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Fact or Fiction – Technology and Historical Reality

The question "Fact or fiction?" contains a number of philosophical questions: What is history? What is a museum? Can virtual reality be real? The last question is sure to raise doubting questions not only in me, but other people of this generation as well. However, it also undoubtedly raises interest in various possibilities.

Interpreting history based on written sources is a test of skill, requiring not only the ability to read sources, but also the ability to make deductions and the ability to write. To clarify, what I mean by the ability to write is not the simple ability of stringing together words to form sentences, but rather the ability to interpret sources in writing. An equally important skill is interpreting objects and placing them in their proper contexts. An object, of course, tells you far less than a written document. Because of this, an object needs an expert to interpret it, to attach stories to it. The basis for evaluating truth and fiction lies in the concepts of **HISTORY** and the **MUSEUM**, and in the way in which the **MUSEUM**, a conveyor of historical or material reality, interprets the past.

The word **HISTORY** refers to the past. But what exactly is history? The origins of the word **HISTORY** lie in ancient Greece, where it meant not only the past occurrences of a community, but also the depiction or study of past events, the science of history and its results. The science of **HISTORY**, in turn, is the study of mankind's past based on written sources, the interpretation of written sources.

History is often thought of as an account of the upper classes, of wars and politics. However, the study of **HISTORY** involves us all, from people living

in the remotest regions to the greatest men and women who ever lived. In studying **HISTORY**, we also learn to understand ourselves and our place in the world. History can refer to the past in two distinct ways; either as a narrative, a story borne out of a person's imagination, or as an account adhering strictly to cold hard facts and sources, on events that can be proven to have taken place.

Over the years, the infinite diversity of the concept of history has confounded the public and researchers alike. Even the supposedly simple matter of coming up with a definition for the word has proven so difficult a task that some researchers have questioned the very sensibility of the attempt. These difficulties, however, have not stopped people from trying, as a result of which we have myriad different definitions. Most of these emphasise what is perhaps the most important facet of history, the human desire to understand oneself, one's community and society from the perspective offered by the long passage of time. As a result, throughout the ages history has been characterised, for example, as a form of human activity, a way for a culture for accounting for its actions; as the experience base of a nation; as the collective memory of humankind; and sometimes as a mirror with the help of which people recognise themselves as part of their forefathers' heritage.

Modern times have also brought with them a variety of definitions, some of which are perhaps a tad simplistic. Some of which are made by Welcome to **HISTORY! HISTORY** brings the drama of the past to life! **HISTORY** is not boring. **HISTORY** is gaining popularity as a hobby! Now it is easy to find information about where, how and when **HISTORY** is made and how you can influence it. These kinds of definitions of **HISTORY** reveal that people expect the interpretation to involve something more than just the written word. In other words, the general public expects **HISTORY** to provide them with experiences.

The science of history produces impressions of the past, meaning interpretations. These interpretations are always based on sources. **These interpretations are also not permanent, but mutable.** Anyone who begins studying history soon discovers that each generation rewrites its history. In other words, the interpretations change as we accumulate experience. As a result, the science of history does not produce or even recognise the existence of absolute truths, of perceptions of the past that remain forever unchanged. The discovery of new sources or the fact that different researchers may interpret the same source in completely opposite manners means that we will always have a multitude of different interpretations, leading to the need to rewrite history.

What is then a museum? The origins of the concept of the **MUSEUM** lie in ancient Greece as well, having originally meant something completely different than it does to the people of today. The word **MUSEUM** comes from the Greek word **μουσεον** referring to a place on Mount Helicon dedicated to the nine muses, the goddesses of the arts and sciences and daughters of Zeus and Mnemosyne, the goddess of memory. In the Hellenic and Hellenistic periods, the Greeks went on to establish a number of "science centres" and educational institutions which can be considered predecessors to modern museums. A common synonym for the word museum, particularly in French, is **GALLERY**, which means a corridor connecting two buildings. During the Renaissance period, galleries were used to display paintings and sculptures, as a result of which they became known as places for storing and displaying art collections. In central Europe, the gallery was replaced by the **CABINET**, a space meant for displaying pieces of art, medals and curiosities. **MUSEUMS** serve as a nation's memory organisation along with archives and libraries. I myself have often characterised the shared role of museums, libraries and archives in preserving tangible cultural heritage as a holy trinity. Our roles may differ, but they also complement one another in covering our

responsibility of comprehensively recording tangible cultural heritage. The purpose of museums is to describe human life in its entirety, and to record and manage the materials, items, samples, pieces of art, buildings, relics and monuments detailing it, as well as related stories. Meanwhile, libraries and archives are responsible for managing literature and documents respectively, both of which serve as important sources for interpreting past events.

In addition to recording and managing various materials, museums, libraries and archives are tasked with relaying information about the past. This is done through exhibitions, by managing education, publishing studies and providing guidance in questions related to their fields.

The central problem with modern museums is that objects alone do not convey enough information, because of which they must be supplemented with stories. Additionally, the interpretations of objects must be modernised so that even someone with little knowledge of the past can understand the concepts presented. A good example of this is the story of a little boy whose grandfather let him try out an IBM electrical typewriter. Not an old invention by any means, but still completely unknown to someone born in this millennium. In any case, this was an unfamiliar and new experience for the boy, leading him to exclaim: "Grandpa look, it's a real-time printer." The story aptly illustrates the generation gap in people's familiarity with concepts and experiences. Moreover, it tells us of the importance of being able to touch museum pieces, to experience how objects were used and how they function. However, this is something that the ethical guidelines of modern museums are loath to allow. This is why finding new ways of presenting history based on modern technologies is crucial for the future of museums.

Another problem is that walls do not speak. What I mean by this is that museums are often located in old buildings, whose walls and items typically have countless stories to tell. Particularly problematic are ruined sites that are

difficult for the lay person to even picture and which often offer no possibility for any kind of restoration.

The incorporation of new technologies in museums began as early as the 1990's or even earlier, when the development of new audio technologies enabled easier ways for people to move about in museums and receive information about exhibitions through "modern" guiding equipment, such as various kinds of audio guides, mobile technologies and visual communication.

Visuals, of course, have been used for the purpose of communicating reality and information since ancient times. After all, visual arts as well as other forms of art have presumably always depicted both the real environments of the past as well as imagined realities. Later on photography introduced the possibility of depicting existing reality, meaning the present moment, which soon becomes the past. Film and literary products are also good examples of mediums used to depict historical reality. Can we be sure that art and film represent reality? Of course not; they, too, are someone's interpretation of the past, the virtual reality of their time.

The latest trend in depicting the past is augmented reality, using modern technology to transport a person into the distant or recent past. During our participation in the Futuristic History project, the National Board of Antiquities managed many sites where new virtual technologies were considered to open up exciting new opportunities. Virtual reality is probably at its best when used to recreate ruined sites or to depict past events, such as sea battles or carnivals. However, these new technologies can also be used to bring objects to life and make them function as originally intended.

A recent meeting held in Paris approved the new UNESCO draft recommendation for museums. One of the key points of the recommendation is the utilisation of new technologies in museums. After all, new technologies support the preservation and digitalisation of museum collections, while the

development of mobile and virtual technologies in particular supports the museums' task of conveying information about the past. Looking at the recommendations, it seems that the possibilities of technology in conveying information are not yet widely understood.

During the same meeting participants were also introduced to the UNESCO World Heritage Centre's Unite4Heritage campaign, the aim of which is to use social media to make world heritage sites accessible to all and support the preservation of threatened sites.

Modern virtual technology opens up a wide range of possibilities, such as giving a schoolchild or a cultural tourist the opportunity to explore Mannerheim's 19th century home manor with the help of a simple tablet. Or the opportunity to visit the medieval Kuusisto Castle and observe the bishops and servants in their daily work or in celebrations in authentic environments. The user is surrounded by the present, while the tablet serves as a window to the past. Can virtual technology help people communicate with the past?

During one of the presentations related to the "Futuristic history" project, I was reminded of modern inventors who are just now on the brink of inventing a time machine, a way of using virtual technology to transport you into the distant past. The purpose of this new project agreement is to define the object and the terms of the research project entitled "Mixed Reality Applications for Culture and Learning Experiences (MIRACLE)". The MIRACLE project aims to find cost-efficient ways to create attractive mixed reality applications for cultural travel and out-of-classroom learning. The goal is to produce applications that improve the attractiveness of tourist sites and create new business in cooperation with experts and companies.

These developments inevitably lead to the question "fact or fiction?" Why is my presentation entitled "**Fact or fiction**"? If there is one thing I have learned during my 35-year career in the museum sector, it is how to find the

truth in the information conveyed by museums, whether this information consists of research, exhibitions, guidance or stories told to children. The important thing about the information conveyed by museums is not how the information is conveyed, but that the information is as authentic as it can be. The information conveyed should be based on sources and consist of the best possible interpretation of these sources, which I also consider to include objects.

The competition for people's time is fierce, and in order to succeed, cultural tourist destinations, museums included, must be able to offer interesting experiences. Mixed reality technologies, meaning augmented reality and virtual reality, are one way of creating just that. With these technologies, a tourist may, for example, experience what it would be like to be transported to another time, and at the same time learn a great deal about what life was like back then.

The MIRACLE project aims to not only create the basis for developing applications at reasonable cost, but also offer concrete tools to businesses. These new technologies have also proven useful for on-site learning, meaning learning taking place outside of the school, which requires a shift from teacher-led learning towards learning that is steered by the pupils themselves. Museums represent society's relationship to history and the present. They are the selective recorders, interpreters and conveyors of the past and the present. The work of museums is based on conveying national history and on selecting present-day phenomena from the entire field of culture, thus preserving the cultural and natural heritage of previous and current generations and their phenomena for future generations. Museums function as part of society, refining information into information products. At its core, museum work is about fulfilling this obligation to convey information about cultural heritage.

Without a doubt, the most important task of the museum is to preserve the past for the benefit of the future "ad utilitatem futuri". Acting as the mandator of the museum, the general public expects the museum's message to fulfil the highest possible standards of scientific inquiry and to be presented in a fascinating and easy to understand format.

Keeping this in mind, the Virtual Museum may very well be the museum of the future. 5But only on one condition: the virtual reality must be as real as a historical or museological interpretation can be.