Museums – facing twilight or new challenges?

The Past Into the Future

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The communications revolution and the continued growth of "information society" are setting new challenges for museums. Will they rise to meet them?

Traditional scientific and cultural institutions are undergoing an identity crisis. Ever since McLuhan's "global village" (1962) began its inevitable transformation into Didier Lombard's "global digital village" (2008), the existing institutional means of passing on our most significant intellectual heritage seem to be losing their footing. This has been a subject of in-depth studies by many cultural sociologists and media experts, as illustrated by the heated debates surrounding the rightful shape and place of museums in the contemporary e-world. Are museums, well-rooted in the landscape of traditional cultural institutions, really up to the new challenges and able to preserve their functions, or will they simply become archaic?

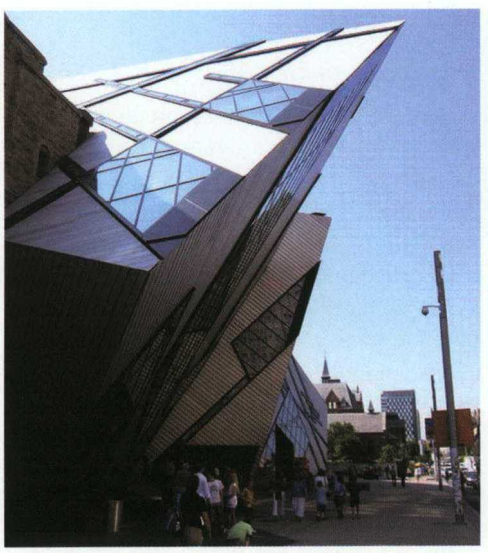
Museum-mania and symptoms of crisis

The revival of museums has been made quite clear by the splendid museum buildings raised in recent years by outstanding architects. The Guggenheim Museum in Bilbao built by Frank O. Gehry (1997), the Science Fiction Museum in Seattle (2004), the Art Gallery of Toronto (2008), the extraordinary Jewish Museum in Berlin (1997) and Daniel Libeskind's Royal Ontario Museum (2007) are all examples of this trend. Museum development over the past few decades has turned into something of a "museum-mania". It was estimated that in the early 1980s one new museum was being built each year; now there is one every month!

Yet this boom is accompanied by criticism regarding the transformation of today's museums. The most scathing accusations appeared recently in Jean Clair's famous book *Malaise dans les musées* (2008). Among the most serious threats listed by this outstanding art historian and museologist is the growing questioning of the assumed sanctity and indispensability of museum collections, the depreciation of the perceived value of original objects, and the uncontrollable transformation of museums into open fora dominated by shallow entertainment and aggressive commercialization. His criticism is aimed mainly at art museums, although Clair does not spare science and technology museums, lamenting the increasing tendency to neglect the role of publicly showcasing original museum collections. He points out that the magic of the museum atmosphere is being eroded – some examples being the modernized exhibitions in the Palais de la Découverte or the Musée de l'Homme in Paris.

Virtual displays?

The advancements of the communications revolution are setting new challenges for museums. State-of-the-art tools such as digital technology, the Internet, and mobile communications networks are opening possibilities that were unimaginable until recently, but



Marietta Gawdzik

The "Lee-Chin Crystal" – the expressive facade of the Royal Ontario Museum in Toronto that draws inspiration from crystal structures, designed by Daniel Libeskind (2007) – marked the first phase of fundamental modernization at this famous Canadian museum

they are also necessitating a change in the existing, traditional mode of operation. The seemingly unshakeable primacy held by material artifacts - original pieces - that used to dominate in museums is starting to be replaced by general access to virtual collections. We are seeing an advent of "virtual museums" that let us view not just selected displays, but also full virtual exhibitions. More and more museums with longstanding histories are offering online access to their collections. For example, the famous Museum of the History of Science in Oxford (1683) has had an excellent virtual presence since 1997, and the London Science Museum (1857) has been accessible online since 1999. We are also seeing an advent of specialist virtual institutions, such as the WebMuseum, Paris (1994), and the Virtual Museum of Canada (VMC). Although the digitization of museum collections is widely accepted to be an invaluable tool that aids scientific documentation and management of collections, the virtualization of public exhibitions has stirred up some controversy. The shift of museum narrative towards virtualization certainly has many supporters, including exhibition designers as well as "new audiences." However, for others the degradation of the role of original pieces seems to defy the museums' main mission. The attractive power of cyberspace cannot replace the unique atmosphere of a real museum space or the cognitive and emotional experiences that can only be reached through interacting with original museum objects - regardless of whether those are the Winged Victory of Samothrace or a unique specimen of an Archaeopteryx from Solnhofen.

Museums as depositories

Discussions and disputes regarding the function of contemporary museums usually focus on public displays and educational activities; the museums' work in the scope of collection, documentation and scientific research is rarely the focus. And yet museums are (and will remain) the largest depositories of our heritage encompassing all spheres of culture, science, and technology. As far as cultural, artistic, and material values are concerned, this requires no further discussion. It would be impossible to imagine any historical, archaeological, or ethnographic research that does not draw upon existing museum collections, and the same can be said for the history of science and technology. Many examples could be cited, from the most specialized institutions all the way to "integrated museums" that attempt to encompass the broadest contexts of the development of contemporary civilization. It is impossible to overstate the importance of the vast collections amassed in natural history museums - biological collections alone number around 2 billion items. The Natural History Museum in London houses over 70 million registered specimens representing wide-ranging documentation of biotic and abiotic elements of the natural environment. They are all the more valuable because they represent an uninterrupted accumulation of resources from all corners of the globe gathered over the past 250 years. They also include a great deal of evidence of decreasing biodiversity, now only preserved in museums. Museums are an indispensable data source for systematic and taxonomic studies, as well as interdisciplinary studies of biological diversity, evolution, ecology, and biomedicine. Museum collections are nowadays frequently used for molecular biology and genetics research, as well as for the protection and re-introduction of endangered species.

We rarely realize that great natural history museums play an important role as research centers with a global reach. Among the most highly regarded are the abovementioned Natural History Museum in London, the Muséum Nationale d'Histoire Naturelle in Paris, the Naturhistorisches Museum in Vienna, the Naturmuseum Senckenberg in Frankfurt, and the Naturhistoriska Riksmuseet

Krzysztof Jakubowski

NaturBornholm in Aakirkeby on the Baltic Sea island of Bornholm, designed by the Danish architect Henning Larsen and erected in 2000, is set among nature reserves. It combines modern educational and exhibition styles with displays of some fascinating objects in their natural environment

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Natural History Museum

The avant-garde construction of this "cocoon," designed by the C.F. Møller architect studio, houses entomological and botanical collections and exhibitions. It was opened to the public on 15 September 2009 as part of the second stage of an innovative expansion program of the Darwin Centre at the Natural History Museum in London

in Stockholm. American museums also have vast scientific potential – including the National Museum of Natural History in Washington DC, the American Museum of Natural History in New York, and the Field Museum of Natural History in Chicago. Huge collections assembled in those museums provide a rich source of scientific information for research and dissemination. Meanwhile, things that happen "behind the scenes," that is outside of the public-access exhibitions, are also finding their way into the public eye.

Fans of popular science programs on the Discovery Channel, National Geographic, or Planete are already aware how many scenes are filmed in museums. Digital technologies, the digitization of collections, and the application of 3D technologies that are being introduced on a broad scale are all significantly improving our utilization of the vast resources of museum collections.

See! Feel! Hear!

The most distinct symptom of how contemporary museums are transforming can be found in changing exhibition content and format. Art museums seek to heavily publicize innovative exhibition designs. They frequently stir up intentional controversies by searching for "new narratives" that at times include exaggerated use of multimedia and electronic gadgets, drawing dangerously close to a Disneyland culture. Science and technology museums are also experiencing dramatic changes. Most renowned museums started to metamorphose in the early 1990s when a public display model dominated by interdisciplinary perspectives, designed using the latest exposition techniques and equipped with supporting multimedia and interactive presentations, became the standard. The slogan *See! Feel! Hear!*, encouraging the public to visit the Natural History Museum in London, is a telling example of how museum marketing has changed – a museum is portrayed as a place *where reality is more incredible than imagination.*

There are now more and more new museums and quasi-museum institutions that prioritize interactive, hands-on exploration and self-discovery. In Europe such hands-on science centers include La Cité des Sciences et de l'Industrie in Paris, Città della Scienza in Naples, Think Tank in Birmingham, Spectrum in Berlin, the Nemo National Center for Science and Technology in Amsterdam, Universeum in Sweden, Heureka in Finland, and the Experimentarium in Denmark. Such institutions are also especially popular in the US, Canada, and Japan. The Copernicus Science Centre currently being constructed in Warsaw also aims to follow that formula.

The cocoon and Victorian architecture

The innovative concept of British museologists to create the Darwin Centre at the Natural History Museum in London is leading the way for contemporary museums striving

to take science-popularization to the next level. The first phase of the project involved allowing the public to access never-previously-exhibited archives, to visit workshops, and to meet the researchers themselves. The second phase, completed on 15 September 2009, saw the construction of an extraordinary, avant-garde edifice designed by the famous architecture studio C.F. Møller, styled as a giant insect cocoon (8 stories high and 65 meters long), which now houses the museum's rich entomological collections (28 million specimens!) and botanical collections. The project has created pioneering opportunity for visitors to participate in the process of scientific discovery rather than simply viewing its final outcomes. In reality this initiative is an attempt at redefining the traditional roles of science museums. It is notable that the Darwin Centre's new building has been successfully "melded" into the historic Victorian silhouette of the London museum, forming an organic whole with the Natural History Museum building, confirming the symbolic significance of the marriage of glorious traditions with visionary modernity.

Knowledge or information?

The ongoing communications revolution is speeding up the ambitious program of constructing a "knowledge society," which is becoming the new paradigm for progress. The process of cultivating a global information society requires a new approach to many fundamental issues, such as the priorities of scientific research, education system reform, and promoting lifelong learning and broader public awareness of science. The ability to correctly utilize the achievements of the technological and communications revolution is becoming key. For instance, there is a disturbing trend towards instrumentalization and fragmentation, gearing the education system towards churning out "useful" knowledge at the cost of general knowledge that allows us to better understand the world. Improved access to information does not automatically result in a more erudite society. That likely explains why some people feel that ignorance is triumphing despite the onslaught of information, as is evidenced by the meanders of massive public debates regarding climate change, alternative energy sources, or genetically modified organisms (GMOs). Various symptoms of pseudoscience are also falling on fertile ground, with the astonishing example shown by the propaganda surrounding "intelligent design," a modified version of creationism.

Credible message

As they undergo a fundamental transformation, contemporary museums are fulfilling an important, complementary role in the system of institutionalized forms of popularization of science. They now have an additional opportunity to affirm their role as institutions the public trusts to disseminate knowledge. If museums preserve their identities, taking full advantage of being credible information sources, they will be able to maintain the balance essential for recognizing key advances and threats to civilization. In an atmosphere of calm, free from the paralyzing information buzz and tumult of the "infected" public space, it is easier to perceive the deepest sense of achievement of human thought.

Museums have an opportunity to reaffirm their role as institutions that are trustworthy sources of knowledge

What does the future hold? Will the current "net generation" want to leave the virtual world from time to time to experience the magic of places where real objects cast their spell? Perhaps the longing for contact with original pieces that stimulate reflection and cognitive satisfaction will win through in the end. It is to be hoped that the British museologist I.G. Robertson was right, when saying in 1988 that museums *will remain indispensable (...). As long as people are interested in the world, they will long for direct interaction with the real object.* And let us hope that science-fiction writer Stanisław Lem's humorous observation that *people now take their children to the supermarket in the same way they used to take them to the museum* does not come true. ■

Further reading:

About the "museum" domain: http://about.museum; http://icom.museum

Jakubowski K. (2005). *Muzea i upowszechnianie nauki - między tradycją i nowoczesnością* [*Museums and Promoting Science - Between Tradition and Modernity*]. [In:] *Teoria i praktyka upowszechniania nauki. Wczoraj i jutro* [*Theory and Practice of Promoting Science - Yesterday and Today*]. Warsaw: PAN, 185-203.