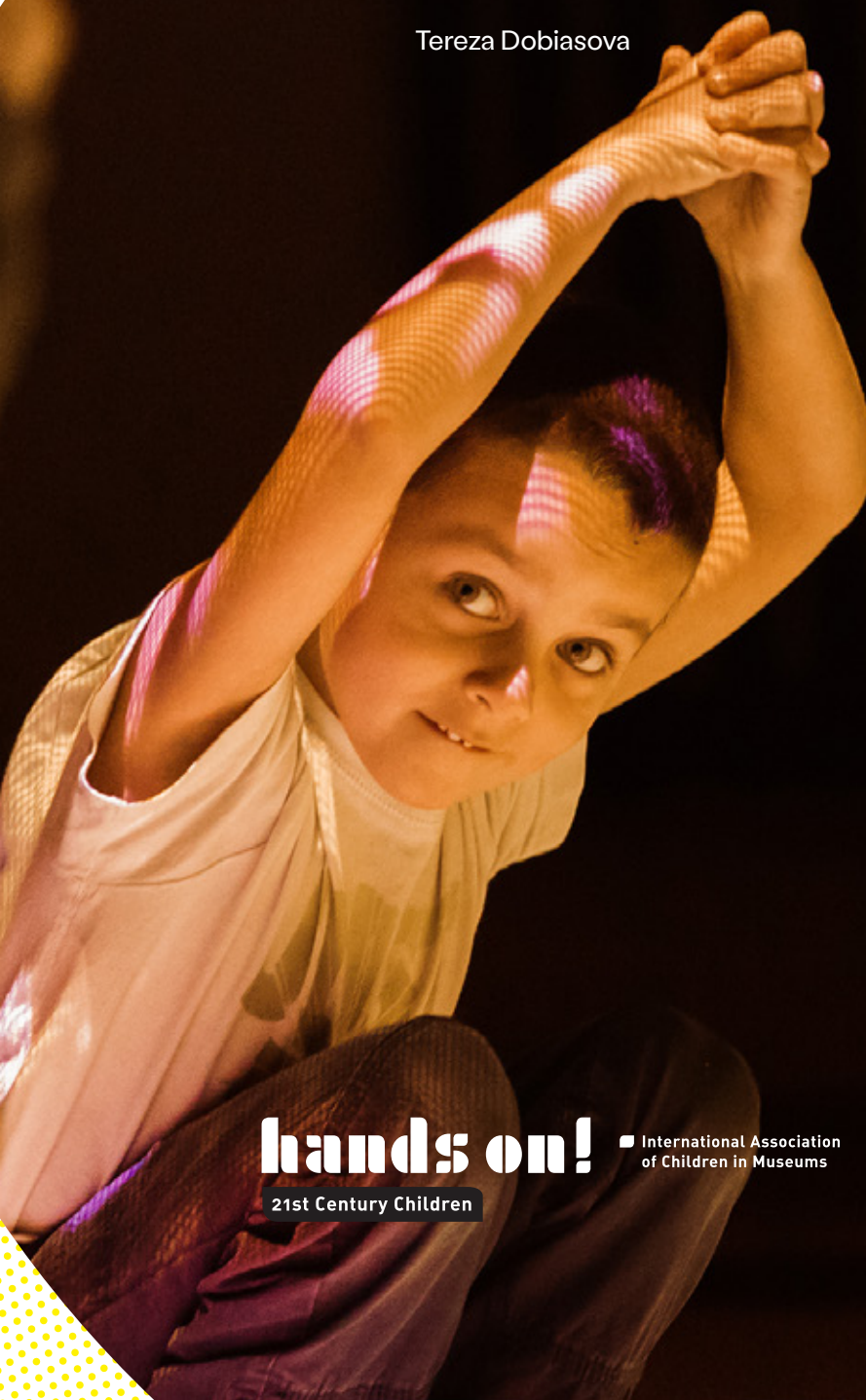




Home
of 21st Century
Education

Part 2
Analyses
on children's
museums'
readiness

Tereza Dobiasova



hands on!
21st Century Children

International Association
of Children in Museums

Museums in the 21st Century *Pioneers of Education*

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Introduction

Deux et deux quatre / quatre et quatre huit / huit et huit font seize...

Répétez ! dit le maître

Deux et deux quatre / quatre et quatre huit / huit et huit font seize.

Mais voilà l'oiseau-lyre / qui passe dans le ciel

l'enfant le voit / l'enfant l'entend / l'enfant l'appelle:

Sauve-moi / joue avec moi / oiseau!*

—
Two and two make four
Four and four make eight
Eight and eight make sixteen...
Repeat! says the teacher
Two and two make four
Four and four make eight
Eight and eight make sixteen...
But there is the songbird
Passing by in the sky!
The child sees it...
The child hears it...
The child calls it:
Save me
Play with me, bird!

* Jacques Prévert: L'Oiseau-lyre

Every child needs to play. Play is its natural way of learning and exploring the world. Every child yearns for a world where it would be able to sing, to dance and fly like a bird does. Where it would feel “the air on its wings”, experience a world full of movement, sensations and emotions, where it can feel the beat of life, where it can be the beat of life, fully accepted, losing itself freely in a pure game, in the joyful moment when something really happens – simply: where it can play. If there are institutions striving to prepare children for the future – “to teach” them, they must provide play environments and game situations.

This publication describes a *status quo* of museums and museum-like institutions as “Houses of learning” for children where they learn by play. It also outlines a possible direction of next development.

It was created between the years 2019 and 2021, in the years influenced by the COVID 19 pandemic and series of global lock-downs which affected museums, schools and – above all – children strongly. It captures the reality from the point of view of mother of two daughters and a woman who once managed to establish first children museum in Czech Republic, once an ex-board member of Hands On International, these days freelancing curator of cultural projects with intensive audience engagement, cultural manager and writer.

The reason to write it is to map the landscape of this museum niche, to close-up two years of the work on developing a label of quality marking cultural institutions as homes of learning for future and above all to question what is their readiness to play a pioneering role in education for future and how meaningful they are today facing recent challenges on European scale. It was also written to inspire, to have open eyes for whatever children manifest they need, for whatever the life brings and always to search the way to go on, so the children are always able to learn, play and keep their will to find new ways and have a chance to be a hope for all of us.

I wrote it driven by curiosity whether there is some philosophical basis, some basic human ideas shared by most of those, who are passionate about empowering children by culture and arts.

Tereza Dobiasova
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project in Hands On!



Big question for small people

If you raise children today or if you seriously want to educate them you may face a lot of insecurity thinking about the world they're growing into. But you also may be very hopeful about changes to come.

If you take it really seriously: accompanying children on their journey with love but also with the awareness of what can come, you may see their situation (and ours as well) as a huge challenge: a lot can be gained but also a lot – if not all – can be lost.

Humans see themselves as the smartest and most powerful of all living beings on the Earth – in fact they see themselves like God. But nature, life itself, even the tiniest of the tiniests: viruses show us more and more strongly that we are not the almighty ones.

Can we, the humans, or can we not handle what we've created and what we have responsibility for? It's a big question which the future will answer. Therefore it is a big question for our children and also for our relationship to them – a big question when accompanying them into the future – a big question for each of us.

Warning from the old ages

In every culture on the Earth stories are told to learn and understand difficult things easily. There are two great stories in Greek mythology about the relationship of fathers (parents), who possess godly powers, and their children. They're both tragic but I think they must be heard when we – the smartest and most powerful – are discussing our culture's relationship to children. Let's hear them as a warning from old wisdom and a simple instruction about difficult things.

Icarus

Daedalus, a very talented Athenian craftsman, driven by his ambitions and imprisoned on Crete, fashioned two pairs of wings out of wax and feathers for himself and his son, in order to escape from the island. Daedalus tried his wings first, but before setting out on their way to freedom, he warned his son not to fly too close to the sun, nor too close to the sea, but to follow his path of flight. Overcome by giddiness while flying, Icarus soared into the sky, but came too close to the sun, whose heat melted the wax and Icarus fell into the sea and drowned. Daedalus was overwhelmed by despair. He got his freedom but lost his future.

Phaethon

A young boy Phaethon, challenged by his playmates, sought assurance from his mother that his father was the sun god

Helios. She assured him about it and told him to turn to his father for confirmation. Helios explained to him how he drove the sun chariot from morning till the end every day and promised his son whatever he wanted. Phaethon insisted on being allowed to drive the sun chariot for a day, so Helios had to let him.

Next morning Phaethon rolled out with the chariot into the sky but very soon it was clear he wasn't able to control the horses. The Earth first froze when the horses climbed too high, but when the chariot then scorched the Earth by swinging too near, Zeus decided to prevent disaster by striking it down with a thunderbolt. Phaethon fell to the ground and was killed.

How to learn to fly?

In both stories children do not find a way to handle the power of their fathers. Both of them come too close to the sun and both fall and die.

Raising children today may feel like standing with children at the edge of an abyss. Either they'll learn to fly or they collapse into the depth.

What is the education that will prevent children from collapsing from the heights and will enable them to swing safely into the unknown future, into the endless shine of a reality transcending us, into the brightness? Who will be able to open to the children doors to "worlds" so rich, diverse and lively as nature is – where they – no matter if a girl or boy, no matter their origin, culture, background, obstacles each of them had to face – have a chance not to get burned and to swing over the abyss – lightly, like in a dream, in an innocent play – there where everything is possible?

Questions about children's education need to be asked again in every educational undertaking. I used symbolic language – the language of stories – as these questions embody very complex matters, which – in my opinion – can not be described only by the list of competencies, articulation of contents to be learned and ultimate methods to be used.

Challenges our children will have to face

A Letter to Homo Deus

*One of the "prophets" of these days, Yuval Noah Harari, a historian mapping "the history of the human future" who sells millions of books worldwide, describes his vision of a human of 21st century as **Homo Deus: a human being, who uses powers previously only attributed to God(s)**. In one of Yuval Noah Harari's books there is a letter he*

wrote to children about what they can expect from the future and how they shall get ready for this:

*"The best advice I could give a fifteen-year-old stuck in an outdated school somewhere in Mexico, India or Alabama is: **don't rely on the adults too much**. Most of them mean well, but **they just don't understand the world. In the past, it was a relatively safe bet to follow the adults, because they knew the world quite well, and the world changed slowly. But the twenty-first century is different. Due to the growing pace of change you can never be certain whether what the adults are telling you is timeless wisdom or outdated bias.***

*[...] Technology isn't bad. If you know what you want in life, technology can help you get it. **But if you don't know what you want in life, it will be all too easy for technology to shape your aims for you and take control of your life.** [...]*

*[...] Should you rely on yourself, then? ... The voice we hear in our heads was never trustworthy, because it always reflected state propaganda, ideological brainwashing and commercial advertisement, not to mention biochemical bugs. As biotechnology and machine learning improve, it will become easier to manipulate people's deepest emotions and desires, and it will become more dangerous than ever to just follow your heart. [...] To know what you are, and what you want from life ... know thyself. **For thousands of years philosophers and prophets have urged people to know themselves. But this advice was never more urgent than in the twenty-first century.***

*The algorithms are watching you right now. They are watching where you go, what you buy, who you meet. Soon they will monitor all your steps, all your breaths, all your heartbeats. **And once these algorithms know you better than you can know yourself; they could control and manipulate you, and you won't be able to do much about it. You will live in the matrix, or in The Truman Show. [...] and if, however, you want to retain some control of your personal existence and of the future of life, you have to run faster than the algorithms and the government and get to know yourself before they do. To run fast, don't take too much luggage with you. Leave all your illusions behind. They are very heavy.**"¹*

Can we imagine museums supporting children of the 21st century in packing light and efficiently for their heroic journey following distant signs of new humanity?

¹ Yuval Noah Harari: 21 Lessons for the 21st Century, Jonatan Cape, London, 2018 / shortened by Tereza Dobiasova and Sarai Lenzberger

² Cynthia Luna Scott for UNESCO: Education Research and Foresight / Working Papers / The Future of Learning 2: What Kind of Learning for the 21st Century, November 2015

His advice for the upcoming generation shows strong parallels to instructions provided to heroes in old legends before setting on their heroic journey. He encourages young ones to know themselves, which can be interpreted as personal development and integrity, and he also warns them against "taking too much luggage".

He encourages them to understand oneself as an "operational system" and also to understand "the operational systems" of globalised enterprises. In order to do this he advises the individualisation of education, which unfortunately is so difficult to achieve for the vast majority of formal education. As a remedy he recommends "know how" of philosophers, artists – holistic, humanistic "know how" which created the core of cultural heritage.

Skills, Competencies and Know-how for the 21st Century

The demand for a transformed education, children and reality

The call for a transformed education, probably even more radically, than Harari suggests, echoes already strongly in the society, in a variety of its niches – not only from writers and philosophers, but also from industries, markets and key global stake-holders, like for example UNESCO.

"Globalisation, new technologies, migration, international competition, changing markets, and transnational environmental and political challenges all drive the set of skills and knowledge needed by students to survive and succeed in 21st century. [...] Yet the comparison of educational frameworks on an international level proves the **absence of these competencies and skills from current learning processes. Curriculum development has not kept pace with current expectations about learner competencies and skills or new tools to support learning.** ... There is no single prescribed approach to educating young people for the twenty-first century."²

The following is a non-exhaustive list of skills and competencies of what 21st century education should provide: *active learning, critical thinking, making responsible decisions, problem solving, scanning multiple domains, self-reliance, effective communication, taking creative action, work with complex ideas, teamwork and*

cooperation, keeping pace with technology, **media literacy, informational literacy, digital literacy, civic literacy, creativity, content creation and understanding, metacognitive skills, failing forward, personalised learning, life-long learning, articulating opinions, collaboration, innovative capacity, creative divergent thinking, enthusiastic experimenting, breaking new ground, envisioning strategies, ICT skills, social and cross-cultural skills, emotional resilience and empathy, the ability to self-govern, adaptability, making sense out of significant and complex global issues, entrepreneurial thinking, questioning conventional wisdom, imagining new scenarios, recognising and acting on opportunities, inventive thinking.**

We must keep in mind that there is always an ideological (and sometimes also pragmatic) background to every vision of education and also to all listings of skills and competencies. Skills Harari suggests to children growing up today most likely don't completely match education's indicators and methodologies created by UNESCO and EU educational experts. Harari can afford the luxury of a purely humanistic view without any commercial and economical regards addressing (one and every) child as an individual – contrasting public bodies that reflect society with the variety of the stakeholders (being public or private institutions) in their visions.

Besides a variety of visions of education there is the practice of education as such, which usually differs from the visions with certain inertia: inertia given by history, by repetition and habits made of elements once also innovative. When thinking of the new vision, we shouldn't forget to analyse what the practice has been responding to.

On inertia of educational practise

*"The world of the Nineteenth and Twentieth centuries, which needed armies of men and women in factories, demonstrations, and battlefields, is dying inevitably",*³ wrote Erich Fromm, psychologist and philosopher already in the 1950s.

It is becoming unjustifiable to raise children as obedient system upholders, like our parents and teachers did. By realistic assumptions, in 10 years up to 40% of jobs will cease to exist. These people's skills will no longer be needed.

These realistic assumptions mean serious threats for the vast majority of society, who were educated to

work for factories, hospitals, offices and shopping malls. These casualties of technology will "inadvertently shift the center of their lives to forces over which they feel no power [...]"⁴

This approach to education and also to humanity is both unsustainable and unsatisfying on multiple levels. "[...] Man stopped looking for the ultimate purpose of life in himself and made himself an instrument serving the economic machine he made with his own hands. We are concerned about efficiency and success instead of our happiness and mental growth."⁵

On collapsing ideology

This ideology, rooted in rationalism and responding to the scientific and technological progress of "Western" societies of 19th and 20th century, has envisioned human society as a self-sufficient, ever-lasting and ever-improving machine rather than a dynamic living organism.

Living and working as a part of a machine called humankind has felt mostly easy. It enabled millions of people to give up their responsibility for their actions as they don't have the capacity to understand the complexity of the "machine" and have gotten used to the fact that there was always someone to hush them with the vision of eternal growth and care for them when needed. This has led humanity into the overwhelming environmental crisis as well as the crisis of humanity.

Crumbling of the growth-ideology is also expressed by the urge to transform contemporary education because it has the potential to re-orientate society encouraging the next generations to think of new ways how to cope with the changes wrought by environmental decimation and technological developments.

Why culture as an education for the future?

I am arguing in this text why cultural institutions are especially fit to educate children for the future. In this passage I will connect three major challenges of the "future" (or what future might be) with expertise which is unique to cultural heritage.

Reinterpreting human ideology

"Humans are able to use language to create completely new realities, based on theoretical constructs. During

the last 70 000 years the intersubjective realities that Sapiens invented became even more powerful, so that today they dominate the world. Will the chimpanzees, the elephants, the Amazon rainforests and the Arctic glaciers survive in the twenty-first century? This depends on the wishes and the decisions of intersubjective entities such as the European Union and the World Bank. However, these entities are constructed and endure through our shared imagination, merely amplifying existing dogmas.

*During the twenty-first century the border between history and biology is likely to blur not because we will discover biological explanations for historical events, but rather because ideological fictions will rewrite DNA strands. Political and economic interests will redesign the climate and the topography of mountains and rivers will give way to the cyberspace. As human fictions are translated into genetic and electronic codes, the intersubjective reality will swallow up the objective reality and biology will merge with history. In the twenty-first century fiction might thereby come to be the most potent force on earth, surpassing even wayward asteroids and natural selection. Hence if we want to understand our future, cracking genomes and crunching numbers is hardly enough. We must also decipher the fictions that give meaning to the world."*⁶

What Harari says in these two texts I see as a very important point: The new generation will **need to re-read the human ideology. Critical and divergent thinking in combination with mastering of textual literacy but also with an ability to process information playfully, with imagination** might enable them to handle this task. By scanning multiple domains, integrating content knowledge of technical, natural, cultural and humanistic kind and generating sense out of complex issues they might be able to question conventional wisdom.

So let's try to think of cultural education as a play-arena to rethink, reimagine the role of humans in the world.

Redistributing power

As humans have developed their power to transform the world around themselves, they are left with the task to transform themselves to be fit to handle this power responsibly.

The global society faces a widening gap between an elite of extremely rich and powerful ones on one

side, and on the other, a rising number of people either needed as a consuming mass and productive force for the elite or, who when not able to produce or consume more, are subsided into social irrelevancy.

My favourite prophet Harari as well as a number of sci-fi movies warn us that this gap might result in creating a privileged minority species having the means to upgrade itself genetically and to avoid the results of environmentally and socially unsustainable policies by living in a protected ghetto. Other scenarios combine the growth of the super-rich niches with the technological development and destruction of democracy. All of these prophecies are actually realistic.

What the sci-fi movies don't take often into account – or they don't speak about – is the power of tangible and intangible cultural heritage – which preserves the systems of basic human values and ethics. Societies have created public institutions which should keep these systems vivid. The social gap scenario Harari describes, proves that the cultural heritage is still needed to build the bridges across the gap.

The values contained in mythology, religions and other expressions of culture are basically the very same as those in described as the "social and cross-cultural skills" in the educational discourse: empathy, justice, emotional awareness, feeling of responsibility, ability to self-govern, adaptability, metacognition, ability to make sense of complex issues, ability to decide, to act, to risk, to fail.

The Dalai Lama calls these bridge-building skills "education of the heart":

"My hope and wish is that formal education in the future will give attention to what I call the 'education of the heart'. I am optimistic that the time will come when it has become clear that children will learn about the need for inner values such as love, justice and forgiveness at school. Obviously, I look forward to the day when children will have their feelings and emotions, awareness and a greater degree of responsibility will feel for themselves and the world around them. Wouldn't that be great?"

The experts on education also confirm the growing importance of "the education of the heart": *"Social skills are expected to grow in importance in the twenty-first century, in particular the ability to empathise."*⁸

Cultural institutions can play a vital role in educating children towards empathy, which – I hope – can allow us to transcend the current challenges towards a sustainable future.

³ Erich Fromm: Psychoanalyses and Religion, Yale University Press, 1959

⁴ Erich Fromm: Psychoanalyses and Religion, Yale University Press, 1959

⁵ Erich Fromm: Psychoanalyses and Religion, Yale University Press, 1959

⁶ Yuval Noah Harari: Homo Deus, A Brief History of Tomorrow / Penguin Random House, UK, 2016

⁷ Education of the heart <https://dalailamacenter.org/educate-the-heart>

⁸ National Research Council, 2012, P21, 2007

“My hope and wish is that formal education in the future will give attention to what I call the ‘education of the heart’. I am optimistic that the time will come when it has become clear that children will learn about the need for inner values such as love, justice and forgiveness at school. Obviously, I look forward to the day when children will have their feelings and emotions, awareness and a greater degree of responsibility will feel for themselves and the world around them. Wouldn’t that be great?”

Dalai Lama



Envisioning the future

In a speech at the 2006 TED Conference, Sir Ken Robins, a leading thinker and speaker on creativity, remarked: “We do not grow into creativity, we grow out of it – or rather, **we are educated out of it.**” Traditional education, with its emphasis on rote learning and memorisation of facts has long valued conformity over novelty of thought.

But: as also UNESCO officers claim: “... **humanity’s future depends on the ability to reconstitute our understanding of human capacity and place creativity and innovation in the forefront of our educational systems.**”⁹

J. K. Rowling described in her Harvard inauguration speech of 2008 how her creation of the fascinating world of Harry Potter led to a complete re-creation of her own life: “Imagination is the uniquely human capacity to envision what is not, and therefore the fount of all invention and innovation. In its arguably most transformative and revelatory capacity, it is the power that enables us to empathise with humans whose experiences we have never shared. ... We do not need magic to transform our lives, we carry all the power we need inside ourselves already: we have the power to imagine better.”¹⁰

The importance of creativity and capability to re-invent and innovate is indisputable, yet for schools as they exist today it is a huge challenge to raise children as creators and innovators.

Cultural institutions as a key player of 21st century education

Considering these three know-how strands, we see that cultural institutions have a great starting position as platforms to educate children. Key elements of innovative pedagogy are also very often associated with arts and culture: learning through direct experience, holistic experiencing, flow, freedom, strong emotional involvement, and storytelling (for example). Briefly said: cultural institutions are competent to combine these elements into a complex educational

structure, appealing to all senses and providing an applied learning context. Cultural institutions based on interpretation and providing cultural participation for children, can become a part of the educational solution for the era of social transformation: as 21st century learning hubs – pedagogic laboratories, resources for quality programs using innovative methods and environments for learning.

Museums as spaces of social transformation¹¹ and pedagogical laboratories¹²

As I’ve mentioned earlier, every vision of education is based on a certain ideology – on a set of beliefs, values, views of life – and it is also given by position in a society – as I also noted before – on the contrast between the vision of free writing historian and UNESCO officers. At this point it is therefore important to question museums’ position – their role, roots and their own inertia.

What is a museum?

Etymologically speaking, the word “museum” derives from antiquity. It functioned as a designation for “**the refuge of the goddesses of protection of the arts**”¹³ the muses. However, this was not a concrete place, but **the mythical sphere of activity of the muses.** Over the next few centuries, this conceptual idea materialised into actual spaces of knowledge.

From the perspective of historical institutional development, the museum started out around 290 BC with the Museion in Alexandria. Although there are verifiable temple collections, the Museion is considered “[...] the first state institute that was ever created **to promote literature and science.**”¹⁴ According to today’s understanding, the Museion can be understood as a mixture of university, art, culture, and natural history collection and library.

In the Middle Ages, the museum’s forerunners were

limited to the so-called art and wonder chambers of the church and aristocracy. These collections, some of which were considerable, were used neither for research nor for real educational purposes but served as mere objects of prestige for the demonstration of power.

When the age of bourgeoisie dawned in the middle of the 18th century, a new group of sponsors and collectors for objects of art, culture and science was looking for **elements that would create identity.**

With the increasing liberalisation of society as a result of the Enlightenment and Industrial Revolution, the preservation, research and presentation of historical objects became a declared matter of the state and local authorities often founded their own cultural institutions (The British Museum, opened in London in 1759, is the first of its kind). Museums were now **understood and treated as generally accessible educational and research institutions.**

This function is still captured and preserved by the current museum definition by ICOM-International Council Of Museums, last revised and ratified at the 2007 ICOM General Assembly:

“A museum is a non-profit, permanent institution in the service of society and its development, open to the public, which acquires, conserves, researches, communicates and exhibits the tangible and intangible heritage of humanity and its environment for the purposes of education, study and enjoyment.”¹⁵

From the refuge of muses to the exercise of human power

Museums have made it very far from their origins: **they moved from the inspiration and creative processes to the possession of knowledge and the possession of material treasures** and connected to this the exercise of power, although always under the flag of study, education and safe-guarding the collective memory.¹⁶

Any attempt of re-thinking the museums and the roles they play and can play in society has to take their real power in society seriously. Thinking of museums and children postulates therefore some questions which are important to think about:

- **What memory will museums confront children with?**
- **Will the museums use their memory protection as a tool to keep children in line with the societies as they have developed so far or will museums be able to open up the perceptions of memory enough to allow children to really create their own view of humankind?**
- **If there is a real social need to rethink human civilisation, to dream it from scratch and to re-create it into a more sustainable form, isn’t it a time for museums to reclaim themselves as a refuge of muses?**

A Museum Niche

There is a museum niche, subtle and indistinct from the point of view of the classical museums, which already practices the know-how suitable for supporting children in their evolutionary role in the 21st century today: children’s museums.

As the name already implies, children’s museums are **institutions for someone rather than about something**, which marked a significant novelty in museum development. They interpret (some kind of) heritage to children with a special attention to their needs and **focus on providing rich and inspiring environments for developing children’s talents.** As such, they often are helping children to “equip lightly and efficiently for facing the challenges”¹⁷ of the 21st century.

Light method of learning

The main mode of behaviour of children is play. Playing is common to all children. It is their method of conquering the world and discovering it. Children’s museums combine the desire to play and their curiosity by offering interactive learning environments that are completely tailored to the needs of children, where they can learn new things self-determined and at their own pace.

9 Cynthia Luna Scott for UNESCO: Education Research and Foresight / Working Papers / The Future of Learning 2: What Kind of Learning for the 21st Century, November 2015

10 J.K. Rowling: Speech at Harvard Inauguration, 2008

11 This understanding/interpretation of museums is reflected and supported by various contemporary research projects and initiatives, such as:

1) Climate action, Museum for future, museums are not neutral, Journal Article

2) Museums as Change Agents, Rex Ellis, *The Journal of Museum Education*, Vol. 20, No. 2, Retrospection (Spring – Summer, 1995), pp. 14-17, Published by: Taylor & Francis, Ltd.

3) www.jstor.org/stable/40479024

4) Conference 2017 https://www.benaki.org/images/Program_Ath_ENG-s.pdf

5) Museums: agents of social change and development., ICOM Publication 2008, ISSN: 0020-6418

6) We are museums www.waare museums.com/research/

12 Based on text of Sarai Lenzberger

13 Baur 2010, p. 20

14 Waidacher 1999, p. 77

15 ICOM 2006, p.29 and <https://icom.museum/en/faq/what-is-icom-definition-of-a-museum/>

16 If a certain memory is ascribed value to the past by a museum, it is considered part of the collective canon of memory and becomes in a way an institution itself. Therefore, museums do not mirror society itself, but rather its dynamics of power, which of course are reflected in the choice of what is considered memory-worthy and whose needs museums as keepers of these memories are designed to cater to.

This role as reflectors of power dynamics in a society, became very evident in Europe in the early nineties, after the fall of the iron curtain, when museums had to alter their approaches in order to stay connected to the next generation of their audience. Kirchberg’s empirical work distinguishes between the three functional levels “objective”, “subjective” and “normative” in reference to Soja’s concept of urban space (Kirchberg 2005, p. 94). Applied to the museum context, these levels mean, for example, social upgrading of locations, acting as a fragment of city identity and the starting point for gentrification. (ibid., p.92f) As another category for the sociological consideration of the social tasks of museums, Kirchberg mentions Merton’s system of manifest and latent functions. (ibid. p.94) The former are communicated openly, for example, through museum vision and mission statements disseminated, by the city, art and cultural politicians and marketing campaigns. The latter, on the other hand, mostly serve to protect the interests of a particularly influential group and are deliberately kept secret. (ibid., p.92f)

17 View Harari’s letter to Homo Deus in section 1.2

Children's museums versus museums

The key difference between children's museums and children's programs of other museum types is that at their core, **traditional museums always work collection-based**, whereas **children's museums have the freedom to create exhibition stories based on their visitor's interests and needs** (which of course does not restrain them from using objects to tell these stories).

The key tasks of a classical museum by ICOM definition are: collecting, conserving, studying, exhibiting and communicating. They are collection-centred. Therefore, in their budgets and programmes, they need to equally pay respect to all these tasks.

Children's museums, on the other hand, are free to develop programmes and their pedagogic work based on individual topics. Furthermore, they have the possibility to tackle whichever topic they believe to be relevant for children of their region and community and by this can quickly react and pick up recent developments.

The advantages of children's museums as pedagogical laboratories

Children's museums develop their **content based on the real-life needs and interests of their target group**. This makes it possible to **react to current topics relatively quickly** and to only provide content which is **relevant for their audience**.

This leads to a huge diversity of children museums, all reflecting the specific needs of children in their area. This variety also serves as an important source of inspiration and innovation for others in the field of museums and education. **Children's museums – very often empathetically driven by women or men with strong social intelligence – are usually very low-threshold and inclusive organisations**. As such they offer access to culture for audience segments who normally experience a lot of barriers. They create a safe **environment for families to participate and learn from each other**. These environments also serve as **social interaction spaces** (ideally for members of all social backgrounds and ethnic groups), offering **the freedom to individually explore, by lingering at one station or skipping another**, focussing on processes, not specific learning goals, and therefore enable **informal and highly personalised educational experiences**. Children's museums foster

critical thinking and curiosity, ask questions, and do not give prefabricated answers. As they are in direct and often very intensive contact with the audience, they become natural educational laboratories and pedagogical competence centres, able to **pick up, test and integrate new approaches** and serve as training and mentoring facilities for teachers. They are also capable of functioning as **community resources** by offering an environment **of fast and natural social engagement and action**. Thanks to their unique expertise and constant exchange with their target group, children's museums are strong advocates for children and their rights within their immediate community.¹⁸

Marking the museums' way into the future

In the past children's museums already took on the role of pioneers, by starting the audience-focused movement of the museum sector. The wide range of low-threshold interactive, hands-on exhibitions and educational programmes we today consider state-of-the-art in museums are all rooted in practices developed in children's museums, who evolved around their audience.¹⁹

Today, we are once again confronted with the need to take this audience-focused movement even further and replace outdated educational and institutional paradigms. This urgency for change becomes evident in many ways and is mirrored in current discourses of the cultural scene.

In the museum sector a major debate, followed by heated arguments, broke loose, when the International Council of Museums (ICOM) announced a major revision of the current museum definition. It is important to emphasise that the ICOM museum definition and code of ethics for museums is internationally recognised as a binding framework for national museum legislations.

One of the driving forces of the new definition stated that the current version²⁰ does not speak the language of the 21st century' by ignoring demands of "cultural democracy".²¹

Proposing this definition instead:

"Museums are democratising, inclusive and polyphonic spaces for critical dialogue about the pasts and the futures. Acknowledging and addressing the conflicts and challenges of the present, they hold artefacts and

specimens in trust for society, safeguard diverse memories for future generations and guarantee equal rights and equal access to heritage for all people.

Museums are not for profit. They are participatory and transparent, and work in active partnership with and for diverse communities to collect, preserve, research, interpret, exhibit, and enhance understandings of the world, aiming to contribute to human dignity and social justice, global equality and planetary wellbeing."²²

Even though the vote for a new proposal was postponed due to the heavy backlash from some national ICOM branches, criticising the non-transparent way²³ the proposal was developed and its vague terminology illustrates how immediate the need for (cultural) institutions has become to offer new approaches in order to stay connected and relevant to today's 21st century society.

When taking a closer look at this new definition, regardless of its controversy and possible inaccuracies, it becomes evident that audience-focus, engagement and critical discourse could be defined as the key-factors for museums to be able to stay true to the requirements of contemporary society.

If we now take the main characteristics of children's museums, which were outlined in the previous chapters, it becomes evident that they already live-up to the core-values attributed to the museum of the future, showing:

- The ideal of a 21st century museum concept is rooted in cultural – democracy which currently already exists in the form of children's museums and there it has been well tested.
- The new museum definition theoretically confirms the operational model of children's museums as a future-proof blueprint for museum work and their role as a "fore-runner" for the transformation of the whole museum sector.
- Taking into account the general outcry for a re-modeling of contemporary education, the current shift in the museums world also has the potential to serve as a prototype and best practice inspiration for formal education.
- Given the audience-centred approach and the usually smaller organisation sizes, children's museums have

the potential to quickly react and address current topics, serving as real-time discourse centres and social laboratories, not shy away of tackling challenging content.

Mapping the reality of children's museums in Europe

Hands On! International realised a project of mapping child-centred²⁴ museums between the years 2019 to 2021. Almost 180 organisations participated in following surveys:

- 1) basic survey focused merely on hard data about the organisations realised 2019 and 2021
- 2) survey on reopening hands on museums after first wave of COVID with respondents mostly from Europe as well as Asia, North America and others, realised in May and July 2020
- 3) evaluation forms of Frankfurt conference
- 4) feedback from the moderators of the workshops during online HO! conference 2021.

Report on mapping of child-centred organisations between years 2019 and 2021 you'll find on the website of Hands On!²⁵ This part of the text selects findings of the mapping which I believe are the most interesting and which add information from the field to the so far realised analyses.

Joy for everyone

The questioned organisations were visited by a mix of kindergartens and schools (35%), families with children (38%) and just adults (27%). This aspect of their functioning corresponds to their unique learning environment and atmosphere typical for them.

It fits most children and stimulates them in a way which is for the majority of educational institutions beyond their reach. In fact it doesn't rely simply on its own education resources, but opens the learning process also to peer and intergenerational learning, where – quite naturally – everyone has a chance to choose the content according her/his needs and – when interested – is naturally motivated to share it with their peers. When this happens, natural undirected learning happens – which is of course the most efficient one.

Know-how to trigger natural learning situations is among a variety of child-centred institutions also very various. We could even say that this specific know-how

18 View, "What is a children's museums, and 'function of children's museums' by ACM: [childrensmuseums.org/images/ACMFourDimensionsOfChildrensMuseums.pdf](https://www.childrensmuseums.org/images/ACMFourDimensionsOfChildrensMuseums.pdf)

19 Zwaka/Haas 'Can children's museums survive the 21st Century' at 12th Hands On! Conference, Frankfurt 2019

20 "A museum is a non-profit, permanent institution in the service of society and its development, open to the public, which acquires, conserves, researches, communicates and exhibits the tangible and intangible heritage of humanity and its environment for the purposes of education, study and enjoyment."

21 Jette Sandahl who leads ICOM's commission

22 Taken from: <https://icom.museum/en/activities/standards-guidelines/museum-definition/>

23 a closed-off committee internally chosen by ICOM created the definition without adequate consulting and feed-back modules to include a broader museum community

24 By "child-centred" I mean both children's museums as well as museums which target children as one of their key audience segments.

25 www.hands-on-international.net

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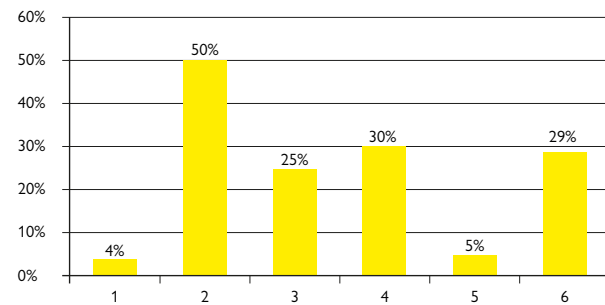
If there is a real social need to rethink human civilisation, to dream it from scratch and to recreate it into a more sustainable form, isn't it a time for museums to reclaim themselves as a refuge of muses?



each organisation develops and cherishes as its holy grail. It is what makes them in their local communities needed, what creates the core of their meaning and what is also crucial to their economical functioning. When you look at the economic functioning of museums and galleries in Europe, you will find out that (with the exception of a handful of institutions which play significant roles in tourism) the vast majority of museums are almost completely dependent on public funding and also almost all of them are founded by public bodies. Children's museums are different. Most children's museums are able to generate income covering about 50% of their overall cost and more, some of them are even economically self-sufficient (compared to classical museums that are usually able to generate 20 – 30%). This is why – also in Europe – **almost half of the children's museums can be private** – which is in the museum sector very atypical.

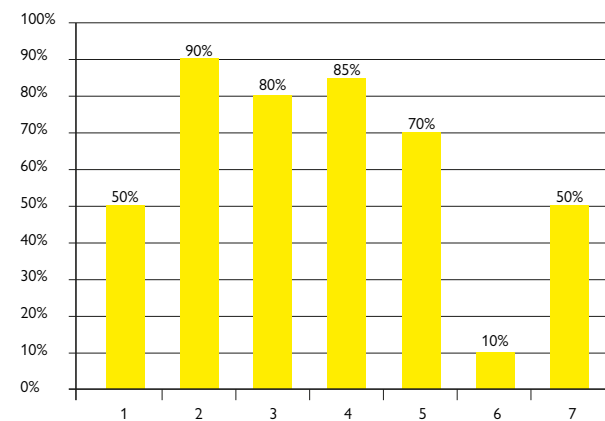
Classical museums with children's programme

% of annual budget generated by own income



Children museums

% of annual budget generated by own income



Observe your visitor

The financial – partial or complete – independence – isn't their only social benefit. The "Re-opening hands on museums" research conducted by Hands On! in 2020 after the first wave of COVID in the EU²⁶ proved that private museums are also much more likely to react faster to needs in society.

This has two reasons: 1) as they are directly financially dependant on the income generated by the audience they can not afford to leave this income out 2) as they are used to creating **their content based on empathetic observation of their audience's behaviour and needs** – "to knit it fitting their visitors" – they were able, after the break-out of COVID, to adapt their operational strategies responding on – suddenly changed – needs of their visitors. Offering on-line content, they reached out to their audience through social networks and on-line channels. They supported schools bridging the gap to on-line learning and as such proved their expertise as the play learning specialists.

It is very likely that whatever happens in the society, these self-reliant and empathetic organisations will be able to react fast, adapt to what is needed and as such, are the form of education that can always be tailored to what is needed.

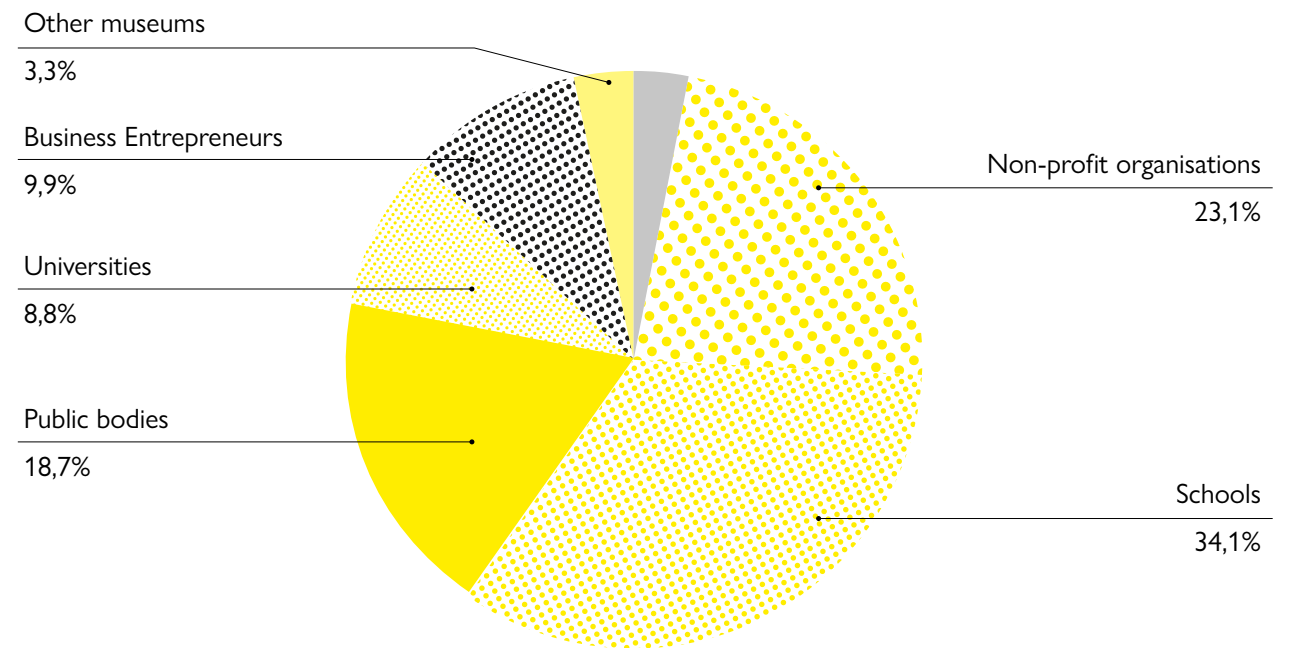
Joy for everyone + observe your visitor: conclusion

Creating rich interactive environments for self-learning – based on observation of the audience – is inspiring for a variety of target groups and it is efficient both from the learning as well as from an economical point of view. Not collection-centred, but audience-centred approach in museums proves itself far more efficient and as such is worth following.

Learning in beauty

85% of child-centred museums create their own program. They also have a very specific mix of content creating teams. 83,9% questioned organisations have their own permanent in-house creative team consisting of curators, exhibition designers, architects, etc. (this differs from house to house) but almost all of them, 93% have educational staff incorporated in the creative process (76% of them employing educators on the basis of the long-term contract). This means that the **combination of creative professionals and educators is one of the substances of these organisations.**

What are your key partners?



What does it mean for the quality of education? It means that education is a crucial component in the programming – **the programs are designed in order to educate** – yet the form of the education is also very important. Very often it has distinct aesthetic form, it's innovative, fun, it affects visitors holistically – connecting them to their bodies, as well as to the world – and often it triggers creativity and imagination as well. This is very much in line with key competencies for the 21st Century and once again: it makes education very efficient. But beside that, by providing learning through beauty for a wide audience of schools as well as of families with children, it provides – very democratically – what psychiatrist Michael Ventura calls: "Aesthetic hygiene." *Civic courage in the ecological age means requiring not only social but also aesthetic justice and the will to argue and speak about beauty in public space. ...Aesthetic hygiene – it could save the soul of the world. Nothing moves the soul as strongly as the aesthetic movement of the heart looking at the fox in the forest – the beautiful sincere face, the sound of a gentle melody.*²⁷ In this sense, child-centred museums offer truly essential learning opportunities for the future. **They are**

themselves an expression of civic courage: in their local communities offering social as well as aesthetic justice, they care for masses of children who wouldn't have otherwise a chance to experience much of social generosity²⁸ and as such are endangered by not building trust in society and feeling irrelevant. If this was the only benefit to society it would be enough as it is much harder to fight irrelevance than humiliation.

Interwoven in local environment

The research also shows that these kinds of museums tend to have multiple co-operations and as such are usually **very well interwoven in their local environment** which is important because of the relevance of their programming but also because of their outreach. More than 34% cooperate with schools, and almost 25% cooperate with NGOs. On the other hand – beside networking in professional networks – these organisations quite poorly cooperate with other museums. This also indirectly signals strong local engagement and directly signals not used **potential of co-producing and circulating content, know-how and sharing resources. This is definitely an opportunity for the sector and its sustainability.**

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26 www.hands-on-international.net/report-reopening-hands-on-museums/

27 James Hillman, Michael Ventura: We've had a hundred years of psychotherapy – and the world's getting worse/ Harper, San Francisco, 1992

28 Mind that in children entered museums – even if you leave out creative teams working out educational content and environment – in 37,5% of these institutions one educator serves 10–15 visitors (which is about a half of the average school in EU ratio).

Today's generation of children museums

When writing about the evolution of children's museums, I mentioned that recent children's museums are opening up their focus from critical thinking, to the children's abilities to empathise, envision, decide and act.

To see whether this is really the case or whether organisations are just about to appear, we need to look at 2 aspects of functioning of these institutions:

- 1) How the museums' personnel treat their visitors and what are their key qualities
- 2) what is the content of the programming.

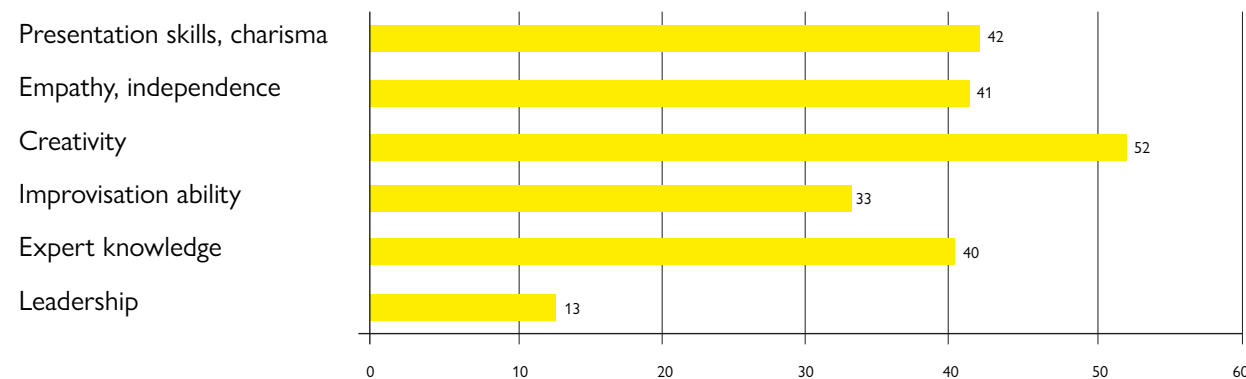
Mediators of the new world

Quality of staff in direct contact with the visitors is crucial. The way these people treat the audience, what kind of relationship (s)he establishes, what does (s)he focus, highlight, how (s)he intervenes, expresses in a way a vision – role model – of how we can be (or even become) in the museum universe. These people are the mediators of the new world. So how should they be? Let's have a look at how the leaders of the museums value the skills of the educators – the key personnel meeting the visitors.

As you see in the graph, creativity is valued the highest, but even empathy, independence and charisma are valued higher than expert knowledge.

This implies – when we see the educators like role models for visitors – that **for the child-centred museums an educator's – as well as visitors' personal qualities – matter more than what they know.** This is already a major shift in focus when you compare it to the status quo of the vast majority of formal education in the EU. It means that child-centred museums really open a way for the education Harari envisions for today's children.

Key competencies of educators



The questioned museums' policies of training their educators imply the same: among many other forms and methods the respondents mentioned hands-on practices, folktale writing and narration seminars, collaborative workshop creation, inquiry-based learning with games, "I ask" method²⁹, methods using art as a medium of communication. When you look at responses in the questionnaires, it is evident that **child-centred** museums seriously search for methods to create an open-ended setting to self-exploration, development of personal skills, building up open and healthy relationships between visitors, museum and community and starting discourse.

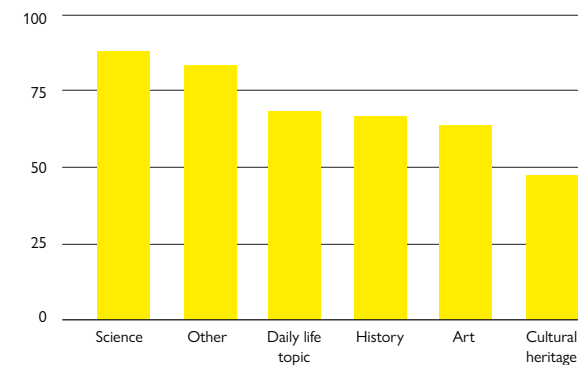
What shall we talk about in the new world?

But what are the topics which the child-centred museums engage with? In fact this is still a difficult question at this point.

The question related to the topics as we've formulated it in the beginning of the project and used it in the questionnaires doesn't offer a clear answer (see the graph on page 21) as the question was formulated too generally. Only under "other" we can read more: "literary-memorial, general type museum with permanent archeological, ethnological, history and media exhibitions, world citizenship, energy sources, renewables, climate change, children in city, democracy, the constitution, empathy, children's rights, intangible heritage, folktales, shadow theatre, insect exhibition, sport."

Hints of possible answers we can find looking at the discourse at the meetings of museum professionals in this field. Insight into topics of the Hands On! conference 2019 and workshops of the on-line conference 2021 can give us a clue.

Thematical focus



The conference 2019 was focused on inclusion into museums³⁰. This topic surprisingly strongly resonated and it was discussed from the point of view of various target groups threatened by social exclusion, as well as from the point of view of inclusive methods.

This indicates a shared will to understand perspectives of diverse social groups and also – indirectly – the will to open up to sensitive topics.

However, the "COVID hurricane" started demolishing the landscape of children's museums shortly after the conference and pushed the questions of content a little bit aside.

In this context appeared the on-line Hands On! conference, too perplexed with just the fact of being on-line and shyly asking, how shall we go into the future³¹, like a clumsy little phoenix arising from the ashes of the mass destruction of children's museums. In this situation I am not completely able to provide an overview of the topics which are "on" in museums just rising from the COVID cataclysm.

Yet – looking back at what was discussed during this on-line event – I'm hopeful. The workshops displayed a variety of projects and brainstormed on the sustainable future, for example: active citizenship in a way, in which children can imagine "The house across the street is about to be demolished. What can we do?", Co-imagination of travelling into the future, Workshop on dancing in museums for everyone, Coding as a way of dealing with problems, discussing what the visitors' interactions in museums of the future will look like.

It's also important to note that both the conferences (but also the one before, 2017³²) dealt with the digital shift and are – in the course of time – from general "yes/no questioning" to introducing concrete tools and discussing their implementation.

Today's generation of children museums = Homes of 21st Century Education

Ready for change not happening

The mapping proved that the child-centred museums' personnel has been for some time ready and looking for ways to refocus from knowledge-based education to holistic personal development and for ways how to contextualise museums' visitors – in museums – in the world how it is now – even with its problematic and sensitive issues in order to enable children to act. Yet somehow the transformation hasn't really been coming for long...

Voices asking about future

During the times of "never-ending happiness" (before the pandemic), there were voices³³ raising the question whether children's museums would survive the upturn in museums³⁴. Traditional museums were massively adopting the know-how of children's museums and these often heavily subsidised places were difficult to compete with.

But the pandemic has changed a lot. COVID came to the "museum universum" like winter comes and quarantines like a frost immobilised a majority of museum activities with the threat of death in the air. Values in society, education and public funding have been reconsidered, as well as the habits of millions of people. Yet children still need to play, their curiosity and hunger for learning need to be fed...

As I've mentioned before, private children's museums suddenly were often the first ones to react and to grab the opportunity in on-line spaces and as educational experts in schools. Suddenly they don't seem ready for extinction. The more true they have been to the values and methods of children's museums, the more they are relevant in the society waking up from the limbo of ever-lasting growth and peace once again.

Opportunity for transformation

COVID created an opportunity for long needed transformation. Exactly like every winter creates a call for new life arising. It feels like the time is really upon us for the new generation of children's museums, but not only of children's museums but of a movement also of museums or "museum-like" institutions which

³⁰ The program of the conference you'll find here: www.hands-on-international.net/conferences/conference-2019/programme/

³¹ Program and full brochure you'll find here: <https://prod5.assets-cdn.io/event/7249/assets/8363622404-ca6b907713.pdf>

³² www.hands-on-international.net/looking-back-on-the-2017-conference/

³³ F.e. the text of Claudia Haas and Petra Zwacka in "What can be the quality of museums as pioneers of 21st century education? Part II: Best Practice"

³⁴ In the mapping in 2019 90% of organisations reported growth and just 10% stagnation.

understand that education needs to change – if we want the dreams of a sustainable future to come true – and that they – as social hubs, temples of muses – can be the change.

Today's generation of children's museums

The today's generation of children's and child-centred museums doesn't educate children to be obedient workers and citizens, as the world these museums prepared children for has proved to be unsustainable and outdated.

Today's generation of children's and child-centred museums educates children to stand on their own feet, to be able to say who they are, what their relationship is to other people, to society, nature and planet, to be able to envision a way through life for themselves, as well as they will be able to join the mission to envision a way for life on this planet, to be able to create and to accept the responsibility for whatever they'll create, to respect, love and grow to wisdom.

Defining standards for the child-centred museums of the future

Based on the analyses of challenges of contemporary education, mapping of the field of, child-centred museums and a series of brainstormings with museum professionals, we've formulated a set of qualitative measurements valid for today's child-centred museums never mind their country of origin, source of funding and scope of functioning.

These qualitative measurements are closely connected to the methods of children's museums (as they can – based on the new – yet unauthorised – definition of museums by ICOM – play a role model for today's innovative museums) yet these measurements aren't fitted only for them. When modelling them, we (in Hands On!) kept in mind a broad scope of institutions: from classical museums to interpretation centres as well as innovative projects, which even might not have a house for their public activities.

These qualitative measurements are developed as a tool for families and teachers to help them to find institutions providing space for learning, inspiration and sharing for children in their care. But they are also developed for the museum's professionals: as a tool for benchmarking, evaluating their work as well as defining a platform for exchange and establishing themselves internationally.

Qualitative measurements can be defined on a basis of mission. The shared mission for all these child-centred organisations is supporting children to **get ready for the future** – which we translated into **education for the 21st Century**.

We have identified 8 qualitative measurements = characteristics of future oriented child-centred museums. Their detailed description together with their practices of excellence you'll find in Part II – Best practice.



8 Characteristics of the Homes of the 21st Century Education

1. Door to Culture

An easily accessible public place of joy, beauty and imagination for everyone. It is a public haven of well-being and enjoyment, heritage, aesthetics and imagination, which serves as a gateway institution into cultural life.

2. Learning Through Play

A home of interactive self-learning, a place to try out the unknown, be astonished and use your imagination. It is an educational laboratory and incubator of contemporary education, developing and testing innovative educational practices. It is continuously creating and improving Hands-on! Mind-on! Heart-on! experiences, offering play-based, multi-perspective and interactive learning.

3. With All the Senses!

It broadens children's horizons holistically through meaningful, multidisciplinary experiences, inviting children to develop their talents and skills based on the Hands-On! Mind-On! Heart-On! principles

4. A Better World

Sees children as an equal part of society, imagining and changing the world into a better place. It fosters education for humanity by empowering its visitors to build healthy relationship between individuals, community and society, encouraging children to become co-creators and agents of change in society.

5. Bridging the Gaps

It serves as a meeting place for all ages, bridging the gap between generations and fostering intergenerational dialogue and learning.

6. Be heard!

A place to interact and engage – where every voice can be heard. It is a responsive, audience-focused institution, where interactivity is at the heart of every visitor's experience. Social and cultural diversity is reflected in all its "P"s: in its people, program, products, promotion, place, partners, processes and prices.

7. Digitally Aware & Active

It is digitally aware and active, embracing digital technology and helping children to navigate between reality and the virtual worlds.

8. Constantly Changing

Connects to global themes, but acts locally and is continuously adapting. It is a dynamic and evolving organisation, adapting and responding to the changing needs of local communities in connection with current global and local developments.



Closing words

I hope children, so badly impacted by the series of lock-downs, can once again become a symbol of change and of hope. I'm thinking of Astrid Lindgren's Ronja whose affection for the boy "from the other side" was able to bridge the abyss dividing them. I'm also thinking of other Astrid Lindgren' heroes, Brothers Lionhearts, who saved one of the co-existing worlds, and I'm thinking of the little boy from Stephen King's The Shining, who was able to fight the deadly evil in his father's mind. But I am also thinking of Greta Thunborg...

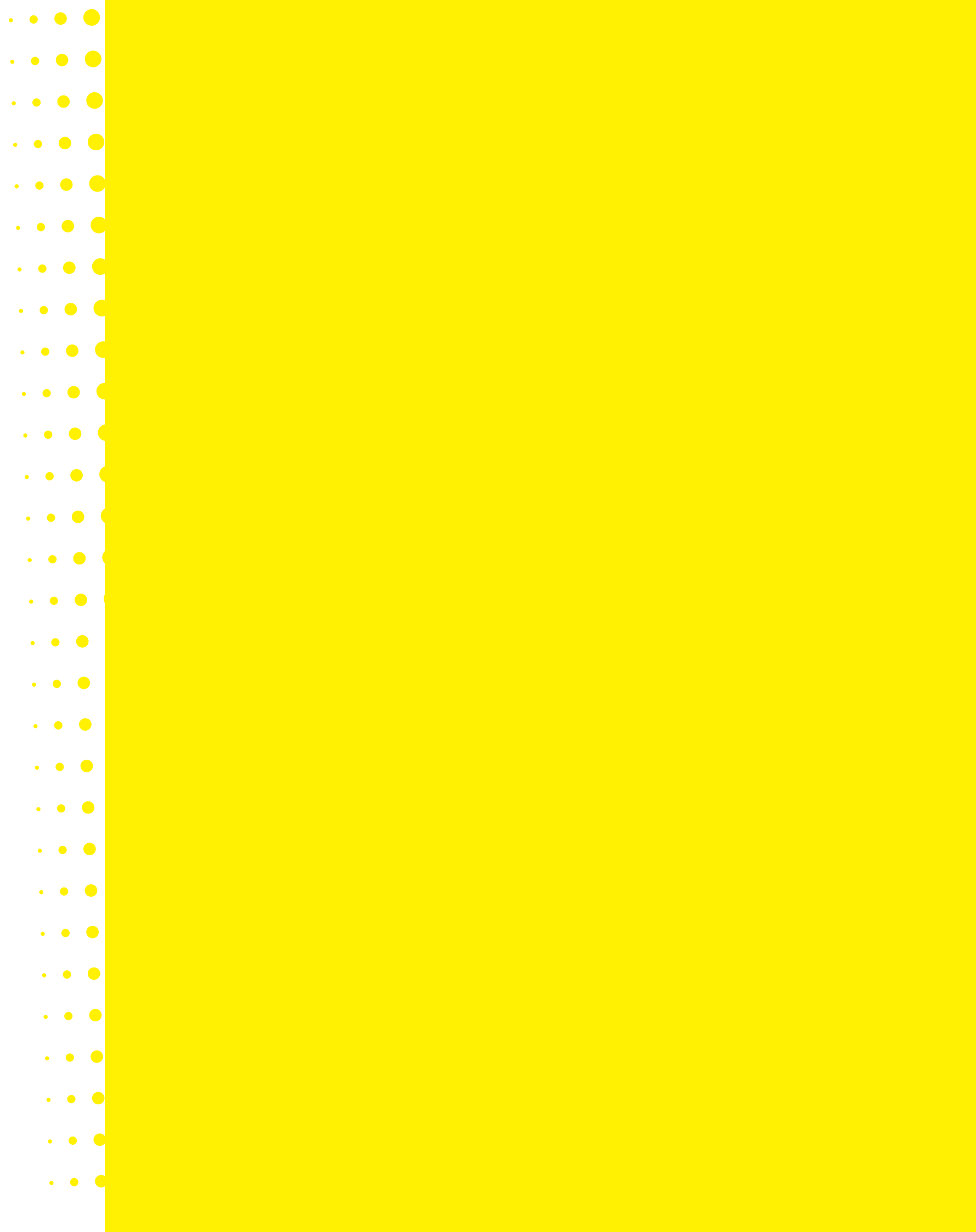
Yet, it would be cowardly to wait for children to save our worlds. To be able to keep respect for ourselves and our dignity we must do the best we can. Museums can play their part as well. Let's remember that the future is in our hands as well as in the hands of our children. Let's fully accept the responsibility for ourselves and educate the little ones in a way that they will be able to continue the human story with dignity. In museums, galleries, science and interpretation centres, we can create a setting for them, where they will be able to find their way into the future – Homes of 21st Century Education.

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Museums in the 21st Century: Pioneers of Education

Part 2: Analyses on children's museums' readiness

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