Design anthropological approaches in collaborative museum curation

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Museums show an increasing interest in participatory activities that open their premises and processes to diverse audiences. Inspired by this turn within museums, the exhibition FOLK adopted a multi-level co-design approach to address scientific racism and its heritage in contemporary science and society. Here we focus on the processes of collaborative curation during a series of public, pre-exhibition events and use the concepts of "knowledge pieces", "transformation" and "correspondence" to analyse how the events became curatorially consequential. We argue that the events acted as sensitising devices for the exhibition team by bringing together ethnographic and critical design methods.

Keywords: design anthropology, design knowledge, design methodology, collaborative curation, exhibition design

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Under the label 'new museum' many heritage institutions explore how to include wider groups of people in the creative processes as participants, co-creators, or co-workers (Lang et al., 2006: Smith & Iversen, 2014 Van Mensch et al., 2011) or the 'participatory museum' (Simon, 2010) illustrate the shift away from an inward, collection focus towards an outward attention to social responsibility and community building. Discussions on practices of collecting and displaying in museums spotlight the roles of curators, who until recently remained behind the scenes and professed authoritative, objectivist and supposedly impartial narratives (Vest Hansen et al., 2019). In these negotiations, we find argumentation for consideration of ethnographic and anthropological methods that can enrich situated curatorial practices "by drawing on specific, local, social and historical conditions" and by activating "varied, flexible, and practicebased frameworks" (Schorch et al., 2018, p. 10). As part of this movement, Clifford (2018,

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p. 112) argues for a new understanding of curating as a profoundly relational caring practice which "is about preservation (in the sense of thriving) through active relations of reciprocity and dialogue".

Relational activity, translation, reciprocity and dialogue can meanwhile take varied forms. Many Nordic museums and around the world explore reciprocity and dialogue by actively involving audience groups into the process of museum exhibition design (Black, 2005; Sandholdt & Achiam, 2018; Mygind et al., 2015; Smith & Iversen, 2014). Active audience involvement often relates to contemporary politics of cultural heritage institutions, where participation is considered a political endeavor of democratizing and opening up power relations. At the same time, audience involvement includes the relational dialogues museums conduct with the aim to translate objects and narratives across cultures and groups.

Relational dialogues include exhibitions and events as core sites for negotiating relevance, capturing public and political attention and contributing to increased self-reflection and awareness (Vest Hansen et al., 2019). This renewed interest in exhibitions invites a rethinking of curatorial practices as research and knowledge-in-the-making (Bjerregaard, 2019a). Exhibitions are increasingly referred to as "laboratories" with "liberty to follow more loosely defined goals and act on an ad hoc basis as ideas develop" (Bjerregaard, 2019a). The laboratory exhibition supports the idea of curation as an emerging knowledge process and highlights generative and transformative aspects. The multiple dialogues and multivoicedness that it rests upon cultivates relations of trust and openness, and thus enables distinct knowledge making practices to come together (Stuedahl et al., 2020).

New curatorial practices together with shifting conceptions of exhibitions as active relational research sites, open up novel potentials for arrangements of people, things and space beyond a predetermined end-product (Bjerregaard, 2019b). Curatorship becomes a form of knowledge production which is "enacted not only through its analytical focus on cross-cultural action, traffic and appropriation but also at the level of method, interpretation and representation of the curatorial inquiry" (Schorch et al., 2018, p. 3). Such thinking broadens the understanding of curatorial practices to embrace methods that may precede or not necessarily take the eventual form of exhibitions but engage in "creative performance using the world to think about, and both affirm and transform, the world" (Preziosi, 2019, p. 11). This widened perspective on the curatorial describes it as "something that employs the thinking involved in exhibition-making and researching" (Sheikh, 2019, p. 99). It allows us to direct attention to curatorial processes that involve external expertise (Treimo, 2020), or include the expertise of audiences and communities, which will affect the timespan of exhibition making. This we will here call *collaborative curation*.

Our approach is inspired by new ways of creating heritage engagement with the involvement of youth referred to as "dialogic curation" (Iversen & Smith, 2012; Smith & Iversen, 2014). Such projects dissolve the traditional boundaries between initial project inception and final exhibition project, and instead suggest a holistic approach to exhibition design. In our work, we consider collaborative curation as a process that addresses the interactions emerging at the intersection of internal negotiations among museum professionals and dialogic relations with audiences.

This article aims to bring into dialogue this emerging and inclusive understanding of curation, collaborative curation, with the maturing field of design anthropology. Both fields emphasize concrete practices of exchange and interaction, manipulation of materials and objects and awareness of the agency of things (Otto & Smith, 2013) and its influence on the design process as well as curation process. Here, we engage with design anthropology as a style of knowing and practical positioning that endeavours to "enhance embodied skills of people, through attention to the dynamics of performance and the coupling of action and perception" (Gunn & Donovan, 2012, p. 10). We suggest that collaborative curation is concerned with transformations of relations resulting in critical, concrete, material renderings around the exhibition, just as design anthropology aims at design proposals and concepts being carried out in material reality (Otto & Smith, 2013). Our aim is to explore how design anthropology concepts may analytically support collaborative curation processes, and how the empirical use of these concepts in a cultural heritage setting may be fruitful for further development within design anthropology.

Collaborative curation is based on audience involvement and strives to understand the socio-cultural dimensions of audiences' engagement with museum professionals, narratives or artefacts and integrates these into the exhibition design processes. Collaborative curation is, in this sense, an ethnographic endeavour (see e.g. Smith & Iversen, 2014), and similarly to the field of design anthropology it requires critical reflections and cultural sensitivity (Akama & Light, 2020). It invokes the interactional competencies of facilitating collaboration with diverse social groups and builds on co-design knowledge, which examines the roles played by curators in negotiation, as well as processes of consensus formation and coherence building in participatory museum processes (Ball & Christensen, 2018; Luck, 2012; Morse, 2020). Much like design processes, curatorial processes have a conventional due date i.e. the exhibition opening, but they also benefit from a longer period of observing design-in-use, when audiences are visiting and using the exhibits, as well as participating in activities and events during the lifetime of the exhibition. The curatorial process may therefore be longer than conventional design processes, and the ethnographic process of knowledge making includes the whole period that the design product — the exhibition and its program — is on show.

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We will here focus on a series of public, pre-exhibition events that took place during the development of the exhibition *FOLK − From racial types to DNA sequences* (2018) at the Norwegian Museum of Science and Technology (NTM) in Oslo.[1] Our reflections are the result of genuinely cross-/transdisciplinary dialogue between a design anthropologist (Stuedahl) and one of the exhibition's lead curators (Lefkaditou), a museum pedagogue (Skåtun) and the events manager (Ellefsen) with a shared interest in exploring concepts and tools that may illuminate the analytical outcome of the events. While the first author followed the exhibition making process as an external collaborator, the other three co-authors worked daily together from within the same institution although from their diverse disciplinary perspectives. The reflections that follow are thus autoethnographically informed and based on the authors' notes and recollections of the exhibition making process. While we were all influenced by and actively participated in the collective curation discussions, it was not until after the end of the project that our common exchanges turned to consider the relations between collaborative curation and design anthropological perspectives.

Co-design processes are time consuming and often beyond the usual budgeting frameworks of museum exhibition projects. In our previous research on an 1-year co-design process with a youth group from a multicultural district of Oslo which unfolded alongside these events, we have shown how continuous reflection and dialogue are central in achieving the inclusion of other voices and how this process led to the becoming of museum professional into participatory designers (Messenbrink, 2018; Skåtun, 2021; Stuedahl et al., 2020). We now turn our focus on museum events that may be practically easier to facilitate within the formats of big museum exhibition projects and still open novel ways to think about collaborative processes and participation.

In the following section we explore theoretical concepts from the field of design anthropology that inform our research. We then turn to our case study and describe the curatorial processes related to the *FOLK* exhibition. We continue with the description of the three public pre-exhibition events, their themes, structure, audiences and dialogues they initiated. We analyse how the events transformed into specific interventions during the curatorial process as well as in the final exhibition and its further programming through three analytical frames: a) personal narratives and sociocultural perspectives, b) control, uncertainty and possibility, and c) relevance and complexity. We end the paper by considering how the design anthropological concepts have facilitated our analysis of the events and point to how collaborative curation may enrich design anthropology discussions.

1 Transformations, correspondence and knowledge pieces in collaborative curation

The design anthropological and museum studies literature offers inspiring insights on the potential of putting things and the relations between people and

things in the centre of our investigations (Gunn & Donovan, 2012; Herle, 2013; Ingold, 2010; Treimo, 2020). Here we turn to the often presumed immaterial and ephemeral settings of pre-exhibition events and examine how they became curatorially consequential sites of field studies, interventions and meaning-making. Our contribution is concerned with the transformations that frame and condition design possibilities (Gunn et al., 2013), and how imaginaries may facilitate understanding and intervening almost simultaneously transforming insights into specific actions and products or services (Halse, 2013). As Halse notes, the object of design is non-existent in the design process, as it emerges through it. In this sense, we focus on the pre-exhibition events as experiments aiming at "a credible and meaningful practice around a particular issue and an idea for its resolution in the environment of and by the people it addresses, before the idea is fully developed" (Halse, 2013).

By looking for transformations in the fluid contexts of these public events, we examine whether the ethnographic endeavour performed through the events could be aligned with what Gatt and Ingold (2013) call "correspondence" anthropology; an approach that does not merely describe or represent the world — but one that is answering to it. In this sense, our contribution is concerned with the interactions and interpretations that emerged during the events and brought attention to being alert and attentive to the potentials that the exhibition design could open up for. We understand collaborative curation meetings as dialogic conversations between and among people and materials or objects involved. These dialogic conversations are corresponding processes of becoming, growth and movement (Ingold, 2017). They include translations between museum professionals and audiences that are situated, fluid, enacted, experiential and involve material reflections (Stuedahl & Smørdal, 2015). These translations emerge when the museum acts upon and answers to its changing context.

We further build upon the work of Kjærsgaard (2013) to consider how the happenings before, during and after the public events brought together "knowledge pieces" as "a form of montage that combines and juxtaposes various types of data, ideas, insights, technology, people, skills, perspectives, and knowledge traditions" (Kjærsgaard (2013); see also Marcus, 1994). We investigate how these public gatherings of museum staff, experts, source communities and other audiences informed the exhibition process by activating knowledge pieces which occupied a liminal position between knowledge and design. We ask how these pieces of personal stories, broken narratives and design elements *sensitized* the exhibition design team to the complex sociocultural realities in which the exhibition was taking shape. The notion of a sensitising concept was originally introduced by Blumer, (1954) as the lenses through which researchers approach their fieldwork and guide them in analysing empirical instances. We suggest that the public events operated as condensed field study conducted by several simultaneous

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participant observers whose perspectives and positions were sensitized and transformed during the exhibition making process.

2 *The exhibition* FOLK − From racial types to DNA sequences: *opportunities and challenges of collaborative curation*

The exhibition *FOLK* explored historical race science, its past catastrophic effects and its heritage in contemporary science and society (Kyllingstad & Lefkaditou, 2019). The framework of the exhibition was an understanding of science as always embedded in contemporary society and culture. Its vision was to become an inclusive arena for all visitors to reflect on and discuss issues, which are often absent from public debate. The latter was a specific challenge in the Norwegian context for two main reasons. First, because of the long history of forced assimilation and harsh discrimination of indigenous peoples and minorities, including the Norwegian Sami people, as well as Roma and Romani people. Second, because of the contemporary situation in which the term race is rarely present in political or public discussions, or in research (Kyllingstad, 2017). This is a common trope in many European countries where race has proven a malleable and slippery object, often hiding under concepts perceived as less biologically laden such as ethnicity (Balkenhol & Schramm, 2019). *FOLK* won the British society for the history of science great exhibitions prize 2018, which praised "the museum's exploration of the history of scientific attitudes towards race and the legacy those attitudes have today" (British Society for the History of Science Great Exhibitions Prize 2018, BSHS 2018).

NTM is Norway's national museum for science, technology, industry and medicine, and at the time had a strong focus on research, both historical and museological, as well as a vision of being the most visible, brave and dialogue-oriented museum in the country (NTM 2015). In 2016, when the exhibition project was initiated, the museum had around 290 000 visitors with more than half being children and youth (NTM 2016, p. 5). *FOLK* emerged from a transdisciplinary research project, which started before the exhibition and continued parallel to it with a total lifetime of about four years, including the two years that the show was open at NTM.

The development of the exhibition coincided with a high level of activity at the museum's LAB, a research and mediation laboratory originally established to explore how research and knowledge making could be understood at the museum. The museum professionals who had participated in these projects, met all the challenges described in museum literature on experimental and collaborative projects: negotiations of power, authority and autonomy, lack of resources (i.e. time, space, funding and human resources), leadership and clarity in plans versus flexibility and openness, real inclusion and institutional anchoring (Treimo, 2020; Scripps et al., 2013). Nevertheless, the *FOLK*

exhibition team embraced the challenge of embarking on a long collaborative process. This, however, does not entail that all exhibition team members shared the same perspectives or ambitions, or that power relations, which thrive in museums as much as in other work environments, magically disappeared. The collaborative ethos was not a given but emerged during this project as a result of the continuous and concentrated efforts of several team members who worked long hours to analyse and articulate possibilities for collaborative museum curation.

While the various disciplinary perspectives, agendas and visions for this project kept being discussed well after the exhibition opening, the final internal evaluation revealed that despite its shortcomings *FOLK* had achieved a unique status of shared ownership. One of the most important aspects was respect for different knowledges and capacities. The two lead curators, acknowledged science historians, had no prior curatorial experience. Therefore, the museum supported the exhibition project by engaging 13 museum professionals including curators, conservators, archivists, pedagogues, guides, producers and technicians, events managers, communicators and an external designer, to follow the project from the start. While the lead curators strengthened and secured their colleagues with their expertise on a potentially controversial topic, they also had strong and sometimes diverse views on the narratives they wanted to communicate, and the degrees of openness the project should afford. Their colleagues on the museum floor brought the visitor perspective and a strong commitment to co-design approaches and collaboration with audience groups. The exhibition designer, an acknowledged scenographer, contributed with her deep knowledge of spatial performance and how spaces facilitate bodily and mental interaction. These are only a few examples of the disciplinary diversity within the exhibition team, which provide a glimpse into the kinds of negotiations necessary for this process to move forward. For the authors of this paper, *FOLK* was a step towards being sensitive to enthusiasm and silences, and that bringing individual visitors around a table is not enough for all to engage and participate.

The exhibition team soon realized that they were missing ways to communicate with source communities and potential audiences on the complex political and ethical issues of race. Therefore, they embarked on a series of events opening for collaboration and co-production with other scholars, museum professionals, activists, source communities and artists. These public pre-exhibition events were always preceded by an internal workshop with the exhibition team and the invited speakers at the museum. The events aimed at opening the exhibition development process as early as possible, when both narratives and design were still unsettled. In the following, we will briefly describe each of the three events, their aims, happenings, and internal evaluation.

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2.1 Racial science − photography as scientific instrument (First event)

The lead curators had a research focus on the history of scientific racism, but they and other members of the exhibition team were wary of putting the products of such research on display − especially the photographs of individuals and communities related to this painful heritage. They were aware that in recent memory practices, historical objects may take on new meanings and therefore carry the potential for re-appropriation (Lefkaditou, 2017). The first event therefore invited to an exploration into how photography was part of scientific practices that aimed at categorizing populations in racial groups based on their external physical characteristics and assuming a connection with their intellectual and cultural capacities. The images included photos of recruits from the Norwegian army, as well as photos from two local communities; one locality from Southern Norway, where early 20th century anthropological researchers expected to find a nearly pure Nordic racial type, the other in the Sami area from Northern Norway where people were perceived as culturally and biologically different and inferior. The focus was on the researchers that worked in this field in Norway, and on their research subjects during the heyday of racial science (ca. 1890s−1940s). The invitation to the event underlined that the museum was developing an exhibition on the implications of historical and contemporary research on human biological diversity and they wished to receive feedback. It continued with asking the participants to discuss together with the exhibition team how we can today relate to such problematic cultural heritage. The main communication platforms for the invitation was a dedicated Facebook event page and the museum's website. The arrangement reached the maximum space capacity of 120 participants.

The event was arranged in collaboration with the Museum of Cultural History (of the University of Oslo), in the old University of Oslo buildings, and more specifically the localities of the then Anatomical Institute where racial anthropological research had been taught and performed. Most of these buildings are seldom open to the public although located in one of the main pedestrian streets of Oslo. The decision to move the event to the old university location from the outskirts of the city where NTM is located, was an attempt to create a bridge between the museum and the city and attract new audiences or even the random passer-by. A second aim was the possibility to enact the potential of engaging with diverse urban places for fostering unseen, deeper and more inclusive understandings of built environments, as well as for recovering public memories of community groups whose voice may have remained unheard (see also, Hayden, 1997). At the same time, several of the team members thought that moving out of the museum could transform participants and museum professionals into visitors and guests in this university space.

One of the lead curators welcomed the participants and emphasized the sensitive nature of the photographic material that will be discussed and added that

the aim of the event was mutual learning and understanding of the possible effects that such materials may have on the people who encounter them. She further explained that the project was at an early development stage and that the team hoped new connections and stories would emerge from this process. The event continued with a 45-min lecture by the other lead curator and a museum photo-archivist on a series of photographs related to racial science and mapping of human biological diversity in Norway by means of body measurements and photography. The lecture ended with a series of open questions which focused on the non-symmetrical encounters between scientists and subjects, and the controversial afterlives of these scientific products. The aim was to open up for an active dialogue with the help of three additional panellists, among whom a senior consultant at Árran Lulesami Centre and Museum located at the Sami area where racial research had taken place. The event's audience directed their questions, which were mainly historical, exclusively to the lead curator. Only towards the end more sensitive aspects of the presentation of the visual material were lifted from a Sami participant, whose family members had been subjected to this kind of research (see Figure 1).

Figure 1 Photos of persons subjected to racial research in the Sami area of Tysfjord, discussed in event one, as shown on one of the exhibition walls. The photographed are Inga Andersdatter (b. around 1830), her daughter Inger Nikolaisdatter Tjikkom (b. 1879) with her children Sara and Peder, Tjierrek-Ánne (Anne Abmutsdatter Kurak) (1882−1948) and the couple Finne Johnsen Ráhka (1830−1918) and Ane Bergithe Johnsdatter (1855−1933). In front of them stands Lars Magne Andreassen, the director of Árran Lulesami Centre and Museum. Photo: Åsa Maria Mikkelsen

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During the internal evaluation of the event, most members of the exhibition team were pleased with the quality of the event, which they thought established the project as reliable and knowledgeable. Most of them were particularly mindful of the power of the photographic material and were encouraged by the audience's positive response. This was especially true for the exhibition designer who had already envisioned to use these photographs as a main element of the exhibition. Since the museum did not collect information on the audience, some exhibition team members reflected briefly on the all-whiteness of the audience and the fact that they had met several of them during their studies or in other academic environments.

Other exhibition team members emphasized that the lecture format did not open for active dialogue with the audience and missed an explicit focus on the photographic material and on the exhibition as the final design product of this process. These were also the ones who had hoped to escape the authoritative voice of the museum and found that the old university as site for the event reproduced a one-way communication from presenters to audience, characteristic of university lectures. Still, several event participants from the audience were inspired to embark either on research or continue with artistic projects related to the exhibition (Sontum, 2018; https://elsalaulasfotspor.com/). The success of the event resulted in a collaboration between the exhibition project and the Sami institution, with the latter becoming a co-producer of the exhibition.

2.2 Typically Norwegian? (Second event)

In the second event the curatorial team wanted to start from present preconceptions and stereotypes and look for their deep historical roots, juxtaposing the historical aspects of racial science and their contemporary understandings. This event focused on the concepts of identity, belonging and origins and raised questions such as "Who is a typical Norwegian?", "Does a person need to be white to be accepted as Norwegian?" or "Why do we even discuss about a Norwegian identity?". The aim was to get knowledge of personal experiences and social—cultural processes of inclusion and exclusion. The museum team invited a diverse panel of performers, activists and researchers and communicated the aim for an active dialogue on how difference is discussed and perceived in contemporary Norway. Therefore, the event was set up with roundtable discussions in smaller groups.

The museum reached out with personal invitations to NGOs, research communities and persons that had been visible in the public debate on these issues. Open invitations was also published on the museums SoMe channels. This was the first time that the project experienced negative reactions arguing that this is pure politics and beyond the aims of a science and technology museum. These reactions indicated the possible push back to the project, and alerted the exhibition team, and especially the communication manager and the lead

curators to monitor the comments on social media, respond immediately and eliminate hurtful language. Prior to the event, the exhibition team facilitators of the roundtable discussions met to discuss how to ensure a safe environment for the participants during an event that would push all outside their comfort zones (Katrikh, 2018). They examined different scenarios and possible reactions and discussed whether the roundtables should be structured around predefined questions. A list of possible questions to help the discussion flow was created, but the facilitators agreed to intervene minimally and only to make sure that none of the participants feels unsafe. For the same reason, the roundtables format was clearly communicated in the event invitation to avoid participants feeling surprised and uncomfortable when it happened. The exhibition team members also presented and introduced themselves with a show of hands at the beginning, so that the audience participants would know whom to approach in any case.

This event took the participants at the very heart of the museum's premises. A quite heterogenous group of around 45 adult participants aged between 20 and 70 years old arrived at the event. Despite its smaller size, this was one of the events with the most diversity in terms of participants' backgrounds. The museum team acknowledged and facilitated for this diversity by establishing a group for those participants who felt more comfortable expressing themselves in English. One of the lead curators with recent immigrant background started the conversation by emphasizing how important it was for the curatorial team that the exhibition would be meaningful for the people visiting it in Norway, even if the issue it addressed was of global concern. The next presenters followed that lead and intertwined their artistic, activist and/or scholarly engagements with lived experiences in their talks and their subsequent interactions with members of the audience.

The roundtable discussions were held inside the LAB, the museum's experimental research and learning laboratory. The intention was to open the backstage of the museum, accessible only to those who either work there or are invited as expert advisors. The four roundtable discussions were moderated by at least one exhibition team facilitator, while all panelists took part in the conversations. These discussions went on for 45 min and were thematically inspired by the invitation text but quickly moved to the interests and experiences shared by those sitting around the table. All discussions were audio-recorded for further work with the exhibition. The participants shared ideas on topics as the political work behind policing hate crime; the awkward language around ways to discuss immigration and origins; the perception of Norway as a post-racial and colour-blind society; the long history of colonialism and the lack of discussion around the Danish-Norwegian slave trade; the lack of knowledge on migration history; as well as concrete cases of exclusion from the job market or housing, and offensive comments regarding skin colour and physical

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appearance. Most of these issues were taken up again during the final plenary session where each facilitator reported from their table.

The internal debriefing session opened with the general impression that all audience participants expressed a positive experience from the event. Audience members commented that the dialogue initiated before the opening of the exhibit was important and that it was rare to encounter an explicit request from a public institution to share personal experiences beyond an exhibition topic. Members of the museum team felt that the audience participants had understood this event as something extraordinary and new and were rather surprised by the result. They had given away so much of the control and still the participants had been satisfied. Although issues of relinquishing control had been debated for some time in the team, with some resistance from one of the lead curators and the designer, this was the first time that "co-production of knowledge" was used to describe the process. They commented it as an open dialogue but not unprofessional, grounded to the competence of the speakers and the museum staff; a new genre of events.

However, several noted that there was a lack of structure in the roundtable discussions and that a series of predefined questions which all four tables should address would have given more insight into the audiences' thoughts and experiences. They defined the event as a learning experience in how to become confident in facilitating discussions without exercising power. Others disagreed and reminded that it had been a conscious decision to avoid even semi-structured questions. The plan was to open up for discussion and its possibilities because there was already enough authority around the tables. The museum pedagogue emphasized that it was important for the team to stand in the insecure situation and experience how sensitive, personal and potentially controversial the topic of the exhibition could be. This assisted the stated curatorial aim of the event to open up for perspectives that were complex and difficult. The event challenged both museum staff and their guests to reflect upon whether they have the language and the methods for complex discussions.

2.3 DNA and identity: history written in the genes? (Third event)

The third event investigated what kind of knowledges people seek when discussing issues of identity. The invitation text asked "What is the relationship between population labels used in genetics and ethnic labels assigned through social and cultural processes? Why are individuals so eager to search their ancestry through DNA-typing? Does this reflect the hype with genetics or a deeper dichotomy between biological and cultural understandings of identity?". The theme of the event was decided upon early as the exhibition team was aware of the public interest in commercial DNA-testing. However, it was the lead curators who had already been comfortable with discussions

that synthesized biological and cultural perspectives that insisted on the double focus on fields that explore issues of identity. This was reflected in bringing together a transdisciplinary panel consisting of humanities, social sciences and biosciences scholars.

Similarly, to the first event, the intention was to reach out to new audiences and break away from spaces that may appear as authoritative. The exhibition team therefore chose a relatively new and vibrant cultural space with multiple parallel activities, located in the center of Oslo. There were already a social crowd hanging around tables before the beginning of the event, characteristic of the space's informal atmosphere that attracts younger professionals and students. In the end, the event gathered about 120 audience participants. Based on onsite observations and the people who responded to the invitation on SoMe, the audience was still adult but of a much younger age and not necessarily connected to academia.

The event was reminiscent of a talk show with a panel of experts and one of the lead curators as the moderator. The lead curator introduced the guests and the discussion topic with a short presentation of basic concepts in genetics research related to ancestry. The aim was to ease the way of the audience participants in the specialist terminology that they had possibly not been in contact with since their school days. The discussion opened with 10 min commentaries from each of the panel participants, with the speakers sharing insights on the relationships between archaeological findings and DNA research, on the construction of identity, and more specifically Norwegianness, through the lens of transnational adoption, and finally on the correspondence between concepts of ethnicity and race. Several experts focused on the importance of cross disciplinary work for adopting a broader perspective of identity research and how such findings are communicated outside laboratories.

There were around ten comments from the audience, sent through twitter or written on paper, and most addressed through the microphone. All those who spoke from the microphone shared their personal story. Many of the themes from the introductions were referenced in the discussion, and while technical questions on DNA research were asked, they were not dominant. The audience brought up issues of curiosity and craving for narratives alongside ethical considerations related to commercialization of science.

The internal evaluation concluded that the whole arrangement achieved the aim of bringing complicated scholarly discussions closer to the interests of the audience. Although the lead curators had previous experience of the potency and challenges of cross disciplinary dialogues, the exhibition team was moving together to such awareness through the room that these common experiences opened. Several members of the team commented that a tighter framework for the discussion could have helped the audience to interact more. The

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team also commented that the event revealed the challenges of shaping dialogues that cut across disciplines even among experts. Some of the team members were disappointed that the discussion part was too close to a talk show that touched upon the matters superficially and without focus on nuances.

Others, however, were positively surprised by the willingness of audience participants to share their thoughts and personal stories in the microphone. They felt that the event had empowered the audience to reflect and wonder about their own concerns, even if they had to stand up among strangers. They emphasized that this event attracted people for whom these matters were important, but probably not the curious passers-by originally expected because of the location. In retrospect, the worry of the discussion being superficial can be understood as insecurity related to the appropriate level of simplification of matters as sensitive as identity. In other words, this was a fairly ordinary panel of short presentations, followed by a familiar loose academic form of discussion, with the only difference that most of the time was devoted to the audience. In this sense, it balanced successfully between letting even more of the control to the audience participants and keeping an informed level of conversation.

3 Sensitizing exhibition design: knowledge pieces, transformation and correspondence

The three events documented in the previous section employed methods akin to ethnographic fieldwork with an emphasis on mutual learning and adaptation. The format and themes of each event built on the knowledge pieces gathered during the previous one and corresponded to the multiplicity of perspectives, values, needs and experiences of the participants. To the voices that were heard louder than others, as well as to the subtle silences and moments of confusion and awkwardness. In this sense, the events acted as sensitizing devices that supported processes of becoming through relational activities and awareness. The assembled knowledge pieces initiated changes and transformed the exhibition design during its lifetime as a process of knowledge-in-the-making.

The analysis will primarily focus on the evaluation of the events and the adaptations suggested by the exhibition team as they struggled to piece together insights from the event dialogues with the exhibition curation. As the previous case descriptions show, all evaluation sessions included juxtapositions of plural and different types of awareness. The variable sensitizing workings of the public events within the team reflect exhibition design as evoking cross- and transdisciplinary translations. The exhibition team learnt to embrace the negotiation of different or even contrasting perspectives as not an alarming situation. Exhibition development work is most often collaborative and requires transcending boundaries and alternating roles. In turn, the familiarity with a work environment that entails constant juggling with different

perspectives may be one important factor that makes exhibition teams sensitive to responding to diversity when given the chance.

The caveat in our analysis is that the pre-exhibition events were part of broader collaborative curation processes which aimed at facilitating emergent knowledges and design results in ways that are difficult to disentangle. The reflections presented below do not imply that there was a mechanistic correspondence between the happenings during the events, the debriefing sessions, the exhibition design and visitor experiences. It was rather several acts of mutual learning and transformation that came together to affect and morph the exhibition design through continuous dialogic engagement within the team and with several external participants.

Here, we suggest that the events sensitized the team and supported the incorporation of the following three analytical frames, where assembling knowledge pieces and negotiating transformations and correspondence became central:

3.1 Personal narratives and sociocultural perspectives

The exhibition team noted in every event how the participants found their way into the discussions through personal stories. More specifically, the first event on racial photography prompted responses related to the stories of the subjects of racial science, while the second event on who is considered a typical Norwegian triggered sharing of personal experiences with racism and discrimination. The participants who took the microphone, as well as those who remained silent during the third event, made the exhibition team aware of the potential of using personal stories to approach the complex relationships between cultural and biological renderings of identity. The stories of transnational adoption, for example, made the abstract tangible and relatable. These were knowledge pieces that confirmed, emboldened and broadened the exhibition team's existing determination to correspond with personal stories and include them in the exhibition design.

In the exhibition the images of people from the two local communities subjected to racial research were shown as enlarged portraits with accompanying labels communicating their names and short life stories written in collaboration with source communities and descendants of the photographed. This attempt to invert the gaze continued with short video documentaries on how racial research is perceived by local communities and affected families today. Another photograph showing a family being subjected to anthropometric measurements served as the starting point for a collaboration with a radio-documentary collective of Sami women, some of which were related to the persons photographed and raised critical questions during the first event. The attention on personal

narratives emerging from the events contributed in the collaboration with two Sami filmmakers who showed excerpts from their documentaries related to Sami identity and family relations in the exhibition space cinema. These stories became the starting points for several events after the opening of the exhibition and the filmmakers were also invited to show and discuss their work. Finally, the events contributed in morphing another design element of the exhibition, called a "cabinet of curiosity" on the outside walls of the cinema space. There several objects accompanied by short reflection texts/personal stories given by members of the exhibition team and museum staff were displayed alongside valuable museum objects related to the long history of racial science, colonialism and racism.

3.2 Control, uncertainty and possibility

The debriefing sessions of all events show how issues of structure and openness, power and control emerged as key discussions in the exhibition team. While these issues had been debated before internally in the team, the contact with potential audiences and the observation of the possibilities for dialogues afforded by different formats brought another awareness in the curatorial team. It was especially the roundtables format, that sparked the most debate. Originally conceived as an antidote to the first event, which several perceived as a performance of authority, the looser form of the unstructured roundtable discussions made several in the team uncomfortable. Those who argued for open discussions suggested embracing uncertainty and possibility. This happening directed sensitivity towards the willingness of audiences to trust the museum and challenged the exhibition team to reciprocate.

Stepping back from the privileged position of asking questions to simply being there as part of a mixed group sensitized the curators towards how audiences meaning-making of identity, origins and belonging can become part of the curatorial meaning-making. This correspondence with an empowered audience came through explicitly in the evaluation of event three. Making the exhibition team aware to the complexities of open dialogues and the persisting power relations even at roundtables had a lasting impact to how tours of the exhibition were organized during its lifetime. While the designer had from the start presented a gathering element in the center of the exhibition, observing how the roundtables worked in the second event strengthened the exhibition team's determination to incorporate it in the final design. This roundtable was further activated by the museums staff as a place of discussion (Figure 2), summing up, sharing thoughts and reflections towards the end of guided tours. At the same time, the facilitators of the events were attentive to the power structures that form quickly in such settings and therefore improvised ways of enriching the activities with the use of cultural probs and smaller group assignments, especially during school tours.

Figure 2 The round table, which became a central design element of the exhibition, was activated by the museum staff and audiences as a place for sharing thoughts and reflections during tours and events. The photo is from the exhibition opening. Photo: Åsa Maria Mikkelsen. **Figure 2:** *The round table, which became a central design element of the exhibition, was activated by the museum staff and audiences as a place for sharing thoughts and reflections during tours and events. The photo is from the event "One picture can change" based on a radio documentary related to racial research on Sami people and a photo shown in the exhibition.* https://elsalaulasfotspor.com/Photo:20I20Elsa20Laulas20fotspor205f20ra-diodokumentar *[In the footsteps og Elsa Laula − Radiodocumentary]*

3.3 Relevance and complexity

When organising the three public events, the exhibition team was nervous about the perception of the exhibition's theme; given the limited public debate on race in Norway would the potential audiences see its relevance, and even more so in a museum of science and technology? The engagement of the participants exceeded their expectations and sensitized them to the different forms that relevance can take, from the personal and intimate to the structural, institutional and historical. It emboldened them to address the topic of scientific racism head on and made them aware that by adopting a clear vantage point they opened for the visitors' individual meaning-making to emerge. This was materialized in the exhibition by a sound screen which displayed a transdisciplinary discussion on how researchers today think about race, racism and human diversity. At the same time, the limited negative reactions on social media prepared the team for defending the relevance of the topic of racial science at a national museum of science and technology. In their public utterances and for several months when giving tours of the exhibition, they always addressed this issue and pointed to the importance of critical thinking for advancing the

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understanding of scientific activities as human activities, as well as the role of a national museum as a safe and public space for these discussions.

The theme's complexity was made obvious in the third event by the difficulties in dialogue, even among seasoned researchers. The exhibition team became sensitive to the challenge of cross disciplinary discussions, and to the communicative challenge of simplifying complex matters without reducing the issue to parallel monologues among heterogeneous audiences. Nevertheless, they decided to avoid big simplifying, tabloid-like headlines, and opened instead for a deeper and slower engagement more akin to the one the exhibition group had experienced themselves. This correspondence was strengthened and put into action through the exhibition design that was not linear and that relied on the visitors' finding their own unique routes in space. The final exhibition design also allowed museum staff to make alternative, multiple and creative organized tours specifically for the groups visiting. Whether this choice was successful or not, and for whom, remains an open question for further research. But in any case, it represented an honest response to encounters such as those at the third event.

4 Reflecting on collaborative curation and design anthropology

In this paper we have explored how collaborative curation may draw on analytical concepts with origins in design anthropology by focusing on a series of public pre-exhibition events. Our approach resonates with recent debates on methods, interpretations and representations of curatorial activities, as well as arguments on how anthropology can "offer tools and methods that can critically analyse, revise and galvanise curatorial theory and practice" (Schorch et al., 2018, p. 7). The methodology of the events opened the potential for ethnographic encounters with research subjects that were not predefined, recruited, or especially invited, even if several individuals were approached in light of their scholarly or activist engagements. The three public events created the opportunity for the exhibition team to examine the exhibition design ideas in dialogue with broader groups of audiences, which we understand as resembling the natural habitat of the exhibition (Ball & Christensen, 2018).

With the exhibition to be realized several months in the future, the events functioned as exercises of the imaginary which, borrowing from Schechner's (2004) performativity theory, expedited irrevocable changes by highlighting what was at stake for the different people involved. At the same time, having a concrete design result in the horizon, transformed the events into sensitizing devices for materially trying out ideas and perspectives in the exhibition.

The design anthropology conceptual tools of knowledge pieces, transformation and correspondence have facilitated our analysis of the events by enabling us to articulate the sensitizing processes and specify the knowledge outcomes of each

event. These concepts have also given us the opportunity to analyse how knowledge was negotiated and transformed within the exhibition team during the exhibition development and its lifetime. Here, sensitizing contains both knowledge and awareness of how to plan and execute dialogues about complex and troubled themes, acknowledge and address power relations, as well as how to perform affective work beyond critical thinking and reflection.

Defining the analytical frames as *a) personal narratives and sociocultural perspectives b) control, uncertainty and possibility,* and *c) relevance and complexity* made us aware of how curatorial decisions corresponded in complex ways to the encounters with the audiences. The ways that the events facilitated decisions to focus on personal stories in the exhibition, placing the roundtable in the middle of the space, and arrange the overall space with non-linear routes were sensitizations that gained a language and analytical vigour with the help of the design anthropology concepts. Put differently, design anthropology may support collaborative curation with concepts that refine empirical knowledge, bring attention to the multiple trajectories exhibition curation may take, and generate knowledge on how processes may be positioned *with*, versus *for* the people involved. As the analysis shows, the kernel of the internal debates in the exhibition team centred around disagreement on how curatorial practices could shift from interactions to correspondence (Ingold, 2017). The fundamental re-orientation that this shift entails for curatorial thinking goes beyond merely adding the word collaborative and arranging open public events as part of the exhibition design. It includes re-adjusting all the professional, institutional and societal lines that curators adhere to and is beyond the scope of this article.

This paper further aimed to point out how the empirical use of these design anthropology concepts in a cultural heritage setting may support further theoretical development. Our empirical narrative suggests that negotiating matters of concern during museum events brings awareness to how curatorial processes may take the form of relational dialogues. These movements of potential empowerment and ownership may support audience participants and museum professionals to articulate their competences and confidence. Our examples remind of design traditions for instigating debate on issues, conditions and consequences and therefore even evoke reaction and response (DiSalvo, 2009). Still, our case of collaborative curation process pushes exhibition development further by emphasizing the caring aspects of curating.

When care becomes central in collaborative curation processes, it may open up for attention to the important details of how curatorial processes unfold, which conversations come to the surface and the engagement and knowledge that materializes (Morse, 2020; Skåtun, 2021). Care in collaborative curation challenges traditional curatorial emphasis on "control" and "choice", and who gets to decide (Morse, 2020, p. 42). The curation of the events corresponded to the participants' needs for safe spaces within which they could share

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experiences and affections, as well as to the needs of museum professionals to establish dialogues with audiences and topics they may otherwise had hesitated to explore. In this sense, collaborative curation was a caring curation of process. A collaborative design result developed from the initial conception period until after the design product was put to use. The paper shows how curating active relations of reciprocity includes sustaining the networks of relations that emerged throughout the exhibition design process. Collaborative curation may thus become a practice of thriving, which is highly relevant for all participants involved and worth pursuing further.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Notes

1. The use of the word "folk" in the exhibition title reflected various curatorial considerations. The word itself has rather neutral connotations in Norway as in its everyday use refers to "people". However, in the context of anthropological race science that the exhibition addressed, it pointed to connections between such research and the völkisch or Aryan/Nordic movement. For those more familiar with the history of anthropology, it also suggested connections between folklore studies, ethnography and anthropology. On another reading, the exhibition title emphasized that on both sides of race science, as subjects and objects, were people and invited to consider their different positions of power. Finally, as the show was exhibited at NTM, and not in the appropriately named Folk museum or another museum of cultural history, the curatorial intention was to provoke curiosity and invite audiences to reflect on the roles and uses of science, technology and medicine and their impacts on the lives of people. Indeed, many visitors commented or asked about all these aspects.

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