Books

Ane Hejlskov Larsen, Rune Gade & André Wang Hansen (eds.). *Cybermuseologi – kunst, museer og formidling i et digitalt perspektiv.* Aarhus: Aarhus Universitetsforlag. 2015. 385 p. ISBN 978877124340.

In this edited volume the three esteemed experts in the Danish landscape of museology and digital art – Ane Hejlskov, Rune Gade and André Wang Hansen – explore the new forms of expression and social relations that digital technologies bring to art museums. The volume contains contributions from 18 scholars, curators, artists, filmmakers and writers who present a multiplicity of entrances into how new technological potentials change curating and visitor communication in art and art museums. Given the interesting and multidisciplinary perspectives of the authors involved, the book paints a broad canvas of constituents of "cybermuseology". This review will therefore focus on the overall contribution of the perspectives drawn up in the volume, and endeavour to discuss their implications for understanding art, museums and communication in a digital perspective.

Overall the authors grapple with three common issues of cybermuseology: issues of digital space, digital materiality and embodied interaction. This includes discussions of digital spaces such as virtual and augmented or mixed media and its production of new types of spaces in museum exhibitions. Also, some contributions include the communicational spaces that go beyond the museum building into online archival spaces or layers of communication in the city. Cybermuseology also includes understanding embodied interaction as a confrontation between the body and human senses and the digital. This goes in art as well as in museology and brings a discussion of how the sensorial character of digital encounters produces new forms of public participation. Also, the encounter between body and digital includes issues of understanding digital as a material of its own, and how digital material, for example, provides performative art beyond the representative, and introduces actions and interactions as acts of art expression and art communication.

The volume focuses on these issues of digital material, digital space and embodied interaction, and discusses the changes the digital brings for curating art and art expressions in the museum, the changes for the museum space and exhibitions as a genre of communication, and the changes for the core duties of museums and cultural heritage institutions. The title, *Cybermuseology,* is borrowed from Steve Dietz's now classical online net publication entitled *Cybermuseology. Taking the museum to the Net/Taking digital media to the museum,* written in the late 1990s. As director for New Media Initiatives at Walker Art Center in Minneapolis, Dietz experimented very early with the potential of Internet platforms for developing art forms and expressions that integrate the distinctive characteristics of digital media. Dietz's text was written at a time before the social media and mobile technologies took over, and the entire online text is printed in the last section of this book. Dietz's framing of cybermuseology focused on the internet and how especially the World Wide Web build new frameworks for museums' duties of collecting, preserving, researching, interpreting and exhibiting art. Dietz's conception of digital media was computer-based, and very much based on

the capabilities of computers to introduce a greater people-orientation in museology. The digital technologies that were available at that time were limited to 3D visualization technologies, Virtual Reality, and the Internet and search engines that formed digital environments. Based on these technologies, Dietz pinned down the concept of Museum 2.0 to be about two-way, point-to-point, real time and decentralized connectivity, which for museums included thinking about responsiveness, choice, hyperlinearity, the personal, multivocality, conversation and the agency of curators and visitors.

Reading this early hypertext enacts an interesting encounter with written text from the time before "the digital". It is interesting that all the concepts Dietz proposed are still central for discussions of digital media today. Even more interesting is that Dietz 25 years ago pinned down the next step of development: the Museum 3.0 as being the hybrid entities that organize the virtual and the real, the online and the physical as integrated and seamless places for interactions. This is where this volume continues Dietz's discussion with a focus on how today's born-digital art introduces new forms of interfaces and physical and digital relations. The volume shows how today's digital material, space and practices challenge the curator as well as the museum in quite other ways than earlier versions of online art exhibitioning. Digital technologies have changed a lot since the end of the 1990s, and the volume shows that the conceptual and analytical frameworks also have developed into distinctively more granularity. For example, we recognize that current digital technologies, such as mobile technologies, social media technologies, sensor-based technologies, kinetics technologies, 3D- and GPS-connected technologies as well as simulation technologies do further the conceptions of "connectivity", "two-way", "point-to-point", "real time" and "decentralized" that Dietz worked with. The volume illustrates the awakening of humanist critics towards the politics of algorithms. Several of the articles discuss how digital technologies deliberately structure connections and are, in fact, designed, created and programmed by somebody to control the interactions and interpretations of the other/the visitor. This includes the creator building his/her programming on cultural conceptions of central political and social issues, such as our conception of security, risk, privacy and anonymity as well as the conception of the role of our physical body in digital driven environments. Digital technology in this way becomes the politics of our time, and the contributions from Artnode, Søren Pold & Christian Ulrik Andersen, Lotte Philipsen, Morten Søndergaard, Theis Vallø Madsen and Annette Finnsdottir show how art may provide voices that question this in ways that require art museums to rethink their curation and exhibition practices.

Meanwhile, the book also goes further into the issues of the Museum 3.0 that Dietz foresaw. The museological impulse between the physical and the digital in museums that Dietz only slightly touched upon is now in full bloom. And this volume seems to be the first step in articulating what hybridity means from an art communication perspective. There is a section that focuses on the role of media in blurring the boundaries between physical and digital, and how this comes clearly into play in involving visitors in acts of co-creation. The contributions from Falk Heinrich, Tina Mariane Krogh Madsen, Lene Bæk Jørgensen, Mogens Jacobsen, Linnea Jacobsen, Lotte Philipsen and Anders Boyen & Kristoffer Ørum discuss how the new performative

aesthetics include visitors in constructions of a virtual layer that in some way or other stand in intellectual relation to the physical exhibition, where tagging and coding become only simple elementary forms of involvement which may be scaled up to inclusive art performances. Rikke Brogaard & Stine Dahl and Sophie Warberg Løssing focus on how performative art is based on the role of mobile technologies and participatory thinking in inclusive exhibition spaces. The new relations that seamless and hybrid technologies open for include establishing a different conceptions of museum communication, and integrating the visitor, not as recipient, but as co-creator. Integrating the visitor in co-creating content and exhibitions is implicitly questioning the basic authority of the museum. Mads Kullberg and Jon Paludan show how this also requires rethinking established practices of collecting as well as collection registration in repositories and archives.

The volume has kept the concept of "cybermuseology" central in the title and in the focus of the 18 articles. It is interesting to see how Steve Dietz's classical writing still works for thinking about museums in the twenty-first century. The editorial text written by Hejlskov Larsen, Gade and Wang Hansen explains that the term was chosen because it connects digital technologies with the central duties of the museum, as well as to the ethics of ICOM and Danish museum legislation. Nevertheless, there is reason to pause and reflect upon this choice because of the history of the concept. The cyber prefix was in the beginning of Internet history used to describe the space, *cyberspace,* and the communicational and interactional possibilities that were created when computers was connected in networks. The parent term is *cybernetics,* which Norbert Wiener in 1948 defined as "the scientific study of control and communication in the animal and the machine". The term was derived from the Ancient Greek *kybernetes,* meaning steersman, governor or pilot. The concept was used to capture how electronic communication is controlled by technology. This etymological and historical background of the cyber prefix has prompted this author to reflect on what it means to use this prefix today as part of a contemporary contribution in museology. What does it mean to speak about cyber in art and museums today compared to the much more frequently used *digital,* what does the concept capture and what does it leave out?

In contrast, the concept of digital is mainly used in, for example, digital media, digital cultures and digital humanities. The digital is derived from the Latin *digitalis* or *digitus,* which has to do with the finger or the toe. This concept has been translated to be about calculations with numerical methods and discrete units, such as the binary digits in digital communication technologies or the use of numbers and digital signal for representation of time. Meanwhile, there is reason to reflect upon how the concept of the digital also may indicate the embodied interactions with technologies that are at hand, partly transparent and tactile.

In the aftermath of the first introduction of Internet technologies, people have emergently used ICT, Information and Communications Technology as tools to interact beyond time and space, to share information, to build online communities, to create activist movements. We have been introduced to multiple concepts that in one or other way describe the cultural and social processes and practices that technology provides: information culture (Manovich 2001), internet culture (Castells 2001), virtual culture (Jones 1997) or participatory culture (Jenkins et al. 2005) just mentioning a few options. Meanwhile, there is a discussion involved in

how these concepts position and determine technology, and how digital technologies build relations between humans and machines. These discussions include whether we can understand technology, for example, as a function of human decisions, or as a structure that determines human actions, or as a negotiation between them both, humans and non-humans. Marc Deuze is one example of media researchers claiming that the most interesting way to capture the relation between digital media technology and culture is to study how culture and value systems and expectations develop and emerge with technologies (Deuze 2006). He explicitly uses the concept of digital culture and leaves the cyber prefix behind to focus instead on the converging processes where culture is a result of both cultural and technical processes. The growth of the concept of digital culture in academic scholarship, in education and in journals indicates that this approach brings meaning to many.

The title of the volume, connected with its written contributions, therefore prompts reflection on what it means to revitalize a concept from the 1990s in today's rapidly growing digital societies. The cyber prefix is today mainly used to notify both negative and positive intimate types of interactions, such as cyber bullying, cyber crime, cyber attack, cyber sex etc., and implicitly points to a system that controls and creates an infrastructure that allows for these intimate actions to happen. Using the concept "digital" would have placed the control and structuring acts with the people using the technology, as they would have been the active party in digital crime, digital attack or digital bullying. I simply pose this as an experiment to continue the thread of thought that this volume prompts; what does it mean for our understanding of current discussions of the Participatory Museum (Simon 2010), or the Connected Museum (Drotner & Schrøder 2013) etc. to revitalize the cyber prefix? Does the cyber prefix prompt us to explore how digital technologies structure and control us, more than studies of digital media practices have allowed us to? Does the concept of cyber museums lead us further to the core of politics of digital communication in curating, art or museums? How does revitalizing the concept of cyber today give us a new entrance into digital art and expressions than Dietz provided at the end of the 1990s?

The questions are numerous, and the list cumulates as the reader passes from one voice to the other, journeying from the art voice of the artist to that of the curator, to the museologist and to the technology developer. The 18 contributions each present a different voice, and the intermediate sheets in red and green that separate the contributions only partly help the reader to make the step from one topic to the next. The connections and meaningful relations between the articles are sometimes a challenge to discover, as in most edited volumes. The rapid shifts between the different perspectives and topics of each contribution meanwhile read as a digital performance, where the cognitive relation between links are not curated by anybody. In this way the volume performs its content; it shows how the digital in fact structures and controls our conceptions and understandings. In a certain way the book gives an analogy to the structure that virtual worlds give for the reader's endeavour to make sense of the bits and pieces. The volume does not directly discuss this role of control and structure in the world of the art museum. However, through its multiple perspectives on "cyber" it does stimulates reflections on how digital media not only open for participation, but also bring new forms of control into art and museums.

Literature

Castells, Manuel 2001. *The Internet Galaxy. Reflections on the Internet, Business, and Society.* New York, NY: Oxford University Press.

Deuze, Marc 2006. "Participation, remediation, bricolage. Considering principal components of a digital culture". *The Information Society* 22:2, 63–75.

Drotner, Kirsten & Kim C. Schrøder (eds.) 2013. *Museum Communication and Social Media.* The Connected Museum. New York, NY: Routledge.

Jenkins, Henry, Ravi Puroshotma, Katherine Clinton, Margaret Weigel & Alice J. Robison, 2005. *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century,* available at http://www.newmedialiteracies.org/wp-content/uploads/pdfs/NMLWhitePaper.pdf. Retrieved on 9 October 2015.

Jones, Steve 1997. *Virtual Culture.* London: Sage Publication Ltd.

Manovich, Lev 2001. *The Language of New Media.* Cambridge, MA: MIT Press.

Simon, Nina 2010. *The Participatory Museum.* Santa Cruz, CA: Museum 2.0.

Wiener, Norbert 1948. *Cybernetics, or Control and Communication in the Animal and the Machine.* Cambridge, MA: MIT Press.

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