor het museum*, Veenendaal: Gaade

Uitgevers, 1988, 18-25; Janssen, D., *Omgaan met informatie in het museum*, Eindhoven, Uitgeverij Lecturis, 1994, 17-18.

⁶⁸ The exit gradient, the tendency to take the shortest route between the entrance and exit of an exhibition, increases with the visit time passed. Bitgood, S., 'Environmental psychology in museums, zoos, and other exhibition centers', in Bechtel, R., and A. Churchman (ed.), *Handbook of Environmental Psychology*, New York: Wiley, 2002, 461-480.

⁶⁹ 'This sentence has five words. Here are five more words. Five-word sentences are fine. But several together become monotonous. Listen to what is happening. The writing is getting boring. The sound of it drones. It's like a stuck record. The ear

use intervals, intermediate headers and paragraphs for longer texts. Offer your readers digestible pieces. Don't tell too much in one go. In Dutch: use short sentences (about 17 words on average), with no more than one subordinate clause. However, do alternate short and long sentences, otherwise the text will be boring.⁶⁹ Combine the directness of spoken language with the proper syntax and precise wording of written language. Avoid grandiose language and jargon. Remember that subjectivity sometimes works well.⁷⁰ Explain who is thinking this way and why. Do not indulge in favourable terms such as 'gorgeous' and 'awesome', whilst at the same avoid dry business text. There are lots of tips for writing good museum texts, but the best tip may be: just do it!

Easy reading is hard writing

Writing is fun but difficult. Creating a nice readable text takes time. Even for the best writers it's not a piece of cake. 'Easy reading is hard writing', Ernest Hemingway appears to have said. As soon as you have made a visual analysis of the object, gathered all your information and thought about the way to build the text, you can then begin writing. When the text is ready, let it 'sit' for a while and look at it a day later. Read it again, delete and rewrite. When you are satisfied, let someone else critically read the text. Or read it out loud and let others comment. The places where you falter whilst reading aloud are perhaps where the syntax is complicated or the content is too difficult. These sentences need to be changed. Always ask yourself: Is this what the visitor wants to know, at this object, at this moment in the exhibition? This is how you can keep perfecting the text until you're really satisfied with it. And do not forget: could it also be shorter? Because shorter is almost always better (but more difficult to achieve). Mies van der Rohe's famous motto for minimalist design 'Less is more' almost always applies to museum texts too.

2 Guided tours

Guided tours are one of the oldest forms of visitor services, perhaps the oldest. Walking around sights with a group of people and talking about them is timeless. Van Gelder, director of Gemeentemuseum Den Haag, wrote in 1928: 'I have seen a lot of museum visitors and I have to say, most of them walk around

aimlessly, with scattered attention, wanting to see it all and in the end seeing nothing properly [ε] it's best to do something about it by giving visitors personal guidance. Spoken guided tours by authorised staff members have proved to be the most effective.'⁷¹ Over thirty years later, opinions and quotes about tours changed dramatically. Head of Education of the Rijksmuseum, Emile Meijer, objected to guiding: 'Fifteen to twenty-five people herd together in front of a painted canvas or panel, the surface of which is often no larger than a few hundred square centimetres. A spectacle that is no less strange than if the same group would be reading a book together. The impossibility of the latter is clear to everyone.'⁷² Like Meijer, Wim Beeren, former director of the Boijmans van Beuningen and Stedelijk museums, also found that it's the direct confrontation between the viewer and the work of art that is valuable. He found the guided tour disturbing with 'clattering chairs, cooing ladies and annoying comments.' And he said of guided tours in the modern art department: 'Didactic verbal violence about contemporary art will have a devastating effect on the reception of the art.'⁷³

At the end of the eighties, the rejection of the guided tour seemed to have disappeared. The credo then was: offer it and let the audience choose. Since then, guided tours have been firmly anchored in museums and other heritage institutions. In 1989, a joint Dutch museum and universities research group was set up to gather knowledge and insight into the practice of guiding. Guided tours in museums are professionalised, courses are organised, Reinwardt Academy students are being trained. Guiding is taken seriously, it's a profession. However, it is also a subject of research. In 2014, the University of Amsterdam, in collaboration with Van Gogh Museum, the Rijksmuseum and the Stedelijk Museum, started a multidisciplinary research project on the theory and practice of guiding school groups. One of the research subjects is how to test the quality of a tour.⁷⁴

2.1 Interaction

How is a tour given today? And by whom? For what audience? Or is it: with what audience? Because one thing is sure, the tour guide is no longer the wise know-

demands some variety. Now listen. I vary the sentence length, and I create music. Music. The writing sings. It has a pleasant rhythm, a lilt, a harmony. I use short sentences. And I use sentences of medium length. And sometimes, when I am certain the reader is rested, I will engage him with a sentence of considerable length, a sentence that burns with energy and builds with all the impetus of a crescendo, the roll of the drums, the crash of the cymbals—sounds that say listen to this, it is important.' Gary Provost, quoted in Roy Peter Clark's *Writing Tools: 50 Essential Strategies for Every Writer*, Boston 2008.

- ⁷⁰ Torringa, J., and A. Harterink, *Tekst bij beeld. Verslag van een onderzoek naar teksten bij schilderijen*, Amsterdam: NMV 2000, 11.
- ⁷¹ Gelder, H. van, 'De Culturele Beteekenis der Musea; Vorming van Museumbezoekers', The Hague, 1928 in: *Rondleiden, een vak apart*, H. Führi Snethlage (ed.) (Amsterdam: 1995), 8.
- ⁷² E. Meijer, De educatieve taak van kunstmusea, *Volksopvoeding* 11, 1962, p. 298 in: *Rondleiden, een vak apart*, H. Führi Snethlage (ed.) (Amsterdam: 1995), 10.
- ⁷³ W.A.L. Beeren, Museum Boijmans-van Beuningen, Rotterdam 1979 in: *Rondleiden, een vak apart*, H. Führi Snethlage (ed.) (Amsterdam 1995), 11.
- ⁷⁴ cde.uva.nl/nl/projecten/rondleiden-is-een-vak.

it-all, but instead someone who invites the visitor to co-determine the course of the tour. Interaction is the name of the game. The visitor's opinion is as important as that of the tour guide. Questions and answers. Designing the tour based on asking provocative questions. This approach requires other qualities in a tour guide than a tour based on knowledge transfer does. From information providers they have now turned into mediators in a looking and thinking process, or facilitators of a conversation. This means in addition to having the necessary content knowledge, they now must also understand the different ways visitors' learn (see also Chapter 4), the art of asking questions and how to deal with these questions. Different kinds of methods have been developed for this.

2.2 Learning through questioning: from Socratic conversation to peer-to-peer

An example of such a method is the Socratic conversation, where visitors, under the guidance of the tour guide, think together and listen to each other. The Socratic conversation is a derivative of the talks conducted by Greek philosopher Socrates on the ancient Athens market. He attempted to encourage his listeners to think by asking questions, which resulted in a dialogue. This dialogue is one of the most important features of the Socratic conversation as it is currently being applied in the museum world. It's a dialogue and not a discussion. The participants should abandon their personal opinions, and think and talk about other people's narrative, looking for possible answers. Thanks to the open attitude of the tour guide, the audience feels at ease and comfortable giving answers. This is not about saying the right answer. The story is built up together and the participants think together in a philosophical way. The conversation starts from the concrete and becomes more abstract. The tour guide facilitates and guides the process, but does not add knowledge.

Visual Thinking

For several years now, the Dutch museum world has been using Visual Thinking Strategies (VTS), developed by American cognitive psychologist Abigail Housen for people who have little experience in viewing art.⁷⁵ Philip Yenawine, Head of Education at the Museum of Modern Art in New York, put the method into practice and wrote about it.⁷⁶ As a tour guide, he had always been teaching the public, but he found that the information didn't stick. The audience did little with the knowledge obtained during a tour. This had to be changed. VTS

takes looking as a point of departure. By looking at art and by asking the right questions, participants are encouraged to accurately observe, formulate and substantiate what they say. Thus they learn to look and to think critically and analytically. Everyone has to actively participate in the conversation. The advantage of this method is that anyone can participate, regardless of cultural background. There are three important questions that are always asked:

- 1 What's going on (in this picture)?
- 2 What makes you say that?
- 3 What more can we find?

The tour guide will then neutrally paraphrase the participants' reactions. He/she will point at the spot that the participant is referring to and in this way the group can understand what it means and further build upon it. By actively looking, talking, and interacting with their environment, participants may obtain new knowledge (see also the constructivist theory, Chapter 4.1).

Visible Thinking

A related method is Visible Thinking⁷⁷ (VT), an approach to teaching and learning that offers opportunities to develop thinking dispositions such as curiosity, understanding and a creative mindset. Originally developed for classroom use, elements of VT such as thinking routines have been adapted for use in museum programmes.

Thinking routines are simple structures, such as a series of questions or steps, that can be used with a variety of age groups and subject matters. There are more than 25 thinking routines and each one encourages a certain type of thinking. Educators find that with frequent use they are able to use the routines flexibly and to combine or modify them as required. In the museum, different types of routines can be used around the museum for different objects thereby allowing the museum educator to concentrate and focus on certain types of thinking.

The first museum programme to use VT in the Netherlands, Stories around the World, was developed at the Tropenmuseum in 2011 where a method was developed to encourage the slow, detailed exploration of objects using thinking routines from Visible Thinking.⁷⁸

Peer-to-peer

Youth tours are increasingly being provided by young people: peer-to-peer. Examples are at Foam, Amsterdam's photography museum, but also by the

⁷⁵ www.vtshome.org.

⁷⁶ Yenawine, P., *Visual Thinking Strategies. Using Art to Deepen Learning Across School Disciplines*, Cambridge: Harvard 2013.

⁷⁷ <http://www.pz.harvard.edu/projects/visible-thinking>.

⁷⁸ <http://thinkingmuseum.com/visible-thinking-in-the-museum/>.

'BlikOpeners' youth group at the Stedelijk Museum. Being guided by a peer has the great advantage that interaction is generally easier. The tour guide understands his/her target audience, speaks the same language and knows how to stimulate the audience's interest. The benefits are twofold: it's instructive for both the guide and the group. Elderly people are also willingly taken around the museum by the young tour guides.

Further reading:

- Cunningham, M.K. *The interpreters training manual for museums*. Washington: American Association of Museums, 2004.
- Grinder, A.L. and S. McCoy, *The Good Guide: A Sourcebook for Interpreters, Docents and Tour Guides*. Scottsdale: Ironwood press, 1985.
- <http://thinkingmuseum.com/visible-thinking-in-the-museum/>.

3 Theatre and Living History Jan Sas

3.1 Features of museum theatre

Museums use various theatrical techniques to enrich the museum experience. A theatre performance is one where actors are playing their parts, and the audience is watching. A performance has its own reality and is often characterised by a unity of time, place and action. In museums and heritage sites, the practice is quite different from normal theatre. Museum theatre is a form of applied theatre.⁷⁹ Catherine Hughes defines museum theatre as 'the use of drama or theatrical techniques within a museum setting or as part of a museum's offerings with the aim of provoking an emotive and cognitive response in visitors regarding a museum's discipline and/or exhibitions.'⁸⁰

The first characteristic of museum theatre is the wide range of ways to involve the public in the performance: passive, interactive and participatory. Passive is traditional theatre: actors – usually disguised – perform a role play, or there is a monologue and the audience is watching. The interactive way is one where the public is actively involved: the actors enter into a dialogue with the audience. Participatory means that the visitors themselves can be, costumed or not, in the shoes of a historical figure.

The second aspect is the place of action. Some museums have a separate space, an auditorium or an events hall, with facilities for staging a drama or dance performance. Sometimes a separate space is included

in the design of an exhibition. Another form includes actors in the gallery, in the midst of the exhibited collection. The space is – hopefully – arranged in a way so that performances can take place. Usually there are no chairs and the actors are acting in the middle of the audience. Or there is a theatrical tour of a number of exhibition rooms.

The third aspect is the extent to which the course of the performance is fixed. Is there a script or is it improvised? If the performance is specially written and developed to supplement an exhibition, the purpose will be to convey certain information, so less will be left to chance. A good improvisation depends on the professionalism of the actors. The Rijksmuseum offers a theatre experience 'You & the Golden Age' for children aged 6-12 years. In the replica of a 17th-century theatre they go on expedition to the Golden Age. They meet an actor playing Rembrandt, or they hide in a book chest (and thus escape from prison) like Hugo Grotius did.

The fourth aspect is the type of theatre. The most common forms of museum theatre in the Netherlands are:

- Actors who give a theatre performance, whether or not based on a script.
- Storytellers. Often in a separate space or in an exhibition gallery. The narrator is dressed up in a costume fitting in with the atmosphere of the story. An example is the story of Anansi the spider, told in the Africa Museum in the Dutch village of Berg and Dal.
- Puppet theatre, with the target audience being mostly children .
- Living history, with actors dressing up in period costumes and trying to involve the public. There is discussion within the sector as to whether this is considered museum theatre or merely a form of educational transfer.

3.2 Practice

It is estimated that one in five Dutch museums uses some form of theatre.⁸¹ A performance varies from a few minutes to a maximum of half an hour, whilst a stage play is almost always an hour to an hour and a half. There is no need to pay for it separately, the performance is usually included in the entrance fee.

There are several professional theatre groups in the Netherlands that act in museums. For example, Pandemonia (www.pandemonia.nl) specialises in

⁷⁹ Prendergast, M., and J. Saxton, *Applied Theatre: International Case Studies and Challenges for Practice*, Bristol: Intellect Books, 2009.

⁸⁰ Hughes, C., *Museum theatre. Communicating with visitors through drama*, Portsmouth: Heinemann, 1998, iii.

⁸¹ Tenwolde, S., *Museumtheater. Onderzoek naar museumtheater in Nederland, en naar wat er met dit museumtheater wordt beoogd*. A Reinwardt Academy graduate thesis, March 2015.

science theatre and has worked with, for example, the Boerhaave Museum (Leiden), NEMO (Amsterdam), Naturalis (Leiden) and the Railroad Museum (Utrecht). It brings plays, acts and performances. The Aluin theatre group (www.aluin.nl) works with the Catharijneconvent in Utrecht, for example, bringing stories from the Bible. Around Christmas 2014, three actors played the Christmas story without costumes, extra decor and only minimal props. During the same period, the Pluim theatre group (www.pluimvoortheater.nl) held a funny and interactive children's workshop specially developed for the exhibition 'Animals in Dutch Sculpture' in the Kröller-Müller Museum. From the experience of all three, it appears that it doesn't matter if the actors are professionally trained or not, the most important thing is their impact on the museum audience. There is no separate stage, so the actors must rely on their capacities to engage the public and improvise. It is similar to street theatre, but with an educational purpose.

3.3 Living History

Role-playing in a museum context, when situations and/or historical persons from a certain period are reconstructed, is called living history. Sometimes it's based on people who really lived, sometimes on people whose character is created on the basis of information from the period in question. As a rule, the actors' texts are based on historical research.

The goal is to make visitors acquainted with the (daily) lives of certain people; there is usually a relationship with the context the visitor is in and the objects displayed. The level of interaction may differ. Sometimes the visitor is only a listener, but there may also be a question and answer game between the actor and the visitor. Within living history there is a distinction between first, second and third person interpretation.

- 1 First person interpretation occurs when the actor performs as a person of a certain period: in terms of clothing, speech, what he or she says and the knowledge of the world. A good example from the Netherlands is the Urker Bult in the outdoor part of the Zuiderzee Museum in Enkhuizen. Here life is acted out in the way it used to be on the island of Urk in 1905.⁸² The Urker Bult is a small street with original houses brought over from Urk. Some are inhabited, at least during the museum's opening hours. Visitors are

encouraged to ask the 'residents' what they feel like. The clothing, the spoken text, everything is based on historical research. The actors give answers, but have no fixed text as in a play. The interaction between the players and the visitors is therefore different each time. The players remain in their role. A question about whether they have cable television or an internet connection is not therefore understood.

The Zuiderzee Museum found inspiration for this presentation method in the United States, where the life of 1627 is simulated in Plimoth Plantation, Plymouth (MA). Here they reconstructed the settlement where the Pilgrim Fathers lived some 400 years ago. They had come over from England on the Mayflower ship. There was also a Dutch woman on board, so you will come across her too in this open-air museum and she speaks 17th-century Dutch.⁸³ Another illustrative example in the United States is Colonial Williamsburg, where 18th-century life in Virginia is depicted. On an area of over 120 hectares, with original buildings and reconstructions, lots of actors and actresses working in first-person interpretation, educate hundreds of thousands of visitors per year about slavery, the tobacco industry, the judiciary and the peoples' riot (the American Revolution began here). Visitors are encouraged to participate in hearing a proclamation, to protest, or to taste the special 'chocolate' drink (as a protest against English tea).

- 2 We speak of second-person interpretation when the actor playing the first person starts explaining things with the knowledge of today, because visitors would not sufficiently understand the historical situation or do not want to take part in the performance. The actor then steps out of his or her role. The Urker Bult actors in Enkhuizen are not supposed to do so, they are to remain living in the year 1905. This does happen in Colonial Williamsburg, though.⁸⁴
- 3 Third-person interpretation is when someone is dressed up in period costume but speaks from the perspective of today. An example from the Zuiderzee Museum is the explanation in costume about how food was prepared and cooked at the beginning of the last century, how nets were mended etc. In fact, it's a costumed staff member who gives a demonstration or a tour. Another example are the archaeology interpreters at archaeological theme park 'Archeon' in Alphen aan den Rijn. There, the staff members wear

⁸² Adriaanse, L., and H. de Boer, 'Nagespeeld verleden. Nieuwe presentatiemethode in het Zuiderzeemuseum', in: *Museumvisie* 14, 1990/4, 139-141.

⁸³ Jan Sas's experience in 1994.

⁸⁴ Jan Sas's experience in 2014.

the clothes of the period they represent (prehistoric, Roman or Middle Ages), but they are just 21st-century residents explaining how land was cultivated in that time or how pots were baked. While demonstrating, they encourage visitors to try it out, too.

Living history is not only found in large museums. The Eindhoven Museum is a heritage park that holds 'experience days' during the weekend and (school) holidays. Here, too, there are costumed characters from pre-history and the Middle Ages. Here, too, visitors can see and experience the occupations from the past. There are sword combat demonstrations, visitors can sail in a tree trunk canoe or cook biscuits over a fire. The visitors themselves are the lead players in an adventure in the spirit of Brabant's former inhabitants. The trick is that the museum gives you a feeling of real life in the past: tools, natural surroundings, homes, activities. This is close to experimental archaeology: you can, to some extent, get an idea of how something was or worked when you simulate the physical conditions as precisely and authentically as possible.

Opinions differ as to whether live history can be considered museum theatre. Nico Halbertsma (1949-2012), who taught at the Reinwardt Academy for twenty-eight years and travelled a lot with his students in England – where he saw many examples of living history – insisted it couldn't. A theatre piece has its own reality, he said. 'Characters and a situation are introduced, an intrigue develops and, finally, there is a resolution. In short, there is a story structure.'⁸⁵ Living history is, rather, a descriptive interpretation. It's about information transfer and education, not about applause.

Other forms of living history

Historic re-enactment is a special and rather spectacular form of museum theatre and living history. A specific historical event is reconstructed, often in its original place, usually that of a battle. Many people do not see this as a form of museum theatre. The participants, professional and non-professional actors, wear historical costumes, but their authenticity is of secondary importance. The focus is on the spectacle, often a magnificent show. In addition to an educational element, i.e. being in the shoes of someone from the past, there is also recreational value. The participants are often real fans of this entertainment genre. Very famous in the Netherlands are the Roman soldiers of Legio II Augusta, clubs that keep medieval martial art

alive (see www.zwaardvechten.nl), Napoleonic groups as well as associations that simulate events of the First and Second World Wars.

Guided tours in historical costumes aren't museum theatre either. Nor are museum staff in costume, such as tram drivers, stokers and conductors in the Steam Tram Museum in Hoorn. They explain or demonstrate, but they do not play a role. They are themselves.

⁸⁵ Halbertsma, N., 'Van rollenspel tot museumtheater', in: *Museumvisie* 18, 1994/3, 1-5.

You can get feedback on a presentation or exhibition by means of audience research. What drives visitors, who are they, and what do they think about it? Good research needs a proper problem statement, an appropriate method and reliable data processing.⁸⁶

Jan Sas Heritage and Audience Research



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⁸⁶ The following manual is still very useful for the heritage sector:
Ranshuysen, L., *Handleiding publieksonderzoek voor podia en musea. Geheel herziene en uitgebreide druk*. Amsterdam: Boekmanstichting, 1999; see also www.lettyranshuysen.nl.

I General

1.1 Before getting started

Research needs a purpose: why do you want to know something? The purpose of an investigation answers this 'why' question. Next the problem statement needs to be formulated: what do you want to know? This is not easy. For a simple question like 'What do visitors think of our museum?' you need to be clear what you mean by museum. Is this the building, its image or the products offered, such as exhibitions and educational programmes? Or all three? And before choosing a research method, you need to check if research is necessary. Maybe similar research has been done in a similar institution. And if you really want to do it, you need to know that you will have to compare your findings with other findings too. Therefore, first check in libraries, the internet and with similar institutions as to what has already been investigated in this area. For example, the pros and cons of free entry to museums has been researched in many countries. You don't have to reinvent the wheel.

1.2 Descriptive, exploratory and testing research

Broadly speaking, there are three types of research: descriptive, exploratory and testing research.

Descriptive research is the identification of characteristics. For example, who are the visitors to the City Museum, how often do they come and where do they live? Exploratory research attempts to find an explanation for differences and relationships. For example, why do more women than men visit the City Museum? As a researcher, you do not have a clear idea of what the reason might be. Perhaps there are more women because they have fewer work obligations and therefore have the opportunity to go to the City Museum with a female friend during the day. Or maybe that is nonsense and it's the atmosphere in the museum that attracts more women? Or does the way of presenting in the museum appeal more to women than to men? If you do have a clear idea of cause and effect, you can choose to conduct assessment research to check your assumptions. In this context, the term experimental research often comes up, associated with concepts such as 'theory' and 'hypotheses'. These are normally relevant for natural sciences, where universal explanations are sought for specific phenomena – gravity is a well-known example.

In the case of a City Museum it's about applied research. You are investigating whether a way of presenting – say, of watercolours – affects visit time and visit frequency. The watercolours in the example lose colour intensity because of light that is too strong. Therefore, in an exhibition you will be trying to expose them as little as possible. There are many possible options: curtains in front of the objects, low light, lighting that only goes on when the visitor is seen by a sensor, changing the objects every week, and so on. All of these options can be tested against each other.

1.3 Choice of method

In addition to earlier research made elsewhere (www.scp.nl), in many institutions you can find useful audience information that was not collected for that purpose. The cash register can say a lot about the audience entering the institution, such as when they enter and with whom (group composition). Also, with a separate button, you can record whether visitors are coming from home or abroad. This is not watertight unless you explicitly ask the visitors where they come from (a Dutchman can speak English or a foreigner can look Dutch), but a large national museum can get a good idea of the percentage of foreigners amongst its visitors. If there is no cash desk, for example, in archives, manual registration could be considered. Alternatively, each visitor could be asked a few questions: what are the four digits of your postal code? Answers can be instantly entered into a database.

Other sources of information are visitor letters, reviews and comments via email. In addition, an institution can provide visitors with the opportunity to leave comments, for example in a guestbook.⁸⁷ This can be a blank book; of course, but could also be loose sheets of paper or reply cards submitted in a box. In this way, visitors are not influenced by what predecessors have noted.⁸⁸

A cash desk printout and comments in a guestbook are both information sources, although a cash register is quantitative information whilst the guestbook text is a qualitative one. Research is often classified into quantitative and qualitative research. Quantitative means measurable things, numbers: what percentage of visitors came by public transport and what percentage did not. Qualitative research is mainly about the content of the answers: it's not relevant that 50% wrote that the exhibition was 'fantastic' in the guestbook, but it does matter that three visitors,

⁸⁷ For more unstructured and structured ways of collecting visitor information, see: J. Sas, 'Der Besucher als Berater' in: Bernd Günther and Hartmut John (eds.), *Besucher zu Stammgästen machen! Neue und kreative Wege zur Besucherbindung* (Bielefeld 2000) 49–65, especially 55–58.

⁸⁸ Serno, R., *Het Gastenboek: de Echte Stem van de Bezoeker? Een onderzoek naar het gebruik van het gastenboek als vorm van publieksonderzoek*. A Reinwardt Academy graduate thesis, June 2014.

including a man, noted there was no place for baby changing. The latter can result in the installation of a baby changing table. In, of course, both the ladies and the men's toilet.

2 Questionnaires

Large quantitative surveys are usually preceded by small, qualitative preliminary investigations. How are people talking about a particular problem and what answers are they giving? You will find it out in a few interviews by asking open questions to a limited number of visitors. The advantage is that you can ask more questions in case of doubt. By inquiring about topical aspects or facts, you can explore the scope of the subject. The interviewee can also correct the interviewer. With some ten interviews, you can already get a good picture of how the opinions vary about a particular issue. The quality of the answers is important - the goal is to find out all the answers that are possible. If after ten conversations, new facts are still coming up, it is advisable to continue interviewing until saturation point is reached. Only after you have inventoried all visitors' concerns, can you compile the questionnaire.

It does matter when questionnaires are handed out to visitors. Often a questionnaire is handed out both in advance (entrance survey) and after the exhibition (exit survey), so the results can be compared. In an exhibition about microbes, 25% of the visitors didn't know upon entry what microbes were, whereas upon leaving, only 10% didn't know. At the entrance 43% could not say in what way microbes differed from each other, whereas at the exit only 9% could not say that.⁸⁹

2.1 Pros and cons

A survey can be conducted by a market researcher who poses the questions and records the answers or, alternatively, visitors can read the questionnaire themselves and fill in the answers, either on paper or by computer.

The benefits of a self-completed questionnaire are that a lot of respondents can be reached in a short period of time, it is relatively cheap, the answers are anonymous (which can increase the chance of honest answers), and the data is on paper or available digitally. The standard answers can be analysed easily.

However, there are various disadvantages. Communication is one-way, the questionnaires are not flexible, and this method only reaches those who want

to join. The length of a questionnaire is limited, since you cannot ask an infinite number of questions. There are also limitations on depth: complicated questions are not possible. There is a threat of what is called non-response. This can take several forms. There are people who refuse to participate in the research, for example, because they are heading to the exit or do not feel like it at that moment (often when they are asked it online via a pop-up window when consulting a museum website). There are people who take a questionnaire but do not hand it in, or the questionnaire is filled in incompletely. It is possible to prevent that in the digital version: you 'must' give an answer even if there is no appropriate answer option.

Another problem is interpretation of the questions by the target group. Respondents can read or interpret questions incorrectly. The quality of the collected answers can also be questioned. Standard answers are by definition superficial. People answer what first comes to their minds, which of course has good sides, too. If there is no desired option among the alternatives offered, people lose the opportunity to answer what they wanted to. Furthermore, of course, it's a question of how seriously a questionnaire is filled in. Despite the assurance of anonymity and that the data will be dealt with carefully, a respondent may decide to answer with what is socially desirable. In addition, the interpretation of the answers to the open questions or the illegible handwriting of respondents can be a problem, as is the case with visitor guestbooks.

The use of questionnaires also means that people who cannot read or write are excluded. This also applies to people who, when the survey is digital, are unable to handle a computer or tablet. The consequence of all this may be a low response or extra energy needed to reach the target number of respondents.

2.2 Questionnaire design

Those who use a questionnaire can choose between open questions, closed questions and a mix.

An open question is: what is your age? The respondent fills in his/her age. A closed question already has a number of response categories (e.g. 15-24 years, 25-49 years, 50-64 years, 65 and older).

Some types of open questions:

⁸⁹ Andrew J. Pekarik, Steven J. Smith, Zahava D. Doering and Kerry DiGiacomo, *Microbes ARE wonderful! A Study of Visitors to the Microbes Exhibition*. Institutional Studies Office, Smithsonian Institution (Washington 1999).

Unstructured

What do you think of the Van Gogh Museum?

.....
.....

(On the dotted line, the respondent may fill in what he/she wants)

Word association

What word first comes to mind when you hear the following?

- Museum
- Van Gogh Museum
- Modern art

Completing a sentence

When I'm in the Van Gogh Museum, I usually first of all...

Making a drawing

What do you think of the Van Gogh Museum? Make a drawing.

Examples of closed questions:

Dichotomous scale

Have you visited the Van Gogh Museum before?

- 1 Yes
- 2 No

Multiple choice

How did you get to the Van Gogh Museum?

- 1 On foot
- 2 By bike
- 3 By car
- 4 By train
- 5 By public transport (bus, tram, metro)
- 6 By taxi
- 7 Other, please name...

The last option, 'other, please name...', makes the question half open / half-closed: the person who arrives by scooter can still fill in an answer.

In addition, this question must specify 'multiple answers possible' (by train to the city and then by tram to the museum).

Likert scale

This is where a respondent must indicate to what extent he or she agrees or disagrees with a statement. There are always five choices: strongly agree, agree, neutral (neither agree nor disagree), disagree and strongly disagree. With this method, developed in the thirties by American psychologist Rensis Likert (1903–1981), you can get a good idea of data that is difficult to quantify. With the so-called semantic differential, we can ask further questions as to what extent one agrees/disagrees with specific qualitative statements. What do you think of the appearance of the Van Gogh Museum: modern, captivating, rustic, extrovert, or cheap? A similar methodology can be used to quantify what visitors consider important and how much something is appreciated (from 1 to 5: excellent, very good, good, satisfactory, bad). Furthermore, the most important marketing question can be asked here: 'Would you recommend us to a friend or colleague?' This requires ratings from 0 to 10, allowing us to calculate the Net Promoter Score (NPS).⁹⁰

The NPS is a convenient comparison tool that is increasingly used in museums. To calculate it, you must deduct the percentage of the 'dissatisfied' (those who give 6 or less) from the percentage of 'promoters' (score 9–10). If you have 25% promoters, 54%

passively satisfied (score 7–8) and 21% 'criticasters', then the NPS amounts to +4 (25% minus 21%). A positive NPS (>0) is generally considered to be 'good'.

Standardization

It is always important to contact interviewees in exactly the same way. Otherwise, there is a risk that the method of approaching could influence willingness to participate in the research. An opener could be: 'May I ask you a couple of questions about the museum? It will take about... minutes.' Furthermore, it is important to indicate what the purpose of the questionnaire is, that the questionnaire is anonymous (unless agreed otherwise) and that the information will be treated confidentially. Shortly explain how respondents are selected and how you are going to do the questionnaire or how to fill in the form if they are going to do it themselves. Explain how the information will be used. Start with easy questions. Put questions about gender, age, education and residence (if you ask them at all?) at the very end. Finally thank them for their cooperation and, in the case of a paper questionnaire, tell them where to hand it in. The design of the questionnaire is also important. An attractive form layout or computer interface can contribute to willingness to answer the questions and to complete the entire questionnaire. The use of pictures, icons and symbols can increase the attractiveness.



⁹⁰ NPS was developed in 2003 by Satmetrix, a U.S. company specializing in Customer Experience Management, see www.netpromoter.com/home and netpromoter.nl/netpromoter-score

2.3 Practical recommendations

- Record and inform respondents where (and how) they can submit the completed questionnaire.
- Verify that an agreed 'compensation' is actually available, both for online and onsite questionnaires.
- Record the number of people who refuse to participate in the research. If 80% of the people asked to participate refuse, it is important to find out the reasons why. In museums, the number of refusals to participate in a public research is generally limited.

Selected questions

- Every question must be essential.
- Every question should only be interpreted in one way.
- Do not ask two questions at once. Avoid: What do you think about the quality and price of the audio tour?

- 1 Attractive
- 2 Unattractive

Because is the question about the price, the quality or both?

Answer categories

- For open questions you should always ask yourself if it's wise to ask an open question at this point. For example: What is your occupation? So many answers are possible for this open question, that categorising will be a huge job notwithstanding the fact that sometimes you will have to guess what someone with a particular occupation actually does. Such questions are not therefore recommended.
- Keep the 'other, please name' category as small as possible. If lots of people do not arrive by car, avoid using the following example: What kind of transport did you take to get to the museum?

- 1 car
 - 2 other (please specify)
- More categories are needed.

- Avoid overlapping categories. Avoid: What's your age?

- 1 under 15 years
- 2 not older than 14 years
- 3 15-20 years
- 4 20-25 years

3 Observation

Observing how someone behaves can clarify things that the person themselves is often not even aware of. There are different types of observation. The first distinction is between unstructured and structured observation. A conservator in a museum who occasionally walks around and observes the audience

will notice incidents (critical events). He will see something here and there, but it's not systematic. Structure is necessary for credible statements about the behaviour of people in particular situations; for example, a system of categories. You can observe frequency: how often does something happen, for example, how often do museum visitors use the floor plan? Or duration, for example, how long do visitors look at a particular top painting, how long do they stay in an exhibition or gallery? Or intensity: how often do children play a computer game before further exploring the exhibition?

The second distinction is between open and covert observation. Sometimes it's important that the people under observation are not aware that they are being observed, sometimes it does not matter.

The third distinction is between direct observation, i.e. observation from a distance, and participatory observation, when the observer is part of the group or situation being observed.

Some examples from outside of the heritage sector: direct, obvious observation such as traffic counting; direct, covert observation such as birdwatching; participatory, open observation such as a football coaching and participatory, covert observation by an undercover journalist.

Every combination has its pros and cons. Sometimes handing out a questionnaire is much more efficient. But if you want to map the behaviour of football fans, you should choose observation rather than questionnaires.

3.1 Preparations

Whoever observes will need to prepare: ask for permission beforehand, make a form to record systematic observations, and schedule the time and duration of the observations. Registration of the observation can be done by pen and paper, but also with a digital camera. It is important to test the situation before the actual data collection takes place. Sometimes security or surveillance cameras are used for observation purposes. However, these cameras are often not accurately positioned or the distance to the observation area is too great. In addition, it's necessary to inform visitors at the entrance that observations are taking place. A sign at the front desk is sufficient.

3.2 Pros and cons

What are the benefits of observation? You are registering actual behaviour. You can do that from an observation point (for example, in the gallery or in a place in an exhibition) or by following visitors. You are collecting detailed information. Observation allows you to study people in their natural environment. People are often unaware of what they are doing. Observation also allows you to study interactive behaviour. Some people refuse to be interviewed, and observation is a fast way of collecting information.

There are also disadvantages to observation. You might focus on uninteresting incidental behaviour and certain behaviour cannot be seen; it remains hidden. The observer does not know why someone is behaving in a certain way. For example, someone passes by a distribution desk: has it been seen or is it no interest? Observing sometimes means interpreting, for example, if someone's face turns in a certain direction, are they also looking? Furthermore, the observer may influence the observed one's behaviour. Someone who is alone in an exhibition hall may behave differently than when another visitor (in this case, the covert participating observer) is present.

3.3 Practical recommendations

- Observe in a structured way.
- Perform all observations in the same way.
- Observation = registration and this is not interpretation.
- Visitors should be unaware that they are being observed unless it has been decided otherwise.
- Do a test to get the feel of observing from a distance (can you see what's happening?) or try to follow a visitor without being noticed.
- You cannot observe a whole family at once (don't try to do too much at once).
- Do not distract yourself, even if other people/events are more interesting.
- Avoid feeling embarrassed: interrupt your observation if necessary.

4 Focus groups

Working with focus groups is a form of qualitative research involving a group interview with elements of group discussion. It's a way to listen to and learn from people. In a focus group, people sit together, for example at a table, to give their opinion on a number of issues and to discuss them. Participants can be recruited by a research agency based on defined

characteristics. Sometimes participants are asked to perform a particular activity, such as visiting a museum. After that they are supposed to show up somewhere at a certain time to join the focus group. Usually the participants are paid.

There are three types of roles in focus groups. The research team formulates questions, collects and analyses data. The facilitator (moderator) is also part of this group. The second role belongs to the participants: the content of their discussion is the material the research team is looking for. The third role is the financier, for example the museum director: the person who commissions the project.

4.1 Focus group sessions

Focus group sessions always involve a three-stage communication process. First, the research team determines together with the client what information is needed; during the session, participants talk about the chosen topics; the research team then summarises what the participants have said and adds conclusions and recommendations. The facilitator, a trained professional, moderates the discussion without interfering with the discussion in terms of content. The conversation is about a predetermined series of subjects. The focus group is a small group, usually from 8 to 12 people. The participants all share the same experience, for example, that they have never before visited the Amsterdam City Archive. The discussion is about topics raised by the moderator. Everything that the participants say is essential information. A typical focus group takes one and a half hours on average. The commissioner (for example, the museum) authorises the research, and in principle attends the focus group sessions, but does not influence the outcomes. The commissioner's attendance is sometimes conducted in a special way behind a one-way mirror. Participants know this but in this way are less affected by the presence of viewers and listeners. Instead of a one-way mirror, a camera and a television can be used. What is special about this situation is that, for example, museum workers see and hear visitors talking about their museum. This is something different than a completed questionnaire. During a focus group session, observers can ask the participants additional questions via the moderator.

4.2 Strong and weak sides

A focus group is a good method of exploring and discovering. There is both context and depth because

people's backgrounds can be conveyed through their thoughts and experiences, or the moderator can ask for them. Focus groups also help with the interpretation of behaviour: for example, why do all visitors pass by the information desk so quickly? There is direct communication because you meet real visitors. Focus groups help generate new ideas or to discuss ideas in more depth. This can be a qualitative boost, partly due to the diversity of answers. It's not about your ideas, but about the way the participants in the focus group see them. Furthermore, the atmosphere during the conversation is important; it can increase the involvement of the participants. It is also important to pay attention to the participants' body language. This is primarily a task for the moderator.

A weaker side of focus groups is limited generalisation because the sample size is very limited and one focus group is not enough. Too much is left to chance, and it's a question of how representative the interpreted opinions are. In addition, in groups there is always the danger of group dynamics, socially desirable answers and mutual influence, and furthermore, the special role and influence of the facilitator. Finally, focus group sessions and the processing of the collected information are time consuming and, when executed by an external party, very pricey.

5 Reliability

For logical reasoning, it is important to know something about the limitations of samples. Any research is actually a sample. Its representativeness determines the credibility of your conclusions and the urgency of the recommendations that follow from the user research. It is best to use a mix of research methods. All of these aspects will be briefly discussed below.

5.1 Sampling

People who carry out quantitative research must know how to get a reliable picture of the group to be investigated. Imagine that you are doing a survey among adults between the ages of 50 and 64. All adults in this age group form the universe, or the theoretical population. However, you are focusing on Dutch adults who go to museums; these form the operational population. Of course, you cannot interview all Dutch adults between 50-64 who visit museums: you have to draw a sample. Samples are subdivided into probability and non-probability samples. With probability sampling, also called random sampling, it

is completely accidental whether someone gets in the sample or not. If you want to have the best possible picture of the population, it is advisable to strive for a representative sample: every person in the population has equal opportunity of being selected. In the case of nonprobability sampling there is no absolute arbitrariness. The best-known form of sampling is so-called simple random sampling, the lottery method. Each lottery ball has an equal chance of being drawn. Translated to museum practice, this means that, for example, every tenth visitor who leaves an exhibition is asked to participate in the survey.

Systematic sampling with a random start means that there is an administrative sampling framework. You know exactly who make up the population. For example, all friends of the museum. Out of the four thousand friends you want to draw a sample. It is decided that four hundred people will be approached. In this case there is an alphabetical list. The surname someone has is completely accidental. A number between one and ten is randomly selected, for example four (the random start) and then the numbers four, fourteen, twenty-four etc. are (systematically) sampled.

In principle, there is a high probability with a random sample, that there will be the same proportion of men and women in the sample as in the population. In order to increase the probability, you may decide to draw a stratified sample. This one includes strata, also called partial populations, for example, men and women. You can decide that the sample should, for instance, consist of 50% men and 50% women. If the Museum Friends Association has an overrepresentation of women (e.g., 70% of the total), you may decide to draw a so-called proportional stratified sample. It is then determined in advance that 70% of the respondents should be women. As there is a chance that a man may be drawn, he is then skipped and the first woman to come next is selected. Then, for example, you will continue ten people before you select the next person.

In addition to probability (random) samples, there are nonprobability samples. For example, you need to approach four hundred visitors. You approach everyone who comes your way until the intended number of respondents has been reached. This is random sampling. If you want to have some impact on the sample composition, you can determine sub-populations, for example, two hundred women and two hundred men. This is called quota sampling.

91 Krejcie, R.V., and Daryle W. Morgan, 'Determining sample size for research activities', in: *Educational and Psychological Measurement* 30, 1970, 607-610.

92 Instituut Collectie Nederland. 'De steekproef als hulpmiddel bij collectiebeheer', 2000. ICN-informatie no. 4.

Sometimes it's difficult to find respondents, for example, because there are few people who meet a particular criterion. Imagine you want to do research among museum visitors who engage in watercolour painting. You can ask each visitor at the museum exit if they make watercolours. However, it's easier to approach someone who already has this hobby. Subsequently, you could ask if this person knows someone else who visits museums and does watercolours as a hobby. In this way, you can collect respondents for an investigation into the experiences and appreciation of watercolour exhibitions by individuals who practice watercolour painting. Another example is sampling people who engage in swinging; it's best to find them through referrals. Such a method is called snowball sampling.

How big should a sample be? There are several formulas for this, but a rule of thumb is that a sample of four hundred persons is sufficient for a survey within a cultural institution.⁹¹ The same figure of four hundred also applies to the selection of objects from a large depot.⁹² The reliability of a sample, that is, whether a sample gives a true picture of the population, increases when working with strata.

5.2 Data processing

The method of processing is chosen depending on the amount of data. In a qualitative, small-scale project, for example, a front-end research or a formative evaluation,⁹³ it is often unnecessary to enter data in a database and analyse it using a software programme. The results of this type of research can result in adjustments in the research questions or to asking other, deeper or far-reaching questions, resulting in an iterative process. With larger amounts of data, it is worth using a database. When respondents give answers via a computer, this happens automatically. When you work with questionnaires, you need to take some time to enter all the data. For simple analyses, Microsoft Excel is sufficient, but for advanced analyses, the IBM SPSS⁹⁴ statistical programme can be used. This works with its own data entry module, which also allows for converting data from other programmes, such as Excel.

5.3 Combination of methods

The best results can be achieved when you work with different, complementary research methods. In statistics jargon, this is called triangulation.⁹⁵ People who need to collect information should think about

how the use of various methods can contribute to a better understanding of a problem. For instance, you can start with organising a number of focus groups. Then you can do some observations in exhibition halls. But perhaps you should first observe and then discuss the observation results in focus groups. Observation alone is often too limited. After completing an observation it is highly recommended to ask the 'victim' a number of additional, possibly clarifying questions. Each research phase has its own methods. For example, a focus group is used more often in a front-end situation, when it's not yet clear if the idea of an exhibition will appeal to the intended target group. This is in contrast to a summative evaluation, for example, of an exhibition that has already opened. And an observation in the gallery is only possible when, for instance, a worksheet is more or less ready. In general, visitors to cultural institutions are willing to participate in a survey, be it an interview or a questionnaire.

6 Measuring the effect

In the Netherlands, it has been customary for some years now that organisations handing out subsidies and sponsorship, ask museums to demonstrate the impact of their efforts.⁹⁶ The reporting almost in all cases is done by citing visitor numbers (in general and for a specific exhibition or event) and the number of (unique) users of the website: what they view, how long and when.

6.1 From performance to effect

Visitors are subdivided into distinct categories that are understandable for those outside the sector, to demonstrate that the museum is visited by politically-relevant target groups, such as students, young people, families, the elderly and (cultural) minorities. In addition, Dutch museums are increasingly shifting attention to local communities, which scores well with local politics. The performance of institutions is visualised using hard quantitative data, specifying the number of organised exhibitions, special events, lectures and other activities, including their success rate, usually expressed in the number of visitors or participants. Museums also provide sales figures, such as ticket sales, museum store revenues, including online sales, as well as memberships of friends associations and proceeds from private financiers. Media coverage is also measured, for example, how many articles have been published and where: in quality newspapers or in the local paper?

⁹³ Sas, J., 'Ken uw publiek! De museumwereld als voorbeeld', in Thomassen, T. (ed.), *Archiefgebruikers. Consumenten van het verleden. Jaarboek 2002/2003*, Den Haag: Stichting Archiefpublicaties 2004, 43-55.

⁹⁴ www-01.ibm.com/software/analytics/spss

⁹⁵ Verhoeven, N., *Wat is onderzoek? Praktijkboek voor methoden en technieken*. 5e dr. Den Haag: Boom Lemma uitgevers, 2014.

⁹⁶ Bunnik, K., and E. van Huis, *Niet tellen maar wegen*, Amsterdam: Boekmansstichting 2011.

To assess how a museum is performing, audience research is also used. Audience research focuses primarily on who comes, their motivation to visit and how satisfied they are. For example, visitors come to see new things, to learn or experience something new, for reflection, for their own pleasure, or, rather, for the pleasure of others. Some museums focus on experiencing, others on discovering or reflecting. Motivations are influenced by the mood and attitude of the visitor, before and during their visit. Audience research is especially important to check whether a museum's offerings meet the visitors' demand and needs.

However, a large amount of the collected figures will barely represent what visitors gain from a museum visit. Sometimes benchmarks are used to compare indicators. However, not everything is measurable. A fundamental question is what makes a particular museum different from other museums. What makes it so unique that visitors choose to go to this museum instead of another one? Or, perhaps more importantly, why are they going to this museum instead of preferring another kind of leisure activity, such as shopping or visiting a café, a sporting event, a performance or a movie? What is the success factor of a museum? What can visitors gain from going to a particular museum?

6.2 Generic Learning Outcomes (GLOs)

An interesting method for measuring the success of heritage institutions was developed in the United Kingdom a decade ago. The MLA (Museums, Libraries and Archives Council) conducted a discussion culminating in the *Inspiring Learning for All* programme. After research and fundamental debate, agreement was reached on naming the learning outcomes of a visit. These are the so-called Generic Learning Outcomes (GLOs). Generic as opposed to the specific learning outcomes you so often see at formal education institutions. This inspiring learning framework was built on a broad and inclusive definition of learning. The GLOs could now be used as performance indicators in the analysis (of the effect) of new exhibitions and educational programmes. In addition, it allows for assessing whether a strategic development programme, implemented at a museum and aiming at engaging visitors and meeting their needs, has had any effect.

Constructivist vision of learning

The wording of the GLOs is based on a constructivist, postmodern view on learning (personal growth, see Chapter 4.1), which also reflects social and cultural differences. Culture itself is perceived as a practice for the production of meaning. Therefore, learning is an active, experience-oriented process leading

Figure 26
Visitor experience at the crossroads of five dimensions according to the GLO theory.



to a continuous change of your convictions, norms, views, and ideas about yourself and the world around you.

Five categories (circles) are distinguished, in which visitor experience can be interpreted as meaningful [see Figure 26], that is, contributing to growth [learning]:

- 1 Knowledge and understanding
 - 2 Skills
 - 3 Attitudes and values
 - 4 Enjoyment, inspiration, creativity
 - 5 Action, behaviour, progression
- These GLOs are interconnected and partly overlapping.⁹⁷

English or Dutch model?

According to British researchers, working with Generic Learning Outcomes provides an instrument for analysing a museum's offer and facilitating discussion about its impact. It is crucial to emphasize that the GLOs do *not* measure learning. They provide a magnifying glass to view the impact of a museum visit on individuals. By asking visitors to respond spontaneously and associatively and then categorising the answers systematically, you get an idea of what they think they have learned. With the GLO approach, the impact of museum visits has been measured in dozens of heritage institutions across the United Kingdom. The reactions of tens of thousands of visitors, mainly schoolchildren, were mapped and interpreted on the basis of the five interconnected GLOs.

A Dutch pilot study

The example from England has also been tried out in the Netherlands. After intensive study of the method and consultation with British colleagues, Reinwardt Academy decided to set up a pilot study in Dutch museums. The research question was: 'To what extent can the Generic Learning Outcomes as a tool and methodology be adapted to and applied in the Dutch context?' We wanted to test the GLO conceptual framework on both schoolchildren (ages 10 to 12) and individual adult visitors. The latter group had been scarcely investigated in England.

The essence was to fully understand the GLOs and to translate them to the Dutch context. This went beyond a one-on-one translation, semantic differences had to be bridged, too. For instance, the Dutch word *leren* [learn] is complex or at least problematic. When

hearing the word *leren*, most Dutchmen think of old-school teachers, performing well, learning by heart, fear or boredom. We decided to avoid the word *leren* completely and use the English word *experience*, which can be translated into Dutch as *ervaring* or *beleving*. The former one, *ervaring*, is probably better in this context because it refers to a more 'deep experience', whereas *beleving* refers to a more superficial experience; similar to the German words *Erfahrung* and *Erlebnis* [see also Chapter 3.3.2].

One of the crucial tools we have taken from the English research is the use of a cloud – known from comic strips – intended to trigger visitors' reactions [see Figure 27]. This tool first made the interviewee think about his or her key experience. That experience had to be drawn in the cloud. The inventing and making of the drawing often took a lot of time. In order to avoid spending too much time on collecting the data and to keep the focus on visualising the experience, it was decided to only ask the name, age and place of residence of the visitor. We hoped that making a drawing would encourage the average visitor to respond in a more active, playful and challenging way than if we conducted a standard interview immediately after the museum visit.

After the drawing was made, a brief conversation followed, where the visitor explained what he or she had drawn. What was the most important, intriguing experience/association during the visit [see Figure 28]? All conversations were recorded and later transcribed.

Figure 27.
Response card with a 'think cloud'.



Figure 28.
Example of a 'think cloud' filled in.



⁹⁷ Hooper-Greenhill, E., *Museums and Education: Purpose, Pedagogy, Performance*. London: Routledge, 2007.

The illustration shows a drawing made in the Tropenmuseum (Amsterdam) by Henk from Almere (60 years old). He said in the interview:

‘Yes, today we have seen a lot about different cultures and, of course, about the old colonial past of the Netherlands. I was very familiar with this because I used to live here as a child, right across the street. It used to be my second home. And now I’m here with my grandsons and my daughters-in-law, well, and I’m hoping to share a bit about what I see. And it’s about man and his culture, but also his music and habits, it’s from joy to sorrow, from weddings to war. It gives a very nice picture of what there used to be in the world, but actually what there still is.’

This says something about the research team’s analysis process. Initially, the team thinks that the learning outcomes here fall within the Skills circle, as the visitor says he wants his grandchildren to learn something about other cultures (this is mentioned in the above excerpt of the interview). However, this does

not say anything about his own learning outcomes. That is, he deepens his knowledge of other cultures and makes links (also in the excerpt). This complies with the GLOs ‘Deepening understanding’ and ‘Making links between things’, within the circle of ‘Knowledge & Understanding’.⁹⁸

The result of each transcribed interview was discussed in the research team. The most important experience expressed was linked to one of the five overarching, generic GLOs. Subsequently, the most applicable subcategory was examined within a specific GLO. This pilot project attempted not to choose multiple GLOs as an option, as that would be an easy way out. In summary: working with an inter-subjective assessment, all visitor responses could be given a place within the GLO framework, both generically and on a specific level. The Generic Learning Outcomes performance indicators proved transferable to the Dutch context. A linguistic translation into the Dutch cultural context was also successfully executed.

Figure 29. Specifications within the five main categories of Generic Learning Outcomes.



⁹⁸ Bierling, A., et al., Van GLOs naar GLUs! Een pilotonderzoek naar de toepasbaarheid van het meetinstrument Generic Learning Outcomes in de Nederlandse context. A Reinwardt Academy graduate thesis, 2011, www.academia.edu/7009265/Van_GLOs_naar_GLUs.

And yet there are differences of opinion about the concept of learning. In the GLO study described, the term *visitor experience* is used instead of *leren*, whereas the more neutral term *visitor outcomes* is used in the United Kingdom. A point of criticism remains about the fact that linking responses to only one specific GLO does not reflect the complex and versatile experience of a museum visit. Children have a narrower vocabulary than adults and need to make an effort to articulate what they feel. For many children, their experience was just 'nice' or 'fun'; and here the drawing often supplied more layers. Adult visitors sometimes gave a surprising insight into their own personal experiences. Be it as it may, using GLOs allows you to communicate the impact of a museum visit to stakeholders, governments, professionals and non-professionals. This is not unimportant at a time when cultural institutions are asked to justify their social and economic value.

Further reading:

- Baarda, D.B., *Dit is onderzoek!* Groningen/Houten: Noordhoff 2014
- Verhoeven, N., *Wat is onderzoek? Praktijkboek voor methoden en technieken*, Den Haag: Boom Lemma 2014
- Baarda, D.B. and M.P.M. De Goede, *Basisboek Methoden en technieken. Handleiding voor het opzetten en uitvoeren van kwantitatief onderzoek*. Groningen/Houten: Noordhoff, 2006
- Baarda, D.B., M.P.M. De Goede and J. Teunissen, *Basisboek Kwalitatief onderzoek. Handleiding voor het opzetten en uitvoeren van kwalitatief onderzoek*. Groningen/Houten: Noordhoff, 2009
- J. Sas, R. Smit, Measuring Generic Learning Outcomes in the Netherlands, a pilot study, in: Jelavic, Z. (ed.), *Old Questions, New Answers. Quality Criteria for Museum Education*, Zagreb: ICOM-CECA 2011, 135-146.

Heritage institutions have a long record of using and deploying media. In fact, as transmitters, receivers and forwarders of information, heritage institutions are themselves active players in the media landscape. Already at an early stage they started using leaflets and catalogues, first as descriptions, then later as educational bulletins. Video projections, sound showers, TVs, touchscreens and audio tours have become ubiquitous. These are all types of media that we take for granted, simply because we have used them for a long time. The first museum audio tour in the world was introduced in 1952 in the Stedelijk Museum in Amsterdam.⁹⁹ It might therefore seem strange that when thinking of audio guides and computer-controlled displays, we talk of new media.

Simone Stoltz Heritage and Media



- 1 Introduction
- 2 Old and new media
- 3 Looking for the impossible
 - 3.1 Digitization and computerization
 - 3.2 Multimedia and carriers
 - 3.3 Innovative technology
 - 3.4 Social media and communication
 - 3.5 Games
- 4 Strategic choices
- 5 Audience and media in the future

⁹⁹ Polygoon Hollands Nieuws, July 28, 1952, see www.npogeschiedenis.nl/speler.WO_VPRO_040927.html.

¹⁰⁰ www.marshallmcluhan.com/biography.

¹⁰¹ Shirky, C., *Here Comes Everybody. The Power of Organizing Without Organizations*. London: Penguin 2008.

I Introduction

But whether it's about old or new media, it's always man that takes centre stage. Public awareness of the impact of media on society arose in the middle of the last century. Marshall McLuhan described in *Understanding Media* (1964) the effects of media on our daily lives.¹⁰⁰ He saw the phone, radio, and television as the technological extensions of the human body. Fifty years later, this vision is still relevant. Don't you feel naked and vulnerable when you have forgotten your smartphone?

In 2008, Clay Shirky is still focused on man. In his vision of networking, new media makes new forms of social interaction possible. It changes the way people form groups and especially the way we relate to each other within these groups. Like McLuhan, he is curious about both economic and social consequences.¹⁰¹ It is therefore not surprising that the concepts of new media and social media often seem to be interchangeable. The notion 'new' can mainly be related to the social (i.e. human) impact of media. In our time, we increasingly use media as a factor to connect people. Media is becoming less 'new' because it quickly becomes an integral part of our lives. Generation Y has grown up with the internet and have not known life without it – it's like water from the tap.

If one approaches media from a technological point of view, education plays a major role. Technological innovations change the way people work and live, and new skills are needed for this. Attention is given already at high school to the fact that technology extends everyone's reach: 'We do not just communicate here and now with the people around us, but the whole world is watching and listening, without context, and nothing can be erased. What does that mean?' You need 21st-century skills.¹⁰²

As far as the heritage sector is concerned, these skills are not just a luxury, either. For heritage institutions, it is essential to listen, to exchange information in many different ways, and to be visible and discoverable through a variety of channels, platforms and communities.

In this chapter, we set out the most important media developments for the heritage field. We focus on use and thus the awareness of media: from 'the medium is the message'¹⁰³ to 'media is a means, not a purpose'.

2 Old and new media

First a paradox. New forms of communication and the ensuing role changes have been there for decades. The Internet, originating in the '80s of the last century, implied a dramatic change in communicating with an audience and thus in the offerings and role of a heritage institution. That said, the turning point only came at the beginning of the new century. Initially, the internet was mainly a new channel to communicate with an already existing visitor. Only after some time did people become aware that the internet could also be an extension of the physical museum. With the advent of the internet, museums also started to serve potential visitors with online information about new and upcoming exhibitions. At a later stage, a selection of items from the collection were made available online. Only a few, because most museums were hesitant about this way of presenting and preferably these were items that could not be seen in the exhibition halls, otherwise visitors would have no reason to come. Due to this view, and because of the fear that presenting the collection online would ruin sales in the museum shop, it took years before real interaction with the public over the internet could begin. Nowadays we embrace digital infrastructure which we see as an indispensable domain. Through mobile technology (Wifi, Bluetooth, GPS) we are always connected, so we are together.

3 Looking for the impossible

A useful classification at the Reinwardt Academy, developed by Theo Meereboer for the 'Public and Media' minor, offers a way of comprehending this field. New media and their implications are divided into five domains.¹⁰⁴ The five sections show how they interrelate. No one category operates in isolation from the other four, but can be examined separately. The sections below analyse the developments and possibilities by category and provide some examples from the heritage field.

3.1 Digitisation and computerisation

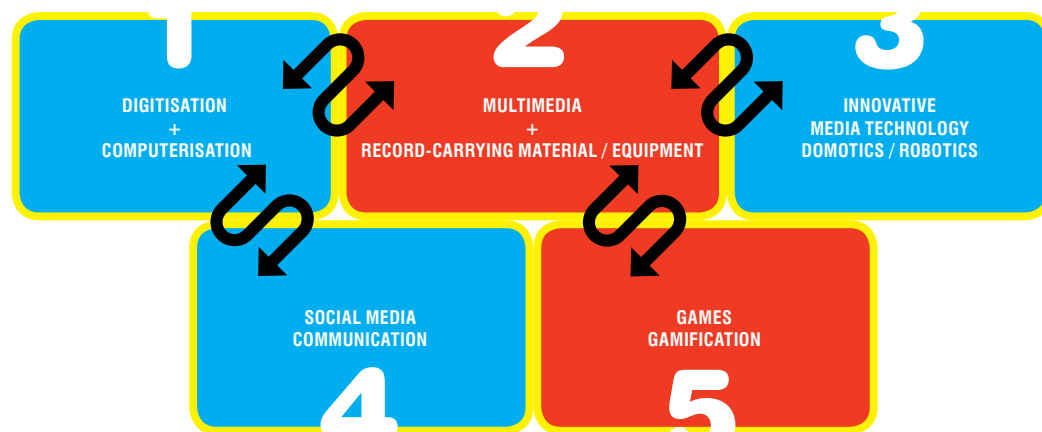
At the end of the nineties, when the internet became well-established, heritage institutions embarked upon a new development in media use: digitisation. The digitisation of heritage seems to have happened in a ramshackle way, but one cannot deny that there have been significant changes in the role of heritage institutions.¹⁰⁵ Digitisation still forms the basis of what is technically possible in communication to and with the visitor.

¹⁰² www.kennisnet.nl/themas/21st-century-skills/vaardigheden/communiceren. ¹⁰⁴ www.slideshare.net/Erfgoed/introductie-30590292.

¹⁰³ A phrase coined by Marshall McLuhan. For his vision and the societal awareness of media, see his lectures: www.youtube.com/watch?v=ImaH51F4HBw (part 1) www.youtube.com/watch?v=a11DEFm0WCw (part 2).

¹⁰⁵ www.den.nl/art/uploads/files/2008-03-Boekman-MarcodNiet-Nietallesuitdekast.pdf. It took 10 years, from 1998 till 2008, for the flat digitisation parameters to be brought in balance with participatory policy goals.

Figure 30.
New media application areas
(Heritage 2.0).



Just before the millennium, there was a growing awareness in the heritage sector that digitisation of collections was necessary. Image banks appeared, demonstrating the possibilities of the internet.¹⁰⁶ In addition to the catalogue, photos of objects could now also be displayed on the website. This may sound a bit dull, but it does indicate what the approach of heritage institutions was like at that time: pictures on the web. After all, we only show three percent of the collections, the rest can be seen on the internet.¹⁰⁷ Since the millennium, more collections have appeared on computer screens at home. However, in spite of increasing speed, in the Netherlands it was only after 2011 that the digitisation of collections was generally acknowledged to be on the right track.¹⁰⁸ It is important to realize that the web audience is no longer satisfied with an extract from the collection registration system and a digital photo. The digitised object is just a means of telling a story about the physical object.

This is also the reason why heritage institutions do not have to worry about decreasing visitor numbers or an empty museum shop when they make their entire collections freely available on the internet, as the Rijksmuseum does with its Rijksstudio.¹⁰⁹ People want to come back to the source; in the heritage sector, apart from intangible heritage, this still means the physical object. Indeed, due to the availability of its digital version, the physical object, which used to lead a miserable existence in the depots, can come to life again. Suddenly it can be the subject of discussion and

hence the starting point for knowledge sharing. In media literacy classes, which are held from primary school onwards, it is emphasised that the most accurate information is the original source.

The advent of social media brought about a shift in the world of digitisation. While in the beginning only the major players were busy digitising and making heritage[-related] metadata available, such as the DEN Foundation (Digital Heritage Netherlands) or the Royal Library, nowadays non-professionals are also doing it as cheaply.¹¹⁰ This trend is linked to the individualisation of digitisation and IT penetration processes. This 'democratisation of data' may well increase in the coming years.¹¹¹

3.2 Multimedia and carriers

When we mentioned digitisation in the heritage sector, we mainly meant home computers. That's where the website or the image bank of a heritage institution was viewed. The computer was the dominant medium for a long time, not only for the visitor, but also within exhibitions. The advent of the iPhone and iPad (followed by a broad stream of smartphones and tablets) led to a shift: for the heritage institution, in its offerings and visitor communication and for the visitor, in his or her control over it. Moreover, a smaller quality screen, with mobility as its main feature, implied a change of technical requirements for digitised heritage object representations. The user's expectations, influenced by the development of wireless internet, has changed as well.

¹⁰⁶ A 2009 research report: www.den.nl/pagina/350/de-digitale-feiten-enmeer-digitale-feiten.

¹⁰⁷ In fact, we still saw only a part of the collection because museums started the digitization with their core collections. In the beginning, this was partly explained by subsidy issues, as one could get a budget for digitizing the core collection easier than for making visible what was in the deposit.

¹⁰⁸ Boekmansichting en Sociaal en Cultureel Planbureau, *De Staat van Cultuur, lancering cultuurindex Nederland*, 2013.

¹⁰⁹ The Rijksmuseum started in 2012 with uploading 130,000 (2017: 606,715) of its masterpieces in high resolution to the so-called Rijksstudio. Users can select their favourite works to build their

own collections or create their own works using the museum collection completely royalty-free (www.rijksmuseum.nl/en/rijksstudio).

¹¹⁰ In 2014-2015, the Reinwardt Academy itself was involved in the Archive Ateliers project, which included the topic of a self-documenting society, see www.archiefateliers.nl.

¹¹¹ See also the National Infrastructure for Digital Heritage: www.den.nl/pagina/344/digitale-collectie-nederland/ and www.den.nl/project/501/, based on Open Data.

¹¹² Mobile media are all media or devices carrying media that are portable, so not just to be used in one place. Of course, many

In recent years, 'mobile media' has brought about a lot of changes for heritage institutions, leading them to think about reaching audiences outside the museum walls. This is where mobile media¹¹² can provide the most added value for (and by) the visitor. The arrival of mobile media soon had major implications on the supply of information. The possibilities are huge. Devices respond to touch, motion and in some cases sound – senses that were unthinkable with the classic computer. As a provider, you need to think even harder about the user, the moment of use and interaction with the user – who is no longer behind a desk, but moving freely in public space.

The immense success of smartphones means that everyone can be in full control of what they want to read, hear, discuss, share, look up etc. This requires heritage institutions to change their attitudes towards their offerings and their communication with the audience. Museums have begun to offer downloadable audio tours on their websites, allowing visitors to walk through the galleries with their own phones.

Decades have passed between the 1952 Stedelijk museum's audio tour, actually a local wireless radio broadcast, and so-called multimedia tours. Multi-, because both text and sound is used, as well as still or moving images. One multimedia tour does not differ much from another. The difference is mainly in the objects the tour is about. Visitors receive additional information, additional pictures and can indicate his or her preference here or there, thus adjusting the route. As there is little technical innovation in a multimedia tour, we have to look instead for innovation in content and perhaps context. It has taken a while before new life has been breathed into the world of multimedia tours. Specifically, we have had to wait until 2014: the MOOD app.

*Amsterdam Stedelijk Museum's MOOD app, aimed at young people, offers tours for every mood you might be in as a visitor. Are you in love, sad or afraid? Or maybe you drank too much last night and you're feeling the effects? Then you can walk through the museum with a tour in tune to your mood. The app takes you to see works that fit your mood.*¹¹³

These applications, just like multitouch tables and walls, audio projections and Kinects, are currently used within museum walls. However, multimedia tours are increasingly being used by museums and other heritage institutions on the outside too. A catalyst was the funding of the 'MuseumApp' by the Postcode Lottery. In a joint online platform, museums (in 2017: 75) can plot out their own city routes with text, image, film and sound. GPS leads the visitor through his or her own smartphone. A major advantage is that the institution can expand its subject and story. The city becomes the museum.

*The Pink Perspectives Tour is a multimedia tour used outside the walls of the Amsterdam Museum and the Waag Society. The visitor discovers places, historical facts and events related to Amsterdam's LGBT culture.*¹¹⁴ *With 'The Amsterdam of a Journalist' of the Press Museum, you make a walk through Amsterdam with three journalists of different ages. They talk about their careers in Amsterdam. This tour does not take the visitor to the museum but rather to the newspaper origins and a number of journalist cafes.*¹¹⁵

QR codes

An additional smartphone communication tool is the QR (Quick Response) code. It has been around for a long time and was used mainly inside the museum, in exhibitions. The QR code was extremely useful for reducing the number of text boards on the wall or in a display. However, it was in public spaces that its true potential was unlocked. Think of areas where GPS does not work accurately, or places where no information boards can or may be placed, such as estates, protected landscapes or zoos. Organisations like ANWB (Royal Dutch Touring Club) work with QR codes on hiking trails.

A successful example of using QR codes is found in the municipality of Wijdmeren.¹¹⁶ The 'Wijdmeren Experience Routes', supported by QR codes, offers historical hikes, architecture routes, art routes and regional product routes. For this purpose, 240 QR code plates have been installed on (lantern) poles across the entire municipality. When walking or cycling, the user can scan the QR code and get information about

kinds of mobile media can be distinguished, but if we are talking about carriers, the two most important ones for the heritage sector are the tablet and the smartphone.

¹¹³ The MOOD app is based on the brilliant Tate Britain leaflets using the same approach, but conceived by a Reinwardt student, a former 'Eye Opener,' Olmo Garcia Koel: www.stedelijk.nl/mobile-apps/mood-app.

¹¹⁴ This tour (available at Museumapp.nl) was developed by Reinwardt Academy's students as part of the Academy's New Media minor in collaboration with the University of

Amsterdam LGBT Studies, 't Mandje cafe, IHLIA (international archive and documentation centre on homosexuality) and the Waag Society.

¹¹⁵ This tour is also made by Reinwardt students, in close collaboration with journalists of, among others, Nu.nl news website, 3voor12 Amsterdam radio station, and the *Parool* newspaper.

¹¹⁶ www.vvvwijdmeren.nl/zien-en-doen/actief-en-sportief/copy%20of%20belevingsroutes.

estates, historical events, activities, tea gardens and more. A combination of history, heritage and the present.

Augmented Reality

Augmented Reality (AR) means adding an extra layer to the existing and/or visible reality. This can be a physical layer, such as a folding map, but usually AR implies an additional virtual layer. A digital navigation system like TomTom comes close to it. The moving pole position line in skating or swimming competitions is another good example. AR can be seen as a way to retrieve (digitally) stored (virtual) data in the form of an additional information layer. According to Ronald Azuma (Nokia, Santa Monica), there is always a combination of real and virtual, and AR is a real-time interactive; it therefore functions in three dimensions.¹¹⁷ The first and still relevant example from the heritage field is the Urban Augmented Reality App (UAR) developed by NAI (Netherlands Architecture institute), now the New Institute, followed by the Streetmuseum App of the Infinite North Holland Foundation (*Oneindig Noord-Holland*).¹¹⁸ These apps use a smartphone camera for image recognition, linking it with a corresponding image (or text) available at the server to create a combination of the existing reality and a digital component. In this way, one can view buildings that once existed, ones that will be built in the future or even buildings that could have been there in an (increasing) number of cities and villages.

AR provides possibilities for contextualisation. The current street scene placed over what used to be there, what could have been there, and possibly the historical facts and stories told by residents. When walking along a street looking at buildings, an additional historical sensation can arise. A provider thus has the opportunity to repeatedly contact visitors, at the times and in the setting of their choice, while they can also choose what information they want to receive: a form of new, interactive experience communication.

'Anne's Amsterdam' app walks you through Amsterdam's streets during World War II. You see Anne Frank playing with boyfriends and girlfriends, waiting

on the porch and entering school. Historical pictures of bygone years in present-day street scenes.¹¹⁹ 'You've never been able to experience Anne so tangibly.'

3.3 Innovative technology

The fact that technology is developing is not in question. However, how it is developing and in what direction, is not known. With each new development we continually ask what the implications for the heritage field might be. What effect can an invention have on a heritage institution, and why? Besides AR, many new techniques have been developed with these questions being answered mainly with regard to exhibition practice.

These answers can be divided into two main groups: fixed setup options and wearable solutions. Examples of wearable ones include handheld devices (smartphone), helmets or glasses like Google Glass and Nokia's Mixed Reality glasses, and contact lenses with AR functionality: Oculus Rift (2014) and Microsoft's HoloLens (2015). As far as the fixed solutions are concerned, think of monitors or projections. The latter include old projections on a glass plate, the so-called Pepper's Ghost.¹²⁰ Fixed and portable solutions are combined in game industry techniques, which are used in heritage institutions as interactive tools, such as Wii or Xbox Kinect.¹²¹

3.4 Social media and communication

From the very beginning social media has formed the basis for everything about working with new media. The (upcoming) heritage professional of today is a seasoned media user and/or community manager. He or she reads news on a tablet, collects information with a smartphone and shares files or topical articles with colleagues, all through social media. As dramatic as it may sound, there are few young people now who do not live their lives this way. The next generation of emerging heritage professionals, originating from so-called generation Z,¹²² are convinced that (social) media is an important part of our societal communication.¹²³

Social media is also deployed to work smarter, to get more done in less time and to increase collaboration. Most media-working heritage professionals keep

¹¹⁷ Azuma, R., 'Location-Based Mixed and Augmented Reality Storytelling', in: Barfield, W., (ed.), *2nd Edition of Fundamentals of Wearable Computers and Augmented Reality*, Boca Raton: CRC Press 2015, 259-276.

¹¹⁸ The Museum of London was the first to introduce 'street museum' as a term and concept. For UAR see en.nai.nl/museum/architecture_app; for Oneindig Noord-Holland's app see <http://onh.nl/nl-NL/verhaal/1991/street-museum-nl>.

¹¹⁹ www.annefrank.org/nl/Nieuws/Nieuwsberichten/2012/Mei/App-Anne-Franks-Amsterdam.

¹²⁰ With a mirror, glass plate and a hidden extra space or a projector the Pepper's Ghost technique makes the illusion that people or figures appear out of nowhere in the space we are currently viewing. Known from the Fairytale Forest in Efteling, the Netherlands' largest theme park, but also the Railway Museum in Utrecht or the Grachtenhuis canal museum in Amsterdam. The oldest Pepper's Ghost in a museum dates back to 1970; it can be seen at the Science Museum in London. The forerunner of the Pepper's Ghost was the Dircksian Phantasmagoria (1862) by Henry Dircks, a technique for making 'ghosts' appear on the theatre stage.

working even after closing time; their work is not location-bound and thus interferes with personal lives. Our private life becomes more professional, and our professional life becomes more social. However, after digitisation, social media helps re-apply time-honoured analogue criteria such as knowledge of people, loyalty and reliability. This will significantly change the work of a heritage professional, if it has not done so already. Social media makes a bridge between the digital and analogue worlds. An important bridge where heritage professionals can make a significant contribution.

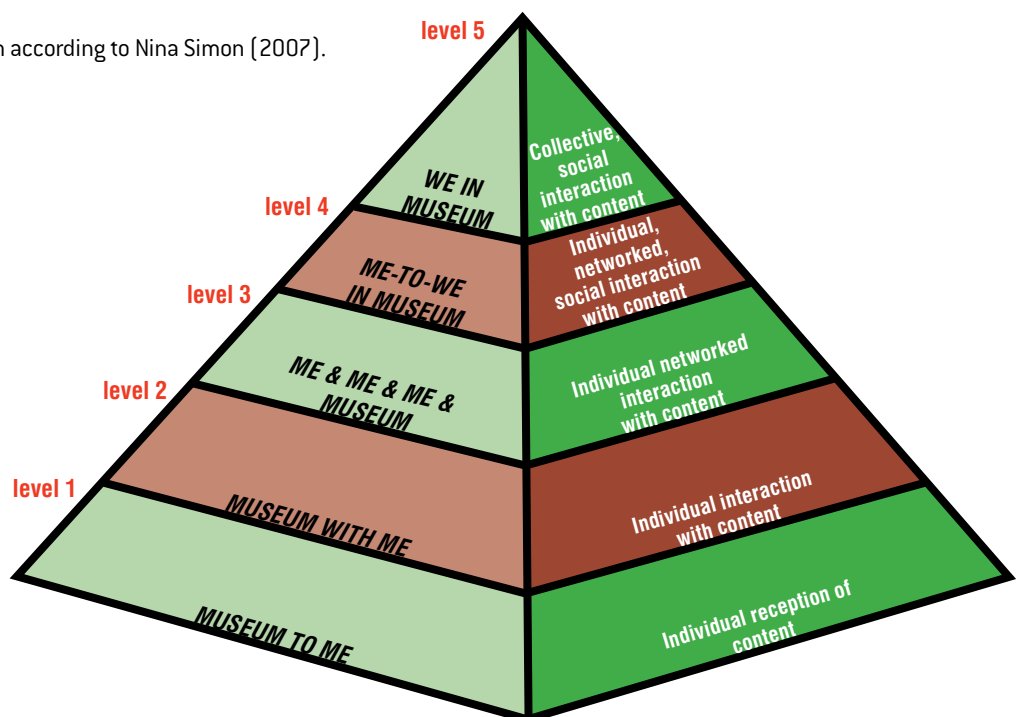
Community management

One of the new tasks for heritage professionals working with social media is community management. This is not yet a crystallised process for each heritage institution, but for the majority it is already under discussion. Anyone at the institution who speaks, responds or answers questions via social media is more or less engaged in community management. This means that there is a need for coordination between different departments and functions, even those where a public function is less evident. Community management is customised

and requires experience and judgment, intuition, and a combination of thinking and doing at the same time. This is similar to the 'plan-do-check-act' cycle (see Reinwardt Academy's Management reader). It's important to start with the institution itself: why and for whom (or with whom) do you want to mean something? After all, this is the basis for everything you say, do or ask. Social media is all about following and being followed, so we speak about followers' groups rather than target groups. What should be of utmost importance for all staff members concerned, is building a lasting relationship with the visitor. Determine in advance what relationship you want to have with your visitor, so that you set the right tone, choose an adequate medium and do not generate false expectations, not even with yourself.

Building relationships can never be done alone. If you aim at a genuine commitment, then the visitor will also have to assume an active role. Engaging the users is a process that takes time and is not obvious. Whilst some enthusiastically embrace the opportunity to act and are happy to participate, there are still a lot of visitors who are used to the 'broadcasting' role of heritage institutions and adopt a wait-and-see

Figure 31. Hierarchy of social participation according to Nina Simon (2007).



- 121 The Polytechnic Museum in Moscow makes an exquisite use of the Kinect technology allowing the visitor to operate video screens with hand movements. For example, by raising your left hand you can indicate that you are English speaking so that English translation is activated.
- 122 Boender, R., and J. Ahlers, *Generatie Z: ken ze, begrijp ze en inspireer ze voor een beter leven*, Amsterdam: Betram + De Leeuw 2011. The same generation is also called millennials.
- 123 This is how Boender and Ahlers answered the question whether the younger generation can be best of all inspired online or through real-life people: 'The question suggests that the online

and offline worlds are two different things. Generation Z does not apply that division. The world is the world, and it's both on- and offline. Real-life people can also be found and followed online, whereas virtual characters [...] appear in real life, too. In addition, it requires an inspiring person who can be approached both online and offline. Finally, it's all about the story being told.' <http://www.frankwatching.com/archive/2011/11/10/wie-isgeneratie-z-en-hoe-bereik-je-ze>.

attitude. As a heritage institution you are confronted in a relatively short time with the law of the participation ladder.¹²⁴

This format for active participation can be found in various forms elsewhere but referring rather to media participation. The 'ten percent principle' comes to mind here. Imagine that a heritage institution has one hundred followers in social media, and that ten of them are avid readers and only one participant really contributes to the discussion. The use of social media is therefore mainly a form of community-oriented work, by using Facebook (like the Bakery Museum in the Dutch town of Hattem) or by expert tweeting (like Museum Boerhaave in Leiden has been doing for a long time). Two larger heritage platforms are popular in the Netherlands: Infinite North Holland (*Oneindig Noord-Holland*), which links regional heritage with stories and sites (with over 6200 page likes on Facebook), and 'If Then Is Now', which also focuses on heritage stories, but is rather tourism- and European-oriented.

Crowdsourcing

The format for active audience participation amounts to what we call crowdsourcing. The same one percent of visitors are the people who are most likely to contribute actively and to think together with the museum about the steps the institution is taking and the choices it is making. Crowdsourcing means that the heritage institution receives input from a large group of people who do not have a formal relationship with the institution, such as an employer/employee relationship. In a heritage institution, this group consists logically of (potential) visitors, and crowdsourcing is mainly done in digital form. Think of transcribing ship's logs,¹²⁵ tagging paintings¹²⁶ or identifying locations shown in photos.¹²⁷ However, the physical option deserves a mention too, like in the Museum of Broken Relationships (Zagreb, Croatia), where almost the entire collection has been put together by crowdsourcing. The objects obtained were physical, but collecting and providing the stories about them was predominantly done digitally.¹²⁸

Besides crowdsourcing, there is what is known as crowdfunding, which focuses not so much on obtaining information or objects but on financial

resources for specific projects. The restoration of the *Entry of Napoleon into Amsterdam* (Matthieu van Bree, 1813) from the Amsterdam Museum's collection was covered by crowdfunding. In 2011, members of the public could buy pieces of this painting, for which a digital grid was projected on the painting listing the donors' names. The museum was none the worse off too, with revenue almost twice as high as expected.¹²⁹

Crowdsourcing is one of the processes that change the nature of heritage institutions. It is likely that this kind of user influence will increase still, significantly affecting the work of institutions in the heritage field.

3.5 Games

In addition to taking over technologies from the gaming industry, games offer heritage institutions a variety of opportunities to delve deeper, increase interaction, or expand communication with the audience. In this respect, we are not as interested in famous video games as in the 'rules of the game.' Gamification uses game thinking in a non-game context. The goal is to think or work in a problem-solving way and to encourage participants to take action. With gamification, a heritage institution can bring visitors to new forms of interaction (they can influence the game), and connect them with each other.

Gamification can be viewed from different angles: form, audience and content of the games. The form of a game responds to the 'analogue – digital' dichotomy. When searching for examples, we tend to look mostly for digital games. Think of a touch table or a tablet where we fight with ourselves, the computer or other visitors. However, analogue games are present in much larger numbers in the heritage field, things such as scavenger hunts and quiz sheets used in an exhibition, or colouring pages which the youngest visitors can take home.

As for the players, we can segment them by age, the number of players or the composition of the group. It will not be surprising that most gamification in heritage institutions has been traditionally aimed at children. There is nothing wrong with this, as they are an

¹²⁴ In March 2007, Nina Simon introduced the 'hierarchy of social participation,' see <http://museumtwo.blogspot.nl/2007/03/hierarchy-of-social-participation.html>. The pyramid was later many times converted into a 'social media engagement pyramid', as is done by Forrester Research. The pyramid still reflects the reality: www.socialmediamodel.nl/2011/02/social-media-model-review-theengagement-pyramid/.

¹²⁵ In The Old Weather Project executed by, among others, The National Archives (United Kingdom), members of the online community transcribe ship's logs from 1801 to 1946. By analyzing data from historical logs, one hopes to predict future weather and climate: www.oldweather.org.

¹²⁶ In the framework of The Public Catalogue Foundation's Your Paintings Tagger project almost the entire UK national oil paintings collection has been placed online so that the public provide them with descriptions by tagging: tagger.thepcf.org.uk.

¹²⁷ The Powerhouse Museum in Sydney made a very large part of its physical photo collection digitally accessible via Flickr, already many years ago. Not so much from the need to share as from the desire to give the public the opportunity to help describe the pictures. The museum itself had little or no information about what exactly was pictured and asked the community to help. Eventually, even Nordic walking groups emerged that

appreciative group who like to be challenged to explore the museum in an interactive way. In the meantime, we see an increasing number of adult games in museums. These often have much more of a digital form than the games for children. In the near future, the numbers are likely to balance out. Many games or assignments with game elements are aimed at individual visitors who will learn more about a subject by single-handedly solving a puzzle on a screen in the display.

In addition, there are games where an individual visitor has to score and then be ranked among other players – an intermediate form between solo and group playing. For participation, which we value so highly in the heritage field, increasing space is being given to gamification. Many games currently under development are based on interaction between visitors, regardless of age. For example, in Museon, a educational science museum in The Hague, three players compete with each other as to who will be the first to get his or her boat from one side of the pool to the other.

In the Utrecht University Museum, the cooperation between players has an extra dimension. Instead of playing a match, the Animal Gang game has been specially designed for families. Visitors playing Animal Gang must work jointly and against each other to let the animals in the cabinet of curiosities be self-sufficient again. The idea is that parents and children play both together and against each other and that the game challenge is equally relevant and/or at a high enough level for all.

Serious Gaming

In the past five years, in the context of gaming or gamification in heritage, we have been discussing serious gaming: learning by playing. The primary goal is not entertainment, but education.¹³⁰ Serious gaming is not only encountered in the heritage field, it is used in the healthcare sector, too.¹³¹ It does not differ much in nature from the game forms discussed above. In the heritage sector and primarily as educational means, gaming is attractive because it enforces a high degree of interactivity or participation, whilst at the same time bringing home the subject matter.

A nice example of a serious game was to be seen in the former Army Museum in Delft, where groups of visitors were immersed in an interactive war documentary. You were confronted with challenging dilemmas: are you taking the injured civilian with you or leaving him behind? The documentary told the story of the war in Srebrenica. As a visitor you commanded a UN tank and had to make decisions based on its position. The storyline developed in different ways depending on the player's choices.

4 Strategic choices

New media bring new chances for what we can offer to the public. Wonderful projects can be developed, exhibitions can be improved and visitors can be reached anytime and anywhere. But what strategic policy should we follow? Many weblogs (e.g. Marketingfacts.nl or Heritage 2.0) distribute action plans that allow heritage institutions to perform better, as well as social media deployment plans, because all things digital always seem difficult. The brief presentation of a process (as that's what it is usually) provides guidance and a sense of control. At best, such step-by-step plans can help determine which social media platforms are best suited for a chosen activity. With a bit of common sense, however, you can use them just as well as a checklist.

It is logical that your audience and media strategy should aim at engagement. That's what heritage is about. In order to conceptualise it, Jim Richardson (UK) and Jasper Visser (NL) developed the Digital Engagement Framework (see Figure 32).¹³² This is a tool that enables (heritage) institutions to identify and develop opportunities for structurally engaging an audience and outline value creation, strategies, processes and technologies. This framework is based on a step-by-step approach as well. In a block model closely related to Osterwalder and Pigneur's business model canvas, the authors clearly explain how digital and social media are used to bring about audience involvement.¹³³ In addition, the framework focuses on the qualities of the institution (the assets) and on whom it targets (the audience), guided by the vision and mission.

(physically) hiked around the districts or buildings shown in the pictures to gather information. Try and find a place for this in the participation pyramid!

¹²⁸ brokenships.com.

¹²⁹ 'A total of €51,349.00 has been collected. The museum hoped for an amount of €30,000.00. The museum is particularly pleased that it has been possible to involve the public in the heritage kept here': www.amsterdammuseum.nl/crowdfunding-amsterdam-museumlevert-5134900-op.

¹³⁰ This is difficult because, according to many, this applies to each game, not just the one called serious. Some claim that playing games is a positive addition to the upbringing of children, such

as Gabe Zichermann in 2011: www.ted.com/talks/gabe_zichermann_how_games_make_kids_smarter. Jane McGonigal thinks gaming contributes to a better world: www.ted.com/talks/jane_mcgonigal_gaming_can_make_a_better_world.

¹³¹ In some hospitals children with burns play in a virtual world of snow and ice, mainly as a distraction from their pain.

¹³² Visser, J. and J. Richardson, *Digital Engagement in Culture Heritage and the Arts*, 2015, digitalengagementframework.com.

¹³³ www.businessmodelgeneration.com. See also Reinwardt's Management reader (2016).



Figure 32.
Digital Engagement Framework, Jim Richardson
and Jasper Visser, 2015.

5 Public and media in the future

Looking into the future, we could try to predict new gadgets, ideas and techniques. We could try and guess how long it will take before Augmented Reality lenses are on sale at every street corner. But for this reader, that would be of little use, as technological developments are moving too fast and are too confusing. Think of the disappointment about Google Glass, concerns about privacy and the decision of influential pioneers' to stay grounded.¹³⁴ In two years, some of the above information, examples and working methods may be behind the times or replaced by even faster or better developments. One may even revert to the use of earlier solutions. For example, the Rijksmuseum, reopened in 2013, banned all location-based interactives from their galleries as they just distracted attention from the beautiful objects. However, the museum does have a nice Rijksmuseum App with multimedia tours.

New media comes and goes. One application replaces another, or maybe even improves it. Society is adapting and media move along, and vice versa. Therefore, also in the heritage sector, we will remain in a continuous stream of change. After all, media is inextricably linked to our core business:

communication with the audience – no matter how much the classical format of that relationship may be under pressure, partly due to new media. New technologies may surprise us: 'What have they thought up this time?' but later on we become amazed at the possibilities they bring along, and eventually we come to depend on them because they make our work so much easier or even make it more pleasant (note that this applies to the principles, not to all incidental applications). An audience's new insights, changed wishes and lifestyles will also force us to keep moving with the media around us. It's the public that obliges a heritage institution to keep developing and it's the public that makes us hop on every train passing by and stay on it at least until the next station. So we do and will continue to do that.

Further reading

There is a lot of relevant material on the website of the DEN Foundation (Digital Heritage Netherlands):

- Current state of affairs: www.den.nl/art/uploads/files/Enumerate-core-survey-NL2013-2014.pdf
- A guide to collections on the internet: www.den.nl/getasset.aspx?id=Website/Wegwijzer_collectie_op_internet.pdf&assettype=attachments

¹³⁴ www.brooklynmuseum.org/community/blogosphere/2014/04/04/social-change: 'There comes a moment in every trajectory where one has to change course. As part of a social media strategic plan, we are changing gears a bit to deploy an engagement strategy which focuses on our in-building

audience, closely examines which channels are working for us, and aligns our energies in places where we feel our voice is needed, but allows for us to pull away where things are happening on their own.'

- A survey on ICT in museums: www.den.nl/art/uploads/files/Publicaties/rapport%20ICT-gebruik%20in%20musea%20met%20bijlage.pdf. The research was spread over time and subjects, namely:
 - digital heritage quality (2005): www.den.nl/getasset.aspx?id=Rapporten/rapportDEN_IVA_ETIN_opgeslagen200803.pdf&assettype=attachments;
 - digital heritage users (2006): www.scp.nl/dsresource?objectid=20584&type=org;
 - best practices: www.den.nl/art/uploads/files/Publicaties/2014-12%20Rapport%20Taaluniecommissie%20Digitaal%20Erfgoed.pdf.
- Dutch museums digitization history is described in a dissertation: Navarrete Hernández, T., *A History of Digitization: Dutch museums*, UvA 2014, dare.uva.nl/record/1/433221.
- Essays and tips on Web 2.0 for museums: Meereboer, T. and S. Stoltz, *SCCS! Aan de slag met social media*, Amsterdam 2012, issuu.com/sciencecentra/docs/sccs_aan_de_slag_met_social_media_erfgoed2.0_en_vs.
- Social media and their implications for museums: Drotner, K., and K.C. Schroder (ed.), *Museum Communication and Social Media: The Connected Museum*, New York: Routledge 2013; Visser, J., 'Perspectives on digital engagement with culture and heritage', *AASLH History News*, 68/3, 2013, 7-13 <http://digitalengagementframework.com/>.
- Mobile technology in museums: Proctor, N., *Mobile Apps for Museums. The AAM guide to planning and strategy*, The Aam Press, 2011; Tallon, L., *Digital Technologies and the Museum Experience, Handheld guides and other media*, Plymath: Altamira Press, 2008.

The Reinwardt Academy (1976) is a faculty of the Amsterdam School of the Arts. The faculty's aim is to prepare students to become all-round professionals in the field of cultural heritage. It offers a Bachelor's and a Master's degree programme.

The Bachelor's programme, followed by some 500 students in four years, is a Dutch-taught, skills-based programme with a practical orientation.

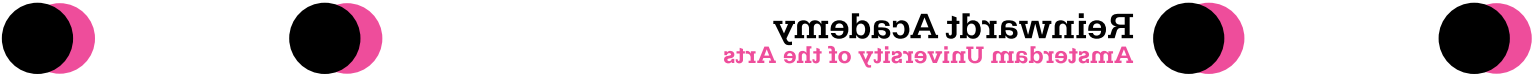
The 18-month International Master's Degree programme, in which some 20 students enrol annually, is fully taught in English and offers graduates a multifaceted training, aimed at providing an academic and professional attitude towards museology and the rapidly changing museum and heritage fields.

Caspar Georg Carl Reinwardt (3 June, 1773 – 6 March, 1854) was a Prussian-born Dutch botanist, founder and first director of agriculture of the royal botanical gardens at Bogor (Buitenzorg) on Java, Indonesia. An early receiver of honorary doctorates in philosophy and medicine, he later became professor of natural philosophy at the University of Leiden (1823 to 1845).

The Amsterdam University of the Arts (AHK) offers training in nearly every branch of the arts, including courses of study which are unique in the Netherlands. The AHK is continually developing and is now proud to occupy a prominent place in education, the arts and cultural life, both nationally and internationally. The school benefits from exchanges with and close proximity to the artistic life of the country's capital – including theatres, museums, galleries and studios. The departments include the Breitner Academy; the Academy of Architecture; Dutch Film and Television Academy; the Academy of Theatre and Dance; and the Amsterdam Conservatory.

www.ahk.nl/reinwardt

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