

Museum: A Culture of Copies

“A good copy is worth a hundred times more than a poor original.”

From “A Museum of Copies” in

Bulletin of the American Art-Union 1851

As affordable 3D printing has been launched, the museum community has reacted emphatically. At professional gatherings firms offering their 3D printing technologies figure prominently, and museum association websites offer articles, discussion and advice on 3D printing. The paradox is obvious: museums are commonly described as storehouses of the real, authentic, material object, but are now eagerly embracing the new copying technologies.

In order to unfold this paradox, we will address key questions in contemporary museological discourse and practice: How does digitization change the place of museums in society, the status of objects and collections, the role of visitors, and the work of museum practitioners? How can these changes in new reproduction technologies help us pose new questions to the history of museums and collections? Through an interdisciplinary humanities project, closely connected with museum practice, we will address the questions from a historical and contemporary perspective. Cutting across current debates, we will offer, we believe, a new take on debates about museums, digitization and authenticity: We will follow copies, and the practice of copying, in the museum as it has happened over a period of three centuries, employing historical findings to theorize the digitization processes of today. The contention is that copying is at the basis of museum practice and that new copying technologies and practices have been taken up and developed in museums since their inception. Alongside this, forgery and fakes, copies and imitations, have occupied researchers and the public. Copying practices might be seen as both subverting and constituting collections and museums – the variegated forms these practices take form the material to be investigated by this project.

The project is based at the University of Oslo/Institute of Cultural Studies and Oriental Languages (IKOS) collaborating with the Norwegian Museum of Science and Technology, Telemark Research Institute and University of Copenhagen/Royal School of Library and Information Science, in addition to a network of Nordic and international researchers.

Background and status of knowledge

Digital media have received a mixed reception within museums and the study of them, provoking debates which have produced binary oppositions: the original versus the copy, the material versus the immaterial, the real versus the virtual, and the authentic versus the inauthentic. In recent years, these oppositions have been critically scrutinized, and much that was once taken for granted about museums, their content and their collection practices is now subject to debate.¹ These debates are central to our understanding of museums and their objects: it seems that objects lose their status and value, even while digitization allows museums to free themselves from the physical burden of their ever-increasing collections.

The historian Steven Conn asked in a recent book of the same name: Do museums still need objects? Conn’s book was welcomed enthusiastically both by museum staff and by museology scholars, who recognized that objects had become gradually less important in museums, and increasingly so with the advent of the World Wide Web. Whereas the investigation of objects, and their public display, was the main preoccupation of all museums around 1900, one hundred years later, objects seem relegated to the margins, it is claimed.²

¹ See esp. R. Parry, *Recoding the Museum: Digital Heritage and the Technologies of Change*, London 2007, and F. Cameron and S. Kenderdine, *Theorizing Digital Cultural Heritage: A Critical Discourse*, Cambridge 2007. For architecture and related fields see the interesting discussions in K. Gundersen and M. Lending (eds), *Kopi & original: Inversjoner i opprinnelsesteningens historie*, Oslo 2011.

² S. Conn, *Do Museums Still Need Objects?* Philadelphia 2009.

The museum philosopher Hilde Hein has similarly observed that museums are moving from objects to experience.³ These scholars point to the diminishing value of museum objects, especially in exhibitions, and a concurrent rethinking of what authenticity might be. Another research tradition with a long pedigree is the interrogation of fakes and forgeries, and recent discussions seek to establish why and how the origin and originality of museum objects matter.⁴ As such authenticity and originality have been at the very centre of museum practices and research recently.

One of the most cited and discussed authors in discussions on museum and copies is Walter Benjamin, centring on his concept of the aura. This term has been used to emphasize two very different ways of thinking about museum objects and authenticity. Either it is used to emphasize aura as the essential property of the museum object, or it is used to hail the way that reproductions free the object – and the museum visitor – from the burden of history and tradition, leaving the objects open to reinterpretation and appropriation by new groups through practices of reproduction. Both these interpretations, we will claim, leave the connection between aura and the authentic museum object uncontested.⁵ New ethnographic research, especially on conservationist practices, has contributed to moving the discussion on authenticity away from properties of the object on the one hand, or the cultural meaning attributed to them on the other, arguing that “in the context of conservation practice, authenticity is neither a subjective, discursive construction nor a latent property of historic monuments waiting to be preserved. Rather it is a property that emerges through specific interactions between people and things.”⁶

This is an inspiring approach to our project, where a close study of practices will enable us to explore how authenticity and originality is produced. For us the question is how this insight might throw new light on historical museum practices as well as on how new copying technologies are appropriated by museums today. We believe that focusing on copying might help us do this.

Two idiosyncratic but highly inspiring books inform our understanding of how pervasive copying is in modern societies, *The Culture of the Copy* by Hillel Schwartz and *In Praise of Copying* by Marcus Boone. The latter argue “that copying is a fundamental part of being human, that we could not be human without copying, and that we can and should celebrate this aspect of ourselves, in full awareness of our situation.”⁷ These authors evoke the *cornucopia*, the horn of plenty, as they address the abundance of copies and copying practices in human life. They show how copies came to be viewed as the negative other of originality and authenticity; by flipping the coin they can address the copy again in its literal meaning as abundance and plenitude. For our project this is a starting point for investigating key moments in museum history, as we identify the centrality of copying practices in collection and museum work, we also need to understand how and when these practices came to be denigrated.

Further, we find media theories important for thinking about the ways that collections and museums change historically as mediating technologies, especially as articulated in the work on remediation by Bolter and Grusin in *Remediation: Understanding New Media*.⁸ They claim that historically new media have oscillated between *immediacy* and *hypermediacy*, between *transparency* and *opacity*. Museums, so it has been theorized convincingly, could be

³ H. S. Hein, *The Museum in Transition: A Philosophical Perspective*, Washington 2000.

⁴ M. Jones (ed.), *Why fakes matter: Essays on problems of authenticity*, London 1992. For a discussion of the changing role of copies in art history see *Visual Resources* 15, no. 2, 1999, Special Issue, The Culture of the Copy.

⁵ See M. B. Hansen, Benjamin’s Aura, *Critical Inquiry* 34, no. 2, 2008.

⁶ S. Jones and T. Yarrow, Crafting authenticity: An ethnography of conservation practice, *Journal of Material Culture* 18(1). 2013.

⁷ M. Boone, *In Praise of Copying*, Harvard 210, 7.

⁸ Cambridge, Mass. 1999.

seen as a prominent example of such a medium. This entails, according to this theory, that museums are sites for remediation, where an immediate version of reality is presented, working continuously to overcome the logic of hypermediacy, i.e., not to become visible as a medium. Not only digitization practices, but also earlier copying practices in collections and museums, can thus be studied as oscillations between immediacy and hypermediacy.

On this theoretical backdrop we will attempt, by examining a wide range of cases, to query the notion that some original or authentic object *is* or *was* the centrepiece of museums. We hope to broaden ongoing discussions on authenticity by asking in what form, and through what means, museum objects have come to exist. By moving the focus from the status of the museum object to the processes of making museum objects, we believe we can gain new insights not only into how museums work, but also into what exactly might be considered new about digitization, and what can be seen as a continuation of older museum practices.

Approaches, hypotheses and choice of method

An important aim is to develop new theories of the copy in relation to the museum, and to develop new perspectives on the history of collections and museums. To this end we will apply a wide notion of “the copy” and “copying”. Copies, in our understanding, can be replicas, visual depictions, models, reproductions, 3D models, casts, and so on. Copying as a verb refers to a broad range of practices, and one aim is to interrogate and analyse this variety. By focusing on the modes of copying, the different practices will be made visible in their variability, contributing to a more nuanced understanding of the contexts for discourses on the original, authentic, and real object in museums. This allows us to ask, through what modes of copying have objects been made present in museums; through what museum practices, and how have these practices been taken up and developed as central, or peripheral, by museums? We have identified four main museum practices through which objects are produced:

Collecting practices are central to the functioning of the museums. Collecting can involve verbal description, drawing, photographing, and sound-recording – all forms of copying that represent an original object that is not moved to the museum, but represented there. These practices have existed alongside the actual move of objects into the museum.

Exhibiting practices entail representations of an outside world in the form of wall texts, miniature models, as well as replicas, all means of making copies of something that is presented in museums as *models of something*.⁹ Again these forms of presenting have existed alongside the presentation of some kind of “real object”.

Pedagogical practices are tightly connected to exhibitions, but there is a particular form of these pedagogical functions tied to presenting paintings, drawings and plaster casts that are further copied, thus serving as *models for* particular arts and crafts.

Ordering practices. Collections and museums have also functioned as totalizing knowledge systems, where the continuous series or the complete system has been an ambition. Different modes of copying have been important for filling in and totalizing a truthful representation of the “real” world (be that natural or cultural).

The project situates itself at the intersection of established disciplines and research fields, as we firmly believe that interdisciplinarity forms the best site for the understanding of the different practices. Archival historical work, ethnographic fieldwork, and cultural analytical and interpretative procedures will be used in the different case studies.

A main common resource for this work is to be found in the turn to practice in the humanities and social sciences over the last two decades, and of special importance are versions of actor-network-theory as developed by Bruno Latour, John Law and Annemarie Mol.¹⁰ These open up for studies of objects, not as essential unities, but as embedded in and

⁹ D. Handelman, *Models and Mirrors: Towards an Anthropology of Public Events*, New York 1998.

¹⁰ J. Law, *After Method: Mess in Social Science Research*, London 2004; B. Latour, *Reassembling the Social*, Oxford 2005.

enacted in practices. The notion of enactment, which is developed by Annemarie Mol, is indebted to performativity theory, but with an emphasis on material qualities of performances.¹¹ Enactment is a concept that can allow us to see copying practices as taking place in relations that are simultaneously material and social. This move can lead us beyond questions of whether authenticity is a property of the museum object or a culturally attributed quality, and bring us to the question of how museum objects are produced as cultural and material artefacts.

Finally, we share a common ground based on historical epistemology, as developed by Lorraine Daston and Hans-Jörg Rheinberger, and in the slightly different form of historical ontology by Ian Hacking. Of specific importance are their ambitions to historicize not only the content of thoughts, but the very way of thinking, not only the meaning concepts, but the very way of making concepts. Modes of attention, description and observation have been historicized in surprising and innovative ways by these scholars, paving the road, we contend, for historicizing copying in museums through similar modes of analysis.¹²

The project plan, project management, organization and cooperation

The project will be organized in four work packages (WPs) enabling us to have tight coordination, as well as to develop joint analytic perspectives that will be present in all subprojects. A main deliverance of each WP (except 1) is a joint event or publication where the key issue of the respective WP is addressed by all participants in relation to their projects. Thus, project participants will take part in all work packages. The project is based on national, Nordic and international cooperation, and the participants are all well-known to the core group, based on previous research cooperation. The work packages are as follows:

WP 1: *Project organization.* This WP will administer the cooperation of the other WPs and the participants. Main deliverance: Overall organization, hiring PhDs and coordinating the meetings of WP leaders every second month (either virtually or corporally). Further, this WP is responsible for the production of an anthology. WP leader: Brita Brenna.

WP 2: *Theorizing copies* will be an integrative work package with responsibility for organizing research seminars and workshops. By organizing the theoretical work as a work package we ensure that theorizing will be prioritized, and that the development of new theory becomes a collective project. Main deliverance: A special issue for an international journal will be produced. WP leader: Anne Eriksen.

WP 3: *Practising copies* will be responsible for convening contact points between the project and relevant partners in the museum sector, with the explicit goal of securing input from and communication with actors there, perhaps in order to adjust research questions in the SPs. Main deliverance: A conference inviting all relevant stakeholders will be organized at the Norwegian Museum of Technology and Science. WP leader: Olav Hamran.

WP 4: *Digitizing copies.* In this WP digitization will be discussed on the basis of historical and analytical research by the project participants as well as invited guests. This WP will ensure the relevance of our research questions to the digitization debates. Main deliverance: A conference where all subprojects address questions concerning digitality will be held at the University of Copenhagen. WP leader: Hans Dam Christensen.

Institutions and people

Cultural History and Museology at the Institute for Culture Studies and Oriental Languages at the University of Oslo (IKOS) is the leading environment for research and education in

¹¹ See especially for a discussion of this concept, A. Mol, *The Body Multiple: Ontology in Medical Practice*, Duke 2003.

¹² H.-J. Rheinberger, *On Historicizing Epistemology: An Essay*, Stanford 2010. L. Daston and P. Gallison, *Objectivity*, Brooklyn 2007.

museum studies and cultural history in Norway. As a priority area of research at the Faculty of Humanities it has resources for developing and maintaining projects and an outstanding record in publication output and PhD supervision.¹³ The project leader Brita Brenna is professor of museology specializing in eighteenth-century collection culture and modern exhibition history; the leader of WP 1, Anne Eriksen, is professor of cultural history with a broad background in cultural heritage, museum and antiquarian studies. Project participant professor emerita Liv Emma Thorsen is located in the same institution and has published broadly on the history of natural history museums and collecting. The PhD positions will also be located at IKOS.

The leader of WP 3 is Hans Dam Christensen, director of the Danish Centre for Museum Research (DCM), and professor of Cultural Communication at Royal School of Library and Information Science (RSLIS), University of Copenhagen. DCM is a virtual centre gathering all university departments in Denmark conducting museum-related research and RSLIS has a specifically strong record in research on museum digitization and digital cultural heritage, integrating information science with humanities.

The leader of WP 2, Olav Hamran, is located at the Norwegian Museum of Science and Technology, a national museum with high visitor numbers and a strong research unit. The project will be able to draw on their central position also in developing digital infrastructure. A second senior researcher, Ole Marius Hylland, works at Telemark Research Institute, a leading institute for cultural policy, cultural economics and museum-related research located in Telemark. Their contributions are vital for the multidisciplinary approach and for asking relevant questions for the museum sector. They will take part in a monthly reading group, workshops/conferences and project publications.

Furthermore, three guest researchers will take active part in the project, Owe Ronström (University of Uppsala), Bodil Axelsson (University of Linköping) and Anne Folke Henningsen (University of Copenhagen). All of them come from outstanding research institutions highly relevant for this project. They will visit UiO for two weeks each year during our project period. An international reference group includes the museologist Sam Alberti, Director of Museums and Archives, Royal College of Surgeons; the biologist and museologist Henry McGhie, Head of Collections, Manchester University; the lecturer in ethnology and historian of early collections Signe Mellemgard, University of Copenhagen; the professor of museology and researcher on art museums and communication Christopher Whitehead, University of Newcastle; and the professor of History of Science at the Humboldt University, Anke te Heesen. This reference group will be summoned to meet, at least, once a year when the WP main deliverance takes place.

Project and projects

The different subprojects aim to scrutinize different modes of copying, or more specifically different practices where copies were and are made, circulated or consumed. The subprojects all deal with forms of copying, but in very different museums and collections, and in various time periods. From antiquarians collecting in the eighteenth century to the curating of personal exhibitions on the net in the twenty-first century, from copying practices in natural history museums in the nineteenth century to the forging of plaster casts from living people at the beginning of the twentieth century, to name but some of our cases. This broad composition of case studies studying a range of collections and museums as cultures of copies will enable us to compare practices across a wide range of disciplines and material cultures. It will also allow us to address theoretical questions on the nature and future of museums in the age of digital (re)production, with a specific aim – to develop new theory on copying and

¹³ Based on a 2013 evaluation of publication points, successful PhD candidates and research grants, Cultural History and Museology was among the most successful on all criteria and are thus among the prioritized areas of research at the Faculty.

musealization processes on a broad empirical basis. Last, but not least, we consider this broad range of case studies an implicit strength of the project: We are dealing throughout with a museum culture of copies. On the following pages we have chosen to present our cornucopia, to visualize the richness of empirical material we want to synthesize in the overall project, although emphasizing that the intersections between these cases are the sites for innovative theorizing.

Subproject 1, Digging or Drawing? Antiquarianism in Practice (Anne Eriksen)

Antiquarianism was among the subjects encouraged by Bacon and other leading proponents of early modern science. During the seventeenth century it became – as did natural history – based solidly on the new scientific ideals: empirical knowledge founded on reproducible experiment, meticulous observation, and material evidence. However, a barrow, a church or a standing stone with runic inscriptions are not easily collectable items, and antiquarian work long meant copying, drawing, mapping, and making descriptive texts.¹⁴ Moreover, conservation usually meant saving ancient objects or buildings from oblivion rather than from destruction. The items of a collection depended on the truthfulness of the work and the painting, drawing and description carried out by the skilled antiquary. Material evidence and empirical knowledge was largely an outcome of the antiquary's competence and practical skills rather than of the removal of ancient objects. Copying skills were central to the practice of antiquarians, depending on previous copy technologies, but developing new practices. Building on previous research by the applicant, this subproject will investigate the practices of early modern antiquarianism in Denmark-Norway. It will document this rather unknown Norwegian branch of European history of knowledge by following antiquarian practice from the late seventeenth century into the nineteenth, when its role was changed by the foundation of public museums.¹⁵

Subproject 2, Modelling and Making Nature in the Eighteenth Century (Brita Brenna)

Eighteenth-century natural history collections have been studied widely in recent years, resulting in a rich and varied picture of collection and classifying practices, and of the natural history cabinet as being situated at the intersection of scientific, commercial and social activities.¹⁶ This project investigates Norwegian natural history collecting with an emphasis on questions about the modes of representing that took place in collecting, describing and presenting the natural world.¹⁷ The main ambition is to discuss the production and use of models in eighteenth-century collections and museums. The models found in Norwegian collections (of animals, fish, tools and machines, and even of society, will be the core material).¹⁸ One prominent example is the collection of Bishop Gunnerus in Trondheim; here models came into his museum, while journal articles and drawings were disseminated outward. A collection space in Trondheim was a place for the circulation and transformation of representations; a location for presentation and a site for scientific practice, one that required copies, and produced copies in accordance with the various communication networks to which it belonged. How were these copies used and maintained in this and other collections

¹⁴ A. Eriksen, "Intet uden de sedvanlige Leerpotter..." *Antikvarer og fornminner i 1700-tallets topografiske litteratur, Tidsskrift for kulturforskning* 2006 5, 1, pp. 39–55.

¹⁵ A. Eriksen, *Museum: En kulturhistorie*, Oslo 2009; H. Shetelig, *Norske museers historie*, Oslo 1944; A. Svestad, *Oldsakenes orden: Om tilkomsten av arkeologi*, Oslo 1995.

¹⁶ We cannot possibly give a full picture here, but notable works are K. Pomian, *Collectors and Curiosities: Paris and Venice, 1500–1800*, Cambridge 1990. A. MacGregor, *Curiosity and Enlightenment: Collectors and Collections from the Sixteenth to the Nineteenth Century*, New Haven 2007. C. Mordhorst, *Genstandsfortællinger*, Copenhagen 2009.

¹⁷ No comprehensive previous study exists, except for articles by the author, B. Brenna, *Halvannen tekopp av kokosnøttskall, Agora: Journal for metafysisk spekulasjon* 3, 2006:32–52, and the next reference.

¹⁸ See chapters 1–4 by B. Brenna in H. W. Andersen et al., *Æmula Lauri: The Royal Norwegian Society for Sciences and Letters 1761–2010*, Sagamour Beach 2009.

in Norway, and how did the copies travel? This project has a threefold purpose: first, to map the existence of natural history collections in Norway in the eighteenth century, which has not been done before, except for a preliminary study by the author. Second, it will discuss the production of models compared to other forms of representing in these collections. Third, in close collaboration with subproject 1, the commonalities and differences, overlaps and divergences between natural history and antiquarian copying practices and collecting will be subject to scrutiny.

Subproject 3, Caring for Natural Objects – Natural History Fieldwork in the 1800s (Liv Emma Thorsen)

The project will shed light on how the growing interest in nature in the 1800s led to comprehensive fieldwork to collect natural objects, in this case particularly birds. Of special interest regarding the significance of the copy are the recommendations for how the work was to be carried out. The fieldwork will be examined as an increasingly guided and standardized activity, where the aim was to produce comparable specimens.¹⁹ Underlying questions will include who collected the specimens, how the specimens were collected and how knowledge about collecting them was disseminated. *Care* and *manual skills* are key concepts for understanding the logic of the fieldwork in natural history. Care refers to the technologies involved in preserving the specimen, while manual skills are the tactile knowledge about how the natural objects are to be handled. Sources of knowledge about care and skills will be manuals dealing with how natural objects were to be treated so that the specimens could be moved to the collection in the best possible condition. The manuals ensured that the natural objects were collected and preserved so that they could be transformed into specimens according to an idea of the natural history collection, i.e. as contributions to more or less successful copies of authoritative collections. British manuals will be useful for comparison with Nordic manuals. Is a clear transfer between countries discernible, a copying of standards for collection? Birds as specimens give a good illustration of the importance of the copy, tying together the fieldwork, the collection and the illustration. Did the manuals encourage collectors to collect and draw the natural objects based on given parameters? A large number of natural histories used drawings made by collectors in the field as sources. In the words of Yngve Löwegren, the initial large bird collections were books with plates – not specimens.²⁰

Subproject 4, Casting Culture: Copying People (Anne Folke Henningsen)

In the anthropometric projects carried out by European scientists, travellers, collectors, colonialists etc. around the world in the late nineteenth and early twentieth centuries, the making of live-casts in plaster of the bodies of the indigenous peoples and the recording of their voices were a central part. The copies thus produced often came to be part of – and were intentionally made for – archives and museum collections in Europe. This subproject will study the copies of actual people – bodies and voices – at the Ethnographic Collections at the Danish National Museum with particular focus on the practices entailed in production, collection, and exhibition of these specific types of copies with their close connectedness to the bodies of the people they were collected and exhibited to represent: the artifactualization necessary in the process of turning the living bodies into copies for museum representation. The plaster casts were frequently used in exhibitions as a way of bringing the displays to “life” and as part of the representation of ethnographic knowledge in their own right due to their unparalleled accuracy in display of what were considered the typical racial features of specific groups of people. The copying of human bodies for research and display was thus an integral part of the practices of the ethnographic museums. Due precisely to their close

¹⁹ S. J. J. Alberti, Objects and the Museum, *Isis*, 96, 2005:559–571.

²⁰ Y. Löwegren, Forna tiders djurkonservering, *Kring Malmöhus: Malmö Museums årsbok 1978*, 2.

connectedness to the bodies of actual people – and the often quite brutal practices involved in this artifactualization of humans – the live-casts are now mainly relegated to the storage facilities of the museums alongside the voice recordings and considered to be controversial in exhibitions. These copies and the practices through which they were produced and exhibited as museum objects thus provide an interesting starting point for reflections around cultures of copying.

Subproject 5, Reconstructing Originality (Olav Hamran)

In the 1940s the Norwegian Museum of Science and Technology began to document water mills, sawmills, ironworks and other sorts of old mechanical and technical objects and structures. Various techniques and methods were used: film, photos, maps, and sketches, models of different sorts, textual descriptions and portrayals. Objects and buildings were also renovated and restored, and also moved and rebuilt (and then re-documented). In this way different copies and collections of various objects were formed. A Historical Technology Archive was established. Furthermore, models and other copies formed central parts of the museum's exhibitions. This diverse copying-collecting-exhibiting work continued up to the 1980s. In this period the ambition and purpose of the documenting and copying practices varied and changed. In the first decades, the focus was on technology in itself; on construction and functionality. Later the museum was influenced by the Industrial Archaeology field as it developed in UK, by the ongoing documentation of the Swedish iron industry and by the activities within The International Committee for the Conservation of the Industrial Heritage (TICCIH). In this period the focal point, and the copying practices, changed. Social aspects such as living conditions or working class culture became matters of interest in addition to function and construction. The project will focus on the correlation between the copies and the real objects – in the collections, and in the exhibitions.²¹ The evolution and changes of purpose and copying practices will be studied within an institutional framework. What sorts of copies were made, how were they made, and for what?

Subproject 6, Original, Variant, Parallel, Cover, Copy: Folk Music's Way In and Out of the Museum (Owe Ronström)

Folk music is a phenomenon that blurs the notion of copy/original in interesting ways. The collection of folk music began as a quest for the original and authentic voice of the folk in the form of text. Large collections of such texts compiled in the late nineteenth century pointed to variability as folk music's form of existence, which called for new ways of approaching the music, as "variants" or "parallels". At the concrete level the collections show a remarkable variation. But through distancing techniques, such as classification, systematization and description, a more abstract and homogeneous underlying object came into sight, the folk and the nation. From the early 20th century recordings became a means of collecting folk music, which induced a shift of focus from texts to performance practices, together with a shift in methods of handling and classification of the collected items. The public appearance of recorded folk music from the 1950s induced the idea of the "cover", and with the massive folk music revival in the 1970s, and the introduction of the music cassette, copying of old recordings from iconized fiddlers and folk singers became widespread. A decade later, young musicians began to compose new songs and dance tunes in traditional style, foregrounding variability as folk music's primary form of existence. From the 1990s digital media opened new possibilities for collecting, archiving and for making recordings publicly accessible. Throughout these different phases, songs and tunes have moved in and out of museums as originals, variants, parallels, covers and copies. The study aims to follow such flows, focusing

²¹ G. N. Swinney, What do we know about what we know? The museum 'register' as museum object, in S. Dudley et al. (eds), *The Thing about Museums: Objects and experience, representation and contestation*, London 2012.

on the circulation of the music, the interaction with museum practices, how new technologies have affected the interface of museums and archives; and how these flows have challenged the understanding of the object, the archival collection, and the logics of the museum.

Subproject 7, The Art of Copying Art (Hans Dam Christensen)

Within the gift shop of an art museum one can find postcards, magnets, posters, etc., all comprising reproductions – or copies – of the art objects held in the museum itself.²² In earlier days, plaster casts of famous sculptures often were an integrated part of the museum collection; at a much later time, art museums quickly became involved in the development of digital platforms for museum mediation. Today, more and more museums are included in Google's Art Project, which not only makes digital reproductions of their art objects increasingly accessible, but also allows for virtual tours in the physical settings of the museums. Contemporary digital representations increase the number of copies, but historically plaster casts, as well as autographic and photographic reproductions, have always been present in the practices and discourses of art history; when speaking, writing and reading about art, then and now, the art object is for the most part present through copies. Against the backdrop of this historical practice of reproduction in art history, this project will investigate the impact of museum copies on understandings of physical art objects. How is the importance of authenticity extrapolated (and reproduced) in the maelstrom of, for instance, digital copies? The case studies will be motivated by the growing focus on conservator departments in digital museum mediation (e.g. the National Gallery of London's *Beneath the Brushstrokes* and the National Gallery of Copenhagen's *Visiting the Conservator*) as well as digital mediation projects which enter into the details of art objects (e.g. the Louvre's *Œuvres à la loupe*)

Subproject 8, Cultural Policy and Digitization (Ole Marius Hylland)

Digitized museums challenge in a profound way the museums' notions of authenticity, as well as the dichotomy between original and copy.²³ An important question is consequently: What replaces claims for authenticity as museum collections are made up of digital representations? What kind of legitimacy can be claimed for digital or digitized museums? This subproject will study the relations between the digitization of Norwegian museum collections and the development of a digital cultural policy. The main question is: *To what degree do digital democracy and digital industry replace the role of a traditional cultural policy?* From a cultural policy perspective,²⁴ the digitization of museum collections can be viewed as two different kinds of redistribution of power. On the one hand, digitization has been judged to be a tool for cultural democracy – making cultural heritage widely accessible, making artefacts and objects matter more to more people.²⁵ On the other hand, digitized cultural heritage has also become a focal point for global digital companies, with Google being the primary example. There is a movement towards greater public accessibility and participation, as well as increased collaboration with private companies. Giving more influence to the public and/or to the digital industry will necessarily and consequently affect the influence of traditional

²² D. Carrier, *Museum Skepticism: A History of the Display of Art in Public Galleries*, Durham 2006. H. D. Christensen, The repressive logic of a profession: The use of reproductions in art history, *Konsthistorisk tidsskrift / Journal of Art History* 4, 2010:200–215; T. Fawcett, Art Reproductions and Authenticity, *Art Libraries Journal* 22, 1997:20–25; D. Karlholm, Reading the virtual museum of general art history, *Art History* 3, 2001:552–577; R. S. Nelson, The slide lecture, or the work of art 'history' in the age of mechanical reproduction, *Critical Inquiry* 3, 2000:414–434.

²³ Cf. F. Cameron and S. Kenderdine, *Theorizing Digital Cultural Heritage*, Cambridge: MIT Press 2007.

²⁴ Following e.g. the perspectives of D. Hesmondhalgh, Media and cultural policy as public policy, *International Journal of Cultural Policy* 11:1, 2006:95–109, K. Healy, Digital Technology and Cultural Policy. Working Papers 19, 2001, <http://www.princeton.edu/~artspol/workpap/WP19%20-%20Healy.pdf>, and Jenkins, H. *Convergence Culture. Where Old and New Media Collide*. New York 2006.

²⁵ For a critical view of this development, see A. Keen, *The Cult of the Amateur*, New York 2007.

cultural policy on the other hand. This project aims to study how this process has been developing in the Norwegian museum sector during the last decade, using two different cases: (1) The development of Digitalt Museum – the national digital museum portal; (2) The implementation and role of Google Art for Norwegian museum collections. These two cases will highlight both processes and results in the digitizing development of the Norwegian museum sector.

Subproject 9, Digital Collections and Individual Popular Collections (Bodil Axelsson)

Under the banner of participation and access, initiatives like Google Art, Europeana and Digitalt Museum project digital representations of museums objects and art works into a general excess of online images circulated and consumed in wider circles. These initiatives invite people to create online collections by saving and tagging images in files. Invited to connect and engage with cultural heritage from more than one institution, museum audiences are here approached as curators of individualized collections. Here institutions seem to rely on digital representations having the power to engage emotions, perceptions and values, that they have the capacity to take on new meanings.²⁶ At the same time, as pointed out by Ross Parry, although all data presented online clearly are virtual, asking the viewer to imagine the real, the museum's online space consolidates its position as a trusted source of expertise thanks to an "Institution-based trust".²⁷ To explore emerging relationships between people, institutions and digital representations, this case study will use an ethnographic approach, including online interviews. It will start from Digitalt Museum and explore the ways in which users perform such curatorial practices as collecting, archiving, categorizing, organizing, synthesizing and exhibiting;²⁸ if and when they put together individual collection on line, and the cultural values and beliefs at stake in popular engagements with online collections. The study will draw upon previous research on collecting as well as on writings on the epistemology and ontology of digital objects.²⁹

The PhDs will be posted as open calls related to the overall project, but we are especially interested in the following themes: (1) The art museum as a model museum and the use of copies in art history, with an emphasis on the museums initiated by Professor Lorentz Dietrichson in Christiania in the second half of the nineteenth century; (2) From catalogue cards to digitization. Especially the transfer from analogue to digital computing in museums in Norway; (3) 3D as museum technology and the role played by museums in generating the demand and the technological solutions.

Communication, gender and ethics

The relevance for societal issues is dealt with above, but the relevance and necessity of extended communication with the museum and heritage sector should not be underestimated; we have thus made the interaction with the sector a responsibility of WP 3. A gender balance will be sought throughout the project, and ensuring this as well as considerations of ethical perspectives will be a responsibility of WP 1. To reduce the environmental footprints of the project virtual meetings will be favoured when appropriate.

²⁶ F. R. Cameron, Beyond the cult of the replicant – museums and historical digital objects, in Cameron & Kenderdine 2007.

²⁷ R. Parry, The Trusted Artifice: Reconnecting with the Museum's Fictive Tradition Online, in K. Drotner & K. C. Schröder (eds), *Museum Communication and Social Media: The Connected Museum*, London 2013.

²⁸ Liu, S. B. Socially Distributed Curation of the Bhopal Disaster. In E. Giaccardi (ed.) *Heritage and Social Media: Understanding Heritage in a Participatory Culture*, London 2012.

²⁹ S. Bayne, J. Ross and Z. Williamson, Objects, subjects, bits and bytes, *Museum and Society* 7(2), 2009:110–124. F. R. Cameron, Object-oriented democracies, *Museum Management and Curatorship* 23 (3) 2008. P. F. Marty, and K. Burton Jones *Museum informatics: People, information, and technology in museums*, New York 2008. S. M. Pearce, *On Collecting*, London 1995; S. Pearce and P. Martin, *The Collector's Voice*, Vol. 4, *Contemporary Voices*, Aldershot 2005.