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# Sketches for a methodology on exhibition research

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Abstract

The past decades have witnessed a rich debate on museum reformation, including their structures and priorities along with increasing visitor numbers. In the same period, it has been found that research in museums has lost ground, and the traditional mandates of the museum – collecting, researching and displaying material culture – seem to have disintegrated. Facing a sort of identity crisis, museums are now being called upon to respond to the challenge. A promising way out, suggested by a wide range of scholars, points to practices of exhibition making as research, which embrace the epistemological value of engaging with objects and collections. Following up on these studies, in this chapter I suggest a method for museum research, slightly different from the academic model. In this regard, the concept of *understanding* as an alternative to *knowledge* (Arnold, 2016) seems fruitful. The method aims to strengthen museum work through an experimental exhibition practice where research functions as an integrative force. The concept of the ancient "thing" (meaning a gathering) is central in the method. The proposed method will allow museums to establish a distinct position in doing research and producing a unique kind of knowledge/understanding stemming from the amalgamating process that combines academic and artistic research in a multidisciplinary encounter with objects, texts and space and people.[1]

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Historically, museums have been sites of research, teaching,and repositories, alongside their mandates to preserve and display material culture. The development of academic disciplines and scholarly knowledge has in many ways been the outcome of intense efforts to collect, describe, map, classify, store, exchange and exhibit objects (Brenna, 2016). This status has clearly changed over time, as museums have undergone an evolution from their former authoritative role as institutions of enlightenment and education of the public (Bennet, 1996), to increasingly interdisciplinary places where the tradition of keeping of objects and the values associated with connoisseurship and expertise

[1]This chapter is a result of several years of discussions related to the question of research in museums at the Norwegian Museum of Science and Technology. Some preliminary ideas emerged at the conference "Museale og arkivale praksiser", University of Oslo, 29– 30 November, 2012. My thanks are due to all of my colleagues with whom I have discussed and been inspired by, and encouraged to continue this, indeed, collaborative endeavour. The research for this chapter is partially supported by the Arts Council Norway under the programme on the societal role of museums ("Museenes samfunnsrolle"). Regarding the present text, I am immensely grateful to the museum librarian, Relsen Larsen, for her support, Olav Hamran for reading and commenting on the text, and Ketil Gjølme Andersen and Ageliki Lefkaditou for their involvement in the whole experiment, insightful comments and perspectives, and compassionate help with the English language. Thanks also to the anonymous reviewer, for their insightful comments and engagement with the text.

have slowly lost ground to a focus on exhibitions and interpretation (Arnold, 2015). Societal expectations and demands as well as political priorities have also urged the museums to be socially relevant and inclusive (Anderson, 2008). In this process, research has lost ground. Facing a sort of evolutionary crisis, museums are then called upon to respond to the challenge of how to serve their audiences and conduct their public role, while at the same time being able to collect, preserve and research collections and objects.

Especially during the last decade, the question of how to re-invigorate research in the museum has been widely addressed in the literature. It seems beyond question that museums are different from and carry other potentials than universities and research institutes. Due to their organisational structure and multiple mandates and obligations, highly specialised research aimed for scholarly publications is often seen as incompatible with museum work (Cavalli-Björkman and Lindqvist, 2008; Eriksen, 2010). However, museums have the advantage of having objects and collections, and expressing new knowledge by engaging with materiality and space. As Steven Conn suggests, museums are "places for ideas–places where knowledge is given shape through the use of objects and exhibitions. … uniquely situated at the intersection of objects, ideas, and the public space" (Conn, 2010, pp. 5–6). Still, the question about what research in museums is or should be nor what knowledge means in this context has no straightforward answer.

This chapter presents sketches for a methodology on museum specific research through exhibition-making that combines academic and artistic research and means. The proposed research method resembles academic research within the humanities in many ways, such as regarding themes, research questions, theoretical perspectives and interpretative methods. On the other hand, it is nourished by the artistic process of unifying ideas with materials into a whole for an aesthetic experience. However, what this method aims for is a third position of collaborative research that unifies the academic approach (that is, reliance on texts) of the museum curator and the more experimental practice involving conceptual art and scenography (spatial thinking) in a practical and inclusive manner that is based on the museum's own premises or assumptions. The method is object focused, and the process is organised to integrate the main parts of museum work. As will be demonstrated, the suggested research method, henceforth the LAB-method, is a multidisciplinary method of gathering, by simultaneously mobilising *objects*, *texts*, and *space* and utilising the fact that museums are public arenas with a unique possibility to engage with their audiences.[2] The common goal of creating an experience of the researched knowledge, insights and perspectives in space – which is obviously different from writing a text – is the glue that holds everything together. The resulting exhibition should ultimately be an amalgam of researched knowledge and aesthetic experience.

[2] LAB is our short term for laboratory. Capital letters are used to underline that it is a particular practice and method at The Norwegian Museum of Science and Technology.

The research can, thus, be understood as a process of amalgamation – the unifying of ideas, perspectives, insights and facts that evolves through the multidisciplinary engagement with objects, texts, space and people – resulting in an exhibition for visitors to experience both intellectually and through their bodily senses. A pertinent question then is, what kind of knowledge is this? As this chapter is mainly concerned with the need for a museum specific research method and demonstration of a potential practice, a full epistemological discussion will not be pursued here. However, the chapter starts with a brief discussion on exhibition research and knowledge within the museum context, to substantiate the need to think through what knowledge is or can be in museum exhibitions. A promising way ahead could be to side with the view that exhibitions, instead of being focused on research knowledge and information, should be concerned with giving their audiences a chance to explore, wonder and reflect in order to reach *understanding* (Arnold, 2016). Following this, the LAB-method will be thoroughly demonstrated and explained by taking the reader through the concrete case of the making of the exhibition "Grossraum − Organisation Todt and forced labour in Norway 1940−45" (which opened in February 2017 at The Norwegian Museum of Science and Technology). Multidisciplinary collaborative practices do not come without challenges, as will be discussed at the end.[3]

## Rethinking research and knowledge in times of an evolutionary crisis

The former director of the British Museum, Robert Anderson, seems to be right in that the pressure from the world around museums reduces their capacity to carry out their independent research (2008).[4] In times when visitor numbers are increasing, the traditional mandates of the museum – collecting, researching and displaying material culture – seem to disintegrate.

Research, once interconnected with all museum tasks, has now emerged as a "standalone function" (Poulot, 2013, p. 20). For many museums there remain hardly any time and resources to carry out research. The question of how to re-install research in museums has for many years been of concern to museum professionals and cultural politicians, as well as historians, philosophers and museologists. The 2007 symposium at the Royal Swedish Academy of Sciences in Stockholm was promoted with the motto, "Research generates exhibitions which in turn generate research" (Arrhenius, Cavalli-Björkman and Lindqvist, 2008, p. 9). Contributors to the volume published after the symposium argued for and exemplified the museum's potential for scholarly research through exhibition work, by utilising the material sources in museums, and through processes that combine academic scholars and

[3] Organisation Todt (1938–1945) was semi state-owned civil and military engineering organization answering to Hitler only. It was a tool for the expansion plans of the Third Reich, to establish a large space under German control, referred to as "das Grossraum". OT controlled a workforce of 1,5 million people. The vast majority were forcibly recruited (Andersen, 2017).

[4] Other inquiries into issues of academic research in museums show that research that has been going on since the early 1980s takes different forms and is experienced differently by museums. For example, the situation for many Natural history museums is quite different (see Anderson, 2008).

museum curators. These and other studies have given us ample insights into the potentials of museum research, in particular as they relate to the *epistemic value of objects* and *exhibitions as generators of knowledge* (see e.g., Macdonald and Basu, 2007; Lehmann-Brauns, Sichau and Trischler, 2010; Thomas, 2010; Dudley et al., 2012; Herle, 2013; Ulrich et al., 2015). Why then, are we still stuck with the question of how to do research in museums?

We still seem not to have a substantial answer to the main question on the agenda in Stockholm: "How can the research of the museum be combined with their public mission?" (Brummer, 2008, p. 215). From a managerial perspective, the problem can be related to the decrease in public funding and the reorganisation of museum policies from collection work towards serving our audiences, followed by a changing role for the curator, as well as a dramatic decline in curator positions (see Anderson, 2008). However, what might be an even bigger problem is that this perspective is based on a certain view on knowledge production in museums that relates research to a standard that may not be compatible with the multiple museum tasks, the epistemic value of collaborative work with objects or the museum's societal role.

Although it has been argued convincingly that collaborative work with objects leads to new knowledge and thus thematic exhibitions could stand as true scientific publications (see e.g., Fleming, 2010; Schnalke, 2010), an issue emerges when academic evaluation criteria infiltrate the discussion. Compared with academic standards, museum work and exhibitions have not been assigned the status of researched knowledge (see e.g., Lehmann-Brauns, Sichau and Trischler, 2010). Within academia, research requires to be peer-reviewed and mainly published as a text (Trischler, 2008, p. 64). The problem with having exhibitions accepted as research relates to the general conceptualisation that research knowledge should be "transferable and communicated unambiguously" (Niedderer, Biggs and Ferris, 2006, p. 4).[5] Yet, exhibitions cannot communicate knowledge unambiguously without, at the same time, compromising what has been argued to be their most valuable contribution as places for the public to experience, explore, wonder and reach life enhancing insights (Arnold, 2016). Following up on the influential anthologies by the Max Planck Society (Lehmann-Brauns, Sichau and Trischler, 2010) and the Stockholm symposium (Arrhenius, Cavalli-Björkman and Lindqvist, 2008), museums should indeed keep working on bridging the gap with the universities, but they should not do this by pushing their exhibition practice in the direction of texts. As Macdonald and Basu argue, exhibitions can generate and display knowledge that is more open to different readings and interpretations in a wider frame of representations by involving and assembling various "actants", such

[5]Attempts have been made to construct "research exhibitions" (meaning exhibition that present and record research outcomes) with a thorough contextual framing to secure an authorial interpretation (as in, ideas communicated unambiguously) and even peer-reviewing of these shows. The result did not turn out to be very successful (see Rust and Robertson, 2003; Niedderer, Biggs and Ferris, 2006).

as "visitors, curators, objects, technologies, institutional and architectural spaces" (2007, p. 2). Rather than trying to mimic academia, museums should explore ways of tapping their own research potential.

Anita Herle's reflection on the exhibition "Assembling bodies: Art, Science and Imagination"[6] is among the very few attempts to explicate the potential of exhibition research as a combination of curatorial, academic and artistic insights and practices "that actively engage with objects and theoretical ideas to generate new understandings" (Herle, 2013, p. 113). Herle demonstrates how research takes place through various encounters between disciplines in collaborative multisensory engagement with objects and space. She shows how it is grounded in theories on the relations between humans and things and a method for working with objects, which builds on the prospect of "discovery" (see also Thomas, 2010, 2016), and the potency of assembling. This technique generates knowledge by fostering new and unexpected relations. The exhibition facilitated the emergence of new understandings and the results were expressed in the gallery through objects, texts and contemporary art in a nonlinear and non-didactic way. Knowledge was not communicated unambiguously. The visitors were challenged through bodily, intellectual and emotional experiences to question preconceived ideas. In other words, they took active part in the generation of new insights and understandings.

Assembling various actors in collaborative encounters with objects and spaces is indeed a method that may produce novel outcomes. More specifically, it has been argued that such exhibition experiments may produce visible insights and knowledge, which would otherwise remain invisible: they make tangible something intangible (Macdonald and Basu, 2007, p. 9). Exhibitions thus generate specific knowledge that could not be delivered differently as it is embodied in the exhibition product and constantly negotiated in the encounters with various audiences. Knowledge produced through exhibitions could be compared to artworks.

As pointed out by Julian Klein (2010), artworks often result from an extensive investigative process. However, unlike scholarly publications, they rarely express an authorial interpretation. Instead, they offer what John Dewey has described as *aesthetic experience* (1980 [1934]). Such experiences, which are not exclusively linked to art works, result from the immediate sensory and intellectual experience of things, that links past experiences with the present (ibid.). Hence, one can say that such things and artworks carry "embodied knowledge" that has to be acquired through sensory and emotional perception, resulting from artistic experience, from which they cannot be separated (Klein, 2010). At the same time, if the experimental exhibitions we are talking about here can be read in multiple ways, how do they then differ from just about anything people come across? What kind of knowledge is

[6]The exhibition was set up at the Museum of Archeology and Anthropology at the University of Cambridge, in 2009.

extracted in these meetings with the audiences? In arguing for the need of a new museum epistemology, Mark O'Neill makes an interesting note on the difference between subjective and individual experiences, which relates to "people's complex capacity to generate knowledge in order to make meaning of the world" (2006, p. 107). The subjective is deeply experienced within a person, it is the kind of experience that touches upon shared values and cultural beliefs, in opposition to the individual, which denotes experience unique to one person (ibid., p. 109). "One of the capacities of art is to articulate these deep internal experiences to other individuals" (ibid.). The openness towards multiple individual readings along with the subjective experiences that we as visitors can share and talk about might be considered the strength of exhibitions that has incorporated a view on people as profoundly different, and not as passive onlookers, but partners in the process of creating knowledge (ibid.). What follows from this is that the knowledge exhibitions may generate is not just different, it is of another kind.

However, although making museum exhibitions shares many similarities with the artistic process, they are not art exhibitions (although they may as well be). What we should be looking for is a third position, somewhere in between open knowledge (art) and contextualised knowledge (science). In a recently published article, Ken Arnold, inspired by John Dewey, suggests that the investigations taking place within (most) museums and the thinking they enable has more to do with *understanding* than scientific knowledge, and that museums have an untapped research potential in producing and staging aesthetic experiences for reflection (Arnold, 2016, pp. 3-4). His argument is based on two epistemological formulae by Stefan Collini, one saying that *knowledge* is the product of skill and information, the other saying that *understanding* is the product of experience and reflection. While the former has worked well in the sciences, the latter is more illuminating to the humanities, where understanding is recognised as a "human activity that depends in part upon the qualities of the understander" (ibid., p. 4). These insights from Arnold, based on his thorough experience at the Wellcome Collection, are fruitful thoughts that may help us in our effort to make space for a qualitatively different museum research.

The museum experience should be relevant for people's lives today and in a future perspective. Research, then, should not be treated as an end but rather a means to achieve this museum mission. The challenge is to carve out a methodology for research that embraces this complexity and expectations. As this chapter suggests, such a methodology should be based on the museums' premises and built on their distinctiveness.

Objects and collections make a natural point of departure for a museum specific research method. A wide literature discusses what we can learn from showing sensitivity to objects (see e.g., Daston,

2004; Costall and Dreier, 2006; Cavalli-Björkman and Lindqvist, 2008; Conn, 2010; Fleming, 2010; Olsen, 2010; Schnalke, 2010; Thomas, 2010; Dudley et al., 2012; Arnold and Söderkvist, 2011; Ulrich et al., 2015). Objects have been assigned epistemic value as entry points for research, due to their relational character and embeddedness in social life, as well as their factual materiality (see Dudley, 2010). This means that we can discover and gain insight by researching both the materiality of objects and the extended networks of relations an object assembles (see Latour, 2004; Thomas, 2016). The concept *thing*, in the double meaning of assembly (of relations) and object (Latour, 2004), is thus a theoretical and methodological concept that invigorates the focus on the double sidedness to extract the full potential of museum objects.

## The LAB

### Background and layout

"The Ding or Thing has for many centuries meant the issue that brings people together *because* it divides them" (Latour, 2005:13).

In 2014, the Norwegian Museum of Science and Technology, NMST, decided to set up a permanent laboratory to try to rethink what research at the museum could be. In the preceding decade, the museum had produced several successful exhibitions, which included new knowledge and insights generated in the process. As such, these exhibitions were collaborative and truly research based. Yet, it was an open question how exactly this research was done, or what status this knowledge had. One initial motivation for the LAB, thus, was to describe methodically how research happens through exhibition making.

The most basic idea, and a working metaphor for the LAB, is that of the museum as a "Thing". The ancient "Thing" referred to a place and an assembly where people met to discuss, judge and make decisions on societal issues (Latour, 2005).

The LAB-method is grounded on the experiences with the exhibition "Thing – Technology and Democracy" (2014).[7] This exhibition literally turned the museum itself into a "Thing". Inspired by a way of perceiving objects as gatherings, and technology as embedded in society and culture, both objects and technologies were presented as always contested (Latour, 2005). In the show, then, the

[7]"Thing – Technology and Democracy" was a celebration of the foundation of the Norwegian Museum of Science and Technology – NMST – in 1914 and the 200th Anniversary of the Norwegian Constitution. The exhibition was on from April 2014 to December 2015, and it was awarded for its experimental inclusion of visitors with the ASTC, Leading Edge Award 2015, and the Mariano Gago ECSITE creativity award 2015. A presentation of the exhibition is available here: https://www.youtube.com/watch?v=Usj7VOTcYRg

museum's objects, its matters of fact, were staged for participatory and deliberate discussions with our visitors on the complex entanglements of technology and democracy, on the exhibition floor.

**[Photo 0, The Thing exhibition, (Photo byManfred Vogel]**

The transformation of the museum's matters of fact into matters of concern inspired us to explore the potential of using the concept *thing* for developing a method for museum research. As mentioned, *thing* carries the double meaning of object and assembly (Latour, 2004, 2005; see also, Ingold, 2010; Olwig, 2013). Any object, whether a space shuttle or a can of coke, is an assembly of a multitude of other parts, actors and ideas. To investigate an object, Latour suggests, we should approach it as a thing held together by a network of relations. This becomes obvious, for example, when accidents happen, like when the space shuttle, Columbia, exploded on its way back to earth (Latour, 2004). All the different actors and institutions that became involved in assembling the parts and investigating the accident not only demonstrated the thing-character of the object, but also the etymological correspondence between an assembly and a matter of concern.

The driving force and our working hypothesis for the LAB is that methodological rigour of the multi-disciplinary involvement and engagement with objects, texts, space and people in the exhibition making process may pave the way to a new museum research methodology. The hypothesis rests upon three premises. First, objects may serve as gathering points of enquiry. Objects and collections are conceptualised as relational *things.* Second, museum research is concrete and conceptual work with unifying objects, academic research (texts), and artistic investigation (space) in the exhibition making practice. Third, the exhibition is the goal in itself, and an experimental product.

To link the aims and the premises of this methodological experiment, the LAB is set up with a particular layout. The physical space comprises of three zones to spatially and conceptually arrange the collaborative work of researchers, conservators and designers/exhibition builders. In addition, there is a roundtable space for discussions.

**[Figure 1 Layout of the LAB]**

The LAB includes a zone for objects and hence the museum conservators to work and for participants to engage with the objects; a zone for the researchers/curators to arrange books, archival material, drawings and ideas; and finally, a third zone for the artists and exhibition builders to construct mock-ups and models. We think of them as interacting zones for *objects*, *texts*, and *space*. The zone for space has been placed in the exhibition area of the museum for visitors to have access and, hopefully,

engage with ongoing projects. From this zone, they are able to look into the zone for objects through a glass wall, and also enter the LAB when work is under way. At the far end of the LAB, the zone for scholarly research (texts) is equipped with huge working tables to display materials and findings. In the middle of the LAB there is a 1,000 kg solid round table of concrete and wood for the participant core group, as well as for various visiting partners, to gather for discussions. We refer to this zone as the "thing" to underline that the collaborative exhibition generation rests on connecting ideas, perspectives, and different kinds of knowledge.

**[Photo 1 Gathering at the Thing (photo, Henrik Treimo)]**

When work is going on, the participants should be able to walk around the area to see and interact with each other's material and ideas. Participants are thus urged to get things out of their heads and onto display as early as possible. This is particularly important and productive when external partners, stakeholders and audiences are visiting the LAB, and it is a most effective way of communicating and involving people in the projects.

**[Photo 2 Models in the zone of "space", available for the museum visitors (Photo, Håkon Bergseth)]**

Projects that have been processed in the LAB are of various sizes, ambitions and resources. The whole process is based on series of workshops. We always strive to include a core group of minimum five persons; a researcher (who could also be the curator), a project manager, a conservator, an artist and an exhibition builder. Yet, since we aim for a method that is truly interdisciplinary, every project should invest effort in engaging even more people from the diverse museum disciplines as far as resources allow. Exhibition work in the LAB starts as most such museum projects do, with the formulation of an initial idea. It can be formulated as an exploration of a concept, an object, a collection or a research theme. The process from that preliminary idea and forward is as non-linear and messy as every other exhibition development project (see for example Macdonald, 2002). Where the LAB-method departs is in its insistence upon objects as entry points. Objects need to be on site from the very start of any workshop, together with all the participants of the core group.

**[Photo 3 Multi-disciplinary collaboration around objects (Photo, Henrik Treimo)]**

Starting to explore a theme through objects is one way of obtaining a museum specific research outcome of the process. Nicholas Thomas has suggested an object-focused "museum method". He states that "If the museum is not only an institution or a collection but also a method – and a kind of activity – then that activity has its moments. The moments we might reflect on are those of the

discovery, the captioning and the juxtaposition [of objects]" (Thomas, 2010, p. 7). His point, which is further developed in a recent publication, is that curatorial work as a method of knowing in museums is at its best, driven by curiosity (Thomas, 2016). By searching collections, and also letting objects "happen upon us", investigating what they relate to and experimenting with captions and juxtaposition of objects, new insights and knowledge might appear. This method of curatorial techniques is played out in the LAB. Still, although this method can justify an exhibition, the LAB aims at even more, thorough investigations. To gain the full potential of penetrating studies of objects, extensive interdisciplinary work is needed. To achieve this aim, collaboration with academic researchers around specific objects allows for cross-fertilisation through theoretical investigations, formulation of other research questions and diverse interpretations (see Brummer, 2008; Roth, 2008). This important aspect of any project is conducted by academically trained curators, or academic collaborators, or both. Also, used as analytical tools, objects may engage conservators in researching the materiality. The physical aspects of any object might also be a source to insights and knowledge about relations and stories of an artefact. Here lies the potential of bringing in the museum conservator's expertise to further research on the material entanglements of objects, that might shed new light on a theme (see e.g., Svensson, 2008). Finally, objects easily connect with artistic investigations and scenographic thinking with space (see Treimo, 2013; Bjerregaard, 2015). Exhibition scenography as artistic practice can be defined as architecture and theatre in a balance, created so as to elicit a dialogue between the audiences and space. What happens between the objects might be just as interesting as the objects themselves, and the point is not say what it is, but to stir imagination (von Arx, 2015). The artistic contributions that blend in with the academic research and the curatorial techniques, carry the potential of bringing in new perspectives as well as organising shared ideas in space.

**[Photo 4. Multi-disciplinary collaboration on models (Photo, Henrik Treimo)]**

Another prerequisite is that the method integrates in practice the role of museums as inclusive and dialogue oriented arenas. To ensure that this important mandate is part of our methodological practice, we have found it even more useful to think with the concept of *thing* also, as a methodological strategy to include the public in the generation of exhibitions.

I will now turn to a case study of the making of the exhibition "Grossraum", focusing on one particular object, a carved stone.

## The "Hitler stone" and Grossraum

The first large-scale LAB experiment was launched in 2015. An ongoing extensive research project on the political economy of forced labour and Organization Todt in Norway during the Second World

War was introduced into the LAB by one of the museum's curators.[8] By the time this project was brought in, the curator had already been researching the theme for several years and had also started to conceptualise it as an exhibition. Still, the aim was not to display and represent already researched knowledge from the ongoing project; he believed that the exhibition should be a unique and complementary research product. During the first workshop, he presented core concepts and topics for the exhibition. Five scenography Master's students and their professor, an additional architect and a scenographer, two in-house exhibition builders, one conservator, the museum photographer, two museum educators, one exhibition technician, the exhibition coordinator, the project manager, the leading curator and the leader of the LAB were included in the workshop. All together there were twenty participants, which made a truly interdisciplinary assembly.

Objects, photos and archival material were placed in the LAB to initiate discussions and the collaborative development of an exhibition concept.

Among several objects, a 240 kg, carved granite stone was brought in. In the archives of Organisation Todt, the curator/researcher had found references to correspondence between Adolf Hitler and chief architect Albert Speer on Norwegian granite stones for the new triumph arch of Germania (as part of the plan for the grand reconstruction of Berlin). This had caught the interest of the curator, because he was looking at the archives with a gaze tuned in on material things that could be relevant in a spatial narrative. It turned out that the remnants of this project were still to be found.[9] The particular stone that came into the Museum's possession was found in a private garden, where it had served its purpose as a sculpture and sitting place. A relative of the recent owner had been involved in carving out the so-called "Hitler stones" at a nearby location, employed by a local company. These few facts about the stone convinced the group of its potential to become part of the exhibition and to be further explored as a "thing".

The stone indicated that Hitler's megalomaniac visions for Germania were not just materialised as architectural models in The New Reich Chancellery in Berlin, but that the process of building it in full-scale was actually initiated. This understanding facilitated the process and assured the curator of the ideas that could develop into the conceptual framework for the exhibition. The relations between the locality of the carving sites and Germania, the little stone in an enormous building and the relations

[8] The research project "The Political Economy of Forced Labor: Organization Todt in Norway during World War II" is financed by the Norwegian Research Council (2010–2017). It was initially developed by the NMST research curator, Ketil Gjølme Andersen. In 2011 the Museum decided to produce an exhibition alongside the research project. From then on, Andersen played the double role of a researcher and curator. The project involves a total of 22 researchers and its academic home is at the Norwegian University of Science and Technology in Trondheim.

[9] The site where the stone is taken from has just recently, in 2009, been protected by the Ministry of Cultural Heritage. It happened all of a sudden, due to an incident where a load of carved stones were "stolen", as it said in the local newspapers and media, and shipped to Cambridge, England to build a War Memorial (http://www.nrk.no/ostfold/sjokkert-over-inngrep-i-kulturminne-1.6830786, accessed 28.3.16).

between local carvers and the Nazi-regime, confirmed the curator's initial core concepts of *scale* and *dimension* as an approach to further the research and presentation of this material and history in space.

The stone evoked discussions, questions and further investigations along with its multiple relations. Research into the curving of the stone to possibly define its exact position in the arc, was one suggestion. Also, artistic exploration by placing the stone at various sites in the museum, and conceptually in the model, generated fresh ideas and more thorough understanding of how this object could enhance understanding of the theme in the final exhibition. The stone similarly gathered several other objects, archives and collaborators. During a photo excursion, the scenography students visited the place where the stones were carved out. Several participants, among them the museum photographer, travelled to see and experience the so-called "Schwerbelastungskörper" in Berlin – an enormous concrete column that was installed by Speer to assess if the ground could carry the weight of the arch. In the process, several new associations emerged. The relation to the archive was put into play through enrolling the National Archives of Norway as an institution that could be included in the further development of the exhibition. The role that this particular "Todt archive", as well as the archival material in general could have in the project was discussed. Another relation was that between the stone and the still existing stone-carving company which had produced it. Their immediate response was that they would take the Museum to court if we mentioned their company in relation to this topic. In short, the curator got into dialogue with them, which in turn resulted in them providing access to their private archive. Their role during the occupation years was not unfamiliar. Several companies had collaborated with the Nazi Occupantion machinery, more or less voluntarily, without being part of the regime themselves. The stone was furthermore used as an assembly point for to stir discussions and engagement with visiting groups and invited partners. These events nourished the process with feedback and proof of new interest in the project. Furthermore, these collaborative encounters with objects enriched the academic research in a constant feedback loop.

**[Photo 5. The curator giving a public talk on the "Hitler stone" in the LAB (Photo, Henrik Treimo)]**

The knowledge and understanding generated from working with some of the objects, such as letters and photos (and other archival material), rail tracks, shovels, remnants from the prisoner camps, the Atlantic Wall (the belt of bunkers stretching from the Bay of Biscay to northern Norway), and the stone, for example, enriched our understanding and allowed for new perspectives and research questions for archival (academic) research. Following the relations to the stone generated a gathering of places, people, logistics, drawings, models, and other stuff across time and space. All these became novel resources for further artistic research and spatial investigations.

Regarding the question of research and knowledge generation in the traditional sense, working with this stone and other objects made the curator aware of certain aspects of the Nazi regime's planning

practices. The political perspectives became detectable and visible through, for example, Hitler's enthusiasm for models and how these in turn actually became enormous construction projects as part of the grand plan to control space. The planning, production at local sites, and the logistics demanded to realise these projects, came to the fore in the research. In the archives, it was now interesting to look for documents that confirmed plans, drawings, execution orders and logistics concerning material and human resources such as equipment, concrete, steel bars, stones, stone carvers and materials for camps, as well as local contractors, payment, food rations, and so on. This research generated new knowledge in terms of facts and also ideas about how we can understand the Organisation Todt in the Third Reich as an important tool for what the curator calls the Nazi's "politics of space" (Andersen, 2018). In this sense the material and spatial approach in the exhibition work altered the academic approach and led to new insights, which might not have happened otherwise.

What all this shows is how the object in focus, along with the aim of presenting this history in space, creates a particular gaze that leads the research in certain directions, raises other questions and ultimately stages a novel view on this part of our history, in the exhibition.

The exhibition was to open in several stages, as work progressed, with the aim to invite external actors into its subsequent development. After four months of intensive LAB-work, we called for an official opening of *Grossraum Part I – Technology as Propaganda*. The content was mainly focused on the pre-war Nazi period. In this period during the 1930s, the plans and their terrible consequences were still partly wrapped up and concealed in the most forceful and disquieting propaganda practices. Visitors were invited to learn, experience and explore how engineering practices and technology as well as architecture functioned as vehicles of propaganda for the Nazi ideology. There was no telling by then, and not in the Part 1 exhibition either, that when these plans would be brought to life, they would involve millions of forced labourers.

In many ways, the exhibit was based on the ideas of scale and dimension. Yet, the resulting content, objects and thematic focus had been significantly reworked, reshaped and changed in the collaborative engagement with materialities and spatial thinking, and also in interaction with external people and projects. In particular, the joint effort between the curator and the scenographers – the five Master's students and their supervisors – had played a major role in the development of the exhibition. The contributions from the museum conservators and their input on the display of objects and archival material, light conditions and security affected the final outcome, as did the voices of the Museum's educational staff, and the feedback from visiting groups, meetings and seminars with academics and public dialogue. The curator retrospectively highlights that the meeting with materialities as relational things in collaboration with scenographers and other museum disciplines, and particularly the fact that he had to think through his research questions with a spatial dimension, enriched and qualified his

research material and widened the scope of the exhibition theme even more. If the aim had been to write a book, he would have done it otherwise and come to see other parts of the history as relevant.

The engagement with the artists is worth stressing here. As James Putnam has observed in his analyses of the use of artists in museums exhibitions, "As free agents, artists can offer fresh insights beyond academic interpretations and take initiatives with groupings and juxtapositions that no museum curator would normally be allowed to consider" (Putnam, 2009, 136). The scenographers, as other artists we have previously worked with, are, certainly, less familiar with museological precepts and academic research standards, and they bring into the process alternatives to traditional museum practice and display. However, while Putnam focuses on the autonomous artist-curator, the LAB-method stressed the joint effort of melding together the perspective of the museum curator and the academic approach with the "artist's eye". This work was conducted through a number of workshops for discussing content, materials, objects and models, and also includes a full scale mock-up (a so-called bauprobe). The bauprobe assembles all objects, materials, ideas and professions in space. Adjustments take place, externals are invited in to give their response, and content and scenography merge into one expression. As the visitors' bodily presence in exhibitions is vital, this testing out of arguments and ideas in actual space is highly important.

The opening of the first part gave the project a prosperous showroom for further engagement, enrolment of partners, and visitor feedback. At the exhibition entrance a poster urged, "Get in touch if you want to join us with your view and perspectives on the further development of the exhibition." An additional reason for the preliminary opening was to contact financial sponsors. Several companies and political bodies were invited to a "sponsor vernissage" early on the opening day. Despite the fact that just a few showed up, and no further funding came out of that first meeting, the occasion generated important dialogues with actors related to the exhibition theme. The LAB and this method aim for openness and cooperation across disciplines and the walls of the museum. The experiences and feedback so far have proven very promising, although there are obvious challenges and obstacles. Before discussing them in more detail, the following four examples demonstrate how the reassembling of objects, interests and actors can dramatise relationships that extend far beyond the particular exhibition (see Ssorin-Chaikov, 2013a,b).

At an early stage in the project the curator was contacted by a documentary filmmaker about a film on the involvement of Norwegian companies in the exploitation of forced labour during WWII. The LAB became the site for meetings and discussions about objects and concepts for the next few months. The film developed alongside the finalising of the first part of the exhibition and the two processes nurtured each other. The documentary "Hakekorsets profitører" (Swastika profiteers) by Erling Borgen, was launched on national television as one of the project's first outreach activities. As a direct result of the film – already watched by more than 0.5 million people – the project has, so far, been

contacted by four descendants of forced labourers. Interviews have been conducted and their stories are now becoming part of the final exhibition along with personal objects some of them brought to the museum.

A few months after the documentary was broadcast, the director of NMST was contacted by the Norwegian Ministry of Transport and Communication. Borgen's film, as well as two recently published books on railroad construction and road construction in Norway during the occupation years (Nygaard, 2015, Westlie, 2015) verified that two state-owned companies had been profiting from extensive use of forced labour during the Occupation years. The historians behind these books had both been in contact with the exhibition and the academic research project, and had discussed their findings in a public meeting arranged by NMST. In several ways, this new ethnographic situation presented the Ministry with a possibility to consider their role and responsibilities for the mistreatment of war prisoners during 1940-45. The curator was invited to present the project and plans as part of a discussion on whether the opening of the exhibition could serve as a moment for addressing this issue on behalf of the Norwegian state. Indeed, this method demonstrates how research and outreach activities can merge into a joint process (see Brenna, 2016).

The artist, Eirik Audunson Skaar, made contact with the museum, and suggested an installation based on shovels used by Soviet prisoners of war who had been involved in the construction of a railway in northern Norway. The museum and the artist partnered in an application that was funded by Arts Council Norway. The art installation is set up in juxtaposition with the exhibition and will later travel on to other places and engage with future audiences.

When the exhibition opened, the local newspaper in the city from where we got the stone published a feature article on the history of the "Hitler stones", including an interview with the former owner. The heading was, "My stone has become evil!" This exemplifies how the relations to objects can be evoked and energised through this method, and how the process and the exhibition then creates effects outside the premises of the museum. Hence, the method is also a performative strategy with a potential to manufacture the social reality that it studies.

The final *Grossraum* exhibition opened in February 2017. Alexandra Mendez, one of the MA students, was responsible for the scenography. The exhibition focused on propaganda, deportation of forced labour and the construction plans and Organization Todt's projects in Norway. The core element of the scenography is bodily movement through space, allowing the experiencing of history with all senses. This invites multiple interpretations and interactions with history, and histories expressed through the research facts. The earlier mentioned "Hitler stone" is placed in the exhibition to tell and evoke several stories of the regime and its ideology. A label describes its origin and its intended use. The object is juxtaposed with Hitler's drawing and a tiny model of the triumph arc,

together with photos of the Schwerbelastungskörper and the excavation site. At the same time, the visitors may also perceive how the stone assembles stories about the Nazi ideology and spatial thinking involving models, as well as planning and logistics. Although this installation does not literally tell the viewer anything, the stone embraces the overall theme and topics of the exhibition. It relates huge construction works with propaganda, movement and control of resources, and Organisation Todt in the Third Reich as an important tool for the Nazi Regime's "politics of space". The framing of the stone between two glass walls makes a narrow space for visitors to enter and physically touch and experience the stone. At the same time, it is endlessly multiplied by the mirroring effect. The scenographer's aim has been to create a potential to engage through the senses and to stir the imagination and make people ask questions. At the same time the exhibition contains information and facts generated through the curator's and the whole team's research. For the layout the curator and the scenographer had been cooperating closely to present the visitors with this amalgam of research facts and information (knowledge) as well as a room for discovery and reflection (understanding).

## Challenges – multi-disciplinary exhibition research

Experimental exhibition processes "with the intention of producing differences that make a difference" generate challenges (Macdonald and Basu, 2007, pp. 17-22). Open-ended and radical experiments rest on the premise that all actors involved are prepared to negotiate their autonomy and enter a process of authority levelling (ibid., p. 95). An even bigger challenge concerns the tension between an open and experimental practice and the institutional context with its constraints of space, funding, personnel and managerial demands (ibid., 2007, p. 17). Finally, there are challenges related to the efforts required in putting collaborative and interdisciplinary projects together in terms of strong leadership and internal organization, flexibility in content but clarity on objectives, trust and accountability, and dealing with diverse power dynamics (see Scripps et al., 2013).

As anticipated, the LAB-method is faced with all of these challenges. Based on our experiences, I will discuss some of the most critical challenges this experimental method has met. These relate to the seemingly contradictory fact of the method's insistence upon being open and inclusive to *objects*, *people* and *ideas,* and at the same time aiming for methodological rigour.

Moving from talking about object-based research as an ideal to putting this into practice is an exacting endeavour. How should we select the initial objects? Who should have the authority to do it, and on what grounds? For sure, we will avoid choosing objects that only represent existing and pre-formulated research. Instead, we should aim to represent multiple voices in society, not to simply stand for the museum and its collection *qua* being its collection. Objects can come into the process in

different ways. Whether they are chosen based on a preliminary idea for an exhibition, or they "happen upon us" (Thomas, 2010), or if we invite external stakeholders to come up with suggestions, or one object leads to the detection of another through the relational network they perform, in the end, it all comes down to a question of how the selection informs and guides the process. Certain object choices will include some people and ideas, while others are left out. This is a risk and a test, but herein rests the potential of this process. A main task for such a strategy, then, relates to the balancing of the multidisciplinary voices in the team. Ideally, all participants should be involved and have an opinion at this critical and important moment in the process.

Another challenge is associated with the premise of bringing the objects into the physical space of the LAB from the start of the project and in every workshop. This would have all been simple, if getting the objects from the storages, sometimes located off the museum premises, and preparing them for display, and even making sure they are properly protected and taken care of, did not require so much effort on the part of museum conservators. Since the process is not linear, the work is difficult to plan for the various disciplines within the museum, such as for example the conservators, who are often entangled in other projects and tasks. When objects have to be installed, reinstalled even installed again, then this becomes a matter of time, money and patience. It is obvious that the focus on the use of objects as assemblies must come with care for resources and possible tensions within the group. To balance the needs of the process with disciplinary work and time schedules has proven taxing. This object-based method is without doubt open and work-intensive and in need of careful planning. Indeed, it is critical that all participating disciplines commit to the process and take responsibility.

The experiments conducted in the LAB so far have been aiming for an "open door" policy. Although we have not yet found the best way to include museum visitors, a lot of other external people and groups have been interested and have enrolled in the projects. People can get involved by invitation or by simply knocking on the door. For example, the experiments have been open for internships, as was recently the case with a Dutch scientist and an MA student of communication. Keeping the doors open has also attracted the interest of people who want to know more about the topic and our work such as university students, museum professionals and different media. Yet others may join the process by bringing in their particular knowledge on the topics in question, either as researchers or experts, or by being related to specific objects. For example, a consultant from the Ministry of Cultural Heritage was hired for a certain period to contribute his perspectives and expertise on site-specific objects and locations that cannot easily be moved into an exhibition, as was the case with the thematically linked Atlantic Wall. The method is in a way endlessly expanding as we follow up on objects and their various networks, which invite more and more people to engage with the process. As we have embraced all this, and never said, "No, we don't have the time", our "open door" policy becomes work-intensive and demands careful and proactive management.

The nature of museum work is, as been pointed out by others, inevitably collaborative (Coombes and Phillips, 2015, p. xx). Most museum organisations are accustomed to this. What the LAB method adds is extensive collaborative work with a lot of partners, who may have little or no previous experience or engagements with museums. It is a challenge to ensure real inclusion of all these voices. This relates to both schedules and resources, as well as to a more delicate management of power structures and relations, and the fact that expertise is unevenly distributed. Thus, an exhibition team leader with a broad repertoire of skills such as ensuring information flow, enforcing deadlines and liaising with all team members (see Dean, 2015), in addition to embracing the crucial openness of the method, is required for managing the whole process. A particularly exigent task is to ensure that all participants from different disciplines are committed to a shared vision and agree upon a unified approach to exhibition research as a collective practice. At the same time, success, as in every interdisciplinary exhibition project, rests upon trust and flexibility among all participants (see Scripps et al., 2013).

Exhibition projects may start with a vague idea or with a more restricted theme and concept, as was the case with the "Todt project". Either way, we develop exhibition themes and concepts as a group effort in concert with objects and with openness towards the public. As the LAB method aims for generation of new knowledge and understanding, a major challenge concerns the management of ideas and making sense of all information, knowledge, curiosities and loose threads that emerge over time, and bringing them into a fruitful conversation with conceptual art. This is a point of vital importance, as the essence of this museum research method very much resides with the project's capacity to join and connect fruitful elements to bring new insights and knowledge to the theme for the exhibition, and create an amalgam of researched knowledge and aesthetic experiences for the visitors.

While we still insist upon all actors involved being prepared to negotiate their authority, we are fully aware of the impracticalities and impossibilities of developing an exhibition project without plans and steering. Indeed, the need for solid leadership extends to managing core concepts and ideas. The person in this role should have both experience in exhibition making and a thorough understanding of the museum and its different disciplinary practices and organisation, as well as experience in academic research. They should have the capacity to act as a mediator between all participants, and be able to summarise and lead this process towards a concrete exhibition result. For the method to produce and gain some sort of consistent and relevant knowledge, and not turn into a mere claim for open-endedness, there has to be a firm focus on the situatedness and performative affects of knowledge (see Ssorin-Chaikov, 2013a). With all this in mind, the role described here should belong to the person who is carrying the overarching idea for the exhibition. This function corresponds to the traditional leading curator of an exhibition. At the same time, our method requires that the curator is willing to give up some of the long-established authority of this role (see Macdonald and Basu, 2007).

Our experience tells us that the curator needs the skills of a researcher, as well as knowledge about other disciplines and perspectives, the particularities of which may be unfamiliar. Most importantly, it is imperative that the curator is capable of thinking with space in order to meet the artistic dimension and merge content and form.

Finally, since the experimental method is nurtured by its potential to continuously assemble objects, people, and ideas, and simultaneously jeopardizes work-plans and raises unforeseen demands for space, time and money, such projects need to be well anchored in and coordinated with all relevant departments of the museum. This is an unpredictable method with the power to incorporate all main mandates of the museum in a practice that creates tension and challenges its organisation. For this reason, and to achieve the full potential of such a research method, it needs to be conducted in close dialogue with the leadership and in line with the overall aims and visions for the museum.

## Concluding remarks

The past decades have witnessed an intense museum reformation including their structures and priorities. In the process, research that used to be interconnected with collecting, caring for and displaying objects has lost ground. The chapter addresses this dilemma by way of a proposed practice to reintegrate and/or rethink the role of research in the museum. A promising way out, suggested by a wide range of scholars from the museum and the academic world, points to practices of exhibition making as research, which embrace the epistemological value of engaging with objects and collections. Still, what remains to be answered is how this research should be carried out, and what kind of knowledge it generates.

It is widely acknowledged that museums are different from other knowledge generating institutions. Based on this premise, the chapter has sought to highlight some of the obstacles and possibilities for museum research. A major challenge is related to the concepts of research and knowledge that reside within an academic standard. As the chapter has proposed, these concepts are not necessarily compatible with the interrelated mandates of the museum institution and its unique public role, nor with its potential as a knowledge institution. The challenge is to carve out a methodology for research that embraces this complexity and these expectations.

The methodology proposed in this chapter aims to strengthen museum work through a practice that reunites research with exhibition as an integrative force within the museum by arranging the process around the concept of the ancient “thing”. By emphasising objects as relational and always contested (Latour, 2005) and the museum as an assembly to sort out things through a multidisciplinary and inclusive practice, the proposed method for research through exhibition making may then unite the museum’s strengths and potential to deliver unique research outcomes.

As the outline of the LAB and the method has demonstrated through the described *Grossraum* case, the research happens through exhibition making arranged as a multidisciplinary collaboration that assembles people, objects, textual knowledge and research, and artistic insights and research on the spatial dimension in the exploration of a theme. The result of this process is a unique amalgam of ideas and materials for visitors to engage with intellectually and through their bodily senses. Due to the particular process and the shared aim of making a product in space, the research outcome of such an endeavour will ultimately be different from a traditional historical research project on the same theme. As underlined by the curator for this project, the encounters with the objects and materiality and their multiple relations, and not at least the fact that he had to translate his research into a three dimensional argument in collaboration with the scenographers, forced upon him other perspectives and insights and opened the theme up in unexpected ways.

The value and status of knowledge generated through exhibition making has been much debated in terms of academic standards (Lehmann-Brauns, Sichau and Trischler, 2010). This chapter has argued that museums should aim for their own research, and possibly find other ways of talking about the results. Researched knowledge that goes into an exhibition, as demonstrated here with the curator's historical research on archives, will not be accepted according to academic evaluation criteria. Still, it *is* undeniably knowledge, in the sense of new and untold stories, facts and novel perspectives on the Nazi regime's ideas and the construction of their *Grossraum*. Furthermore, by the unique combination of these findings with spatial thinking, it adds up to something that is qualitatively different from published knowledge. Analytical perspectives such as *scale* and *dimension* developed to grasp this part of our history evolved and matured as the academic research was confronted with spatial exhibition thinking and objects. As the curator will also publish on this research in the years to come, the insights and perspectives from the exhibition, in particular those arising from these two concepts, will feed back into and enrich the academic discourse on Nazis ideology and practice as a "politics of space". However, the main value of the results from this exhibition research is that the museum visitors will get access to this history in a way that could not be delivered differently. Through aesthetic experience of the theme, visitors might not only learn but also achieve life-enhancing understanding.

The chapter suggests that the epistemological issue concerning knowledge is also a question of museum strategy. And if we are aiming for a vital and inclusive museum *for* the public, the proposed concept of *understanding* that resides with the humanities and also embraces the aesthetic products of an artistic process, might be a good way to proceed in developing strategies for museum research. The LAB method suggests a third position, between art and academia that unifies the academic approach

of the museum curator and the more experimental practice involving conceptual art in a practical and inclusive manner that is based on the museum's own premises.

During these experiments, we have faced several practical and conceptual matters of importance in embarking on museum based research. Bringing together multiple actors to generate new knowledge by engaging with objects and art demands openness as well as rigour in practice. Contradictory as this may seem, the potential of the method lies in this tension. The challenges we encounter concern coordination of various disciplinary tasks, managing the work process, and the workload that comes with our "open-door" policy; these challenges carry prospects to reinvigorate museum work just as much as they are obstacles. An object-oriented approach brings the disciplines of the museum closer together and research feeds upon the diverse, and often dispersed, knowledge located within the museum. Knowledge generation does not have to be a task solely for one academically trained curator, but a more inclusive endeavour, which blends together instead of separating museum practices. This counts for conservation and collection work, as well as outreach activities. As a consequence of interacting with diverse actors, places and issues over a long time span, the LAB method also transforms the relationship between research and outreach activities. The emerging connections stretch far beyond the particular project and the museum, and take participate in the manufacturing of reality. Such entanglement, or linking, is both a premise and consequence of our project and as such the method relates outreach and research in time.

As the title of this chapter suggests, our approach should be regarded as a work in progress. Based on extensive experimentation and practice with smaller and bigger projects, we have come to see the contours of a method of exhibition research that brings together the museum (objects), academic research (texts), art (space), and the public in a "thing". Further elaboration and development of this methodology could be inspired by the flexibility of the idealised museum proposed by the artist-curator Eduardo Paolozzi who sees "… all parts movable – an endless set of combinations, a new culture in which problems give way to possibilities" (cited in Putnam, 2009, p. 136). This is an idea which, as Putnam notes, "has parallels to the *Wunderkammer*, where multiple associations stimulate both thought and wonder" (Putnam, 2009, p. 136). To renew the museum through an amalgamation of collection work, research, display and communication in connection with its social role, our plan(t) should be nourished by thoughtful knowledge and wondrous exhibitions.

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