Out of Order: How External Multimedia Companies "Errorize" Archaeological Exhibitions

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Abstract. This paper discusses the influence of private companies in the museum sector. For that I will use qualitative accounts and my empirical research to evaluate and interpret the issue. This article shall present the delegation of multimedia development to outsourced companies at expense of the museum's integrity.

Keywords: Outsourcing, Digital Archaeology, Museum Apps, Virtual Museum, Digital Heritage

1 Introduction

The second half of the 20th century has brought many changes to the ontology of the archaeological museum and its mission in handling material culture on public display. While archaeological collections and exhibitions have been mostly "associated with the educated members of the bourgeoisie" (Trigger, 2006, p. 19) until the end of the 20th century, the museum as a cultural institution started to pursue a different approach from then on. While first attempts in 1890 by the Übersee-Museum in Bremen were undertaken to address non-academics with eye catching exhibitions with dioramas, models and maps (Hoffman et al. 1999: 32). Scholars like Paul Rea and Theodore Low had forwarded the idea to actively engage the public and reflect on popular subjects (Shapiro, 1990, pp. 169-170) in the upcoming decades. "The world exists, for the education of each man" (Tilden, 1977, p. 17) has become the general ethic in the education of heritage which would partly lead museums to implement popular media in order to appease to the preference of the general public. As more and more people in the western world possessed TVs and radios in the 1950s, projectors and sound installations would accompany exhibitive formats from now on (Tilden 1977, p. 95).

The development of media in the context of archaeological museums has continued from then on. The multimedia boom in the 1990s led to the point where applied (digital) media in archaeological exhibitions did in some cases not serve anymore as an added extra but rather as a substitute for the actual exhibited material. The factors that have caused this development are multiple and had been critically discussed over the last years (Tilden, 1957; Hofmann et al., 1999; Lukasch & Hein 2012; Stobiecka 2019; Hanussek forthcoming) therefore I have decided to present an understudied issue in this context; the role of private multimedia companies in the museum's sector.

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This paper has the aim to discuss the development and implementation of digital media in archaeological museums since the 1990s. The scope of this paper will focus on the question of how the responsibility for the development of digital media in museums has started to be delegated towards private multimedia companies and how their "hegemony" over those *gadgets* (Tilden, 1977) has led to a severe lack of quality in modern exhibitions as interactive tablets and museum-apps stay un-serviced and unupdated by their developers. For that I have decided to evaluate records on the development of digital media in the Ashmolean Museum in the late 1990s and the Neanderthal Museum during the last decade; But also, general accounts on the whole issue. Further I will complement my research with my own empirical enquiry that I had in the Rynek Underground Museum in Kraków and with Museum Apps by the developer Museums Guide Ltd. Finally, I will evaluate the issue under the framework of contemporary theoretical discussions towards the role of material heritage under "the digital revolution" (Ariese-Vandemeulebroucke, Boom, Mol, & Politopoulos, 2017, p. 8).

2 On the Implementation Factors of Digital Media in Museums

The speed in which computer sciences develop has become exponential (Brock, 2006, p. 33) and has led to an uncountable number of digital innovations. It has been therefore not surprising that archaeological museums have made use of "innovative techniques and cross-disciplinary borrowing" (Shapiro, 1990, p. 176) in form of multimedia. "Multimedia results when two or more digital media are combined to provide information about a subject." (Davis, Trant, & van der Starre, 1996, p. 9). Archaeological museums have since the 1990s experimented with interactive kiosks in order to find a digital solution for the pressing digital preference of newer generations (Twenge, 2017). The experimentation of museums like the Ashmolean museum with multimedia kiosks (Economou, 1996) has led to the utilisation of interactive tablets and digital dioramas (Chowaniec, 2017) at first and by now to museum-apps and augmented realities (Reinhard, 2018, pp. 53-57). The factors that drive the implementation of digital innovations in exhibitions are numerous. Stobiecka's concept of digital escapism (Stobiecka, 2018) for example has discussed how the increasing utilisation of computer applications in archaeological sciences has led to a huge amount of digital data which is being on display in museums and further related applications like museum-apps. The Neanderthal museum for instance has hosted multiple research projects under its supervision since 1996, in which also projects like NESTOS (Neanderthal Studies Professional Online services) provided digital data sets for the exhibition (Alvermann, 2012, p. 34). This example shows the interdependence between museums and science and can be seen as an internal factor as science serves as base of any archaeological exhibition. Digital escapism also describes on the other hand how a "cool factor" (Olsen, Shanks, Webmoor, & Witmore, 2012, p. 88) drives museums to use digital tools in order to appease towards a digital preference of the public and compete with other institutions that promise entertainment (Hoffmann, Emele, & König, 1999, p. 35). This is clearly an external factor because contemporary trends like gamification (which is also applied in few museums) do originate externally in the liberal market.

The factor that is going to be discussed further in this paper concerns the digital agenda of the European Union that has forwarded digitization in museums since 2006. The European Commission has proposed in a report from 2011 "on the digitisation and online accessibility of cultural material and digital preservation" (European Commission, 2011) the optimisation of cultural heritage through information technologies to increase "economic growth, job creation and the quality of life of European citizens, as part of the Europe 2020 strategy" (European Commission 2011, p. 1). While the report covers mostly the benefits of the agenda it is interesting that it mentions the associated high costs directly with the solution to reach out towards the private sector (European Commission 2011, p. 2) and that "partnerships between cultural institutions and the private sector" (European Commission 2011, p. 4) are supported. Known figures from CSES (Centre for Strategy & Evaluation Services) have provided the information that the European Commission has contributed for the period between 2007 and 2013 over 6 billion euros for culture and heritage projects (CSES, 2010, p. 8). The amounts of funding provided by the EU are inevitably important for museums in order to maintain, develop and compete with other institutions. It stays therefore questionable to think of the conceptual influence on museums and their exhibitions if the probability of receiving grants is determined by how digital the proposed project plan is (Lukasch & Hein, 2012).

3 On the Development of Digital Media in Museums

The "Introduction to Multimedia in Museums" from 1996 was a major attempt by ICOM to standardise the implementation of multimedia in museums and gave an outline that has never been outmatched in its extent. It has been one of the few publications on this matter that has provided sober expectations on the work with multimedia in museums and discussed much on practical matters; how to manage a project or who should be in charge? Hence it has been stated that due the interdisciplinary nature of multimedia the project should involve a team of "several organizations as well as a number of individuals" (Davis, Trant, & van der Starre, 1996, p. 42). In theory, this includes the curator as manager, the museum workers as conductors, multimedia specialists as implementers and consultants as objective evaluators and strategists. Representative examples for this approach are the Ashmolean Museum and The Neanderthal Museum. The implementation process in the Ashmolean Museum in 1995 had been supervised and evaluated by the museum staff (Economou, 1998) and the multimedia kiosk was considered as "a successful and useful addition to the exhibition" (Economou 1996: 1114). The implementation process of multimedia devices as interactive tablets, sound and video installations in the Neanderthal Museum had been slightly different but similar in nature. According to an interview I have conducted with a representative of the museum in 2019 the institution had outsourced an external multimedia service company but had fully supervised the project throughout its development stages (Hucklenbruch, 2019). The museum also offers a mobile app that has been developed as part of the doctoral thesis of a department member under the framework of a cooperation between the University of Cologne and the Neanderthal Museum (Alvermann, 2016, p. 1509).

In practice, this can also look quite different and expose "questionable results" (Hoffmann, Emele, & König, 1999, p. 39). The Rynek Underground in Kraków has used the service company New Amsterdam for the implementation of interactive tablets and multimedia kiosks. During my visit at the museum in May in 2019 I have recognized that many of those devices were not serviced (meaning defect or frozen) and poorly designed. The same observations had been done in the previous year (Stobiecka, 2018). It seemed also strange that the same installations and applications by the same company had been done in many other museums around Poland like the Museum of World War II. in Gdańsk or the NBP Money Centre in Warsaw. This raises questions concerning the equalisation of content in individual exhibitions through standardised applications. A similar case concerns the outsourcing of many museums like the British Museum or the Pergamon Museum in the case of the company Museum Guide Ltd. The British company (which seems dissolved) has applied the exact application design on 11 museums. The apps have been much criticised by the public in concerns of content and technical quality and were not updated since 2016 (Pergamon Museum Guide Reviews, 2019). Public reviews by users showed much frustration and could lead "ultimately to alienation and thus undermined the efforts designed to attract the uninitiated into the gallery" (Shapiro, 1990, p. 173).

Questions arise on why these services have led to such results and why they have been still applied by the museum. It seems though obvious that the lack of quality in the implementation is connected to a "lack of client commitment" (Davis, Trant, & van der Starre, 1996, p. 38). This means that the museum has not been taking the responsibility to supervise and control the whole implementation process. I have contacted in course of this research over 10 multimedia service companies to be able to give statements to these issues and have received no answer.

4 A Trojan Horse in the Museum

The paper has pointed towards factors that drive the implementation of digital media (Institution, state of science, the public, investors) and cases in form of developed multimedia solutions for museums by the institution itself or at least under its supervision but also cases were the development apparently had been fully delegated to an external company. The suspicion that companies like New Amsterdam do not properly communicate with the staff of the museum did result after I had consulted the staff of the National Museum of Warsaw that is currently preparing the reopening of the archaeological permanent exhibition.

It had been proven by previous cases that the implementation of digital media in the exhibition can enhance the visitor experience (Preucel & Mrozowski, 2010, p. 554) if the implementation had been following a labour-intensive effort in assigning a task force that would from then on constantly be in charge of multimedia related develop-

ment and issues. Exactly this is also the case of the Ashmolean Museum and the Neanderthal Museum that still have a department for multimedia and digital matters in their institutions.

This brings us to the other side of the issue; The Trojan Horse. Looking back at the report by the European Commission it seems clear that museums could hope for better funding by appeasing to its Digital Agenda. It has been therefore visible that many museums especially in Poland (Kobielska, 2017) tried to use multimedia devices without any elaborated concept. As the report also supported "partnerships between cultural institutions and the private sector" (European Commission 2011, p. 4) it would seem rather unbeneficial to try to set up a dedicated team of experts on this task because chances would be smaller to receive funding. It seems therefore even more unethical that New Amsterdam advertises its service with the "support in obtaining funds from the EU and EEA grants for cultural projects" (Amsterdam, 2019) while being supported by European funds on its own (ERDF). As tempting as the Trojan Horse, the external company is brought into the museum's business in which it provides its deficient services. From then on, the development of the application, the service of technical errors and the further development lays in the hand of the external company which leads to a complete disconnection between the educational goals of the museum and the economic goals of the company. "It is inevitable that the values of the third party (either a privatesector company or a not-for-profit institution) will come into direct conflict with the mission and mandate of the museum" (Harrison, 2000).

5 Conclusion

Museums have been since over a century trying to find effective ways to connect its exhibition with the contemporary preferences of the public. Lynn Meskell remarked on the matter of modernity that "new forms of communication and mobility led to different understanding and experience of time, space and place" (Meskell, 2013, p. 245). This modern world with its accelerated innovations of digital nature can for sure seem confusing, hence curators rely on the guidance of external experts. Still it seems questionable if funds by a commission (that does not even appoint any experts from a background in culture historical or humanities related fields) indoctrinate a digital agenda that elevates economic growth to a maxim. Things get even more dubious if economic companies seem to exploit the system of cultural funds to earn on it with promising museums to receive funding if they are employed for a contract. What we see here is how local heritage becomes "a public asset at the service of other cultural enterprises" (Colomer, 2019, p. 125). The idea to apply digital media can work as seen in the case of the Neanderthal Museum and the Ashmolean Museum. But the success of it is associated with a remarkable amount of planning, testing, developing and updating by appointed multimedia divisions that are supervised by the museum or other academic institutions. This kind of sophistication of the applied media lacks in the case of many Polish museums that delegate most of the job to external companies that seem to not effectively service their devices or even update them. Considering the outsourced museum-app company Museum Guides Ltd. another concern appears as the company seems to have been inactive since years while its deficient applications stay online for purchase and download, representing the museum in a poor and incompetent nature to the public.

The issue that is being here discussed is of immense importance for the educational integrity of the museum as a public institution. We seem to have opened the gates to a Trojan horse that revealed itself as a trap and "errorises" our exhibitions. It was for sure wise by the international academy to loosen its grip its interpretational hegemony over the past (Holtorf, 2017, pp. 2-3), still this should not cause to let other forces (investors, trends, external companies) exercise pressure on the *non-mandated* function of museums (Harrison, 2000). The ICOM Code of Professional Ethics states in Article 2.9 "that commercial support and sponsorship may raise ethical issues. The museum must ensure that its standards and objectives are not compromised by a corporate or with a commercial partner. Control over the content of the application and its presentation should remain with the museum or subject experts." (Davis, Trant, & van der Starre, 1996, p. 60) and one cannot expect the European Commission or economic companies to act according to this principle. Intelligent developments in the museum must come from within and must be led by the curator or manager.

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Bibliography

- Alvermann, J. (2012). 75 Jahre Neanderthal Museum. Mettmann: Neanderthal Museum Foundation.
- Alvermann, J. (2016). Mobile Media in the Museum Space: the Example of the Neanderthal Museum's App "Neanderthal+". *Proceedings of the 2016 ACM International Joint Conference on Pervasive and Ubiquitous Computing* (pp. 1509-1512). New York: ACM.
- Amsterdam, N. (2019, May 30). *Solutions: Museums*. Retrieved from New Amsterdam: http://newamsterdam.pl/en/rozwiazania/muzea/
- Ariese-Vandemeulebroucke, C. E., Boom, K. H., Mol, A. A., & Politopoulos, A. (2017). *The Interactive Past: Archaeology, Heritage & Video Games*. Leiden: Sidestone Press.
- Brock, D. C. (2006). *Understanding Moore's Law: Four Decades of Innovation*. Philadelphia: Chemical Heritage Press.
- Chowaniec, R. (2017). *Archaeology for Everyone: Presenting Archaeological Heritage to the Public in Poland.* Warsaw: Institute of Archaeology Press.

- Colomer, L. (2019). Stones, Books and Flags: Born and the Role of Archaeological Heritage Management under the Barcelona Model. European Journal of Archaeology, 22(1), 111-130.
- CSES. (2010). Study on the Contribution of Culture to Local and Regional Development: Evidence from the Structural Funds. Kent: Centre for Strategy & Evaluation Services.
- Davis, B., Trant, J., & van der Starre, J. (1996). *Introduction to Multimedia in Museums: A report by the International Council of Museums*. The Hague: CIDOC Multimedia Group.
- Economou, M. (1996). The Euesperides Project: Design and Evaluation of a Hypermedia Program for an Archaeological Exhibition. *Archeologia e Calcolatori*, 1105-1115.
- Economou, M. (1998). The Evaluation of Museum Multimedia Applications: Lessons from Research. *Museum Management and Curatorship*, 17(2), 173-187.
- European Commission. (2011). *On the Digitisation and Online Acessibility of Cultural Material and Digital Preservation*. Brussels: European Commission.
- Harrison, J. (2000). Outsourcing in Museums. *International Journal of Arts Management*, 2(2), 14-25.
- Hoffmann, K., Emele, M., & König, V. (1999). Vom Diorama zur virtuellen Realität. *TenDenZen Jahrbuch* (VIII), 31-40.
- Holtorf, C. (2017). *The Archaeology of Time Travel: Experiencing the Past in the 21st Century*. Oxford: Archaeopress.
- Hucklenbruch, S. (2019, May). Fragebogen für Museen im Kontext: Multimediale Ausstellungen. (B. Hanussek, Interviewer)
- Kobielska, M. (2017). *Difficult Issues: ICOM International Conference Proceedings* (pp. 105-115). Sweden: ICOM Deutschland e.V.
- Lukasch, B., & Hein, H.-D. (2012). QR-Codes, Apps und Tablet-PCs: Eine neue Technikwelle rollt übers Land sollten ihr die Museumstüren geöffnet werden? *Mitteilungen des Museumsverbandes in Mecklenburg-Vorpommern e.V.*, 21, pp. 19-22.
- Meskell, L. (2013). A thouroughly modern park: Mapungubwe, UNESCO and Indigenous Heritage. In A. González-Ruibal, *Reclaiming Archaeology: Beyond the Tropes of Modernity* (pp. 244-257). Oxon: Routledge.
- Olsen, B., Shanks, M., Webmoor, T., & Witmore, C. (2012). *Archaeology: The Discipline of Things*. California: University of California Press.
- Pergamon Museum Guide Reviews. (2019). Pergamon Museum Guide, Berlin.

 Retrieved from Google Play:
 https://play.google.com/store/apps/details?id=air.com.perg.berlin.vusiem&hl=en
- Preucel, R. W., & Mrozowski, S. A. (2010). *Contemporary Archaeology in Theory: The New Pragamatism* (2nd Edition ed.). Oxford: Willey-Blackwell.
- Reinhard, A. (2018). Archaeogaming: An Introduction to Archaeology in and of Video Games. New York: Berghahn Books.
- Shapiro, M. S. (1990). Museum Education. In M. S. Shapiro, *The Museum: A Reference Guide* (pp. 167-197). London: Greenwood Press.

- Stobiecka, M. (2018). Digital Escapism: How Do Objects Become Deprived of Matter. *Journal of Contemporary Archaeology*, *5*(2), 194-212.
- Tilden, F. (1977). *Interpreting Heritage* (3rd ed.). Chapel Hill: University of North Carolina Press.
- Trigger, B. G. (2006). *A History of Archaeological Thought* (Vol. 2). Cambridge: Cambridge University Press.
- Twenge, J. M. (2017). *iGen: Why Today's Super-Connected Kids Are Growing Up Less Rebellious, More Tolerant, Less Happy and Completely Unprepared for Adulthood and What That Means for the Rest of Us.* New York: Atria Books.

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