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**THE FAT MADE US DO IT:
UNDERSTANDING EVENTS THAT
ENTANGLE
PEOPLE AND VIBRANT MATTER**

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THESIS SUBMITTED FOR THE DEGREE OF DOCTOR OF PHILOSOPHY (PHD)

April 2022

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DECLARATION

I hereby confirm that the work presented in this thesis is my own. Where I have consulted the work of others, this is always clearly stated.

Michael Thompson

ACKNOWLEDGEMENTS

To my supervisors, Tobie and Bill, your drive, encouragement, and generosity have been an inspiration. Tobie, you taught me how to distil what began as an eclectic assemblage of practices, questions, and themes into something more pointed and insightful. Bill, your broad interests and sharp insights gave me the confidence to develop an academic account of my design/art practice that remained true to its diverse origins and motivations. I will never forget our conversation about my writing being “only a thesis”, which provided a sense of perspective when I needed it most. My upgrade examiners Juliet Sprake and Kat Jungnickel also deserve thanks for their honest judgement. While it is fair to say that the revisions you proposed to my writing proved challenging, they forced a rethink of the crux of my research, and the work is infinitely better for it.

Naturally, a special mention must go to my collaborator, Arne Hendriks. Although detached from my PhD process, Arne’s thoughts and actions delivering Fatberg events have inspired many thoughts in this thesis. While the resulting ideas and insights ultimately represent my subjective take on the work, Arne’s discussion and opinions were greatly appreciated. I sincerely hope the ideas and resources within this thesis reflect the richness of Fatberg and prove fruitful as we move on to a new chapter in the work.

I want to thank my colleagues at PhD in Design at Goldsmiths University of London for their support. A special mention must go to Sarah Pennington, Tim Miller, Liam Healy, and Tom Marriot; your counsel and sense of humour made this experience enjoyable.

I have been fortunate to have had many rich discussions over the last five years, inspiring invaluable thoughts and insights that helped shape the research. While not an exhaustive list, especially deserving of thanks are Mike Michael, Snezhana Oliferenko, Jeremy Carlton, Hannah Platts, Dash Macdonald, Christian Nold, Emily Dawson, Bas Raijmakers, Danielle Arets and Jaap Seidel.

Given the synergistic nature of participatory events, there are many (too many) collaborators, partners, supporters, and participants to whom I should express gratitude. Special mention must go to Angeliqe Spanninks and Rieke Vos, with whom we collaborate to produce Fatberg. It would have been impossible to create a work so unconventional and vast in size and scope without your trust and advocacy. For those I have not named, you know who you are; therefore, please take this as a token of my thanks.

I am indebted to my parents, Janet and John, and siblings, Jen and Andy, for their unwavering interest in my work and support. To my partner Shama, I am thankful for your patience, listening ear, and words of encouragement. Finally, to my daughter Rei, I am eternally grateful to you for providing a whole new sense of perspective and forcing me to take distance from my writing.

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ABSTRACT

This research examines a design-art practice consisting of a programme of interdisciplinary, participatory events. The events employ the building of an island of fat – the Fatberg – as a form of conceptual-analytical inquiry into relations with a socio-cultural, biological substance. What is striking about the practice is that fat functions not only as subject and construction material but is given an elevated status whose expressions purportedly direct proceedings. The result is a practice that follows an inherent logic for engaging with vibrant matter (to use Bennett’s phrase) that encourages unpredictability. Identifying and critiquing the features and methods that compose Fatberg activities, the research examines the role of material as a participant and collaborator within participatory events.

An introductory discourse analysis reveals three features that shape the research enquiry: a dialogic space for fat, fat as a construction material, and fat as an agent. Each represents a distinct motivation for practice, affecting the relations between designer-artist, participants, and material. They also motivate various methods, theories, and practices drawn from art, design, literature, and philosophy that help situate and interpret the practice. Huizinga’s theory on the function of play in human culture serves as a starting point to establish the basis of creative experimentation. Considering play as a temporary, open pursuit or enquiry, I trace a path through play’s features and ecology to its transgressive character and use in situated critique. I then examine creative practices, including Kaprow’s improvised happenings and Beuys’s expanded concepts of art and material, that employ playful engagements with the everyday as a trigger for social transformation. Examining this body of knowledge, I compile a preliminary lexicon supporting narrative and analytical accounts of practice.

The practice-based component of the research centres on a triptych of events performed in summer 2017 and elaborates upon the three practice features to examine their practical effects upon people and material. I argue that while Fatberg events appear susceptible to and arguably encourage chance disturbances and divergences, this is essential to nurturing

mindful engagements with vibrant material.

The primary contribution of the research is that it advances a holistic notion of participation, one that grapples with the real and imagined agency and contributions of material. The thesis is thus a blueprint, contributing empirical accounts and practical resources that enable practitioners to navigate and comprehend the multifaceted, unpredictable goings-on in events centred on playful engagements with vibrant matter.

CHAPTER 1

Introducing a hybrid design/art practice

1.1 HAPPY BIRTHDAY TO FATBERG

A man steps in front of a green backdrop. A tripod-mounted video camera and flatscreen TV stare back directly opposite. Dressed in black workwear and boots with a pair of tennis rackets gaffer-taped to the bottom, the man gestures toward the camera, swaying back and forth in time to the music (Figure 1). The TV displays the man atop an island-like form floating on water, bobbing up and down, side to side, on a never-ending loop. A technician, stood to the right, works feverishly at a laptop, shifting periodically to adjust the camera. Next to the TV, atop the same table, sits a chunk of lardo di Colonatta (an Italian cured pork fat) on a white chopping board, surrounded by slices of cured fat. Crates of beer are stacked neatly to one side. A variety of tools and objects lie piled up on a cage trolley. A fishing net, a rope, a metal shovel, a canoe paddle, a flashlight, a metal bucket, a wooden sledge, umpteen blocks of wrapped cooking fat, and a second pair of 'fat boots' fashioned from wellies, wooden tennis rackets and silver gaffer tape, can be made out amongst the heap. The technician gives a thumbs up to confirm that the audio-visual equipment is working. Meanwhile, a small audience has amassed, drawn to the sight of the man, shuffling along the green screen stage, making digging gestures with a shovel.

It is the opening weekend of Dutch Design Week 2015 (DDW), and scores of design enthusiasts and members of the public are ambling around, nipping in and out of the hundreds of installations, exhibitions and events scattered across the STRP district of the Dutch city of Eindhoven. Positioned outside MU Artspace, a renowned gallery and platform for creative research, my artist collaborator and I are staging an event. It's one year to the day since an island of fat - the Fatberg - was born, and we are holding a party.

Central to festivities is the Fatberg, present, on this occasion, in the form of an interactive artwork. Selecting an object, or objects, from the trolley and stepping onto the green screen stage, visitors observe themselves on the TV opposite, interacting with a life-sized depiction of the island. Mimicking the island's movement on the water, visitors perform a variety of actions, from shovelling blocks of fat into a bucket or paddling to manoeuvre the island



FIGURE 1 Top Screentest at Fatberg's 1st Birthday Party (2015) [Photo credit: Hanneke Wetzler].

FIGURE 2 Middle Visitors interacting with the simulated Fatberg (2015).

FIGURE 3 Bottom Posing for a photo with the project partners and fat cake (2015) [Photo credit: Hanneke Wetzler].

to hauling objects from the water with the fishnet and sledging down the island's slopes. Others play air guitar with the fishing net or shovel while dancing to the music. Meanwhile, a photographer discreetly hovers in and around the action, documenting activity for the project blog and social media. The playful interactions stir attention, as additional passers-by momentarily stop to observe the goings-on. All the while, my collaborator, our student helper, and I invite visitors to have a drink, taste lardo di Colonatta, discuss fat, and, if they wish, step onto the green screen stage, and experience the island.

Aside from chance encounters with Dutch Design Week-goers, friends, colleagues, and supporters pass by to observe the Fatberg. A case officer from the Art of Impact, who helped fund the event, drops by to show their support. The director of MU Artspace additionally joins to endorse the event they helped co-produce. Other colleagues and supporters take the opportunity to reconnect and learn about the project's progress over the last 12 months. Two such visitors, who previously pledged their waste cooking fats for island-building, arrive with a gift. Peeling back the tin foil wrapping, a birthday cake formed with beef fat, and coated with bacon sprinkles, is revealed. The lighting of the cake provides the highlight of the event, with everyone assembled singing Happy Birthday to Fatberg. This sets the scene for a final photograph with the case officer, gallery director, my collaborator and me, all posing together with the fat cake while sharing a celebratory drink (Figure 3).

1.2 BACKDROP TO THE RESEARCH

Since 2014, Dutch artist Arne Hendriks and I have collaborated on Fatberg, a design and art-driven research project, with an ambition to explore fat's meaning and function across knowledge, culture, and disciplines. Fat is a fundamental material, yet one with which humanity shares the most complex of relationships. Closely tied to health, energy, and ecological issues, including obesity, body image, alternative fuel sources, and wastewater treatment, fat today is no longer a description of a material or size but a moral category tainted with criticism and contempt (Orbach, 2012). Nevertheless, fat is a substance we

know intimately as an intrinsic part of our diet and physical being.

Significantly, Fatberg events unite around one distinct activity - building an island of fat - the Fatberg (Figure 4). The activity was inspired by a 15-tonne mass of congealed fat extracted from the sewers beneath the London borough of Kingston upon Thames in August 2013. This bus-sized “fatberg”, an accumulation of solidified grease and oil, had grown to obstruct 95% of the 2.4-metre diameter sewer pipe, threatening the risk of flooding (Thompson and Hendriks, 2015a; Vidal 2013). From my and Arne’s perspective, it was not the blockage that made the incident noteworthy, but the material held responsible - fat (Thompson and Hendriks, 2015a). In our view, the fatberg was more than an amalgam of fat and discarded material but a metaphor for the diverse meanings and concerns associated with a fundamental, misunderstood substance. It signalled an often disregarded material drawing attention to itself.

Inspired by this phenomenon, we chose to build an island of fat, inviting people to participate so that making - chopping, melting, dripping and being “hands-on” with fat - provides occasions to explore and reflect upon our relations with this substance and its role and value in society. Our aim, presenting fat in a distinctive form and scale, is to recontextualise fat to catalyse new experiences, relationships and practices with this material. This playful, seemingly illogical activity emphasises empiricism and the belief that other ways of doing and knowing are required besides the scientific to apprehend fat and its relations. For this reason, in Fatberg, fat is granted an elevated status whose expressions are said to motivate proceedings. That is to say, Arne and I claim to understand, speak for and act on behalf of fat. This role-play is an attempt to consider the needs and wants of material, recognising fat’s role as a participant and collaborator within participatory events. Thus, Fatberg endeavours to look beyond an anthropocentric view of fat, to complicate and challenge what we think we know to imagine what relations with this substance might become.



FIGURE 4 Building an island of fat (2014–present) [Photo credit: Hanneke Wetzer].

Or so we claim. Bearing in mind the mixed materials, activities and modes of participation involved in Fatberg events, how should we understand these entanglements between people and material? What does it mean to recognise material as a participant and collaborator within participatory events? How does fat's elevated role inform the design and delivery of activities? What are the effects and products of events that recognise material agency? As a material-oriented research, what do Fatberg events actually do?

1.3 ESTABLISHING THE FEATURES OF THE FATBERG

This research studies the discrete features, mechanisms, and logic of Fatberg events to establish their merits as a form of interdisciplinary, participatory research. I now present a short discourse analysis of preexisting materials as an entry into the practice. Drawing upon sources, including the practice blog, social media accounts, and a range of published articles, interviews, and conference papers, I highlight the principal features, sites, claims, and concerns relating to the practice. The aim is to establish where and how the practice operates, to grasp its motivations, characteristics, and logic relative to other creative, participatory methods, theories, and practices. The features and insights emerging from this review motivate and structure the subsequent research examining entanglements between people and matter in participatory events.

FAT AS A CONSTRUCTION MATERIAL

Fatbergs within living sewer systems are created from a complex mixture of animal, vegetable and trans fats, combined with materials such as toilet paper and sanitary wipes, which harden to form a rancid, concrete-like mass (Thompson & Hendriks, 2015a, Vidal, 2013). Loosely inspired by its namesake and the gradual accumulation of fats, the island-building process originated as a single drop of melted fat solidifying in a water tank (Thompson & Hendriks, 2014b). Repurposing everyday actions, tools and materials, participants repeatedly chop, melt, stir, pour and drip a mixture of animal and vegetable fats, one drop on top of the other, causing the island form to grow (Thompson, 2014, 2015a). These actions were imitated at *Fatberg's 1st Birthday Party*, where participants were observed, on the TV opposite, using the tools and

objects provided to perform a variety of work-like interactions with a simulation of a life-sized island of fat. The supplementary spin-off from the main island-building activity emphasises an unending practice that does not resolve in a bounded set of conclusions or learnings. Instead, new variations of and engagements with fat are introduced by ourselves or participants with each new event or publication, characterising a work that is continually in progress. Indeed, the island as a goal embodies the project's endless nature, with no predetermined idea of what constitutes island-like proportions. In this way, the island serves as a concept, ambition (to reach the size of an island), participatory object (the thing that participants coalesce around) and artefact. Such diverse manifestations allude to the multiplicitous nature of fat, comprising various forms, processes, actions, and concerns. With this, Fatberg functions as the context and medium to stage encounters between people and material, the human and nonhuman. However, the principles and characteristics that define these seemingly open-ended, material-oriented activities are absent within the source materials. What are the practical effects of employing fat as a construction material? To answer this question, I require a vocabulary to explain the diversity of activities and outputs of a practice built on open, embodied experiences with a lively, biological material.

A DIALOGIC SPACE FOR FAT

The following statement, lifted from a publication documenting a public engagement event, helps to explain the underlying motivation and array of activities bound within the practice:

A surgeon, who routinely unblocks patients' arteries, shares a comparable experience with a sewer flusher, who unclogs a sewer pipe. What would happen if they came together? What might they learn from one another and could such dialogue lead to new avenues of enquiry and collaboration? (Thompson, 2019).

The statement describes a setting where lay and expert participants meet to reflect upon their knowledge and experiences with fat. The account of *Fatberg's 1st Birthday Party* echoes this approach, where visitors' performances on the greenscreen stage triggered the curiosity

of passers-by who stopped to discuss the work and participate. What is conspicuous about the Fatberg, however, is its loose contextualisation. Passers-by encountered a familiar substance materialised in an abstract form and distinctly out of place. The diverse actions of participants at *Fatberg's 1st Birthday Party* portray an activity that was open to interpretation, with the Fatberg the trigger for dialogue and action. From limited evidence emerges a loosely defined practice whose experiences and outputs appear multiple and indeterminate. However, ambiguous within the source materials is the composition of these events. How are collaborative engagements between people and material structured? What are their prominent features, and how do they differ from other forms of participatory enquiry? These questions imply that I look to examples from participatory practice to shape a reference frame to describe the composition and effects of collaborative engagements between people and material.

A VARIETY OF ACTIVITIES AND SETTINGS

Aside from island-building, Fatberg employs numerous satellite activities and sites that provide a setting for creative research, experimentation and dissemination, and various types of engagement.

The practice consists of a wide variety of participatory activities, including public performances and demonstrations of the island-building process (Thompson & Hendriks, 2014b); production of exhibitable, fat-related objects and artworks such as bespoke tools and observational drawings (Thompson & Hendriks, 2015b); island-building workshops and practical lessons including fat rendering and soap making (Thompson, 2015a); panel discussions and keynote presentations at academic conferences and art/design symposia (Thompson, 2019a; Thompson & Hendriks, 2015a, 2017b); charitable events raising funds and resources (MU, 2015); and educational courses based on creative investigations into fat (@buildingfatberg, 2016). These activities typically occur at art/design galleries, museums, and cultural or scientific institutions inspired by and sharing our topical interests or concerns. In spring 2017, we began a residency at Stichting NDSM (NDSM Foundation), a cultural institution situated at the former NDSM shipyard in the north of Amsterdam (NDSM, 2017).

This site became Fatberg’s temporary home. Here, a custom floating dock was constructed at the bottom of a submerged shipping ramp, forming a production site for building the island (@buildingfatberg, 2017c). A shipping container overlooking the site provided an office/workshop, exhibition space, and storage for project equipment, tools and fat (@buildingfatberg, 2018). These conjoined sites played home to the practice as an observable artwork-in-progress and event space, where a programme of public events routinely took place. Considering Fatberg’s diverse and ongoing activities, I reason that a mixed-method approach can help capture and paint a rich depiction of practice. The approach can take advantage of my proximity to practice observing and interpreting the diversity of participant experiences to deliver a multi-layered account of events.

DOCUMENTATION AND CIRCULATION

In parallel to the delivery of activities and events, the practice is documented via a blog (Figure 5) and social media accounts (Facebook, Instagram, and Twitter) co-authored by the project leads. These different forms of documentation give expression to the project through a broad range of articles and posts, here categorised in terms of their function: promotion, investigation, or dissemination.

Promotional posts primarily announce upcoming events, public exhibitions, workshops, and talks. These include advertisements for the *Fat and Food* and *Float Fest* events central to the subsequent research. They also comprise calls for volunteer participation and patronage. For example, a “Fatraiser” event requested individuals pledge their leftover fats to support island-building (MU, 2015). Similarly, Fatberg-inspired merchandise, including “Lard Pour Lard” printed T-shirts and “Certificates of co-ownership” are publicised, with the proceeds from sales used to purchase project materials (Thompson & Hendriks, 2017a, 2017c).

Investigative posts describe practical and theoretical studies performed and shared by the practice. They comprise reports of material research such as rendering animal fats or experimenting with different compositions and ratios of fat (Thompson, 2015a, 2015b). They also include historical, scientific, and cultural accounts of fat and fatbergs, for instance a

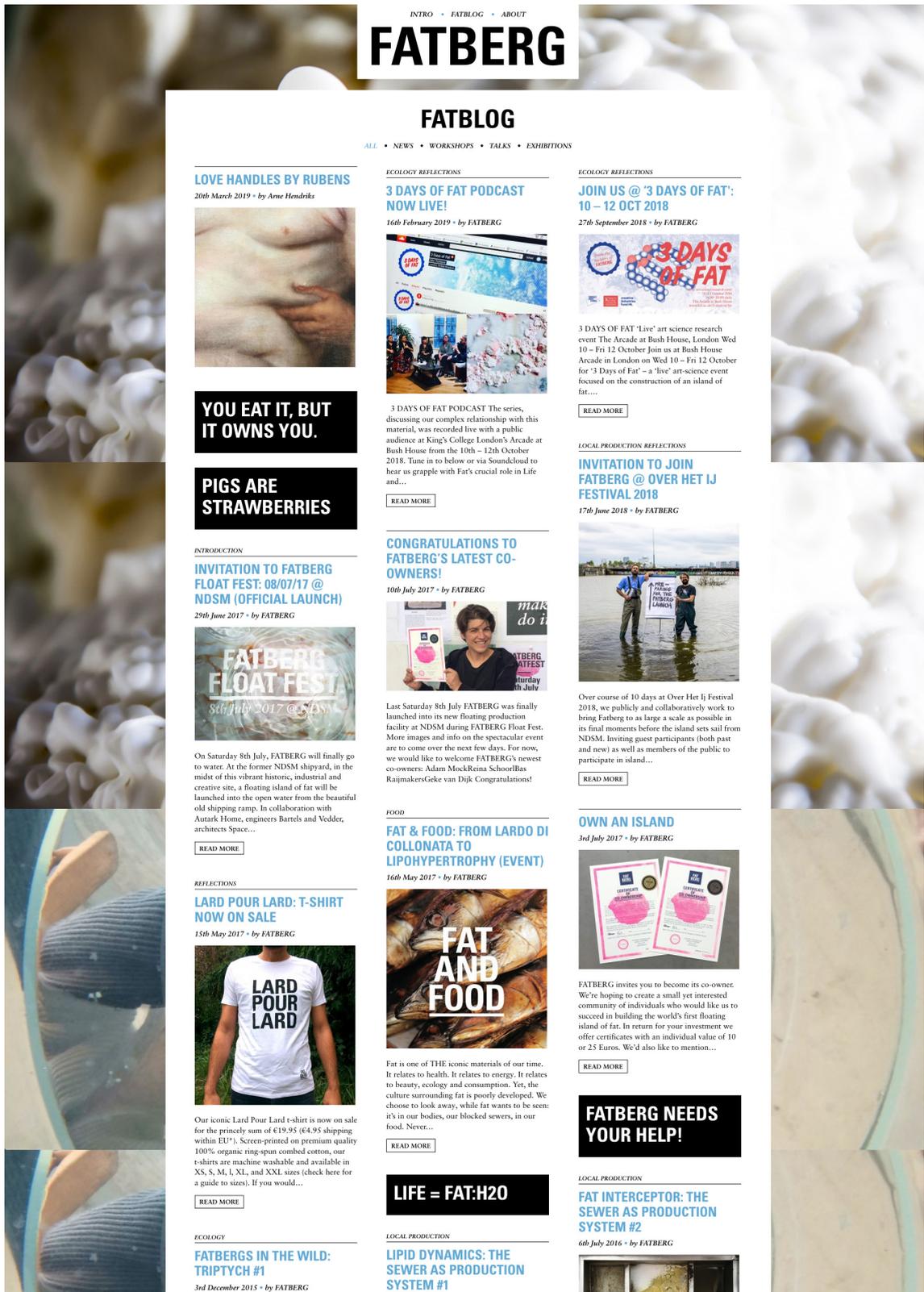


FIGURE 5 The Fatberg website/blog (2014–present).

factual article describing lardo di Colonnata, a type of cured pig fat (Hendriks, 2015). Then there are articles reflecting upon how the processes observed and developed within the research, for example, the fat interceptors employed by restaurants and takeaways (Helder, 2016), might be appropriated and inspire novel methods for island-building.

Finally, there are posts disseminating outcomes from events, public exhibitions, and workshops. These include written, photographic and video documentation of events such as *Fatberg's 1st Birthday Party* (Fatberg, 2015). Another example is a limited podcast series recounting the discussions that formed part of an event titled 3 Days of Fat, held at Kings College London in October 2018 (Thompson, 2019) (Thompson, n.d.). Dissemination also extends to reflective accounts and analyses of practice features, such as comments on observations and experiences or the broader effect of our project activities (Hendriks, 2017). For instance, the newspaper *Chewing The Fat* presents a collection of ideas, thoughts, and reflections by the team and guests at 3 Days of Fat (Thought Collider & Branscombe, 2019).

The various types of promotion, investigation and dissemination result in a project represented by, and arguably made through, the process of capture and publication. However, the review materials present only a partial view of practice, lacking empirical evidence and reflection upon the actual goings-on within Fatberg events. While the examples in this subsection highlight the scope of the practice's activities and outputs, they demonstrate that additional forms of data are required to obtain a less rhetorical, more detailed perspective on Fatberg events.

MIXED TYPES OF PARTICIPATION

Fatberg receives the support of a range of partners who provide the foundations for an ongoing series of activities and events. For instance, we count on the financial support of Stichting DOEN and The Art of Impact, funding bodies that subsidise art and design projects and initiatives tackling current social and environmental issues (Stichting DOEN, 2018; The Art of Impact, 2015). Besides this, cultural institutions such as MU Artspace and NDSM

Foundation assist in the programming and production of public-facing activities. Together, the partners contribute to a design/art practice that creatively experiments with the concepts and material of science and technology yet occurs independently of scientific collaboration.

Instead, the practice embraces a diverse range of lay and expert knowledge and expertise, with collaboration occurring on an ad hoc basis in response to a specific theme, enquiry, context, audience, or invitation. This is evident from the broad spectrum of activities and themes and their respective guest contributors, participants, and partners. For example, an event titled *Fat and Food* (which I review in Chapter 4) counted on the contributions of an obesity researcher and food journalist. Other events have brought nutritional scientists face-to-face with hula dancers or electrochemical engineers with cured sausage makers (Thompson et al., 2018).

The character of event audiences and participants is typically theme- and context-dependent. Participants range from museum/gallery visiting members of the public, such as visitors to Dutch Design Week or passers-by at NDSM Wharf, to members of the maker/hacking community and individuals interested in creative research and experimentation with science and technology. It also extends to project supporters or “co-owners”, who routinely show up at events, follow the work via the blog and social media, and support the project by donating fat/materials or purchasing project merchandise.

The forms of participation outlined above show the diverse motivations and experiences that contribute to Fatberg events. They suggest that a suitable research methodology is needed that reflects the diverse experiences and perspectives that shape the practice to support its documentation, account writing and analysis.

FAT AS AN AGENT

Central to the practice is that fat functions not only as subject and construction material but is recognised as an active participant and collaborator that contributes to the unfolding of events. This involves an attempt to read fat’s behaviours and expressions, a material

that, depending on the conditions, interaction, and interrelations, melts, breaks, decays, is slippery to hold, and is a food source and habitat for other species. However, what is most striking about the project is that we refer to ourselves as “agents” of the Fatberg, with fat provided the status of an agent that directs proceedings. Phrases such as “we don’t know why we simply know we must” (Figure 6), “the fat made us do it”, and “lard pour lard” (Hendriks & Thompson, 2014), a play on the slogan “l’art pour l’art” (Gautier, 1835) translated “art for art’s sake”, or in this instance “fat for fat’s sake,” adorn the blog as statements of our intent. An artist’s video expands upon these proclamations, with my collaborator remarking of fat, that “we have the idea that something is speaking to us,” pondering “is this a language we can speak?” (Thompson & Hendriks, 2019). These statements emphasise a concern with the agency of fat that deserves further examination. Rather than acting out a specific methodology, the processes that emerge through practice are motivated by and germane to fat. This is evident in the presence of the fat boots and island-building tools produced through an embodied experience with fat. In essence, we adopt a philosophical position or role-play that assumes a less anthropocentric view, allowing for and even encouraging chance ideas and influences to stimulate creative associations, concepts, and outcomes.

Having decided to build an island to study fat, other associated activities started to make sense and gain traction. Tasks such as fat rendering, chopping, melting, and dripping become an inherent part of the working process. The challenge of producing work at such a large scale additionally leads to ventures such as the Fatraiser event, where individuals were invited to contribute their leftover fats for island-building and talks held to promote and rally contributors to the cause. Even the mock interaction with the island, experienced at Fatberg’s First Birthday Party, is justifiable within the project mindset, providing a means to explore the kinds of interactions that might occur and tools that may be required when building an island of fat. Bearing in mind fat’s elevated, multiplicitous role within Fatberg events, how does this shape entanglements between people and material and what are the tangible effects? It is, therefore, necessary to study practices and theories that similarly recognise material agency to develop an analytical perspective and vocabulary



FIGURE 6 "We don't know why, we simply know we must..." poster (2014).

to make sense of such entanglements and describe how fat's real and imagined agency materialises in participatory events.

1.4 CONJECTURE:

A PRACTICE THAT PLAYS BY ITS OWN RULES

From an analysis of preexisting practice materials, Fatberg can be described as a creative investigation into humanity's relation with fat, which employs the material construction of an island - the Fatberg - as a site where lay and expert participants meet to reflect critically upon a socio-cultural, biological substance. Crucially, this playful approach emphasises the agency of fat as a driving influence producing an inherent logic for engaging with material.

The discourse analysis produced six themes - fat as a construction material, a dialogic space for fat, a variety of activities and settings, documentation and circulation, mixed types of participation, and fat as an agent - which helped identify the research scope and focus. Each theme presented a specific query or insight foreshadowing the thesis enquiry and the development of an appropriate research methodology and structure. Fatberg's varied activities and settings result in numerous experiences and outputs. Consequently, Fatberg events involve a mix of types of participation, embracing a broad spectrum of motivations, knowledge, and expertise. However, the review of practice materials has revealed a lack of empirical evidence and critical reflection upon the actual goings-on within Fatberg events and their outputs. I, therefore, reason that a mixed-method approach is needed to navigate and comprehend entanglements between people and material within participatory events. The approach will benefit from my proximity to the practice. Being positioned "where the action is" (Bernard, 2006, p. 343), I will utilise my lived experience as a practitioner and researcher to observe, interpret and record a detailed account of practice. These lived experiences can help recognise and reflect upon the diverse experiences and voices contributing to Fatberg events, offering a multi-layered representation of practice.

In addition to anticipating an appropriate research methodology, three discrete practice features emerge from the six themes: *a dialogic space for fat*, *fat as a construction material*, and *fat as an agent*. Each feature represents a distinct motivation for practice, affecting the relations between designer-artist, participants, and material. Practically, the features provide different focal points to scrutinise entanglements between people and material and anticipate specific methodological approaches. For instance, examining fat's function as a construction material, I reasoned that an appropriate vocabulary is needed to document and analyse participants' embodied and situated experiences with material. Describing collaborative engagements between people and material as a dialogic space, I propose looking at participatory practice examples to form a reference frame to establish the discrete logic, composition and effects of Fatberg events. Most striking about the practice, however, is that fat is considered an agent that directs activities to the effect of displacing our agency as project leads. I, therefore, intend to review practices and theories that similarly acknowledge material agency to shape an analytical perspective to study fat's role as a participant and collaborator within participatory events. In the following research, the three features provide an entry into Fatberg events, motivating the selection of relevant theories and practices that help situate and examine encounters between people and material and configure the empirical research.

1.5 SITUATING THE PRACTICE

Through an analysis of existing project materials, I have established the character of Fatberg events and anticipated the configuration of a research methodology. Next, it is worth considering the broader frameworks, context and epistemologies that support the work. This helps to situate and further explicate the practice and support the selection of relevant analytical material.

While coaching together in the Department of Design at Eindhoven University of Technology in 2011, my collaborator Arne Hendriks and I became aware of our mutual

interest in the culture of fat. We felt a pressing need to address what appeared, because of its connection with a range of societal challenges, to be *the* iconic substance of our time (Thompson & Hendriks, 2015a). The discovery, in August 2013, of a 15-tonne mass of congealed fat – a fatberg – in the sewers beneath the London borough of Kingston upon Thames served to underline the sense of urgency, causing us to ponder:

What is fat if its ‘behaviour’ becomes so unpredictable, overtaking not only our bodies but our systems? What is fat when its original purpose as an energy reserve evolves into the impractical blockage of a sewer pipe? Do we still understand fat, or are our presumptions so limited that we need a fresh perspective? (Thompson & Hendriks, 2015a, p. 4).

The Kingston upon Thames fatberg prompted our idea to build an island of fat to rediscover an empirical understanding of this substance and challenge preconceptions concerning “what fat is, how it functions, what it means, or how we should regard it” (Thompson and Hendriks, 2015, p.8). MU Hybrid Art House in Eindhoven, an explorative presentation platform concerned with “the liminal space between ‘what art is and what art can be’” (MU Hybrid Art House, 2021), offered to support the practice’s development by providing their expertise as production partner and exhibition space to produce Fatberg activities and events. A successful application to Stichting DOEN, a foundation supporting initiatives that actively work towards a green, socially inclusive and creative society (Stichting DOEN, 2018), additionally provided funds to initiate and promote the work.

Noting the different motivations, activities and partnerships supporting the origination of Fatberg, let us now examine the Dutch creative industries’ relationship with innovation in science and technology to describe the conditions that give rise to this interdisciplinary practice. Research and development programmes such as Horizon2020 support research and innovation in excellent science, industrial leadership, and tackling societal challenges in agriculture, energy, healthcare, mobility, climate change, and inclusivity (European Commission, 2013). Interdisciplinarity is seen as the answer to these goals, promoting

relations between science and society, developing accountability, and fostering innovation in the knowledge economy (Barry et al., 2008). Design and art practices – the creative industry – with their emphasis on creative experimentation, are valued as collaborators and catalysts triggering the development and circulation of novel products and social, economic, and business models. In the Netherlands, where the practice originated, the creative industry is believed to generate “economic value by aligning technology with the values and interests of people and society” (ClickNL, 2017, p. 19). This is reinforced by the Nationale Wetenschapsagenda (Dutch Research Agenda), who maintain that art and creativity function as an engine for innovation, reflection, and alternative forms of knowledge production (ClickNL, 2017). Such explanations of the function and value of design and art practices help to locate Fatberg activities, with island-building employed as a collaborative practice of enquiry, reflection and concept elaboration across knowledge and expertise.

Central to this is the view that the creative industry inspires co-creation. In what can be loosely defined as an act of collective creativity, co-creation is said to benefit all stakeholders by focusing on their experiences and how they interact (Ramaswamy & Gouillart, 2010; Sanders & Stappers, 2008; Thota & Munir, 2011). Creative professionals are regarded as being particularly adept at co-creation, bringing together knowledge and stakeholders from across various disciplines, imagining novel ideas, scenarios, systems, and worlds to generate new value propositions (ClickNL, 2017). Advocates of interdisciplinary collaboration suggest that interdisciplinarity encourages research that is more readily applicable to industry, market, and societal demands. This leads Click NL to pose two fundamental questions. Firstly, “how can creative professionals contribute to orchestrating interdisciplinary collaboration, initiating creativity in service of societal issues?” Secondly, “What role can art play in the gathering of knowledge in complex development processes?” (ClickNL, 2017, p. 96). The belief is that creative practices cross-pollinated with scientific methods can lead to new reflective and innovative practices (European Commission & Directorate-General for Research and Innovation, 2017).

Such questions motivate cultural platforms such as ARS Electronica, Waag Society and MU Artspace, who provide resources for artistic research and experimentation with science and technology. Nussbaum (2007) asserts that the arts and humanities create “vital spaces for sympathetic and reasoned debate” (p. 40), providing a fundamental link between cultural engagement and the ability to act as a global citizen within a democratic system. Consequently, cultural platforms such as those above position themselves as breeding grounds for cultural and social innovation, practising an open and inclusive approach to scientific and technological research driven by the public’s interests and concerns (Ars Electronica Futurelab, 2020; MU, 2020; Waag Society, 2019). Building upon the objectives outlined by the creative industry, the ambition is to transcend the epistemic limitations of science, enacting open or public forms of research that recognise locally situated knowledge. This presents opportunities to research in ways different or perhaps not possible within more specialist or institutional settings (Barry et al., 2008; Groth et al., 2020).

For these reasons, a broad spectrum of practices and public-facing activities and events occur within and parallel to cultural platforms. These include public discussions and presentations, practical demonstrations, workshops, seminars, the production of commissioned artworks and performances, public exhibitions, and open calls for citizen-led projects or design/art investigations. Such activities underline Fatberg’s correspondence with practices such as hacking, critical making, DIY biology, and bioart. These practices emphasise embodied and situated experiences with material to query or problem-solve socio-cultural-environmental-technological concerns and often operate within the same cultural contexts. I will return to critical making and bioart within the empirical chapters to examine the characteristics and effects of conjoined making and reflective practices that emphasise mindful engagements with material. However, the point is that a growing number of independent designers and artists practice in connection with these overlapping fields. In such cases, creative practitioners develop interdisciplinary collaborations with cultural platforms, galleries, museums, scientists, and industry, creating public-facing research and works motivated by socio-cultural-environmental-technological interests and concerns. It is

within this niche that Fatberg activities perform.

In line with the objectives outlined by the creative industries, our cultural partners, including MU Artspace and Stichting NDSM, support Fatberg in various ways. These range from allocating physical space and practical resources for the production and delivery of activities to providing access to their visiting public and professional network and financial support in the shape of commissions or contributing to funding applications. Our shared motivation is to develop works that demonstrate the virtues of open, creative, and public forms of research. Having observed the practice context, I have gained insight into the collective ambitions underpinning Fatberg events. The primary aim of the research that follows is to examine Fatberg as an event-based practice predicated on situated, participatory engagements with material. To do so, I must identify practices centred on creative experimentation and alternative forms of knowledge production to help articulate how Fatberg operates and provides value as a form of interdisciplinary research.

1.6 A HYBRID DESIGN/ART PRACTICE

Having established the principal features of the practice and where it performs, it is worth considering the non-Fatberg activities carried out by Arne and me to determine our respective motivations and methodological perspectives. In doing so, the section initiates a brief overview of our practices to consider the influences and motivations that shape Fatberg as a practice based on embodied and situated experiences with biological material.

Thought Collider was an art, design, and research practice established by Spanish designer/artist Susana Cámara Leret and myself. The studio created interactive works, experiments, participatory workshops, and performances exploring emerging (bio)technologies (Thought Collider, 2015a). These public-facing works were typically developed in collaboration with life science researchers. The studio's practice can thus be regarded as a form of public engagement with science and technology (PEST). PEST broadly refers to practices, activities

and institutions that attempt to bridge the perceived gap or deficit between science and society (House of Lords (HofL) Select Committee on Science and Technology, 2000; Kerridge, 2015; Wilsdon & Willis, 2004). Practically, this means bringing researchers, policymakers, and the public together in dialogue concerning the policy, legal, ethical, and societal effects of scientific and technological research (Pytlik Zillig & Tomkins, 2011). As the Engineering and Physical Sciences Research Council (EPSRC) states in their *Public Engagement Guidance*, effective public engagement is two-way, “with researchers listening to and learning from participants” (EPSRC, 2021, p. 1). PEST represents a broad range of approaches and activities, including public relation campaigns, opinion polls, consultations and other initiatives that seek to interact with and share decision making powers with the general public (Gavelin et al., 2007). Here, designers and artists adopt a crucial role in making science and technology more accessible to the lay public. Collaborations between designers/artists and scientists produce tangible prototypes and participatory works that provide test-beds for emerging concepts and technologies (Benford et al., 2013).

Take, for example, *The Rhythm of Life*, a collaboration between Thought Collider, the department of analytical biosciences at Leiden University and media artist Dave Young. The project investigated sensory interactions with a Photon-Multiplier Tube (PMT), an experimental diagnostic tool designed to measure biophoton (light) emissions from the back of the hands. Invisible to the naked eye, these electrochemical messages are referred to as “rhythms of life”, representing biological processes within the body. The resulting interactive installation (Figure 7) employed a PMT to collect biophotonic data, translating the rhythmical pulses of light into the strikes of a cymbal. Participants were invited to hear and feel the electrochemical pulses from their bodies played directly back to themselves in real-time. The purpose of the work was twofold. On the one hand, the artwork provided a means to gather data for scientific research. On the other, the recontextualising of the diagnostic tool within an art-design context provided the stage to interrogate how meaning and value are attributed to biological data (Thompson et al., 2015). In sum, the work characterises a practice that employs the tools and concepts of science to present members of



FIGURE 7 Top *The Rhythm of Life* (2014) by Cámara Leret, Thompson and Young [Photo credit: Gert Jan van Rooij].

FIGURE 8 Bottom 15-second French fries with quail egg mayonnaise at the Disproportionate Restaurant (2011) by Arne Hendriks. From *The Incredible Shrinking Man*. Retrieved from https://www.the-incredible-shrinking-man.net/?page_id=83. Copyright 2011 by Arne Hendriks.

the public with an embodied experience of emerging technology.

My work with Thought Collider contrasts with the work of my collaborator, Arne Hendriks. A prominent example of Hendriks' practice is *The Incredible Shrinking Man*, a speculative research project that proposes downsizing the human species to an average height of 50 centimetres (Griffiths, 2013; Hendriks, 2008b). The project consists of a wide variety of participatory activities, including workshops, exhibitions, a Disproportionate Restaurant (Figure 8), serving downsized portions, tailored to the 50-centimetre-tall customer (Griffiths, 2013; Hendriks, 2008a), and a blog comprised of accounts of and reflections upon size and shrinking. What stands out is that these are self-initiated research activities inspired by scientific concepts, which speculate on the creation of other realities. Hendriks states that his practice explores "the positive transformative power of creative impulses and the importance of fundamental free scientific research" (Andreotti, 2013). Hendriks' practice has seen him described as a radical ecologist (Next Nature Network, 2015), a term originally attributed to German artist Joseph Beuys. Beuys significantly pioneered an expanded concept of art "forging radical ecological paradigms for the relationship between human beings and the natural environment" (Adams, 1992, p.26). As will become apparent, Beuys's work is an important reference for Fatberg and for apprehending entanglements between people and material.

To summarise, both practices share a fascination with investigating scientific concepts but do so in notably different ways. My work with Thought Collider is situated relative to public engagement with science and technology. Collaborating with scientists, the studio produces interactive works that offer members of the public an embodied experience of emerging scientific concepts and technology. By contrast, Hendriks's work, based on a belief in the importance of fundamental free scientific research, is more speculative, consisting of participatory works and performances that propose radical new relationships between humans and the natural world. As will become apparent, Fatberg, being the point where these practices overlap and meet, represents a third practice to all intents and purposes. This practice draws upon our respective skills, methods, and ideologies in an ad hoc manner, in

what seems necessary to the investigation at that moment. The result is a hybrid practice that is undefinable as either PEST (House of Lords (HofL) Select Committee on Science and Technology, 2000; Kerridge, 2015; Wilsdon & Willis, 2004) or art, yet it can, and often does, contain elements of one or both. Given that the practice is less concerned with dissemination or the formal shaping of policy, and more with the dialogue, exchange, and collaboration that can emerge through creative experimentation with scientific concepts and materials, how might these mindful engagements with material be defined?

To initiate the research, I consider Fatberg's three discrete features - a dialogic space for fat, fat as a construction material, and fat as an agent - to motivate the selection and review of relevant art, design, literary and sociological theory, methods, and practices. The objective is to prototype a suitable vocabulary, a lexicon of terms, to help situate and describe the logic, characteristics, and effects of events that entangle people and living matter, identifying how they offer insight and value as a novel form of event-based research.

1.7 RESEARCH ENQUIRY

The initial discourse analysis considered the varied motivations, interests and processes that compose Fatberg events. A practice emerged that employs the concepts and materials of science yet operates independently as creative research predicated on entanglements between people and material. Such practices are hardly new, nor without their critics, with some protesting the "troubling genealogies of conceptual art and art and technology movements, which proffer practices and objects that are incommensurable with disciplinary art or science" (Barry et al., 2008, p.32). Herein lies the problem. Considering the perceived value of creative practices discussed earlier, what might be the outcomes of independent, creative research beyond serviceable products?

Research and development programmes such as Horizon2020 and ClickNL assert that this lies in developing new reflective and innovative practices (ClickNL, 2017). However, the

earlier analysis presented a practice whose activities primarily exist through the remains of promotional material. These materials lack context, reflection, and evidence of the activities substance and character. Such deficiencies are not unique to Fatberg but, in my view, endemic within the outlined interdisciplinary practices. Designers and artists simultaneously grapple with making science and technology accessible to the lay public, their creative autonomy (e.g., fundamental free scientific research), and the uncertainty of participatory practice. I argue that if practitioners are to justify interdisciplinary events as a mode of research, they must address the nature of events and their agency to expose the outcomes of independent, creative research.

I contend that describing such activities' often-messy features and outcomes can help demonstrate the dynamic and diverse ways designers/artists practice beyond serviceable products. For this reason, this research examines the role of material as a participant and collaborator within Fatberg events. It offers insight into the effects and tensions arising from a practice emphasising mindful engagements with material. Given that a mix of motivations, inspirations and agencies influence Fatberg, this thesis hopes to learn from and contribute learnings to fields beyond design, including Architecture, Art, Sociology and Theatre, which similarly employ the event as a context for interdisciplinary, participatory research.

If Fatberg events follow an inherent logic for engaging with material, where might this practice be situated, and how can it be justified as a novel form of creative, participatory research? Noting that fat's agency is emphasised as a motivating force, what are the practice's unique mechanisms and logic, and how do they propose innovative tactics and methodologies for event-based research? How should we consider the outputs of this work? Moreover, what knowledge and communities of practice arise via these emergent activities?

1.8 THESIS STRUCTURE

The structure of the thesis correlates practice with theory to identify methods and literature

that support critical reflection on interdisciplinary, participatory events. The research approach is influenced by artist Allan Kaprow, whose single-performance, improvised happenings developed through practice and theorisation. To develop his artistic happenings, Kaprow looked to Dutch historian and cultural theorist Johan Huizinga's *Homo Ludens* (1949/2016), which established humans as innately playful beings and play as the bedrock of human culture. Happenings, which I discuss in the following chapter (section 2.4), are, therefore, of interest to this enquiry because they embrace the uncertainty and playful, generative potential of participant interpretation and improvisation to inspire novel interactions, observations, associations, and ideas. Significantly, through empirical events, Kaprow developed a distinct theoretical and methodological framework, which promoted, in turn, the production of subsequent happenings and their theorisation.

An initial review of practice materials centred around six themes, emphasising issues that anticipate and help configure the methods and approaches adopted within the empirical research. Observing the assortment of activities, sites, motivations, and forms of participation that characterise Fatberg, I reasoned that a mixed-method approach that utilises my proximity to practice is necessary to capture and paint a detailed description of events predicated on entanglements between people and matter.

The preceding section outlined the Dutch creative industries' alignment with innovation in science and technology to establish the practice context, emphasising our ambitions, partners, and broader influences. I then summarised mine and Arne's associated practices to identify our respective motivations and principles. This resulted in Fatberg's description as a hybrid design-art practice that experiments with scientific concepts and materials to prompt dialogue, exchange, and collaboration across knowledge and expertise. However, I argued that if we (practitioners) are to claim interdisciplinary events as a mode of research, we must confront their often complex and messy nature to expose their essential features and outcomes.

Besides foregrounding an appropriate research methodology, the discourse analysis

identified three practice features that provide entry into Fatberg events, thus focusing and structuring the research: a dialogic space for fat, fat as an agent, and fat as a construction material. Each feature represents a distinct motivation that informs the interrelations between designer/artists, participants, and material. They inspire the selection of a diversity of concepts, methods, and theories to form a working vocabulary, a lexicon of terms, for writing empirical accounts of practice activity. Theory subsequently helps shape a methodology for performing, capturing, and analysing interdisciplinary, participatory activities within the empirical chapters. Each feature additionally provides the subject of analysis corresponding with one of three practice events conducted in Summer 2017. Specifically, the practice events provide the context, while the lexicon provides the terms to examine the effects of each practice feature in turn. Here, the research correlates practice with theory, road testing the terms within the lexicon, prompting refinements and new additions to think through collaborative engagements between people and material.

Considering the trajectory, I have sketched above, the research consists of eight chapters: introduction, literature review, methodology, three empirical chapters, final discussion and conclusion, and an afterword. I will now provide an outline of the thesis structure, including a brief description of each chapter.

CHAPTER 1: INTRODUCING A HYBRID DESIGN/ART PRACTICE

The first chapter established the background and premise of the research. Conducting a short discourse analysis of existing practice materials, I broadly outlined the character of Fatberg events, pinpointing three discrete features that serve to drive the research. I have explained the circumstances prompting the origination of the Fatberg project in The Netherlands, including describing its initiators' respective backgrounds and motivations, which helped situate the practice and shape the research inquiry.

CHAPTER 2: BENEATH THE FAT: A LEXICON FOR INTERDISCIPLINARY EVENTS

This literature review adopts a discursive approach, reviewing concepts, theories and

practices from art, design, philosophy, and sociology to develop a working vocabulary, a lexicon of terms to begin thinking through creative entanglements between people and living material. Motivated by the mixed backgrounds and motivations of myself and Arne and the three features that form the basis of the research, the selected literature provides a benchmark to establish the key principles and characteristics of creative participatory research. To initiate the review, I introduce Huizinga's notion of 'man the player', or homo ludens, as described in the book of that name, first published in Dutch in 1938, to examine the basis of creative experimentation and structure the selected literature. The chapter comprises two sections: the ecology of play and play as practice.

In **The ecology of play (2.2)**, I examine play's function as a social activity and attitude, one defined by rules, behaviours, objects, and spaces that shape a distinct way of being within the world (Huizinga, 1949/2016; Sicart, 2014). Establishing these features, the ecology of play offers a means to describe the conventions and boundaries of practice as distinct from ordinary life, to reflect upon their effects upon participants and activity.

In **Blurring art and life: Play as practice (2.3)**, I take a detailed look at the practices of artists Allan Kaprow and Joseph Beuys. Kaprow and Beuys's practices emerged through a blend of practice and theory, employing playful engagements with the everyday to subvert and critique the habitual as the spark for social transformation. The practices in this section thus present a reference point for participatory activity, contributing practical terms and concepts to reflect upon entanglements between people and material.

Concluding the chapter, I present a summary and table outlining the provisional terms that shape a lexicon supporting account writing and studying Fatberg events.

CHAPTER 3: GETTING FAT: A METHODOLOGY FOR STUDYING EVENTS

This chapter specifies how the concepts and approaches emerging from the literature review apply to the design, capture, and analysis of participatory events. It establishes

practical issues and ethical concerns associated with the practice to define a methodological framework. The aim is to shape a mixed-method research approach to capture the diverse experiences and perspectives that contribute to Fatberg events to support account writing and practice analysis. The approach leverages the entangled role of the practitioner, participants, and material in events that employ shared material construction as a site and trigger for critical enquiry. This means acknowledging the contingency of practice and the diversity of ideas and perspectives that shape events (Schön, 1991; Till, 2005). The selected mix of data collection methods, primarily characterised as participant observation, forms a standard for reconstructing the stories of event activity.

Noting the varied forms of data that emerge through documentation, I discuss the creation of annotated slides to index event activity and as a mechanism for effecting and supporting account writing. I subsequently propose storytelling as a means to move beyond an idealised, potentially one-sided representation of practice (Till, 2005). This implies engaging with activity as a space of multiplicity, presenting a multi-voiced, multi-layered description of events.

To conclude, I discuss issues arising from the mixed-method research approach. I consider the risk of bias and originality when researching a pre-established practice and highlight the multiplicity of participation within Fatberg events. I contemplate the duty of care to participants in events that require interaction with tools and biological material. I address how participants are informed of the nature of the activity, the associated risks, the intention to observe and document activities for research purposes, and guidelines for safe, anonymised data handling. Finally, I discuss how participants' consent is obtained and how they are appropriately credited for their contributions to the work.

CHAPTER 4: *FAT AND FOOD*: A DIALOGIC SPACE FOR FAT

This empirical chapter centres on *Fat and Food*, the first of a triptych of Fatberg events performed in summer 2017 (Figure 9) coinciding with an art-design residency at Stichting-

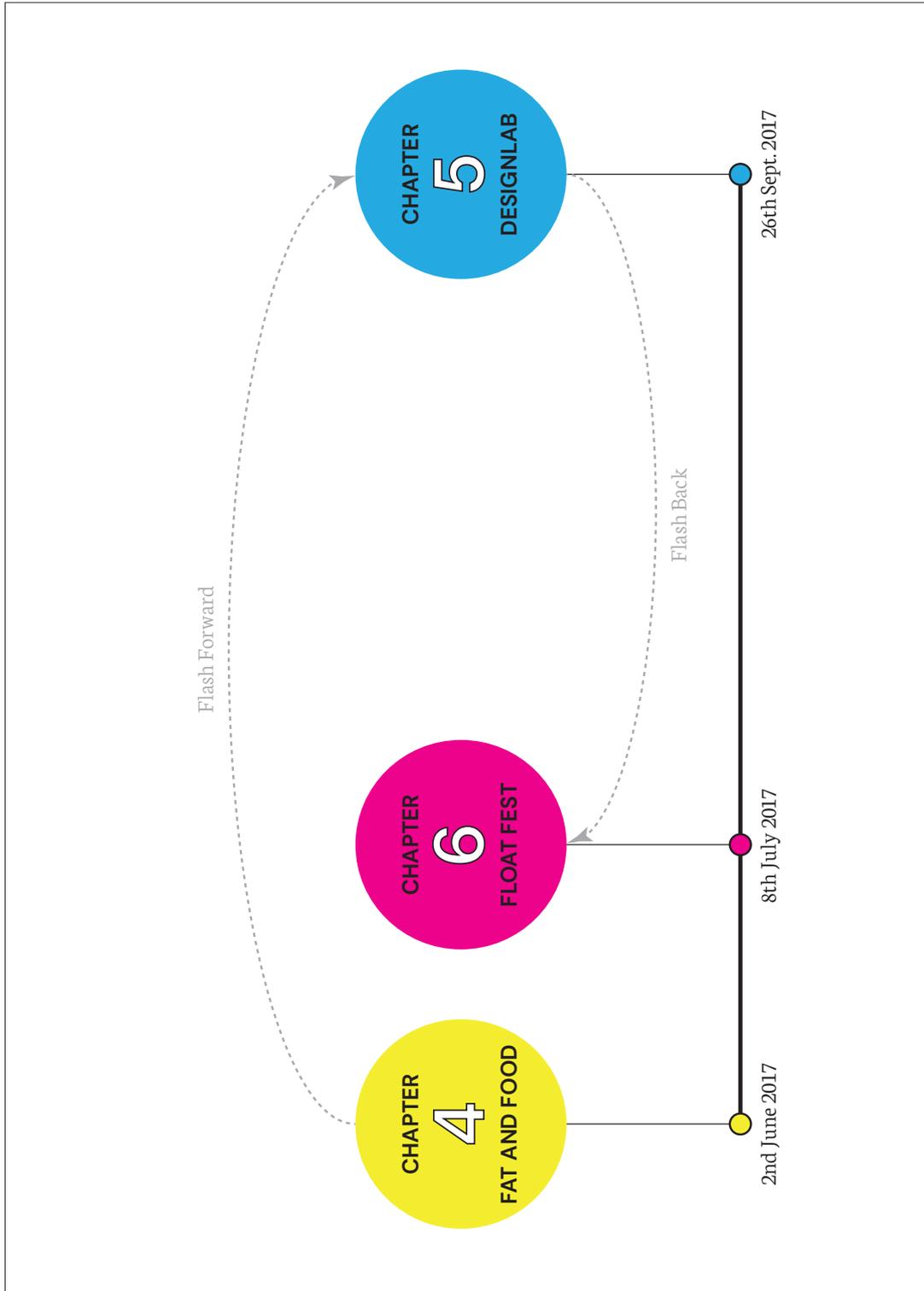


FIGURE 9 Timeline of Fatberg practice events, summer 2017.

NDSM in Amsterdam. Comprising a loosely scripted panel discussion and sensory activities which sought to situate dialogue within an embodied, material experience, this open and open-ended event examined fat's relationship with nutrition and health. This event provides the context to study a dialogic space for fat as a practice feature. Introducing McCarthy and Wright's (2015) dialogical approach to participatory practice and Ratto's (2011; 2019; 2009) critical making as models of collaborative, conceptual-analytical practice, I identify the essential functions and characteristics of dialogic space to establish a reference frame for studying emergent encounters between people and material. An event emerges where the panellists and participants evade the openness offered, imposing a frame based on their perception of a panel discussion to curtail our transgressive ambitions. Referencing Michael's (2012a) notion of *overspills* (participant misbehaviour within engagement events), I advance that the curtailment represents a distinct form of overflow whereby participants reject or close activity. Moreover, while the curtailment unfolded due to the event's openness, I argue that this motivated participants to reconcile their different value centres to shape a community of practice at the expense of experiencing an alternative view of material.

CHAPTER 5: *DESIGNLAB*: FAT AS A CONSTRUCTION MATERIAL

In the second empirical chapter, I fast-forward to the final event in the triptych to examine fat as a construction material (Figure 9). Billed as the kick-off to a semester-long project with students from Gerrit Rietveld Academy, the *DesignLAB* workshop emerged following the unfortunate destruction of the Fatberg production site, which prompted our invitation to co-author the island rebuild. Accordingly, the students grappled with the programme's obligations as they analysed the ruins to inspire both the islands' reconstruction and personal investigations. *DesignLAB* thus provides the setting to consider playful engagements with fat as a form of situated making and socio-cultural critique. I reference Foote and Verhoeven's (2019) "Tactics for a more-than-human maker culture" and bioart as conceptual-analytical practices grounded in embodied and situated material experience to shed light on this practice feature. I argue that the transformative potential

of encounters with living material lies in introducing chance to unsettle anthropocentric biases. I subsequently characterise Fatberg events as *making with vibrant matter*, describing practices that harness the dynamism and instability of biological materials and processes as the catalyst and site for collective thought and action. With this reference frame, three attitudes emerge that describe the nature of the students' engagements with vibrant matter: pragmatism, intuition, and non-participation. The attitudes characterise the students' willing suspension of disbelief, belief in the Fatberg narrative, and potential of material. I subsequently reason that making with vibrant matter involves a leap of faith, a wilful belief in material agency and a resolute commitment to situated play.

CHAPTER 6: FLOAT FEST: FAT AS AN AGENT

In the final empirical chapter, I rewind to the second event in the series to consider fat as an agent (Figure 9). *Float Fest*, which coincided with Europe's largest flea market, marked the formal start of our NDSM residency with the transfer of the island of fat to open water. The event comprised two distinct phases - Setup and Performance - containing different activities and forms of participation. Significantly, *Float Fest* demonstrates the presence of a synthetic agency where Arne and I claim to be instructed by and act as representatives for fat. The chapter examines how the synthetic agency manifests and shapes engagements with the nonhuman. I discuss the entanglement of agencies within Fatberg events - fat as a vibrant material, the designer/artists, and synthetic agency - describing their theoretical and philosophical motivations, including the concept of 'politeness towards things' found in Haraway (2016) and Despret (2014), to consider the intricacies of embodied and situated encounters between people and material. *Float Fest* emerges as an event marked by instability where chance departures and embellishments, such as the farcical island transfer, were numerous and encouraged. The Fatberg, however, functions as the meeting point between people and material, a participatory object that structures interactions by obliging people to play along that it is necessary to build an island of fat. I conclude that the synthetic agency serves as logic for rationalising the conflicting desires of people and material. It encourages a practice of thinking about and engaging with vibrant matter

that perpetuates chance occurrences and readings and sheds light on peoples' orientations towards fat and its associated concerns.

CHAPTER 7: CHEWING THE FAT: DISCUSSION AND CONCLUSIONS

The final chapter summarises the research findings to set out the contributions of this thesis to event-based practice research. To do so, I introduce the Dutch term *hufteproof*, which roughly translates as idiot-proof, as an overarching analytical concept and narrative thread. This helps to unify and reflect upon the practice's contribution of resources to produce and scrutinise activities that harness the dynamism and instability of living material. I contend that describing the often messy features and outcomes of such activities demonstrates the dynamic and diverse ways designers/artists practice beyond serviceable products, offering insight into the actual effects, tensions and products that arise from practices that make with vibrant matter. The chapter ends with several recommendations for further developing the findings and resources, highlighting outstanding questions and activities for study by myself and practitioners who employ interdisciplinary, participatory events as a form of practice research.

CHAPTER 8: IN CASE YOU WERE WONDERING: AFTERWORD

As a final aside, I present a concise account of Fatberg activities beyond the triptych of events to reaffirm the endless nature of this open and open-ended practice.

1.9 CHAPTER SUMMARY

This opening chapter has established the context of the research. An account of *Fatberg's Birthday Party* offered a prelude to a design-art practice comprising a programme of interdisciplinary, participatory events. An initial discourse analysis examined a variety of practice resources and outputs to gain insight into the motivations, principles and features underpinning Fatberg activities. It was shown that Fatberg events employ the building of an island of fat - the Fatberg - to advance situated encounters between people and material as a form of conceptual-analytical inquiry. However, a notable feature of this practice is that

material - fat - functions not only as subject matter and construction material but is given an elevated status whose expressions are said to direct proceedings. Thus emerged a practice that follows a characteristic logic for engaging with material that encourages unpredictability.

The chapter also outlined the respective backgrounds and motivations of the project leads, the context in which the practice operates, our collaborators, and subsequent influences. Fatberg was identified as a design-art practice that employs the ideas and materials of science and technology yet operates independently as a mode of participatory research. Several questions subsequently emerge. Considering the practice's discrete logic for engaging with material, how should it be explained? What are the characteristics and effects of events that entangle people and material? What learnings emerge from the analysis of such events, and how might they advance novel tactics and methodologies for event-based research?

Three discrete features emerged through the discourse analysis providing an entry into the practice and catalyst for the research: a dialogic space for fat, fat as an agent, and fat as a construction material. Each feature specifies a distinct approach or view on material, offering a means to grasp the intricacies of Fatberg events. The features motivate the selection of relevant theory, methods and practices in the literature review that follows, facilitating the creation of a provisional lexicon of terms and methodology supporting account writing and analysis of practice activities. The aim of the research, thus, is to consider the practical effects of the three features via the study of a triptych of Fatberg events to examine the role of material as a participant and collaborator within participatory events.

CHAPTER 2

Beneath the fat:

A lexicon for interdisciplinary events

2.1 INTRODUCTION

In the previous chapter, I introduced Fatberg as a design-art practice exploring the culture of fat through an ongoing programme of interdisciplinary, participatory events. Noting that the practice consists of several distinctive features, I argued that it follows an inherent logic motivated by an underlying ambition to build an island of fat. Presenting an outline of the motivations and conditions that influence Fatberg activities, the practice was viewed relative to science and technology innovation trajectories in the Netherlands. In this context, creative experimentation is valued as the trigger for interdisciplinary collaboration, catalysing innovation, reflection, and alternative forms of knowledge production (ClickNL, 2017). However, as far as explaining goings-on within Fatberg events, creative experimentation is a rather vague term encompassing a vast range of processes, practices, and activities. It is, therefore, helpful to identify the fundamentals and characteristics of creative experimentation to grasp why and how the events come together in a particular way. To do so, I introduce some primary concepts that form a trajectory for this literature review. For this, I draw a link between the Fatberg and play, establishing how this art/design practice constitutes a playful practice. The chapter reviews various art, design and sociological theories and practices, motivated by the three features highlighted in the introduction. The aim is to identify and shape a working vocabulary supporting account writing and analysing Fatberg events in the later empirical chapters. This lexicon provides a means to think about and thus evidence of my learning process as I reflect on playful entanglements between people and material.

THE CHARACTERISTICS OF PLAY

Dutch historian and cultural theorist Johan Huizinga's seminal 1949 text *Homo Ludens* examined the contribution of play to the development of human culture. For Huizinga, the basic urge, or necessity, to play "transcends the immediate needs of life and imparts meaning to the action" (Huizinga, 1949/2016, p. 2). *Homo Ludens*, translated as "man the player", establishes humans as playful beings, with play conceived as a specific type of activity, one with an innately social function. Play, for Huizinga, is the bedrock of human civilisation and culture. This implies that the following activities all originate in the spirit

of play: ritual, the act of transporting participants to another world; poetry, in its capacity of making and reflecting culture; music and dance, as the embodiment of play; knowledge and philosophy, which take shape through fervent debate; the rules of war and society, which derive from play-patterns; and games, consisting of playful competition, contest and rivalry (Huizinga, 1949/2016, p. 173).

To support his argument, Huizinga distinguishes play from other forms of activity:

Play is a voluntary activity or occupation executed within certain fixed limits of time and place, according to rules freely accepted but absolutely binding, having its aim in itself and accompanied by a feeling of tension, joy and the consciousness that it is “different” from “ordinary life (Huizinga, 1955, p. 28).

The middle of the description states that play is “executed within certain fixed limits of time and place, according to rules freely accepted but absolutely binding, having its aim in itself.” This refers to the magic circle, the sacred space where “play moves and has its being” (Huizinga, 1955, p. 10). Inside the magic circle, an absolute and peculiar order reigns, where events, such as kicking a ball into a net, possess special meaning. For Huizinga, there is no formal difference between play and ritual, implying that the consecrated spot, whether a card-table, temple, stage, screen, tennis court or the court of justice, is indistinguishable from the playground (p. 10). The playground is the setting for play, a space defined by aims, conventions and boundaries that differentiate play from ordinary life. This extends to the role of props or toys, objects curated or designed as triggers for play. As will become apparent through the examples discussed in this chapter, the playground or play space sets the scene for complex interweavings of rule- and non-rule-bound play, with play a way of engaging with and learning about one another and the world.

The two statements bookending Huizinga’s definition express the attitude of play as “a voluntary activity or occupation ... accompanied by a feeling of tension, joy and the

consciousness that it is ‘different’ from ‘ordinary life’”. Here, Huizinga emphasises that play exists as a voluntary, temporary excursion into a domain with its own disposition (Huizinga, 1949/2016, p. 8). Play, it is insinuated, exists beyond everyday life, in the sphere of the imaginary.

I contend that Fatberg can be considered a playful practice. This is evident from the features that form the basis of this enquiry. Our ambition is to create a dialogic space for fat, a setting where lay and expert participants meet to critically explore fat’s meaning and function across knowledge, culture, and disciplines. To do so, we construct an island of fat. This collaborative task contains no predetermined idea of how to build such a structure nor its endpoint, only the material used in its construction. Moreover, the work is motivated by fat; Arne and I are at the service of a substance that purportedly directs proceedings. This role-play aims to encourage a novel engagement with fat to challenge preconceptions.

Together, these features embody an activity that appropriates the features of play. The activity comprises its own unique motivations, settings, timespans, and conditions, having an end, purpose, and logic in and of itself. They depict a practice that shares the hallmarks of play. In the introductory chapter, the discourse analysis revealed Fatberg as a hybrid design-art practice with a mix of influences and motivations that result in a diversity of activities, participation, and outputs. This literature review adopts a discursive approach precisely because of the practice’s playful and interdisciplinary disposition. To this end, Huizinga’s description of play provides a trajectory to examine the basis of creative experimentation to begin reflecting on playful engagements between people and material.

FROM PLAY TO PRACTICE

In this chapter, a path is traced through the features of play to explore play’s transgressive qualities via the review of creative practices that employ playful engagements with everyday things, actions, and processes to catalyse collaborative thought, dialogue, and action. As the examples will begin to show, Fatberg events offer more than a playful experience with fat. They provide occasions to study creative entanglements between

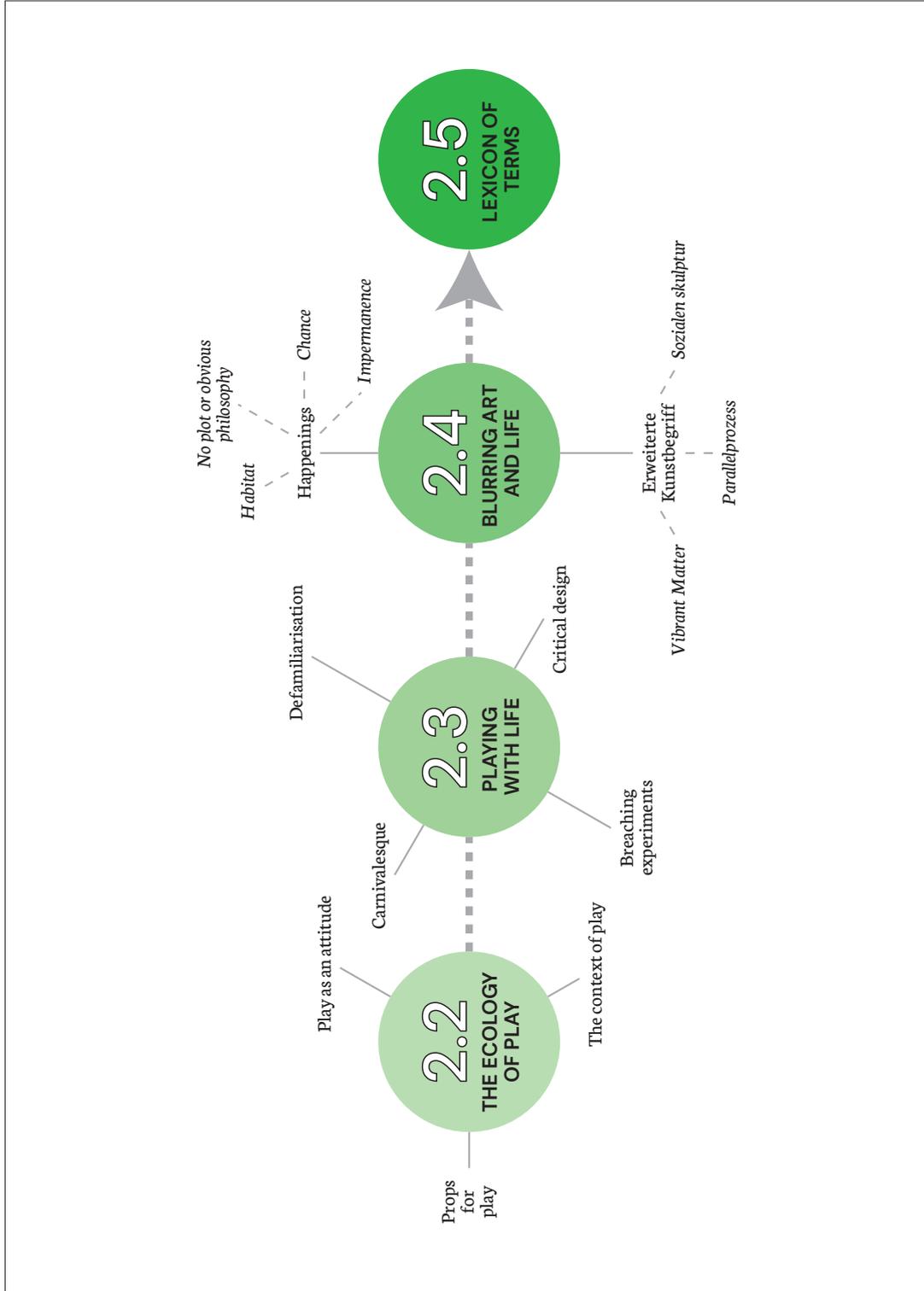


FIGURE 10 The methods, theories and practices studied in the literature review to form an appropriate lexicon of terms.

people and living material to reveal what such practices entail and produce. The following literature review comprises two distinct sections (sections 2.2 and 2.3), resulting in a working lexicon of terms as evidence of my learning process at the chapter close (Figure 10).

Expanding on the features outlined in Huizinga's description of play, I first consider what Sicart (2014) calls the **Ecology of play (2.2)**. Discussing play as an attitude, play as a context and the props of play, the aim is to establish the qualities and dimensions that define play as an activity distinct from ordinary life and a specific way of being in the world.

In **Blurring art and life: Play as practice (2.4)**, I present a detailed discussion on two artistic practices that play with the relations between people, things, and the environment to challenge established rules and conventions. I begin by reviewing artist Allan Kaprow's happenings, which expand upon *Homo Ludens* to develop a methodology for experimentation with the everyday. I then examine artist Joseph Beuys's expanded notions of art and material, which employ the transformative power of artistic production as the trigger for social, political, and environmental change. The practices in this section thus present a model for event-based practice research, offering a reference point and practical concepts and terms to reflect upon playful entanglements between people and material.

The chapter concludes (2.5) by reiterating this literature review's key learnings and insights to establish a preliminary lexicon of terms to support narrative and analytical accounts of practice. It suggests how the specified theories, concepts, and methods can elucidate the character and inner workings of interdisciplinary, participatory events in the later empirical review and initiate the creation of a working methodology in the next chapter.

2.2 THE ECOLOGY OF PLAY

PLAY AS AN ATTITUDE

In *Homo Ludens*, play is regarded as an innate part of human culture, an activity set apart

from ordinary life with a purpose and meaning in and of itself. This implies that play is an unserious activity. However, play and seriousness are inextricably linked. To emphasise play's significance, Huizinga (1949/2016) considers earnestness as its linguistic opposite, noting that the two terms are unequal (p. 45). Earnestness implies seriousness. It indicates the absence of play. Yet, play does not preclude seriousness. Indeed, professional sports, the theatre, parliamentary debate, and courtroom rituals demonstrate that play can be profoundly serious. Here it helps to recognise the difference between play as an activity and playfulness as an attitude. Play, as an activity, exists as an interlude, a set of temporary actions and behaviours geared toward an agreed-upon objective. Playfulness, however, refers to the attitude of play without play, of play outside of the context of play. Playfulness incites the spirit of play yet respects the intentions and customs of people, things and situations with which it interacts (Sicart, 2014). It speaks to humans' sense of curiosity, love of diversion, exploration, creation and wonder (Gaver, 2009, p. 165). This means that whereas play occurs beyond everyday life, in specially formed spaces, conditions and timespans, the contexts for playfulness are not designed but claimed. Everyday life is "occupied by play" (Sicart, 2014, p. 28). To be playful is to take a break from the everyday. Playfulness is innately appropriative, forming pockets of play within non-play contexts. To design for play means to create a setting to be appropriated. Designing for playfulness means promoting an appropriative attitude - of inspiring thought to action. As Gaver (2009) states, designing for playfulness "requires a new focus that seeks intrigue and delight at all levels of design, from the aesthetics of form and interaction, to functionality, to conceptual implications at psychological, social and cultural levels" (p. 176).

THE CONTEXT OF PLAY

Having distinguished between play as an activity, and playfulness as an attitude, let us now focus on the context where play emerges and gains meaning. Huizinga's magic circle depicts a privileged domain where the logic and consequences of play are internal to the activity. To play within the magic circle is to accept the legitimacy of this site. Thus, individuals pursue the objectives defined by the rules and conventions within this privileged domain. Rules are instrumental to play, acting as cues for specific actions and behaviours which

shape an association with and commitment to the context of play. Play, to use Sicart's (2014) term by way of Henricks (2006), is autotelic, an activity with unique motivations and aims, performed within its own pronounced spaces, conditions and timespans. This implies that play's boundaries are fixed, yet play is often negotiated. To play is to broker play's objectives: the scope of its rules and conditions, its boundaries over time and space, and level of seriousness - whether to play for stakes or self-expression (Sicart, 2014).

The play space versus the game space

Considering the different ambitions and seriousness of play as an autotelic domain, it is worth contrasting gaming, playing for stakes, and play as an open-ended endeavour. What does this mean for the disposition of the magic circle? Sicart (2014) observes a clear difference between a play space and a game space:

A play space is a location specifically created to accommodate play but does not impose any particular type of play, set of activities, purpose, or goal or reward structure ... A game space is a space specifically designed for a game activity. The size, measure, props, and even location are all created with the purpose of staging games (p. 51).

Broadly, game spaces are defined by the activity's rules and objectives. The rules are absolutely binding, determining the etiquette and disposition within the magic circle. Whether a board game, football game, pub quiz or political debate, every game has its stakes, whether material, symbolic or representative of an ideal (Huizinga, 1955, p. 50). Play spaces, by contrast, are defined by their openness to appropriation. They are suggestive, encouraging exploration and appropriation. The stakes are to be determined. The play space is an emergent space, a space of negotiation, that comes into existence when a space is appropriated by play (Sicart, 2014). Incidentally, Huizinga remarks that when games evolve into the guise of sport, particularly in the transformation from amateurism to professionalism, they reach a point "of technical organisation and scientific thoroughness" that oversteps the pure spirit of play - that of spontaneity and carelessness (Huizinga, 1955, pp. 197-199). As will become

apparent when discussing transgressive play (section 2.3), game spaces can be appropriated as play spaces. However, the distinction between a play space and game space is marked by openness and constraint: the extent to which the space is open to appropriation. If, however, the true spirit of play is appropriative, and the objectives, rules, and conventions of play to be negotiated, there appears a flaw in Huizinga's concept. If play only exists within a separate, hedged off world with its own rules and conventions, this means that play is only understandable within the context of its performance. The implication is that inside the magic circle, the rules and conventions of ordinary life hold no consequence, and vice versa. I instead argue that play represents an ability to momentarily set aside or relax ordinary life rules. Play is never truly detached from the outside world. People inevitably carry their motivations, ideas, experiences, expectations, moods, and attitudes with them; thus, the magic circle also exists within ordinary life.

Openness

The distinction between a play space and game space has been established as the extent to which participants are free to appropriate the activity. As will be shown, to manipulate the rules, objectives, and structures of ordinary life and play is to be playful. Much has been written regarding the role of openness and ambiguity in design to trigger curiosity and user interpretation (Gaver et al., 2003; McCarthy & Wright, 2015; Michael, 2012a). Participatory art resonates with this philosophy, with Bishop (2012) noting that socially engaged works are distinguishable for their commitment to open, reflexive questioning rather than confirming or validating existing processes and knowledge (McCarthy & Wright, 2015). Interpretative openness, to use Bishop's phrase, is exercised as a tactic to inspire creative participation.

McCarthy and Wright (2015) refer to openness as a multi-layered construct, observable within participatory activities in three significant ways. The first is enquiry, where participatory projects are open to learning with and from others and receptive to new readings and interpretations. For example, when interactive systems or participatory activities are purposefully left open to maximise engagement and user interpretation (Gaver et al., 2003;

McCarthy & Wright, 2015; Michael, 2012a; Sengers & Gaver, 2006; Wright & McCarthy, 2005). The second way is structural openness, with activities being receptive to emerging subjectivities, for example, when participants are invited to collaborate. Here, participants are encouraged to play to appropriate activity to suit their own needs and uses (Gaver et al., 2003; McCarthy & Wright, 2015; Michael, 2012; Sengers & Gaver, 2006; Wright & McCarthy, 2005). The third, borrowing from Eco's (1989) "work in movement" (p. 21), refers to resolving incomplete works or scaffolds. Such works act as prompts, inviting participants to create, compare and perform their own works. The three layers suggest a range of practical uses for openness that can help to describe the relations between things, bodies, and happenings within the context of play. By applying openness as a dimension, the categorisations can help evaluate the level of authoritative control that designer/artists exert over activities and how this informs participants' observable behaviours and outputs.

PROPS FOR PLAY

Having observed how appropriation is central to the spirit of play, it is necessary to consider the things that invite and shape play. Incidentally, Huizinga only indirectly discusses objects and their role in play. This is despite citing the contest drums used by the Greenland Inuit to register a complaint or misdemeanour, and the coif, the medieval headdress still worn today by English judges, as objects central to the performance of law and order. These objects act as cues for a set of actions and behaviours that distinguish the play context from ordinary life.

Sicart (2014) contends that there are cues embedded within objects that signal their intent as things to be played with. For Gibson (1966, 1979), awareness of the world and our relations to it are inseparable. This means that our perception of things, objects, and the environment is established in our interactions with them through the properties they afford. The world, and the things that constitute it, provide perceptual information that facilitates an action or sequence of actions for those suitably equipped to act upon it (Gaver, 1991). We determine what it is not because of physical physics but ecological physics (Gibson, 1966, 1979). Gibson's ecological approach to perception provides an

alternative to cognitive structures, such as memory and problem-solving, as means to describe perceptual phenomena, seeking explanation in terms of the physical attributes and vibrancies that surround us (Gaver, 1996, p. 12). For example, air affords breathing. It also affords movement relative to the ground, which affords support. It further affords visual perception and the transmission of sound and odour (Gibson, 1979).

Developing his ecological approach, Gibson primarily focused on the visual. The air, as an example, indicates that affordances are perceived in other ways too. We can sense, in this instance, through sound or smell, what can be done with something (Gaver, 1991, p. 82). The ecological approach to perception is similarly observable amongst people, with behaviour directly influenced by the perception (or misperception) of what another person or persons afford. Social behaviour can be understood as interactions that occur within and are shaped by the physical world. As Gaver (1996) notes, “if social interaction is considered in terms of its environment, seemingly arbitrary social behaviours often become clearer” (p. 1).

The ecological approach to perception draws attention to human beings’ innate capacity to read and change their surroundings into an opportunity for play. By appropriating the affordances of things, objects, situations and the environment, play comes into being. Through a playful attitude, the world becomes a toy (Sicart, 2014, p. 40). Transforming things, objects, situations, and the environment into an instrument for play requires understanding the potential for play within a given situation. Toys are, for example, instruments designed for play. They enable a way of being in and making sense of the world by presenting fragmentary elements to be appropriated through play (Sutton-Smith, 1986). The designed functions of toys and their materiality filter the features of the play space, suggesting and affording certain actions and behaviours and how these are performed and understood (Sicart, 2014). Sicart refers to the example of a ball, which can be rolled, bounced, or thrown, and perhaps even inflated or deflated (p. 45). The limited properties of the ball filter play and the surrounding context. Filtering concerns the “signifiers, affordances, and constraints” (p. 45) baked into objects by design. Products such as power tools, “his and her” razors and even bicycles

demonstrate what Kirkham (1996) refers to as the over-determination of gendered coding present in the design of objects. Such products even filter how and by whom the activity will be performed. Recognising how toys filter play is essential for understanding the actions of participants within play or playful activity; the why and how we play.

SUMMARISING THE ECOLOGY OF PLAY

Starting with Huizinga's writings on the culture of play, I have provided an overview of play's ecology and the features that characterise play as an activity distinct from ordinary life. Play is an autotelic pursuit, a temporary disconnection from the everyday performed within the confines of its own spaces, motivations, rules, and conditions - the magic circle. This suggests a privileged domain where actions and consequences follow an inherent logic distinct from the rules and conventions of ordinary life. A contrast was observed between playing and gaming, with game spaces limited by the rules and motivations of the game, whereas play spaces are emergent and open to appropriation. McCarthy and Wright propose that openness occurs within activity as a multi-layered construct, suggesting a means to evaluate the level of control asserted over activity and interpret participant responses. The ecology of perception points to human beings' ability to read and change their surroundings into an opportunity for play, revealing playfulness as an attitude and way of being in the world. It also demonstrates the capacity of objects, props, and toys to inspire specific actions and behaviours - to filter play - presenting a means to reflect upon how play is performed and understood.

2.3 PLAYING WITH LIFE: TRANSGRESSIVE PLAY

Having examined the ecology of play to consider why and how we play, I will next discuss play's effects - its transformative potential. The examples in this section examine how being playful with and disrupting the context within which play is performed presents a means to critically engage with the structures and conventions that define the play context, delivering means for knowledge creation and situated critique.

A distinction was observed between gaming as a distinct type of play defined by strict rules and objectives and playing as an open-ended endeavour marked by exploration and appropriation. However, I explained that because the spirit of play is appropriative, play's objectives, rules and conventions are continuously negotiated. Sicart (2014, p. 9) regards play as a struggle to comprehend and perform within the constraints of the play context and a struggle to resist the temptation to break that context. However, to cheat, bend or redefine play's rules and conventions does not necessarily mean the end of play as the magic circle suggests. A famous, albeit often disputed, example is the game of rugby, where student William Webb Ellis disregarded the rules when he picked up the football and ran, inspiring a new code of sport. Rules present another prop that can be appropriated by play, and in doing so, new spaces and forms of play can emerge (Sicart, 2014). Transgressive play demonstrates the capacity for play to move beyond being a respite from everyday life, to knowingly play with and within the play context. With this move, play reveals its disruptive potential, presenting a mirror to reflect upon and challenge the structures and conventions in which it resides.

DEFAMILIARISATION

In the discourse analysis within the introductory chapter, I observed that passers-by at *Fatberg's 1st Birthday Party* encountered a familiar substance presented in an abstract form, distinctly out of place. The motive for recontextualising fat, outlined in the paper "FATBERG: Chapter 1", is to rediscover an empirical understanding of this substance and challenge preconceptions concerning "what fat is, how it functions, what it means, or how we should regard it" (Thompson & Hendriks, 2015a, p. 8). It can, therefore, be instructive to examine works and practices that similarly employ estrangement from the everyday as a trigger for critical reflection and creativity to explain the practical function and effect of events that reconfigure relations between people and everyday things and actions. In the following examples, I describe the logic and features of the respective method or practice, then examine their effects through a practice example to establish a parallel with the approaches taken within Fatberg events.

Ostranenie (usually translated as “defamiliarisation” or “estrangement”) emerged in the early twentieth century via the Russian formalist school of literary criticism. In the essay “Art as Technique”, Victor Shklovsky (1917/1986), a leading figure in this movement, introduced defamiliarisation in direct opposition to the Symbolist school of poets and critics. For Symbolists such as Potebnaya, poetry represented a specific type of thinking – thinking through imagery – a philosophy that directed and categorised objects and activities to shed light on the unknown through the known. This did not align with Shklovsky’s worldview. The purpose of art, in his opinion, is to convey the sensation of things as they are perceived, not as they are known. Examining “what makes poetry poetic?” Shklovsky argued that as perception becomes habit, it becomes automatic (p. 19). For Shklovsky, the writings of Tolstoy demonstrate the true nature of art, presenting a vision of an object instead of merely serving as a means to know it. This implied a displacement, with an object foregrounded to remove the automation of perception. In the following extract from *Kholstomír* (1887), Tolstoy positions the reader in the horse’s-eye view to render routine human behaviour unfamiliar:

Now, what they said about whips and Christianity, I understood well enough; but it was perfectly dark to me as to the meaning of the words, my horse, his horse, by which I perceived that men understood some sort of bond between me and the groom ... At that time I could not understand at all that it meant that they considered me the property of a man. To say my horse in reference to me, a live horse, seemed to me as strange as to say, my earth, my atmosphere, my water (Tolstoy, 1887, p. 479).

The above recounts a conversation where the horse recognises themselves described as someone else’s property. The foregrounding of the horse – the horse’s-eye view – causes displacement to occur, prompting the reader to consider the notion of living beings as private property. Defamiliarisation is used to prompt the reader into questioning the unquestionable – the logic of human convention. It presents a means to challenge and reflect upon the perception of things, objects, practices, and the environment by playing with the reader’s perspective. This suggests two practical functions. Firstly, it offers a tool to provoke broader human experiences

by designing for novel emotions and experiences. Defamiliarising narratives are essential for developing future technologies, for they confront the cultural and political assumptions and biases inherent within the design of products (Bell et al., 2005; Kirkham, 1996). Secondly, defamiliarisation can be the intended product of design, with objects or experiences triggering a defamiliarising effect. Here, designs act much like a text, with the defamiliarising effect occurring in the observer's mind or materialising through exploration and play.

Fatberg utilises both functions. The island-building task appropriates everyday actions such as chopping, melting, and dripping to interact or play with fat at a shape and scale that participants simultaneously understand yet are estranged from; it triggers a defamiliarising effect. At the same time, the rudimentary activity invites participants to collaborate in a making and reflective process that aims to expose their personal stories, hopes, and fears, to identify and challenge what we think we know about fat. Defamiliarisation is beneficial to the research as an effect and technique because it describes the practical effect of estrangement from the everyday, which can help unpack the range of experiences and perspectives present within Fatberg events.

CRITICAL DESIGN

Having examined defamiliarisation as the playful repositioning of subject and object, it is worth contrasting this method with the function of designed objects within critical design. Critical design attempts to create a space for the imagination, where hypothetical products, services and systems are presented in believable scenarios to encourage citizens to reflect upon the social, cultural and ethical consequences of new technologies before they arise (Dunne et al., 2009).

In *Hertzian Tales*, Dunne (2008), introduces the term “para-functionality” (pp. 42-43) to describe the practical use of estrangement or defamiliarisation as a technique, where the relation between things and ideas enables designers to adopt a critical position to challenge social, environmental, or political norms. The use of “para” as a prefix extends designs’



FIGURE 11 *The Anatomy Lesson* (2016) by Agi Haines. From *The anatomy lesson: dissecting medical futures*, by Waag. Retrieved from <https://www.flickr.com/photos/waagsociety/29875644601/in/album-72157673253058931/>. CC BY-NC-SA 2.0.

functionality beyond utility to include poetic, symbolic and existential characteristics (Dunne, 2008; Malpass, 2016). Fictional objects and scenarios shape worlds situated somewhere between reality and the seemingly impossible to reflect upon ideas, trends and developments rooted in the present (Dunne & Raby, 2009). Here, design is employed rhetorically to stimulate the imagination. Critical design, thus, represents a form of materialised critique with objects presented as propositions within subjective contexts to focus attention on the habitual and question dominant ideologies (Malpass, 2016).

At first glance, the approach appears to resonate with Fatberg, with the island of fat and its related tools and processes presenting an alternative reality to facilitate critique of social, environmental, and political conventions. However, as the following example demonstrates, critical design, in contrast, offers a kind of critique on rails, with participants directed through, thus holding limited agency within, the debate the works intend to spark.

The Anatomy Lesson by Agi Haines (2016) represents a notable example of a critical design approach to public engagement with science and technology. In such cases, hypothetical products and interactive installations are used to trigger participant reflection upon emerging technologies. In this instance, the audience, playing the role of medical students, probed life-like augmented body parts (Figure 11) in a quasi-simulation of future medicine (Waag, 2016). The theatrical staging of anatomical props, for instance, removing a cyst from a bionic eye, drew participants into an embodied experience of a possible future to consider themes of body modification and future medical procedures (Haines, personal communication, 26 June 2017). Haines's *Anatomy Lesson* did not educate participants; instead, participants collectively dissected the future of medicine (Thompson, 2017). Doing so, this playful abstraction of medical surgery not only imagines the future but attempts to take possession of the present (Branzi, 2006).

The event took place in the *Theatrum Anatomicum* at Amsterdam's Waag Society (Appel, 2016); the rooftop space where Rembrandt van Rijn famously produced sketches for the

painting *The Anatomy Lesson of Dr Nicolaes Tulp* (1632). Consequently, the participant experience was filtered not only through the life-like staging of surgical instruments and bodily augmentations but through the history and atmosphere associated with the play context. Unless you are a surgeon, most people's experience of dissection comes via an anatomy lesson at school. By giving visitors the freedom to poke and probe fictional bodily implants, participants were drawn into an embodied experience that was vaguely familiar yet strange. A playful attitude was cultivated, with participants invited to play with, make sense of, and accept or reject this vision of the future (Thompson, 2017).

In sum, critical designs such as Haines's *Anatomy Lesson* present complex ideas and technologies in the form of highly polished products and scenarios. Their purpose is to guide participants to imagine a specific vision of the future. Haines's work notably blurs the boundaries between the past, present, future, fiction, and reality, drawing on the atmosphere of a historical context to present participants with an embodied experience of the future of medicine. The experience paints the illusion of openness and appropriation, of playing with surgeon's tools and bodily augmentations within a fittingly evocative context, all the while directing participants through a carefully choreographed form of technological critique. The designed scenario acts as a text that filters how these future technologies are performed and understood. Rather than playing with everyday life directly, critical designs indirectly play with everyday life, providing the conditions for the observer or participant to engage with an alternative vision of the everyday and imagine how life could be different.

BREACHING EXPERIMENTS

For sociologist Harold Garfinkel, the features of what we understand as real society are produced via a person's commitment to underlying structures and expectancies that form a scheme of interpretation. Drawing on the work of Schutz (1971), he argued that for such assumptions to come into view, a "special motive" is required to estrange oneself from the "life as usual" character of the everyday (Garfinkel, 1984, p. 37). Developing his *Studies in Ethnomethodology*, Garfinkel aimed to expose the underlying frames and assumptions that

make up the rationalised understandings of everyday interactions. By making trouble in ordinary situations and rendering background expectancies inoperative, routine structures and mechanisms that compose the everyday were made observable. A breach would consist of: making it difficult for the subject to interpret the situation as a game, experiment, or deception; providing insufficient time for the subject to reconstruct the “natural facts” of interaction; and leaving the subject to reconstruct the “natural facts” alone, without mutual agreement (Garfinkel, 1984, p. 54).

Breaching experiments appropriate everyday situations where ordinary language, actions and expressions establish a framework for social interaction. In the following excerpt from an experiment, Garfinkel (1984, p. 44) instructs his student (the experimenter) to engage in conversation with a friend or acquaintance (the subject):

CASE 6

The victim waved his hand cheerily

Subject: How are you?

Experimenter: How am I in regard to what? My health, my finances, my schoolwork, my peace of mind, my...?

Subject: (Red in the face and suddenly out of control.) Look! I was just trying to be polite. Frankly, I don't give a damn how you are.

The exchange shows that the subject's expectation of their conversation is unsettled by the experimenter's disruptive behaviour. The rules of conversation are revealed by their absence, rules that the participant relies upon for everyday social interaction. Moreover, the case indicates that individuals turn to preconstructed elements to scaffold social activities rather than producing situations in situ. This is shown by the subject, who, in revealing their frustration at the dissenting behaviour, attempts to reassert the boundaries of commonplace interaction by calling out the experimenter's bad manners.

The experiment shows that by playing with and unsettling an individual's social environment, an attempt was made to recapture anticipated structures and mechanisms. This underlines the extent to which everyday language, actions, expressions, cues, and frames are taken for granted. Taking the participant outside of their typical frame of reference, they were compelled to improvise to make sense of and negotiate the rules and conventions of this different reality.

It is here that Fatberg events share a similarity with Garfinkel's experiments. It is fair to say that there is no precedent, or at least no clear point of reference, for building an island of fat. Instead, a mix of familiar materials, actions, and activities are appropriated, shaping a reality that is both familiar and strange. The Fatberg represents a breach of expectations. However, while the mix of appropriated elements seems ambiguous, they provide a scaffold helping participants make sense of and co-create the work. For instance, at *Fatberg's 1st Birthday Party*, the selection of tools and materials filtered the features of the play space, suggesting and affording the actions subsequently performed by participants. In short, Fatberg events oblige participants to momentarily set aside their knowledge, experience, and prejudices of fat to negotiate the ambiguous activity, setting and materials. As events unfold and the island grows, opportunities emerge for novel tools, processes, insights, and collaborations. For instance, in Chapter 5, I examine a class of design students' attempts to acclimatise with Fatberg, its abstract narrative and the traces of activity scattered across the ruined production site. As will become apparent, the students' emergent readings and responses signal their belief in material agency and orientations towards fat and its associated concerns. As this last example intimates, breaching experiments are relevant to the research because they present a model for situated critique. They show how everyday social situations can be manipulated to relax or challenge life's ordinary rules and expectations, offering the potential to upend and expose latent views and experiences that might trigger original questions, ideas, and actions.

THE CARNIVALESQUE

For another relevant example of transgressive play, let us now consider Bakhtin's (1968/1984) analysis of Rabelais's five comic novels under the title *The Life of Gargantua and of Pantagruel*, which examines the notion of folk humour, the carnivalesque. Fatberg displays characteristics that are reminiscent of Bakhtin's description of the carnivalesque, with the confrontation with fat at scale, a similarly playful attempt to upend normative behaviours and beliefs. In the story, the giant Gargantua, his son Pantagruel, and their companions embark on a series of adventures, which provide the setting to ridicule the superstitions and normative structures, the "cosmic order", present in medieval culture. Bakhtin's interpretation of Rabelais is best understood relative to the upheaval within Soviet society at the height of Stalinism. For Bakhtin, the carnivalesque promised "human emancipation through freedom of expression and creativity" (Robinson, 2011). Rabelais' work represents the time when folk and high culture came together - during the Renaissance era of the 15th - 16th century. This cultural revolution occurred because social changes undermined existing social hierarchies, with medieval folk culture, the catalyst (Bakhtin, 1968/1984; Robinson, 2011).

In medieval Europe, the prevailing view was that the world was on the brink of disaster or "cosmic terror", a concept employed by the ruling elite to maintain hierarchy and order and suppress dissent and rebellion (Robinson, 2011). Carnival and its rituals represent the purposeful break from and subversion of the everyday. Life is lived festive, with everything rendered "ever-changing, playful and undefined" (Robinson, 2011). In carnival, the hierarchical barriers that separate people and class are dissolved, replaced by a social space marked by freedom and excess.

Central to the notion of carnival is folk humour, where laughter is celebrated as the parody and inversion of high culture. Folk humour is epitomised by grotesque realism, imagery that emphasises bodily processes such as eating, drinking, defecating, birth and decay, as metaphors for incompleteness, transgression and the disruption of expectations (Robinson, 2011). The spirit of carnival is personified as an overweight, raucous man consuming vast amounts of food and alcohol (Figure 12). In this image, an ordinarily censored body appears



FIGURE 12 Gargantua at table, illustration by Gustave Doré from *Gargantua and Pantagruel*, by François Rabelais (1494-1553). From Granger Academic. Copyright by Granger.

in a monstrous, exaggerated form, representative of officialdom (Lachmann et al., 1988). This symbol exists to ground life on a material level, depicting it as something becoming and dying, as part of a never-ending process. By ridiculing death and finiteness, folk humour refuses the authority of institutions that employ the cosmic terror to exert and extend their dominance (Robinson, 2011).

Klein (2008) observes that in the summer following the 2003 invasion of Iraq, there was such desire for political participation, that despite citizens' frustrations with the economic situation, electricity blackouts, and the presence of foreign contractors, Baghdad displayed a carnival-like atmosphere. This was marked by frequent "outbursts of unregulated, exuberant free speech" (Klein, 2008), Chapter 18, Section 2, para. 1). Workers protested daily outside the headquarters of the Iraqi Interim Government, clerics took to preaching politics during their Friday sermons, and newspapers, critical of the US's economic programme implemented following the war, flew off the printing presses (*ibid.*). Laughter and exuberance, therefore, represent the ability to overcome cosmic fear. The spectacle of the carnivalesque is not directed toward the institutions whose functions and forms are temporarily ousted, but at "the loss of utopian potential brought about by dogma and authority" (Lachmann et al., 1988, p. 130).

Playful acts of defiance

Carnavalesque play exists not only to playfully subvert and critique hegemonic structures but to demonstrate that things might be different. As Robinson (2011) remarks, "Perhaps a complete world cannot exist without carnival, for such a world would have no sense of its own contingency and relativity." Carnavalesque play is a popular method for political action, where civil disobedience attempts to subvert, critique, and reclaim power from the establishment. This is particularly evident in the actions of Extinction Rebellion (XR), a global environmental movement that employs "non-violent civil disobedience in an attempt to halt mass extinction and minimise the risk of social collapse" (Extinction Rebellion, n.d.). In April 2019, XR held peaceful demonstrations across several locations in London,



FIGURE 13 *Top* The *Berta Cáceres* (2019) by Extinction Rebellion. From *xrmediaarchive*. Retrieved from <https://bit.ly/3vzubCQ>. Copyright 2019 by Extinction Rebellion.

FIGURE 14 *Bottom* *In Your Hands* (2007) by Dash Macdonald. From *Dash N' Dem*. Retrieved from <https://dashndem.com/in-your-hands>. Copyright 2007 by Dash Macdonald.

including Oxford Circus, Piccadilly Circus, Marble Arch, Waterloo Bridge, and the area around Parliament Square, strategically occupying and effectively shutting down these sites. To do so, they erected cultural roadblocks: stages for musical performances and public speakers; mini ramps for skateboarders; stalls for the cooking and distribution of food or the painting of protest signs, banners, and artworks; and other physical structures where people congregated in the spirit of carnival. Through the spirit of play and an open act of defiance, the roadblocks drew protestors and observers into dialogue. Symbolic of this was the presence of the Berta Cáceres, a 21-foot-long, pink wooden boat with “Tell the Truth” painted along the sides - a demand that the British government acknowledge the climate and ecological emergency, and the need for radical change (Figure 13). Named in honour of the assassinated Honduran environmental activist, the Berta Cáceres was the centrepiece of a demonstration at Oxford Circus, “a traffic-stopping photo opportunity” (James & Ruby, 2019, p. 200), where curated DJs and speakers performed amongst a sea of people united in their ambition to save the environment. Because cultural roadblocks such as the Berta Cáceres are temporary, playful acts of defiance, they give shape to the idea that things might be different.

A perhaps more relevant example of carnivalesque play is the project *In Your Hands* by designer Dash Macdonald (2007). This participatory activity employs play’s explorative and appropriative nature to unwittingly transform audience members into actors within an elaborate performance-cum-sociological experiment. The work is inspired by the Milgram and Stanford prison experiments of the 1960s, which investigated destructive obedience (Milgram, 1974), and the power of social situations to trigger aggressive or abusive action and behaviour (Dutton & Tetreault, 2009). Dressed as a superheroesque character in a silver frog suit, crash helmet and remote-controlled roller skates, Macdonald (Figure 14), in the role of a test subject, places his fate in the hands of the public as a single audience member, holding the controls, manoeuvres him awkwardly around a traffic cone-lined play space. The lack of clear rules or guidance presents an activity left open to interpretation, allowing participants’ urges and conscience (or lack thereof) to take over, wilfully luring them into deviant behaviour. The thrill of directing and crashing the designer at speed is an elaborate,

if not painful, ploy to coerce participants to question the lengths they will go to in search of entertainment (Macdonald, 2007).

What appears a simple dialogue between the designer as puppet, the participant as puppeteer, and the audience as spectators, soon presents a more nuanced conversation, as the audiences' cheers and laughter goad the participant towards increasingly risky manoeuvres (Tweakfest, 2008a, 2008b, 2008c). McCarthy and Wright (2015) remark that participatory projects facilitate dialogue, supporting constitutive practices through which meanings, voices and perspectives are experienced, recognised and acted upon (p. 11). This suggests that the audience's cheers and laughter are self-reinforcing, as participant and audience together distort and revise behavioural norms in response to the action unfolding in front of them. *In Your Hands* stretches the boundaries of the play space to its limits, with audience members pulled directly into the performance, whether wittingly, as they encourage and embolden the participant at the controls, or unwittingly, as the designer comes crashing into them. Together the participant and audience negotiate the objectives of play, the scope of its rules and conditions, its boundaries over time and space, and its seriousness. The work forms a carnivalesque, alternate reality, where people are momentarily released from the normative structures of health and safety culture. By amplifying the playful act of steering a remote-control car, the designer, taking the place of the car, provokes the participant to the brink of disaster (cosmic terror) to critique and reflect upon the boundary between their desires and accepted behaviour.

This sub-section has examined the carnivalesque and folk humour as the celebration of excess and parody of high culture. The carnivalesque is a temporary break from and playful subversion of dominant social and political structures and gives shape to the thought that life could be different. The two examples, one from political activism and another from participatory design, demonstrate how the spirit of carnival offers a method to subvert and critique the prevailing order, inspire self-reflection, or empower people to enact change. The carnivalesque resonates with Fatberg because it helps to describe and justify a form of

play and creative expression that is dissenting out of necessity. By exaggerating fat's status, and roleplaying that we are agents of the Fatberg, a much-derided substance is celebrated as playful, ever-changing and undefined (Robinson, 2011), thus proposing another way of thinking, doing and being with material.

SUMMARISING TRANSGRESSIVE PLAY

In this section, play has shown a transgressive quality utilised to reveal and challenge the logic of everyday rules and conventions. I first considered Shklovsky's critique of Tolstoy's story *Kholstomer*, which employs defamiliarisation as a literary technique to reposition the habitual to challenge what is known. Playing with and displacing the customary view of the observer, observers confront the subject from which they have become estranged, challenging them to reflect upon their assumptions and biases. I then looked at critical design's use of fictional products and scenarios as a form of materialised critique. Examining an example of a critical design approach to public engagement with science and technology, I observed that critical designs offer participants limited agency within the discussions they intend to prompt. Instead, they plant an idea or scenario in the observer's mind or guide participants through highly directed experiences. In this way, critical design's disruptive potential, akin to defamiliarisation, lies in its capacity to estrange the viewer from social, environmental, political, or technological norms by providing an alternative vision of the everyday to encourage reflection upon the present and possible futures.

By making trouble and breaching established expectations of everyday situations, breaching experiments were shown to reveal the tacit structures and mechanisms that scaffold common sense knowledge and experience. In doing so, they provide a model for situated critique, offering the potential to upend and unearth latent views and experiences through which new questions and ideas might form. Finally, examining carnivalesque play, it has been demonstrated how play can transcend entertainment and cross into the realm of critique and action. Temporarily breaking from and subverting the prevailing order, carnivalesque play presents a form and theory of play that points to how life might be lived differently by

exposing the relative nature of things.

By revealing play's transgressive potential, the practices discussed in this section have shown how play as an activity and attitude offers a method to challenge the habitual. The examples, therefore, introduce a range of practical terms and criteria that help describe and rationalise Fatberg activities.

2.4 BLURRING ART AND LIFE: PLAY AS PRACTICE

In this third and final section, I present a close examination of a pair of creative practices that utilise the transgressive quality of play to question everyday phenomena and as a spark for social transformation. The chosen practices benefit the research because their deliberate blending of practice and theorisation lead to a range of characteristics and methods that can identify and explain the kinds of activities and occurrences within Fatberg events. The examples thus provide a series of reference points and practical terms to situate and define how Fatberg activities offer novel learnings and methods for event-based practice research.

Exploring the culture of play within the arts, Huizinga notes that poetry, music and dance share performance as the core of their social and ludic and function. Drawing a comparison with the plastic arts, Huizinga (1955) remarks:

A work of art, though composed, practised or written down beforehand, only comes to life in the execution of it, that is, by being represented or produced in the literal sense of the word—brought before a public [...] Once finished their work, dumb and immobile, will produce its effect so long as there are eyes to behold it. The absence of any public action within which the work of plastic art comes to life and is enjoyed would seem to leave no room for the play-factor (pp. 165-166).

The statement asserts that it is only through play as an action that art comes to life. Play,

Huizinga maintains, cannot manifest in the plastic arts because, being confined to matter, they are constrained by their form (p. 166). This means the artwork itself is inert, requiring action and participation to hold its effect. The potency of art is not in the artwork per se but the collaborative making of the artwork. This shift from considering art as an object to art as a process is central to the two practices that I examine in this section, practices whose meaning and value emerge through play and focused attention on everyday things, actions, and behaviours and their potential to transform the social fabric.

HAPPENINGS

In the previous chapter, I referenced artist Allan Kaprow's single-performance, improvised happenings as inspiration for the research. The reason for this is twofold. Firstly, happenings present a model for open and open-ended participatory practice, comprised, as I will discuss, of four distinct qualities. Secondly, they developed through practice and theorisation, expanding upon Huizinga's conceptualisation of play to establish a method to reengage with the everyday.

To Kaprow, art was a convention - or set of conventions - by which the meanings of experience are framed, intensified and interpreted (Kelley, 2004). Abstract Expressionism, a post-war art movement in American painting, typified by the intense, spontaneous and deeply expressive paintings of Pollock, Rothko and de Kooning, was the epicentre of the art world when Kaprow became an artist in the late 1950s (Kelley, 2004). Pollock's action paintings, on which Kaprow wrote an essay (2003e), signalled a clear divergence from the conventions of art. Here, the boundary between the artwork and the performance of production, and the artist and audience who participate in the production, are blurred (Gyorody, 2014). This view expanded upon Dewey's call (1934/2005, p. 2) for artists to look beyond the aesthetic object to "the everyday events, doings, and sufferings that are universally recognised to constitute experience." Dewey's philosophy is often summed up in the phrase "doing is knowing" (Kelley, 2004). To Kaprow, life's subject matter was almost too familiar to grasp, and life's formats not familiar enough. The result of this disconnection is that "serious practicalities, competition, money, and other sobering considerations get in the



FIGURE 15 Top Left Participants posing with the barrels in *Transfer* (1968) by Allan Kaprow. From Media Archive Performance. Retrieved from: <http://www.performap.de/map5/paradoxe-medien/what-can-we-learn-from-photographs-of-happenings-allan-kaprows-transfer>. Copyright 1968 by Andrew Glantz, The Getty Research Institute.

FIGURE 16 Top Right Image still of participants exchanging handfuls of straw in a reinvention of *18 Happenings in 6 Parts* (1988) by Allan Kaprow. From YouTube. Retrieved from: https://www.youtube.com/watch?v=G_kklw3gdQI.

FIGURE 17 Bottom Allan Kaprow throwing tyres in *Yard* (1961). From @HepworthGallery. Retrieved from: <https://twitter.com/hepworthgallery/status/1278614916291756034?lang=ar>. Copyright The Getty Research Institute.

way” of life and its enjoyment (Kaprow, 2003a, p. 115).

To address this issue, Kaprow looked to Huizinga’s philosophy of play. Specifically, Kaprow noticed the crucial difference between gaming, the realm of competition, and playing, a typically unserious, open-ended, autotelic activity. Play, for Kaprow, lies at the heart of experimentation, and experimentation typically involves paying attention to the unattended (Kaprow, 2003a, p. 250). The notion of doing life consciously (Kaprow, 2003a, p. 195) was fundamental to the development of happenings as single performance participatory events in the late 1950s and early 1960s. By conducting life consciously and paying close attention to routine actions and behaviours, life is simultaneously revealed as artificial and real – the everyday is made strange (Kaprow, 2003f). Play, therefore, offered the potential to reintroduce spontaneity and carelessness within the practice of making art. Based on “a headful of ideas of a flimsily jotted-down score of ‘root’ directions” (Kaprow, 2003a, p. 19), thus lacking a clear philosophy or structure, the encounters that ensue were improvised responses to the situation, materials, props, actions, processes, spaces and experiences. Happenings simply *happen*, prompting experimentation with the everyday. Ordinary activities and routine behaviours were appropriated as participatory activities, for instance, inviting people to move empty oil and chemical barrels from location to location (Kaprow, 1968) (Figure 15), or arranging meetups to trade handfuls of straw (Kaprow, 1988) (Figure 16). In such examples, participants focus their attention on the typically unseen, and through their playful actions, they acquire a new way of seeing and engaging with the world.

A prominent example is *Yard* (Kaprow, 1961), which consisted of an environment of hundreds of used tyres scattered and piled across the Martha Jackson Gallery’s sculpture garden (Figure 17). Exhibition visitors were encouraged to walk amongst, sit on, or move or toss around the tyres as they saw fit (Kaprow, 1992; Kelley, 2004). *Yard* thus represented a contrast to the constrained, white cube of the art gallery, purposefully encouraging visitors to touch and play with the artwork. Inspired by observations of his children playing, with this rudimentary happening, Kaprow created a place in which people could be endlessly

inventive; they could play with life (Kelley, 2004, pp. 61-62).

Like the work of the situationists and Fluxus movements, happenings were born from a desire to erase the barriers separating art, audience, and artist. Play was at the heart of this transformation as an inherently participatory activity. In the early happenings, the artist's friends and colleagues observed and helped carry out the work in some cases. Over time, however, the insider audience evolved into unknown volunteers collaborating to make the happening happen. The role of the audience was eliminated, with happenings restricted to collaborators and co-creators whose experiences formed the happenings' aesthetic content.

Huybrecht, Schepers and Dreessen (2014) argue that participatory activities are risky, with the uncertain and open-ended nature of encounters between artists/designers and participants an inherent part of the creative process (Pilmis & Menger, 2009). This is especially true of events that relinquish a degree of control to encourage participant interpretation and improvisation. In happenings, the artist provides the setting and the participant the terms; they appropriate the play context. Through these activities, Kaprow came to believe that it was the collective experience of making work and the resulting displacement of the ordinary - a defamiliarising effect - that caused meaning to emerge, not from the enactment of high drama, but the low drama of enactment (Kelley, 2003, p. xxiii). In happenings, to play with everyday life is not to subvert ordinary routines and behaviours but to engage in the process of (re)discovery.

Besides their playful, participatory character, happenings are of interest because their unique philosophy and methodology developed through the blending of practice and theorisation. Having described Kaprow's motivations and activities in the following two sections, I detail the qualities that established happenings as a distinct art form and examine their practical effects by reviewing one such event. Through this process, I scrutinise and calibrate the qualities contributing descriptive and analytical terms to reflect upon the dialogue between play and everyday life.

PRACTISING SPONTANEITY AND CARELESSNESS

In the 1961 essay “Happenings in the New York Scene” (Kaprow, 2003a), Kaprow reflects on the New York happenings to date to assert their “purpose and place in art” (p. 16). In doing so, he outlines four crucial qualities that distinguish happenings from other performative works such as experimental theatre or Pollock’s action paintings. It is worth examining these qualities because they show how Kaprow developed Huizinga’s characterisation of play into a methodology for artistic practice. Significantly, the qualities present a blueprint for creative experimentation, demonstrating how the artist introduced spontaneity and carelessness into the practice of everyday life to defamiliarise oneself from the habitual and stimulate impromptu, playful engagement with the everyday.

Habitat

First, there is the context, the place of conception and enactment (Kaprow, 2003a, p. 17).

Kaprow noted the organic relationship between art and its environment from the outset. This meant that the happening’s place of conception and enactment, its habitat, is not only perceived as a physical space but a set of relationships, values and overall atmosphere that permeates it and whoever experiences it (Kaprow, 2003a). A habitat is a happening’s play space, a space that comes into being through the explorative and appropriative nature of play. What Kaprow adds is an awareness of the performance of space, a reminder that space is not fixed but forever evolving in an active state of becoming. This means the play space is receptive to, and perhaps even encourages, outside influences, deliberately blurring the boundaries between art and life by recognising that happenings exist in the wider world.

In theatre, scenography refers to the relations between space, object, material, light, and sound that define the space and place of performance and condition the reception and engagement from the audience (Palmer, 2011b, 2011a). Lefebvre (1991), and de Certeau (1984), propose that place emerges as a form of practised or lived space, created and defined by its inhabitants and

the activities that happen within (Palmer, 2011b).

The performance of space also recognises that physical space presents echoes of prior activity – whether that be functions, memories, or traces of history (Palmer, 2011b). Such echoes shape the play space and participants’ expectations and experiences. It, therefore, seems plausible that certain habitats echo more strongly than others. For instance, at Haines’s (2016) *Anatomy Lesson*, participants’ explorations of fictional bodily augmentations occurred within a location synonymous with public dissection and immortalised in a renowned Rembrandt painting. The performance of space is also observable in the events that form the basis of the empirical chapters. For example, *Float Fest* was situated directly within the bustle of the coinciding IJ Hallen flea market. This framed visitors’ expectations, who mostly came upon the work unexpectedly, lured by the merchandise display and the lively preparatory activities. In this way, a habitat suggests an expanded, more holistic conception of the context of play, one that recognises the multiplicity of agencies that encounter and permeate the play space.

No plot or obvious philosophy

The second importance difference is that a Happening has no plot, no obvious “philosophy,” and is materialised in an improvisatory fashion, like jazz, and like much contemporary painting, where we do not know what exactly is going to happen next (Kaprow, 2003a, p. 18).

Happenings materialised in an improvisatory fashion, unfolding via participants’ negotiation of a loosely jotted-down score or directions as well as the situation, materials, props, actions, processes, spaces and encounters (Kaprow, 2003a). By having no plot or obvious philosophy, the border between happening and the everyday was kept as fluid and indistinct as possible.

Although happenings claimed plotlessness, they emerged through detailed planning and instructions. When Kaprow stated that a happening has no plot or obvious philosophy, this emphasised that happenings are generated through action. The lack of a plot referred to

the improvised enactment of everyday actions and activities in response to simple cues or a loose plan or instructions, with the lack of an obvious philosophy signifying that the event's motivations remain ambiguous. For example, in *Yard* (1961), the random piles of tyres, which pressed up against the gallery walls and sculptures that adorned the sculpture court, were enough of a prompt to exhibition visitors to walk through, sit on, move, and toss the tyres as they saw fit. Happenings were, to borrow Eco's (1989) term, "works in movement", left open to interpretation and appropriation.

A parallel can be drawn here with Fatberg. The island-building objective does not state how it should be constructed so much as it does our ambition. The rudimentary technique, building with droplets of liquid fat, presents a starting point or cue, bringing about an ad hoc process that appropriates materials, tools, actions, processes, and contexts in response to the ever-changing scale and conditions. No plot or obvious philosophy acknowledges the agency of things, materials, spaces, and participants, recognising and encouraging their coming together as the happening's or event's driving force. Another way of understanding this principle is that it expresses the level of freedom or control bestowed upon the play activity - its openness to appropriation. Considering openness as a spectrum offers a way to gauge and understand emergent actions, behaviours, and outcomes as rational responses to the continually evolving settings from which they materialise.

Chance

The involvement of chance, which is the third and most problematic quality found in Happenings ... is a deliberately employed mode of operating that penetrates the whole composition and character (Kaprow, 2003a, p. 19).

Chance lies at the heart of happenings and most clearly symbolises the artist's attempt to break from the conventions of art. For Huizinga, the social function of play is rooted in playful competition. However, Kaprow is not concerned with winning or losing but the uncertainty that play presents as an appropriative activity. Chance implies operationalising the elements of risk and fear (Kaprow, 2003a). Where there is risk, there is the promise of

reward - the possibility of looking at the world anew. Visitors at happenings are intentionally unsure of what is meant to happen, what is happening, what has taken place, when it has ended, and when things have gone wrong. The vague directions and assemblage of components inject spontaneity and carelessness (the pure spirit of play) into activity to focus attention on being in the moment and “doing life consciously”.

Kaprow presents contradictory directions, however, stating, “you’re interested in getting things done. When you need official approval, go out for it” (Kaprow et al., 2007). Chance is encouraged within circumstances created for the most practical materialisation of the happening, a type of managed unpredictability. Happenings possess little risk of failure precisely because they are designed for appropriation.

Chance is the desired effect stimulated by and, in turn, stimulating play. Koestler’s (1964) theory of bisociation provides a useful conceptual reference here. Bisociation occurs when a situation or idea consists of two self-consistent but ordinarily incompatible frames of reference (p. 35). As an example, he refers to the following joke (p. 19): “A convict was playing cards with his gaolers. On discovering that he cheated they kicked him out of gaol.” Analysing the joke’s construction, Koestler observes that the humour lies in the playful mismatching of two unrelated conventions, “offenders are punished by being locked up” and “cheats are punished by being kicked out” (p. 19). For Koestler, it is this temporary, unstable state, where the balance of emotion and thought is unsettled, and through this disturbance, creative thought is formed (Páldi & Westphalen, 2016, p. 106).

This tension is also observable in Fatberg. Despite the analogy with fatbergs found in sewers, an island and fat are two things that do not go so obviously together. However, combined, they give shape to a process that provides occasions to reflect upon our relationship with fat and its role and value in society. As indicated when studying *Fatberg’s Birthday Party*, the events encourage chance encounters, responses, and associations regardless of knowledge and expertise, with the potential for such comings together to be both radical

and generative. In this way, chance signals an unstable state, a necessary feature of creative experimentation and condition that renders the play activity more or less susceptible to disturbances and divergences.

Impermanence

The final point I should like to make about Happenings ... is implicit in all the discussion - their impermanence ... a happening cannot be reproduced (Kaprow, 2003a, p. 20).

As happenings emphasise the moment, they are, by definition, impermanent, and irreproducible. Happenings were not designed to be experienced by a mass audience, to be rehearsed or repeated. They were fleeting events that live on as myth via the passing of stories, written accounts and photographs (Kaprow, 2003d). Impermanence refers to play's quality as an interlude, an activity set apart from ordinary life with a purpose and meaning in and of itself. It is no coincidence that repeat performances were referred to as reinventions, rather than reconstructions, for works were said to markedly differ from performance to performance (Kaprow, 1992). The value of happenings lies in "their use of realms of action that cannot be repeated" (Kaprow, 2003d, p. 64).

This distinction not only underlines the ephemeral nature of happenings but their artlessness. Such actions were not to be perfected, for repetition implies there is something to improve upon (Kaprow, 2003d). When Kaprow stated that happenings should live on as myth, the intention was to emphasise the implausibility of capturing such unique experiences and focus attention on the moment. Impermanence is the embodiment of spontaneity and carelessness, symbolising a moment distinct from everyday life where participants temporarily immerse in play.

At first glance, impermanence does not appear relevant to Fatberg. Repetition, both in terms of making (island-building) and this being a task with no obvious end, is an intrinsic part of the work precisely because it focuses attention on an often misunderstood and ignored substance. That said, like happenings, repetition does not mean reproducing actions like-for-like, nor



FIGURE 18 Enactment of *Fluids* in Los Angeles (1967). From Los Angeles County Museum of Art. Retrieved from: <https://www.flickr.com/photos/lacma/2417416174/in/photolist-4Ecm3P-4FLovv-4EgA23-4FBTBd-4FxHzz-4FBUEh-4FxHXP-4EgA39-4FxGxZ-4Ecm2R-4EhfVS-4Ehr6Q-4GanMV-4GapxV-4FCsGU-4Gaosa-4Gexjh-4FCrHQ-4Gezg9-4GaoUi-4GapmD-4GeysG-4GexWW-4HaUAb-4GexwW>. Copyright 1967 by Dennis Hopper.

does it necessarily imply perfecting a process. Impermanence means observing the emergent and evolving nature of activity, recognising that an event's idiosyncrasies emerge not from their coming together but their *becoming together* in a particular way (Fraser, 2006, p. 131).

FLUIDS (1967): A HAPPENING

To grasp what these four qualities mean in practice, let us now look at one such happening. *Fluids* (1967) was a happening that called for the building of multiple, large-scale ice structures across Los Angeles (Figure 18). The artist recruited participants using the following billboard advertisement:

During three days, about twenty rectangular enclosures of ice blocks (measuring about 30 feet long, 10 wide and 8 high) are built throughout the city. Their walls are unbroken. They are left to melt.

Those interested in participating should attend a preliminary meeting at the Pasadena Art Museum, 46 North Los Robles, Pasadena, at 8:30 p.m. on Wednesday, October 11, 1967. The happening will be thoroughly discussed by Allan Kaprow and all details worked out (Henri, 1974, p. 97).

Given its scope, the happening was pre-organised with the commissioning Pasadena Art Museum. Sites were identified, permits, permissions, and insurance obtained, and the Union Ice Company scheduled to deliver ice blocks every 2 to 3 hours (Kelley, 2004, p. 121). Over three days, teams of 10 to 15 volunteers constructed, block by block, a series of approximately 70 feet long, ten feet wide and seven feet high (evidently bigger than advertised), roofless, rectangular enclosures at 15 locations across the city (p. 121).

While the task was identical, its execution varied from location to location. Building the structures presented a challenge, with each cumbersome block of ice melting the moment it left the truck. This posed the risk of slipping and falling while carrying the heavy blocks.

Accordingly, workers needed to pay attention to the task at hand, adapting to the changing state of the material and those around them. This sparked considerable creativity and coordination as teams improvised and appropriated the task. Crew members learnt that constructing a sturdy enclosure on the uneven ground required considerable precision. Another crew pioneered the use of rock salt to bind the ice blocks together (Schechner & Kaprow, 1968, p. 154). Most significant, however, was that the structures began to melt in the warm October weather as fast as they were assembled. Passers-by at the 15 sites observed teams of workers toiling to erect impermanent structures for no obvious purpose.

At one site, a Marine recruiter, admiring the teamwork on display while on his lunch break, attempted to convince several workers to enlist (Kelley, 2004, p. 125). In response, the workers tried to persuade the Marine to desert. At another site, a young motorcycle cop (or, as it turned out, an unknown art student in disguise), asking to inspect the artist's event permit, declared, "I've got something for you," before tossing several flares into the ice enclosure (p. 125). A few workers were seen pressing their bodies against the glowing walls as a gaseous pink light billowed out into the evening sky. Shortly afterwards, the ice-delivery drivers, who had initially been hostile towards the project, broke out several crates of beer. Together, the workers, the delivery drivers, and even the "cop" held an impromptu party (p. 125). These incidents signal the appropriative nature of the happening, with the event prone to and even encouraging chance actions and deviations. By acknowledging spontaneous responses, the happening gave participants the freedom to explore and make sense of the world and the potential for new play spaces and perspectives to form.

Another observation was that the activity at certain sites echoed their surroundings. For instance, one enclosure was constructed close to a McDonald's hamburger stand, with the building process reminiscent of the assembly-line precision of the kitchen staff (p. 123). A second site located at a children's play centre was suggestive of children playing with building blocks. Another situated near a decorative stone supplier seemed like a parody of bricklaying (Kaprow, 2008, p. 45; Kelley, 2004, p. 125). The resonance between the happening

as a playful activity, and the surrounding environment, highlights the performance of space, demonstrating that the activities that unfolded were the unique product of the evolving interrelations between space, objects, participants and passing observers. Whether intentionally or serendipitously, the three mentioned sites echoed in ways that complemented the work-like nature of the task.

To play is to know

This brief analysis of *Fluids* demonstrates the ways that Kaprow's four qualities occur in practice. Huizinga's study of play inspired Kaprow to move away from the tradition of art as the product of a process to art being a process in and of itself. In doing so, he developed a practice that, by being open to spontaneity and carelessness, by being unstable, utilised the social and appropriative nature of play to produce a more holistic form of artistic production. For example, in *Fluids*, the unstable building material rendered the task and structures subject to time, the elements, and other outside influences. Teams needed to work safely and efficiently while adapting to the continually, often spontaneously, changing circumstances.

As a form of artistic production, happenings do not exclude external influences. They embrace and even encourage incursions to the play space (habitat), blurring the boundaries between art and life. At some of the *Fluids* sites, the work seemed to echo its surroundings, whether mimicking the efficiency of the McDonald's hamburger stand or reflecting the meticulous display at the opposing stone suppliers.

Participatory practices possess an inherent unpredictability. Interpretative openness, to use Bishop's (2012) phrase, is a necessary feature of participatory engagements, with participants invited to make a choice, whether that is as fundamental as whether to take part (Kelley, 2003). *Fluids* presents numerous examples of interpretative openness. The obscure task, which to the passing observer seemed like manual labour, prompted chance encounters, such as the Marine's attempt to enlist young crew members and the art student/police officer's request to view the artist's permit, which triggered a chain of playful incidents.

This latter example reminds us of the role of humour in everyday life. Humour is neither good nor bad. Humour is a system of valuation, but it is not the valuation (Páldi & Westphalen, 2016). It might symbolise an appreciation of a situation; then again, it might represent joviality, bonding, group identity, or the permission to indulge one's resentments (Páldi & Westphalen, 2016). Humour is a human response to unpredictability. Despite being an interlude from the task, the student's careless tossing of the flares and the whimsical reaction of the workers and delivery drivers epitomises the spirit of play. Spontaneity and carelessness are essential to happenings precisely because their unpredictability obliges participants to be in the moment. This instability represents the transformative and creative potential of happenings as a form of participatory practice. Their idiosyncrasies emerge not from the coming together of things, bodies and actions, but from the disturbance caused by their becoming together in a particular way (Deleuze et al., 2004; Fraser, 2006; Koestler, 1964; Páldi & Westphalen, 2016).

Huizinga contends that play has "nothing to do with necessity or utility, duty or truth" (Huizinga, 1949/2016, p. 158). However, happenings, as an expansion of play, propose the contrary. Play's "utility, duty and truth" lies in the Deweyan sentiment that "doing is knowing". Happenings are a starting point, an invitation to immerse in impromptu exploration, to creatively experiment with the everyday and reconnect with the world from which we have become estranged.

In this subsection, I have examined the four guiding principles of happenings – habitat, no plot or obvious philosophy, chance, and impermanence – and their basis in practice and theory. I have considered where Fatberg events share similarities and differences to these characteristics and how these qualities function in practice by examining an account of a happening. The four qualities subsequently contribute a range of concepts and descriptive terms that expand upon Huizinga's conceptualisation of play as a method for creative exploration, enabling consideration of the overlaps and dialogue that occur between play and real life.

AN EXPANDED NOTION OF CREATIVITY

As shown, happenings present a holistic, expanded notion of play, a philosophy that, by focusing on process, recognises and appropriates external effects that encounter the play activity. To elaborate upon the transformative potential of artistic production, let us now closely examine the work of German artist Joseph Beuys. As indicated in the thesis introduction, Beuys's work and theories are an important reference for Fatberg because they provide a benchmark for participatory practice and means to study the relations between things, people, processes, and ideas. Beuys's expanded definition of material, embracing will, speech and thought, contributes to his expanded notion of art, which viewed art as a sculptural process and event where one can be playful and inspire social transformation. The expanded notion of art is expressive of play's inherently social and appropriative nature, a philosophy that purposefully blurs the boundaries between play and real-life and the dichotomies of expert and non-expert, art and life.

A celebrated conceptual and performance artist, active from the 1950s to the early 1980s, Beuys's extensive body of work comprised a range of media, materials, and themes, from painting and writing to lectures, teachings, sculptures, and objects shaped from organic matter, artistic happenings known as actions, and activism. For example, in the performance *I Like America and America Likes Me* (1974), the artist, drawing inspiration from shamanistic rituals and tropes, lived eight hours a day for three consecutive days, locked inside a New York gallery space with a coyote (Figure 19). For Beuys, the coyote represented both the spirit of America and the agent of change. Levi-Strauss (1990) remarks that Beuys "engaged the coyote in a dialogue to get to 'the psychological trauma point of the United States' energy constellation'- namely, the schism between native intelligence and European mechanistic, materialistic, and positivistic values" (p.26). The performance exemplifies the desire of the artist to reclaim an empirical understanding of natural processes of materiality and transformation. To do so, Beuys developed three intertwining concepts through which he practised his notion of art as a vehicle for social change: *Plastiker*



FIGURE 19 | *I Like America and America Likes Me* (1974) by Joseph Beuys. Reprinted Joseph Beuys, *Coyote*, by C. Tisdall and J. Beuys, 1988, Munich, Germany: Schirmer-Mosel. Copyright 1976 by Caroline Tisdall and Joseph Beuys.

(an expanded notion of material); *erweiterte Kunstbegriff* (an expanded notion of art); and *soziale Skulptur* (social sculpture), a concept signifying the potential of everyday actions to transform the social fabric.

Philosopher Rudolf Steiner was a crucial influence on Beuys's work. Steiner's anthroposophy, a human-oriented spiritual philosophy, maintained that the key to knowledge and understanding of the universe lies in man himself (Flew, 2002). Inspired by this principle, Beuys came to recognise that human beings' status and role corresponds with broader processes of change (social, ecological, political) of which they are a part, with art the mechanism for achieving individual freedom and social transformation (Gyorody, 2014; Walters, 2010). In his view, understanding the complexities of social, ecological and political processes meant extending beyond the practice of rational or analytical methodologies to include the experiential, intuition, inspiration and imagination (Beuys & Harlan, 2004, p. 57). Key to this is an expanded notion of material. Beuys did not use the typical German word *Bildhauer* (to carve) to describe himself as a sculptor. Instead, he used the term *Plastiker*, which refers to the shaping of flexible material such as clay (Beuys & Harlan, 2004; Walters, 2010). In Beuys's view, *Plastiker* describes an expanded, or holistic, definition of material that perceives will, speech and thought, as well as actions, the inner workings of the human body, ripples on the water, and other ecological processes, as creative activities or sculptural movements (Stachelhaus, 1991; Walters, 2010). The expanded definition of material considers material not as static but as the stimulus for a sculpting process. Materials are the catalysts for transgressive play.

With this analogy, Beuys seeks to invoke the energy and dynamism of the sculptural process as the departure point for *erweiterte Kunstbegriff*, his expanded practice of art. *Erweiterte Kunstbegriff* foregrounds the experiential, by acknowledging the formative shaping, or sculpting, associated with both practice and theory. Engaging in a reciprocal dialogue and sculpting process with material, language and actions (the experiential), Beuys's aim "was to inspire new insights, to make things happen, to inform and transform" (Harlan, 2004,

p. 2). The concept proposes not an end to formal divisions between life, art, science and other activities or domains, but their expansion, viewing the contrasts between practices as different means through which to communicate (Gyorody, 2014; Walters, 2010).

Erweiterte Kunstbegriff is arguably a precursor to the kinds of event-based participatory practice outlined at the beginning of the research. The creative industries and cultural platforms have appropriated the expanded concept of art as a methodology for creative practice and justification for more open or public forms of interdisciplinary research. Concerning Fatberg, *erweiterte Kunstbegriff* presents a model for creative research based upon the reciprocal dialogue between practice and theory, thinking and making. Making, or in this case, island-building acts as a leveller. As an object and process, Fatberg attempts to draw people across knowledge and disciplines together in dialogue.

SOCIAL SCULPTURE

Beuys's theoretical expansion of material and art provides the impetus for a more ambitious concept: social sculpture. Central to Beuys's practice is a belief in the transformative potential of art, a belief that, guided by Steiner's anthroposophy, stretches to the principle "that every person can and should play a role in the collective reimagining of society" (Gyorody, 2014, p.130). Social sculpture presents society itself as a *Gesamtkunstwerk*, a total work of art with which every individual can and should creatively engage. Art, for Beuys, is the method to "mould and shape the world in which we live" (Beuys & Harlan, 2004, p. 9). In the following extract from the text, *I Am Searching for Field Character*, Beuys presents his manifesto for the "evolutionary-revolutionary power of art":

We must probe (theory of knowledge) the moment of origin of free individual productive potency (creativity). We then reach the threshold where the human being experiences himself primarily as a spiritual being, where his supreme achievements (work of art), his active thinking, his active feeling, his active will, and their higher forms, can be apprehended as sculptural generative means ... EVERY HUMAN BEING IS AN ARTIST who - from his state of freedom - the position of



FIGURE 20 Poster for *Honigpumpe am Arbeitsplatz* (1977) by Joseph Beuys. From Tate Images. Retrieved from: <https://www.tate.org.uk/art/artworks/beuys-joseph-beuys-honigpumpe-am-arbeitsplatz-ar00958>. Copyright 2018 by DACS.

freedom that he experiences at first-hand - learns to determine the other positions in the TOTAL ART WORK OF THE FUTURE SOCIAL ORDER (Beuys, 1973/2003, pp. 929-930).

With this declaration, Beuys argues for the collapse of what he deems a repressive social system. In its place, Beuys proposes that each individual embraces their rightful, democratic position as “a creator, a sculptor, or architect of the social organism” (p. 929). This is sculpture reimagined as an evolving, social process. Beuys projects art as *the* politically productive force, performed in all walks of life, in the workplace, institutions, on the street, in schools, as a means of establishing reciprocal dialogue, cooperation, and collaborative structures (Beuys, 1973; Biddle, 2014). In doing so, I argue, he taps into human beings’ innate ability to read and change their surroundings into an opportunity for play. As Walters (2010) notes, “for Beuys, understandings and interpretations of the empirical material both seen and intuited at a sacred site could be creatively redeployed and worked with in ways that stimulate human creativity and social change” (p. 26).

Honey Pump in the Workplace: A trigger for social change

A notable example of social sculpture is the work *Honigpumpe am Arbeitsplatz* (Honey Pump in the Workplace) (Figure 20), which formed part of the artist’s contribution at Documenta 6 (1977). Combining an exhibit, performance and educational platform, the work displayed at Museum Fridericianum functioned as a space for dialogue and action. For 100 days, Beuys, along with the input of thousands of international visitors, developed ideas on art as a force for political change. The honey pump, a machine situated in the museum’s central staircase, was central to the work. The machine, consisting of a pump powered by two motors, transported honey up and into a 17-metre-tall pipe, circulating the viscous fluid across a network of pipes distributed throughout the museum. The pumping of honey through the machine, from room to room, was a symbol of and trigger for the distribution of ideas and connections within a social body, with honey emblematic of life’s processes of circulation and renewal, “a metaphor for the creative energy released by the social interactions of a participatory society” (Biddle, 2014).

Running parallel to the honey pump were a range of participatory activities orchestrated by the Freie Internationale Universität (FIU). Founded in 1973, the FIU, of which Beuys was a founding member, was conceived as a school outside the traditional state education system. Born from the belief that free education is a universal right, the FIU's mission was to unlock people's creative potential, no matter their social or educational background. To do so, they promoted the interdisciplinary exchange of knowledge and ideas while developing methods and concepts for enacting social change (Joseph Beuys - Free International University (FIU) for Creativity and Interdisciplinary Research, n.d.). The FIU's activities at Documenta 6 included public talks, discussions, workgroups and an action committee, activities that appropriated the real-world formats of political dialogue, covering real-world topics such as nuclear energy, civil rights, and the relationship between creativity and capital (Szeemann, 1993). These activities were, for Beuys, an integral part of the work, for the honey pump "only justified itself inasmuch as people with their different kind of energy are integrated into it ... the people were the innovative thing, not the machine" (Beuys & Harlan, 2004, p. 51).

Parallel process

The synergy between the honey pump and the parallel discursive activities is illustrative of what Beuys calls a *Parallelprozess* (parallel process), recognising the intimate connection between things, their associated actions, and dialogue (Harlan, 2004a). Parallel process refers to the sculpting process central to the artist's work. For Beuys, the creative process begins in thought (thinking = sculpture), with words the shaping of thoughts (speaking = sculpture), and social sculpture the dialogue and action through which we mould and shape the world (Beuys & Harlan, 2004). Critically, when remarking that "the people were the innovative thing" about the honey pump artwork, Beuys underlines that the process of dialogue and creation is most important. The honey pump was the thing (a toy or prop) and expression around which people and ideas coalesce, triggering social, ecological, and political action and new communities of practice. Through this parallel process, Beuys attempts to form what McCarthy and Wright (2015, p. 9) refer to as a dialogical relationship between people

and things, with each recognised for their distinct qualities, experiences, and differently placed centres of value. Cruikshank (2005) remarks that social imaginaries and knowledge develop from making sense of situations, negotiating an imbalance in knowledge and how each participant views and imagines their relationship. Recognising difference encourages empathy, not merely as a form of identification, but as an imaginative response enabling individuals to live out their own experience, collectively shaping their own and others' futures (McCarthy & Wright, 2004, 2015).

I previously mentioned that Beuys's artistic practice is an inspiration for Fatberg. A parallel can be drawn between the various practices that compose *Honigpumpe am Arbeitsplatz* and those that make up the Fatberg. I argue that, akin to Beuys, the activities and constituent artworks that shape the practice – the island of fat, the custom-made fat tools, and related paraphernalia – are secondary to the dialogue and exchange that encounters with such artefacts produce. They are triggers for a parallel process.

An important question concerning both Beuys's work and Fatberg is, if such works exist to stimulate human creativity and social change, what are their products? Examining Beuys's use of politics as a medium to champion the revolutionary potential of art, Gyorody (2014) suggests one answer. Beuys's ceaseless production of art objects – props for memory, as he called them – emerged as a means for storytelling and the perpetuation of his ideas and influence beyond the moment of artistic action (pp. 129-130). Returning to a question posed by the Dutch Creative Industries, “what role can art play in the gathering of knowledge in complex development processes?” (ClickNL, 2017, p. 96), I contend that Beuys offers a response. Social sculpture's products are physical works, translations of thoughts and action, and the perpetuation of thoughts and action.

THE ENERGY OF THINGS

However, the most significant of Beuys's philosophies to this research is his desire to reclaim an empirical understanding of natural processes, materiality, and transformation. The idea



FIGURE 21 *Fat Chair* (1964–1985) by Joseph Beuys. From Tate Images. Retrieved from: <https://www.tate.org.uk/art/artworks/beuys-fat-chair-ar00088>. Copyright 2018 by DACS.

of creativity, dialogue, and participation as continuous, evolving processes is evident in Beuys's conception of sculpture and the work's often unfinished and impermanent nature. A work such as *Fat Chair* (1964) does not just present a slab of fat smeared on the seat of a chair, but a slab of fat in every state of transformation: hard, soft, melting, even rotting (Figure 21). Organic substances such as fat, felt, blood and honey were alchemical materials symbolic of natural processes, materiality, and transformation. Beuys looked to the warmth, energy and dynamism of natural substances and processes, not as metaphors, but to form a holistic and empirical understanding of humanity, the natural world, and the cosmos. For instance, *Honigpumpe am Arbeitsplatz*, which references the beehive as a complex social system and system of production, is analogous to the human social fabric. This fixation on material warmth and energy signals a belief that it is possible to tune into the intentions of things and their connection to the world by practising with substances and substance processes. Beuys considered this a crafting process, not craft as proficiency, "but craft as an attitude, as consciousness, in which one can still enter into the intentions of a plank of wood" (Beuys & Harlan, 2004, p. 32). Beuys promotes a playful, inquisitive attitude toward substances, processes, people, and situations, an attitude that respects their agency.

A similar attitude and attention to substances and their broader relationships is observable within the Fatberg project. The following interview extract describes some of our observations on Fatberg's interactions with its immediate environment (Audrey Chieza & Thompson, 2018):

NC: Do you think your fatberg is living a life specific to its environment?

MT: You've got to remember that the Fatberg started off in a small tank with relatively clean water—which is quite a hermetic context. Even in the lab, we noticed very quickly that slime moulds move in and start to grow on this thing underwater. It's now in relatively clean open water ... moving out towards the estuary, but the water is full of all sorts of life ... Recently, the slime moulds have been thriving, and there's evidence of algae starting to grow. There were quite a large number of freshwater mites swarming around it yesterday and even small freshwater shrimp feeding off it. So, the

Fatberg has become its own ecosystem.

The conversation suggests that through routine interaction with fat at different scales, an expanded view of fat emerges, where Arne and I and event participants became aware of fat's agency and interplay with the environment.

Vibrant Matter

Beuys's preoccupation with substance energy and constellations of forces shares similarities with Bennett's (2010) notion of vibrant matter. Building upon the work of Latour (2004), Deleuze and Guattari (2013), and Spinoza (1960), Bennett (2010) advocates for the vitality of matter, proposing a less anthropocentric, more distributed concept of agency. Vibrant matter imagines the world without primal separations between human, animal, vegetable, or mineral, where "all forces and flows (materialities) are or can become lively, affective, and signalling" (Bennett, 2010, pp. 116-117). Through this lens, no one body or agent is the privileged site of agency but "an ontologically diverse assemblage of energies and bodies, of simple and complex bodies, of the physical and the physiological" (p. 117).

In a presentation titled *Power of the Hoard: Artistry and Agency in a World of Vibrant Matter*, Bennett (2011) ponders, what if we were to take the signalling of matter seriously? What if things really can "hail us"? In response to this question, Bennett looks to the example of hoarders - people who obsessively collect and store things. Hoarders appear attuned to the call of things, forming "an unusually resilient, intense, and intimate bond with nonhuman bodies" (Bennett, 2011). They have unique sensory access to the energy of things. Bennett asserts that normal perception is biased towards instrumentation rather than vibrancy, postulating that artists, like hoarders, share the same perceptual abilities, "hearing the aesthetic call of things to conjoin with them, play with them, respond to them" (2011).

Things as co-workers

Beuys would likely have appreciated Bennett's analogy. Routinely working with organic

matter as representative of natural processes, materiality and transformation, he similarly recognised that other agents, what he referred to as co-workers, play a part in the shaping of things (Beuys & Harlan, 2004, p. 72). In Beuys's worldview, it is only by engaging with the vibrancy of things, substances, and substance processes that one comes to genuinely understand the interrelations between humanity, the natural world, and the cosmos. By stating that there is intrinsic energy within every substance and being, the artist implies that multiple means of observation are necessary, not only the scientific, to understand them in their totality. The expanded concepts of art and material propose a fundamental way of thinking and being within the world, where listening to the aesthetic call of things provides a means to question whether things are as they seem. It is an approach not solely based on rationalism and disciplinarity, but one that seeks the interconnectedness between things, requiring attentiveness, open-mindedness and creativity (Harlan, 2004b; Walters, 2010).

Sicart (2014) contends that “playfulness glues together an ecology of playthings, situations, behaviours, and people, extending play toward an attitude for being in the world” (p. 25). The idea of an ecology of play seems apt considering the various features, methods, concepts, theories, and effects discussed in this literature review. However, considering Beuys's and Bennett's sensitivity towards “the call of things”, I contend that if we consider play as an ecology, this ecology must embrace the vibrancy of the things, substances, and substance processes we play with, as equally creative forces. They, too, play a role in play. For this, Beuys sets an example. Recognising that human beings' status corresponds with broader social, ecological, and political processes, Beuys capitalises on the agency of everyday substances and processes as the inspiration and catalyst for thought, dialogue, and action.

I argue that Fatberg adopts a similar approach. Phrases such as “the fat made us do it”, “lard pour lard” (fat for fat's sake), and “we don't know why we simply know we must” indicate a philosophical position where fat is not only granted agency but leadership over proceedings. Further, my collaborator and I refer to ourselves as agents of the Fatberg, effectively “doing fat's bidding”. Much like Beuys, acknowledging the energy or vibrancy of matter

means entering into the intentions of matter and displacing oneself from the established anthropocentric view. It means defamiliarising oneself and recognising our assumptions and biases to shape a more holistic and empirical understanding of the interconnectedness between things, humans, and the natural world.

Referring to the complex nature of medical activity and the interrelations between the body and material practices, Mol (2002) notes that ontology in practice is multiple, asserting that a praxiographic approach, taking “objects and events of all kinds into consideration” (p. 158), is necessary when trying to make sense of the world. As she concedes, this does not make the description of practices easier. By accepting that ontology in practice is multiple, Mol asserts that the critical question is “what is being done and what, in doing so, is reality in practice made to be?” (pp. 159-160).

Mol’s question applies to Fatberg events. As the initial discourse analysis shows, the practice comprises activities typified by a loose or open outline agenda, with processes and activities emerging via a situated engagement with and critical reflection upon material. Crucially, an understanding of fat occurs through its routine shaping into an island – the Fatberg. The island literally and figuratively represents the multiplicity of fat simultaneously existing as a concept, ambition, participatory object, and outcome. The Fatberg, therefore, functions as the context and material where Arne and I stage encounters between humans and nonhumans.

As will become apparent in the subsequent empirical chapters (notably in Chapter 6), Fatberg events comprise three types of agency: fat as a vibrant material, the designer/artist’s agency, and a synthetic agency, role played by Arne and I, who claim to understand, speak for and act on behalf of fat. Importantly, what begins as a role-play to adopt an alternative view of fat encourages a way of thinking about and engaging with matter that perpetuates novel happenings and readings of entanglements between people and material.

SUMMARISING PLAY AS PRACTICE

Two artistic practices were introduced that show plays transgressive qualities used to spark creativity and social change. Influenced by Huizinga's *Homo Ludens*, Kaprow's single-performance, participatory happenings appropriated routine materials, routines, and behaviours to focus participants' attention on the everyday, encouraging a process of (re)discovery and a new way of engaging with the world. Through their development, Kaprow established four qualities that distinguish happenings from other participatory activities: habitat, no plot or obvious philosophy, chance, and impermanence. A brief review of *Fluids*, a happening consisting of the construction of large-scale ice structures, demonstrated the qualities' practical effects, drawing attention to the interface between play and everyday life.

Beuys's intertwining concepts - *Plastiker*, *Parallelprozess*, *erweiterte Kunstbegriff*, and *soziale Skulptur* - provided further evidence of play's transgressive potential. Based on the belief that everyone and everything is innately creative, Beuys exploited the synergy between thought and action, thinking and making, positioning artistic production as the spark for social, political, and environmental engagement. Crucially, concerning the research, Beuys looked to the dynamic nature of things to shape a holistic and empirical understanding of the world and its interrelations. A connection was subsequently made with Bennett's notion of vibrant matter, which asks, what if we were to take the signalling of matter seriously? Bennett's question resonates with Beuys's practice and Fatberg because it signals the desire to decentre oneself from an anthropocentric view to recognise the contributions and effects of nonhumans. Consequently, the practices in this section provide a range of conceptual references and terms that support the review of creative practices and consideration of the dialogue that exists between play and real life, thought and action, humans and nonhumans.

2.5 DRAFTING A LEXICON FOR INTERDISCIPLINARY EVENTS

This chapter has examined a range of concepts, methods, theories and practices from art, design, literary criticism, philosophy, and sociology. Starting with Huizinga's definition of play, I traced a path through the features that compose an ecology of play. I have established

play's transgressive potential and practical effects and demonstrated how play as an activity and attitude has been appropriated and elaborated to shape methods and philosophies for creative practice. To conclude the chapter, I identify the descriptive and analytical concepts that have emerged through this review. The chosen concepts support account writing and analysis of the three practice features that motivate the empirical chapters: a dialogic space for fat, fat as an agent, and fat as a construction material. The section, therefore, specifies how the selected terms can be applied to analyse and give nuance to accounts of Fatberg activities. The resulting lexicon of terms is by no means definitive, hence the need in the empirical chapters to test the terms to refine and expand upon this initial analytical perspective to reflect the complexity of interdisciplinary practice. The chapter ends with a table (Figure 22), presenting the preliminary lexicon of terms and their working definitions.

THE ECOLOGY OF PLAY

Huizinga describes *play* as an interlude, an activity consisting of temporary actions and behaviours oriented toward a set objective. Play is *autotelic*; its purpose and meaning - its logic - expressed within its own pronounced spaces, conditions, and timespans. This refers to the context of play, *the magic circle*, a hedged-off domain existing beyond everyday life. To play within the magic circle is to accept the site's legitimacy. This suggests that the boundaries of play are fixed yet, as demonstrated, play is often a negotiated activity. Here I noted the distinction between a *game space*, where there are stakes at play and where rules and objectives are absolute, and a *play space*, an emergent space that comes into existence when a space is appropriated by play (Sicart, 2014). The difference between playing and gaming is marked by *openness* and constraint: the level of control asserted over activity and the extent to which an activity is open to *appropriation*. Openness can be considered a dimension used to evaluate the level of authoritative control exerted over activities and how this informs participation. McCarthy and Wright (2015) propose that openness is a multi-layered construct, observable in three ways. There are *open activities*, with works open to the readings and interpretations of others. There are *structurally open activities*, with participants encouraged to appropriate materials and tasks to suit their needs and interests. Finally,

there are *incomplete works* that act as prompts for participants to create, compare and perform their own works. As prerequisites of play, openness and appropriation demonstrate that play cannot be detached from the outside world, for people carry their motivations, ideas, experiences, expectations, moods, and attitudes with them.

Appropriation additionally refers to *playfulness* - the attitude of play. It speaks to humans' innate curiosity, love of diversion, exploration, creation and wonder (Gaver, 2009, p. 165). Playfulness specifies a way of being in the world, of inciting the spirit of play, yet remaining respectful of the conditions in which it interacts. Playfulness is to interact with the world as a plaything, to transform our surroundings into an opportunity for play.

Gibson's (1966, 1979) ecological approach to perception seeks an explanation of perceptual phenomena in terms of the physical attributes and vibrancies that surround us (Gaver, 1996, p. 12). Our perception of things, objects, people, and the environment are established through our interactions with them and the properties they afford. *Affordances* enable consideration of how actions and social behaviours are shaped by and occur within the physical world. Playfulness involves understanding the potential for play within a given situation. This alludes to how playfulness appropriates things and objects as *props* or toys. The perceived materiality and function of props *filter* the features of the play space, affording and inspiring specific actions and behaviours. Recognising how props filter play implies understanding the actions and interrelations performed within play or playful activity; why and how we play. Filtering also refers to the degree of openness, consciously baked into objects, such as the design of fragmentary elements appropriated through play.

In conclusion, the ecology of play establishes the features and boundaries of playful activity, contributing a range of terms and conventions that can help identify and comprehend the emergent qualities and conduct of participants in participatory events.

TRANSGRESSIVE PLAY

The second section presented a series of concepts and strategies that revealed play's transgressive potential. Shklovsky's critique of Tolstoy's *Kholstomer* established *defamiliarisation* as a literary technique that displaces the readers' gaze to confront them with the subject from which they have become estranged. The technique has since been employed by designers both as a practical technique for designing and the intended effect of design. In these instances, defamiliarisation is used as a tool to reflect upon the politics and culture of everyday life (Bell et al., 2005), confronting assumptions and biases baked into the design of products (Kirkham, 1996) and provoking a defamiliarising effect via engagement with designed objects. The latter approach is prominent in critical design. Fictional objects and scenarios plant a vision of the future in the observer's mind to provoke reflection upon present social, political, environmental, or technological trends and ideas. Critical design represents a form of materialised critique, proposing alternative versions of the everyday to play with ideas of how life could be different.

Garfinkel's breaching experiments have shown that when an individual's social environment is unsettled, and *expectancies breached*, an attempt is made to recapture anticipated structures and mechanisms in rational and observable ways. This underlines the extent to which everyday language, actions, expressions, cues, and frames are socially constructed and taken for granted. Breaching experiments present both a method for conducting empirical research and an analytical concept to reflect upon participants' expectations and the subsequent reading of activity. They demonstrate how routine social situations might be appropriated to provoke improvisation and unearth latent views and experiences through which novel questions and ideas can form.

Bakhtin's critique of Rabelais' novels 'Gargantua and Pantagruel' emphasises the *carnavalesque* as the celebration of excess and subversion of high culture. The carnivalesque represents a break from prevailing social and political structures, exposing the relative nature of things to demonstrate that such structures are temporary and that things might be different (Robinson, 2011). Folk humour is purposefully disruptive, offering a form of socio-

cultural critique with the potential for creative action.

The concepts and strategies in this section demonstrate how play might be employed as a technique to subvert convention, offer critique, and trigger creativity and collaboration. Practically concerning the research, several terms and criteria were identified that help describe the planned and emergent effects of play supporting account writing and analysis of practice activities.

PLAY AS PRACTICE

The final section presented a detailed examination of two artistic practices whose meaning, and values emerge through playful engagements with everyday things, actions, and processes.

Kaprow's single-performance, improvised happenings expand upon Huizinga's notion of play, establishing a set of four qualities that distinguish them from other participatory activities. Contrasting the qualities with the features of play, I discussed their correspondence with Fatberg events and, where necessary, a preference for other conceptual or analytical terms. The four qualities thus provide reference points to study how outside forces interact with and impact play.

Habitat calls attention to the performance of space, a physical space and set of relationships, values, and atmospheres that emerge through play and the multiplicity of influences (past and present) that permeate it and whoever experiences it (Kaprow, 2003a).

No plot or obvious philosophy refers to the level of freedom or control - *openness* - bestowed upon participatory activity. Openness is considered a spectrum to analyse the planned and emergent actions and behaviours that characterise playful activity.

Impermanence emphasises the ephemeral and emergent nature of events in the "realms of action that cannot be repeated" (Kaprow, 2003d, p. 64). Impermanence alludes to spontaneity

and carelessness, the moment where participants immerse in play.

Chance is an effect stimulated by, and in turn stimulating, playful activity. To seek chance is to court instability and the potential to see the world anew. Chance is a necessary characteristic of creative experimentation (Koestler, 1964), a condition to which participatory events are susceptible.

In the second example, I studied Beuys's artistic practice, which provided a range of theoretical concepts to consider the relations between things, people, processes, and ideas in participatory events. Motivated by a belief in the transformative potential of art, Beuys drew a distinction between the German words *Bildhauerei* (carving) and *Plastiker* (shaping flexible material) to propose an expanded notion of material. In doing so, Beuys recognised practice and theory as a reciprocal dialogue, a parallel process between things, actions, and dialogue (Harlan, 2004a). With this step, Beuys advanced his *erweiterte Kunstbegriff* (expanded notion of art), proposing that every aspect of life be approached creatively as the mechanism for individual freedom and social transformation.

As intertwining concepts, *Bildhauer*, *Plastiker*, *Parallelprozess*, and the *erweiterte Kunstbegriff* represent the synergy between thinking and making. *Soziale Skulptur* (social sculpture) subsequently developed as a uniting theory, positioning creative practice as *the* politically productive force and catalyst for dialogue and action, with everyone and everything an agent for change.

Significantly, Beuys considered matter and substances as co-workers within this sculpting process, signifying the dialogical relationship between humans and nonhumans. Here a parallel was made with Bennett's (2010) notion of *vibrant matter*, which imagines the world without primal separations between human, animal, vegetable, or mineral. To acknowledge the vibrancy of matter, to enter into the intentions of things, means decentring oneself from an anthropocentric perspective. It reflects a need to extend beyond rational and

TERM	DEFINITION
Affordance	Gibson's (1966; 1979) ecological approach to perception refers to the perceptual (sensory) information or properties of things, objects and the environment that facilitate an action or sequence of actions for those suitably equipped to act upon (Gaver, 1991). These "affordances" enable consideration of how actions and social behaviours are shaped by and occur within the physical world.
Appropriation	Huizinga contends that the true spirit of play is appropriative. Appropriation refers to the action of taking something and adapting it to one's objectives. It describes how participants take and adapt things, objects, situations and or their surroundings as opportunities for play. Appropriation can be both self-initiated, for example, when participants transform their surroundings into an opportunity for play, or by design, in the form of objects or situations purposefully left open for participants to interpret.
Autotelic	An activity or work with an end or purpose in itself. Play is an autotelic activity. Its motivations and logic are expressed within its own pronounced spaces, conditions and timespans (Sicart, 2014; Henricks, 2006).
Breach of expectancies	When an individual's social environment is unsettled and their expectancies breached, an attempt is made to recapture anticipated structures and mechanisms rationally and objectively (Garfinkel, 1984). Such breaches demonstrate that routine social situations might be manipulated to provoke participant improvisation and unearth and upend latent views and experiences.
Carnavalesque	A performative expression, where the celebration of excess and parody of high culture creates a break from and critique of prevailing social and political structures. Carnavalesque play is necessarily disruptive, existing to demonstrate that things might be different.

FIGURE 22 Table of the preliminary lexicon of terms.

TERM	DEFINITION
Chance	One of the four qualities of Kaprow's artistic happenings. Refers to the inherent unpredictability within participatory practices. It signals an unstable state, a necessary feature of creative experimentation and condition that an activity can be more or less susceptible. Chance might be encouraged or designed as a feature of interdisciplinary events, employed for its disruptive potential and ability to evolve thinking and debate, obliging participants to be in the moment.
Defamiliarisation	A literary technique displacing the reader's gaze upon the habitual to confront them with the subject from which they have become estranged. Employed within design, both as a tool to confront assumptions and prejudices embedded in the design of objects or as the intended effect of design – a defamiliarising effect.
Expanded notion of art/social sculpture	Building upon the notion of parallel process, which foregrounds the experiential as a catalyst for thinking, dialogue and action, Beuys forwards his expanded notion of art and material. The philosophy does not propose an end to formal divisions between life, art, science and other domains and processes, but their expansion, offering different means to observe the world and communicate. The philosophy, which aims to inspire new ideas, connections, processes and insights, provides the impetus for the broader concept of social sculpture. Social sculpture reimagines sculpture as an evolving, social process, positioning creative practice as <i>the</i> politically productive force, with everyone deemed a participant and agent for change; everyone is an artist. In this research, social sculpture provides a useful theoretical tool to reflect upon the interrelations between things, people, processes and ideas in the context of playful events.
Habitat	One of the four qualities of Kaprow's artistic happenings. Concerns the performance of space, being not only a physical space but a set of relationships, values, atmosphere and echoes of prior activity that permeate the event space and the experiences of those who perform within.

FIGURE 22 Table of the preliminary lexicon of terms.

TERM	DEFINITION
Impermanence	Another of the four qualities of Kaprow's artistic happenings, impermanence, describes an activity's existence as a one-off, autotelic pursuit. It signals that an activity's value lies in its ephemeral and emergent character; when participants immerse in unrepeatable actions.
Magic circle	The context of play. An autotelic domain defined by aims, conventions and boundaries that differentiate play from ordinary life. Inside the magic circle, an absolute and peculiar order reigns, yet, its boundaries need not be fixed, for play is often a negotiated activity. Here lies a distinction between two types of magic circle: a game space, where there are stakes at play and where rules and objectives are absolute; and a play space, an emergent space that comes into existence when a space is appropriated by play (Sicart, 2014). Such spaces differ in openness and constraint: the extent to which the space is open to appropriation.
No plot or obvious philosophy	Another of the four qualities of Kaprow's artistic happenings. Related to openness, no plot or obvious philosophy expresses the appropriative nature of happenings, where rudimentary plans and instructions oblige improvisation of the unfolding situation and relations between material, things, spaces and people.
Openness	A dimension used to describe the level of control asserted over activity and the extent to which that activity is open to appropriation. McCarthy and Wright (2015) contend openness is a multi-layered construct observable in three ways: open activities refer to works that are open to the readings and interpretations of others; structurally open activities encourage participants to appropriate materials and tasks to suit their needs and interests; and, incomplete works, which prompt participants to create, compare and perform their own outputs.

FIGURE 22 Table of the preliminary lexicon of terms.

TERM	DEFINITION
Parallel process	Contrasting the German words <i>bildhauerei</i> (to sculpt by taking material away) and <i>plastiker</i> (to shape flexible material), artist Joseph Beuys traces a link to the creation of will, speech, thought and action. With this analogy, the artist perceives the shaping of practice and theory as a reciprocal exchange, a parallel process occurring between objects, their associated actions, and dialogue.
Play	In <i>Homo Ludens</i> , Huizinga (1955) depicts play as an innate part of human culture, a specific form of activity, with an inherently social function. Play, as an activity, exists as an interlude, a set of temporary actions and behaviours distinct from ordinary life. As opposed to being rooted in competition, within the research, play is understood as a carefree, self-determined pursuit, evolving extemporaneously according to the circumstances and intrinsic motivations.
Playfulness	Playfulness describes the attitude of play; play performed outside of the context of play. It specifies a way of being in the world, of inciting the spirit of play, yet remaining respectful of the conditions in which it interacts. To be playful is to treat the world as a plaything, transform one's surroundings into an opportunity for play, and evoke a sense of curiosity, love of diversion, exploration, creation and wonder.
Props (toys)	Props (toys) facilitate a way of being in and making sense of the world. They encourage appropriation and the reading and changing of one's surroundings into an opportunity for play. Props are the things that make play and are made for play, inspiring or filtering specific actions and behaviours. A prop's filtering potential derives from its functionality and how the prop adapts to the actions and behaviours that emerge through play (Sicart, 2014). Recognising how props filter play is essential for understanding the actions of participants within play or playful activity; the why and how we play.

FIGURE 22 Table of the preliminary lexicon of terms.

TERM	DEFINITION
Vibrant matter	Specifies the energy of matter and things, where “all forces and flows are or can become lively, affective, and signalling” (Bennett, 2010, pp. 116–117). It expresses that no one body or agent is the privileged site of agency, but “an ontologically diverse assemblage of energies and bodies, of simple and complex bodies, of the physical and the physiological” (Bennett, 2010, p. 117). To enter into the intention of matter is to decentre oneself from an anthropocentric perspective and recognise that various modes of observation are required, beyond the scientific, to comprehend things and events in their entirety.

FIGURE 22 Table of the preliminary lexicon of terms.

CHAPTER 3

Getting fat:

A methodology for studying events

analytical methodologies to embrace the empirical, spiritual, and inspirational to observe the world in its entirety.

3.1 INTRODUCTION

The research presents an empirical account of Fatberg events, identifying and critiquing their features and methods to describe their qualities as practice research. The practice focuses on constructing an island of fat – the Fatberg – as the catalyst and site where lay and expert participants meet to study a socio-cultural, biological substance. However, what is striking about the practice is that fat possesses an elevated status whose expressions are said to direct proceedings. Consequently, the research can offer insight into the effects and tensions that arise from practices that emphasise mindful engagements with material.

Through an introductory discourse analysis, three distinct features were identified that can shed light on the practice's inner workings: a dialogic space for fat, fat as an agent, and fat as a construction material. The previous literature review chapter employed a discursive approach to select theories, concepts, and methods that reflect the diverse motivations, contexts, activities, and experiences contributing to Fatberg events. Tracing a path through the characteristics of play, various art, design, and sociological practices were introduced which utilise play as a method for creative exploration and social transformation. This resulted in a prototype lexicon of terms that provide dimensionality to the notion of playful events, supporting account writing and scrutiny of the three practice features.

This chapter develops an appropriate methodology for designing, delivering, and capturing practice activities, elaborating on this varied approach. Practically, it considers the following: How can this practice's discrete features, processes, and logic be researched? What methods might be employed to record and shed light on these characteristics? What knowledge and insights will they produce? Moreover, what concerns arise because of the adopted approach?

The chapter establishes the methodological underpinnings and concerns that influence the approaches and techniques employed in the research. Aside from the open and emergent nature of Fatberg events, the approach is motivated by my entanglement within the practice, where I often adopt multiple, overlapping and changing roles. Given the impossibility of

disentangling myself, I instead embrace my entanglement as an opportunity. This is research about practice conducted through practice, where being an insider, whether in the guise of a host, performer, participant, researcher, agent or another emergent role, is central not only to the unfolding of making-oriented activities but to making sense of such unfoldings. This implies a varied approach that is both reflexive (Schön, 1991) and opportunistic (Riemer, 1977), adjusting perspectives and methods to suit the situation.

To begin, I reassert the practice context and introduce the background and setting for the events that form the basis of the research. Taking into account the varied motivations, contexts and design of the three events, and the need to adapt to suit the characteristics of each activity, I discuss the methodological frameworks that underpin the research, including Haraway's (1988) situated knowledge, Schön's (1991) reflection-in-action, and Till's (2009) notion of the contingent researcher. I then consider participant observation as an overarching approach that provides a set of sub-methods for capturing the scope and nuance of event activity. Finally, I examine the issues related to the adopted approaches, highlighting the potential shortcomings and how I intend to mitigate such concerns.

3.2 RESEARCH SETTING

In the introduction, I presented a snapshot of the Fatberg project by providing an account of *Fatberg's 1st Birthday Party* and a discourse analysis identifying its distinct features. Doing so, I established Fatberg as a hybrid design/art practice. The practice employs the building of an island - the Fatberg - as a form of conceptual-analytical inquiry providing occasions to explore humanity's relationship with fat. Practically, Fatberg operates as a programme of participatory events. These events often occur in partnership with art/design galleries, musea, cultural institutions, and creative funds, who provide the context, audience, and practical and financial support for public-facing activities. These activities include public performances, demonstrations, and workshops; panel discussions and presentations; fundraising activities; and educational courses exploring fat as a material and culture.

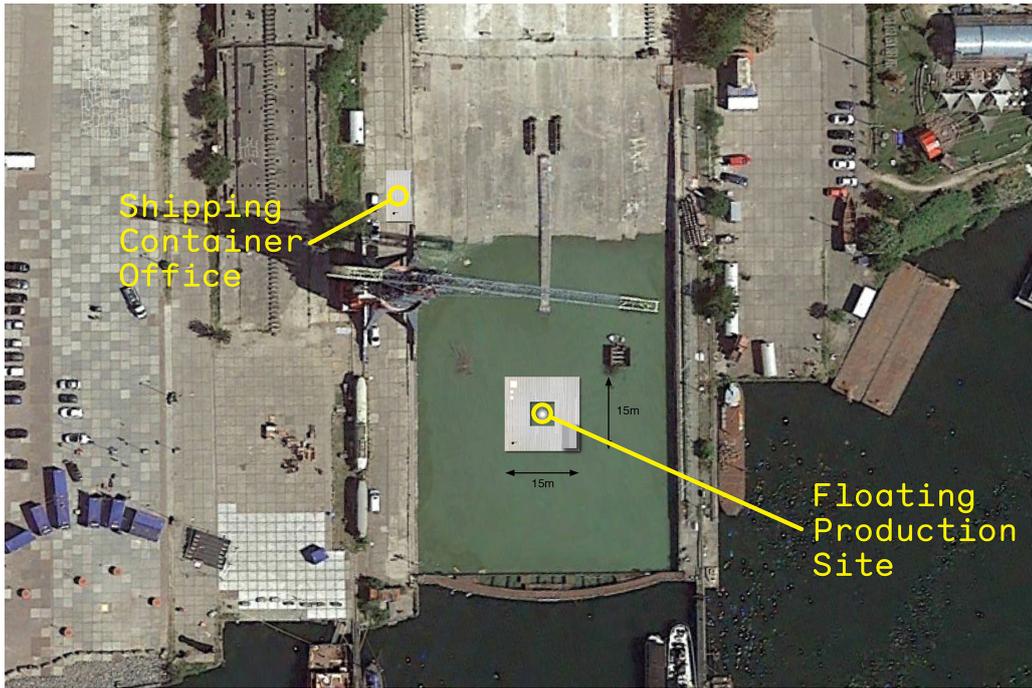


FIGURE 23 The Fatberg production site at NDSM, Amsterdam Noord.

Considering the practice's wide-ranging and ongoing nature, I must design a set of studies that support the documentation and analysis of practice to describe the kinds of knowledge, methods and collaborations that can emerge through material-oriented participatory events.

Considering the above, I sought a compact set of events to evaluate the three practice features. Thus, the study concerns a triptych of events held in summer 2017. The events coincided with an art/design residency at Stichting NDSM (NDSM Foundation), a cultural platform situated at the former NDSM shipyard in the north of Amsterdam, the Netherlands. Stichting NDSM's mission, coinciding with the regeneration of this post-industrial area, is to place the wharf at the very heart of Amsterdam by contributing an iconic, "permanently temporary location for creative experimentation: an indispensable cultural free space serving and belonging to the city" (Stichting NDSM-werf, 2020). Under these circumstances, the foundation was eager that we develop the island of fat, the site, and activities as part of their ongoing cultural programming.

Fatberg appealed to Stichting NDSM on multiple levels. First was our ambition to build an island as an icon and cultural reference for fat (van Daal, 2016), which matched the foundation's desire to promote the unique status of the wharf. Second was our ambition to develop a programme of activities and events coinciding with island-building, thus contributing to the foundation's ongoing cultural activities. Third was designing and constructing an innovative floating production site to support island-building. This appealed to the foundation's wish that the location serve as a platform for creative experimentation. Architects Space&Matter and construction company Autarkhome subsequently joined as project partners, using the unusual brief to experiment with building using an innovative floating concrete. The site evolved to accommodate a broad range of activities (Figure 23). The production site, consisting of four custom-built pontoons floating atop the flooded shipping ramp, acted as an event and exhibition space where island-building activities took place. A shipping container, positioned overlooking the water, served as a workshop to produce and display artworks, research, and work-in-progress. Spaces next to the studio/exhibition space

and production site were also appropriated as needed to suit specific activities. In short, the residency provided both the physical space to produce and exhibit the Fatberg and a public-facing location and programme with a constant stream of visitors.

A series of public events were produced in summer 2017 to kickstart the residency and unveil the newly built site. This triptych of events makes up the fieldwork in support of the research. Each displays a distinct theme and approach, engaging with and directing participants and material in notably different ways. The events, therefore, focus upon a specific practice feature. For this reason, in the substantive chapters, the three events are discussed thematically rather than chronologically. In terms of establishing a research methodology, the different themes and approaches imply that a mix of methods is required to design, capture, and analyse activity. As I discuss later in the chapter, the chosen methods fall under the umbrella of participant observation and attempt to take advantage of my proximity to practice. Moreover, a dialogue between the scheduled events and my research interests could form because the events occurred in quick succession. This meant that I could learn about, adapt, and refine research methods by and through practice. I will now provide a brief overview of the events in chronological order to expand upon these choices.

The first event, titled *Fat and Food* (discussed in Chapter 4), combines a public discussion with hands-on activities and performances. With the discussion central to proceedings, the event provides the context to examine the notion of a dialogic space for fat, contributing an account of how actors, roles and contingencies emerge and evolve relative to fat as a material and concept. In this instance, a mix of methods was employed to adapt to and focus on the changes in activity and capture the overall event narrative and post-event reflections.

The second chronological event, *Float Fest* (Chapter 6), marked the start of our NDSM residency with the performance of the transfer of the island of fat to open water. The event, which combined various activities, contexts, and materials, developed in ways specific to fat's elevated status as an agent that directs proceedings. With improvisation central to *Float Fest*,

the adopted approach capitalised on my proximity to emergent actions, issues, and behaviours.

The final event, *DesignLAB* (Chapter 5), concerned a workshop with design students from the Gerrit Rietveld Academy, Amsterdam. This event, which was the kick-off to a semester-long student project, took place in the aftermath of an incident in which the site was vandalised. Students were tasked to examine the ruins to gain insight into past activity and plan the island's reconstruction. *DesignLAB* provides the circumstances to examine how participants make sense of fat as a construction material and the products of such encounters. With the students central to the event, and Arne directing proceedings as a tutor, an approach akin to shadowing was employed on this occasion to gain a first-hand perspective of activity.

3.3 PRACTICE-BASED RESEARCH

In *The Promises of Practice*, Gad and Jensen (2014) propose a notion of practice that accepts the inseparability of the conceptual and the empirical, recognising that practice is always partly found, partly fabricated (p. 699). Consider the diverse nature of practice. One can be in practice or have a practice. Practice can be a cause, effect, or explanation. It can denote a context or activity (Gad & Jensen, 2014, p. 698). The terminology's widespread and sometimes conflicting use reveals practice as simultaneously analytical and empirical. Gad and Jensen (2014) argue that this slipperiness is unavoidable, yet potentially productive, as the inseparability of the conceptual and the empirical renders practice as a process of ontological transformation. It indicates that practice takes many forms, comprising a broad range of activities and multiple agents. This notion of practice complements the diverse and entangled range of activities, material, and participation in the Fatberg project, which encourages chance encounters, ideas, and happenings, leading to empirical and conceptual outcomes. It also implies that practice can never be simplified, meaning the researcher and practitioner, united here, within the research, as a researcher-practitioner, must take responsibility for their fabrications (Gad & Jensen, 2014, p. 712).

SITUATIONAL FAMILIARITY

The adopted research approach responds to the opportunities afforded by my entanglement within the practice, my situational familiarity. Riemer (1977) refers to this as an opportunistic research strategy, where the researcher views themselves as a social product, exploiting their unique life experiences and familiarity toward a situation or event. As insiders, “they know, rather than know about” the field of study, their “at hand knowledge” providing an in-depth understanding of the socio-cultural context and its impacts upon themselves and others (Riemer, 1977, p. 469). This is reminiscent of Haraway’s (1988) concept of situated knowledge, knowledge produced by social actors based on their limited position or location within society. Situated knowledge recognises objects as both actors and agents, unique in their agency and authorship of objective knowledge, an objectivity that enables us to become answerable to what we learn how to see. It signals that participation is central to the unfolding of activity and how we come to make sense of such unfoldings. As researcher-practitioners, we stand on the inside, not on the outside looking in (Jönsson, 2015, p. 21). We have a direct influence on the environments we research. This resonates with Gad and Jensen’s (2014) assertion that practice is partly found, partly fabricated. We never simply find insights or understanding; we create them (Raijmakers & Miller, 2016, p. 8).

Understanding, therefore, relies upon the practical and instinctive reading of participants’ reactions and events in transition (Schön, 1991; Sengers & Gaver, 2006). The practitioner enacts a reflective conversation with the materials of the situation as part of an ongoing process (Schön, 1991; Sengers & Gaver, 2006). Discussing the epistemology of practice, Schön (1991) notes the relationship between changing things and understanding them. Based on experience, the practitioner demonstrates specific characteristics of knowing, describing the knowing that action reveals and adjusting perspectives and methods to suit the situation; they reflect-in-action. However, while the practitioner might attempt to adjust the situation to their needs or view, they are simultaneously open to the readings of circumstances and the reframing of their enquiry. The logic for this shaping is often implicit, situated in the practitioner’s experience of reflective practice. My situational familiarity and experience of the practice thus

offer a privileged position to observe, interpret, and adapt to the unfoldings of events.

This has two notable implications. Firstly, it points to the need for a range of data capture methods. It implies a flexible approach that adapts to the emergent nature of events and the multiple, evolving roles that I, as a researcher-practitioner, might adopt. Secondly, a framework is required to consolidate the mix of data to support analysis and account writing. As I will discuss later in the chapter (section 3.4), this resulted in the development of sets of annotated slides, visual workbooks which combine and categorise recorded visuals with textual notations, observations, quotes, and reflections, to form a narrative reconstruction of events.

RESEARCH IS CONTINGENT

Reflection-in-action points to the non-linearity of research, recognising that the research context is shaped by and contingent upon the actions and ideas of others. As Till (2009) notes, because we enter into choice-making as knowing, situated people, our experiences enable us to imagine the consequences of our decisions and actions, demonstrating our reliance on our situatedness (pp. 59-60). The contingent researcher echoes the reflective practitioner, being discreet enough to allow events to shape via the actions and ideas of others yet sufficiently resolute not to be overwhelmed by them (Till, 2009, p. 48). Such an approach recognises the multiplicity of ideas and perspectives that shape events, acknowledging that “paradigm shifts are frequently initiated from outside and not within a particular field” (Till, 2009, p. 47). To recognise the contingency of practice is to dissolve the authoritative role of the practitioner, prompting a reshaping of the expert/non-expert paradigm and movement away from the pretence of engagement toward a more transformative participatory process. It implies that knowledge is not applied from outside but co-developed within.

This seems befitting to an open and endless practice, where Arne, myself, and participants adopt multiple, overlapping, evolving roles. Moreover, it is in keeping with a practice that establishes embodied and situated encounters between people and material and grants fat an elevated presence and command over proceedings. As the practice case studies will show,

Fatberg events contribute more than just a playful experience with material. They show that material-oriented participatory events simultaneously display resistance and capacity to change, as deemed necessary and productive to the aims, needs and stresses of both the task and of the human and nonhuman participants. It, therefore, makes sense to apply a mix of methods akin to participant observation for the capturing and reflection upon activity to develop an approach that utilises my situational familiarity to read and respond to people, matter, and events in transition.

ATTENDING TO FAT

The contingency of practice resonates with Fatberg, which not only counts on participation but encourages outside influences and chance occurrences to stimulate novel tools, processes, insights, and collaborations. Fat performs on both a conceptual and physical level, with the island of fat acting as a concept, ambition, participatory object and outcome. In the previous chapter, I expanded on this thinking, introducing Beuys's conviction that other agents or "co-workers" contribute to shaping things. I then referenced Bennett's (2010) notion of vibrant matter, which imagines a world without primal separations between human, animal, vegetable, or mineral to ask, what if we take the call of matter seriously? Observing the role of fat as a participant and collaborator within Fatberg events means "to consistently recognise that there are many entanglements in every action" (Mol, 2002, p. 156). Bennett, fortuitously, provides a conceptualisation of fat's agency. Contemplating the human and nonhuman bodies connected with American consumption and the obesity crisis, Bennett, quoting Nicolis and Prigogine (1989), proposes that this assemblage can be understood as a nonlinear system (2010, p. 42):

In a linear system, the ultimate effect of the combined action of two different causes is merely the [addition] ... of the effects of each cause taken individually. But in a nonlinear system adding a small cause to one that is already present can induce dramatic effects that have no common measure of the amplitude of the cause (Nicolis & Prigogine, 1989, p. 59).

Bennett brings together nonlinearity and Deleuze and Guattari's (2013) notion of assemblages to argue that:

In nonlinear assemblages, “effects” resonate with and against their “causes,” such that the impact of any added element (omega-3 fatty acid) or set of elements (high fish diet) cannot be grasped at a glance ... To take seriously the efficacy of nonhuman fat is, then, not only to shift one’s idea about what counts as an actor but also to focus one’s attention away from individuals and onto actants in assemblages (Bennett, 2010, p. 42).

Nonlinear assemblages characterise the complex interrelations between human and nonhuman entities. This indicates that fat’s agency is recognisable via its interrelations with others and how it is reflected in thought, dialogue, and action. In *Staying with the Trouble: Making Kin in the Chthulucene*, Haraway (2016) makes a similar observation, describing Despret’s (2014) observations of encounters between birds and ornithologists as cultivating politeness. This implies that by being open to the possibilities of an encounter, one cultivates the virtue of letting those who visit intra-actively shape what occurs (p. 127). I will return to and elaborate upon this concept in Chapter 6, where I discuss the agency of fat. Significantly, both concepts suggest that fat’s effects may resonate beyond planned encounters with the material. Studying objects is to consider their role in the production of events, yet, sometimes objects are liable to misbehave and not act as expected (Michael, 2012b). Michael, for instance, refers to a “disastrous interview episode”, where an interview was left unrecorded due to the interviewee’s cat playing with and dragging away the cassette tape recorder placed on the floor. Reflecting on this episode, Michael notes that not only must objects, humans and nonhumans “be made orderly” if the desired event is to occur but that these agents are changed by their coming together. The agents co-emerge: the cat became playful, the tape recorder transformed into a plaything (Michael, 2012b, p. 170). The incident demonstrates that events hold the potential to trigger happenings that “overspill” their empirical, analytic, or political framing (Michael, 2012a, p. 529).

Overspilling is a concept that I will return to in Chapter 4 to examine participants' reorientation of the *Fat and Food* event. Michael's "disastrous interview episode" is a valuable reference because it emphasises the messiness and complexities of material agency. Introducing the practice, I characterised fat as *the* iconic substance of our time (Thompson & Hendriks, 2015a), a fundamental building block of life, inextricably linked to health, identity, energy, and ecological issues. A parallel can be made with Gad and Jensen's (2014) reflection on the slippery nature of practice. Much as one can be in practice or have a practice, one can be fat or have fat. Likewise, fat can be a cause, effect, or explanation. This slipperiness signals that fat is by no means an inert, lifeless substance. Fat is "lively, affective, and signalling" (Bennett, 2010, pp. 116-117). Fat does stuff. These diverse manifestations demonstrate the multiplicitous nature of fat, comprising a vast array of forms, processes and behaviours.

However, what is distinctive about Fatberg events is that they practise a philosophical position and role-play, where fat is elevated to the status of an agent that directs proceedings. Thereby fat's outsized role introduces the element of chance to interactions with and reflections upon vibrant material. As will become apparent in the empirical chapters, Fatberg events can, and often do, drift from their planned trajectory, sometimes deliberately, other times unintentionally. I argue that this opportunistic quality is a value in itself. However, it is necessary to address the nature of such events and their agency to show their features and benefits as a strategy for interdisciplinary, participatory research. This explains the decision to focus each empirical chapter on a specific event and practice feature. It enables examination of how fat influences and is influenced by entanglements between people and material. As Beuys and Bennett's sensitivity and Haraway and Despret's politeness towards "the call of things" shows, fat's agency offers a vantage point and analytical perspective to read and reflect upon the co-emergent relations between things, bodies, and happenings.

3.4 OBSERVING PARTICIPANTS

The ideas in the previous section use my entanglement within the design and delivery of

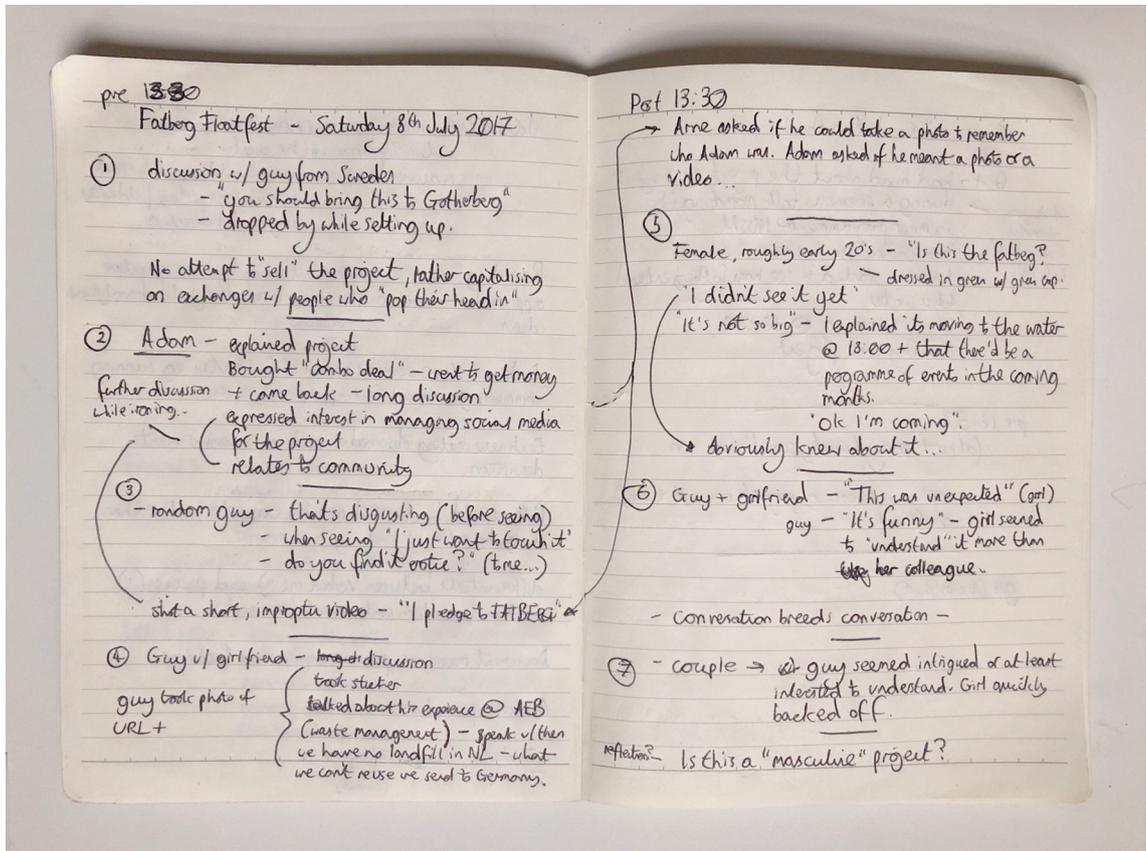


FIGURE 24 Jotted field notes from Float Fest.

events to shape a research approach that can generate insight and critical reflection upon the practice and its features. The approach can be described as participant observation, characterising methods that observe the “routines, rituals, language, discourse, symbols and signs that people develop as they live, make sense and meaning in the course of daily interactions” (Stokes, 2011). Agar (1986) uses participant observation as a cover term, referring to a range of observational methods that capitalise on the researcher’s situatedness. Participant observation may comprise a mix of methods, including: field notes recording the researcher’s sights, thoughts and participant dialogue; photography; audio and video recordings and their transcriptions; and open-ended interviews. For this reason, Bernard (2006) describes participant observation as a “strategic method”, for one or more methods might be chosen to suit the specifics of the enquiry. The approach centres the researcher “where the action is” (Bernard, 2006, p. 343), turning them into instruments for data collection and analysis. Thus the researcher comes to understand the perspectives of others through lived experience, their experience of situated conversations and actions (Brockmann, 2011, pp. 236–237). The approach recognises that the research, and the researcher’s role, are contingent upon a multiplicity of agencies, ideas, and perspectives. It also denotes reflexivity, with the research and the role of the researcher determined by the meanings imposed by participants, in much the same way that the researcher shapes the participant experience.

The varied and entangled activities and participation within Fatberg events meant that a mix of qualitative data collection methods was required to form a standard for capturing the stories of activity while responding to the specific features of each event. Fundamental was a combination of mental and jotted field notes (Figure 24) and photographic documentation. These methods were essential to documenting the *DesignLAB* (Chapter 5) and *Float Fest* (Chapter 6) events, with field notes used to record participant dialogue, including quotes and anecdotes and personal observations and reflections. These later helped to paint a thick description of activity (Geertz, 1973). Other data capture methods were added as required, per the nature of the planned or emergent activity. For example, at *Fat and Food* (Chapter 4), audio recordings captured the evolving panel discussion, with a



EXPLORING WHAT IT MEANS TO BE CO-OWNER

- Our engagement with r4 proved memorable as our conversation moved beyond explicating the project to discussing a potential role within the community:
- Firstly, r4 agrees to purchase a 'combo

deal'. r4 asked if we had any 'social media accounts', to which I mentioned our twitter and Instagram handles, and r4 immediately brought them up on his smartphone and followed the accounts. Sensing r4's broader interest in the project, I was quick to highlight that we were hoping to create a community to collectively build the island and explore

our relationship with fat, pointing to the possibility to become a co-owner of the island. R4 was interested in this idea, and said he would like to do so... I immediacy explained to the artist that r4 would like to purchase the combo deal. The artist remarked that the t-shirt needed ironing which he could take care of... it seems that through their informal chat, r4 again asked about our social media accounts... and expressed an interest in managing our social media accounts.

- Handing the certificate and t-shirt over the 4r, the artist asked, 'can I take a photograph to remember you by?' R4 replied " Do you mean a photograph or a video"? Struck by the potential in this response, the artist suggested that he shoot a quick video of r4 saying their name and "I am a FATBERG co-owner".

- The video pledge became an impromptu feature in the process of becoming a co-owner, and was repeated throughout further purchases later in the day.

- It might be said that features of co-ownership / community are prototyped on-the-fly, inspired by conversations with members of the public.

- In other words, the shape of the community emerges organically from conversations on the myriad roles individuals might take.

FATBERG FLOAT FEST: 8TH JULY 2017
Slide 6/10

FIGURE 25 Annotated slide from the *Fat and Food* event.

flip chart used to log important ideas and insights. The flip chart had the additional benefit of facilitating dialogue with participants. Exit interviews followed the event to yield a personal and reflective account of the participant experience. With Arne and I shouldering numerous responsibilities delivering *Fat and Food* and *Float Fest*, a photographer was tasked to visually document activity. Finally, other impromptu forms of data collection, such as the co-creation of the video pledge (video selfie recording) at *Float Fest*, emerged as an extension of activity as participants exerted their influence over proceedings. This latter, improvised method highlights that the role of the researcher-practitioner is a work-in-progress, continually negotiated and reconstructed within the unfolding research context.

RECONSTRUCTING STORIES: DEVELOPING ANNOTATED SLIDES

The adopted mixed-method approach required a framework to structure and organise the varied forms of data and as a mechanism for effecting and supporting account writing. This resulted in the development of the annotated slides as an index of event activity and experiences (Figure 25). The annotated slides built upon Gaver and Bowers' (2012) use of annotated portfolios as a means to articulate the detail and multidimensionality of design artefacts. Annotated portfolios combine select images of design artefacts with textual notations to form a contextual narrative. The indexical qualities of annotations capture patterns of similarities and differences, or family resemblances, amongst designs, connecting the features of design to broader concerns for discussion amongst the research community (Gaver & Bowers, 2012). The annotated slides similarly employed the mutually informed relationship between visual evidence and annotations of design activity to shape a picture of events. In the first instance, the slides evolved to collate and cross-reference field observations, quotes, and reflections alongside related visual evidence to construct a narrative account of events. Combining the varied forms of data with personal observations and depictions of people's thoughts, beliefs, and interpretations helped give meaning to those observations, thickening the description of activity (Geertz, 1973). In the second, the slides present a means to re-order and classify the key features and layers of activity. This process helped yield secondary insights, aiding the discussion and critical reflection upon events' emergent features and outputs.

STORYTELLING: FORMING A MULTI-LAYERED ACCOUNT OF ACTIVITY

The research approach attempts to represent the multiple experiences and perspectives that constitute Fatberg events. The annotated slides provide a practical framework supporting the reconstruction and written accounts of activity. A criticism of this strategy is that the constructed accounts amount to storytelling through “my voice” as a researcher, with meaning acquired through an interpretation of specific social interactions occurring within specific social contexts. Such representations of practice are what Clifford (1983) calls “partial truths”, for there is “no ‘complete’ corpus of first-time knowledge” (p. 8). Given that the enquiry aims to address the nature of Fatberg events and their agency to expose their merits as a mode of practice research, I argue that, despite what might be considered a shortcoming, my concern fundamentally lies with understanding the logic of activity. It is, however, necessary to recognise and address the situationality of this position and the power relations that exist between the researcher-practitioner, participants, and vibrant matter in providing representations of practice.

As stated earlier, the research and the role of the researcher-practitioner form through the meanings imposed by participants, in much the same way that the researcher-practitioner shapes participants’ experiences. This underlines the need for a situated ethics that is attentive to the particularities of the research context and mindful of the relationships and power relations that unfold between practitioner and participant (Doucet & Mauthner, 2012; Gilbert & Stoneman, 2015; Wiles, 2013). As the research will show, the conventional roles of the expert and user, or practitioner and participant, are fluid within the context of open and endless events and should be acknowledged as such and explored. This means bridging the realms of practitioner and participant, observing where the knowledge and experience of one illuminates the other (Till, 2005).

Discussing participation in architecture and the tension between the ideals and reality of architectural practice, Till (2005) argues that storytelling provides one way that practitioners might develop knowledge from within a given situation and redistribute the expert-user

paradigm. This seems particularly relevant to a practice that asserts that everyone is an expert because fat is a substance with which we share the most intimate of relations. Whereas explication asserts inequality, storytelling, according to Ross (1991), “presumes an equality of intelligence rather than an inequality of knowledge” (p. xxii). Stories contain both personal and social elements, providing “a means of describing one’s place in the world, of locating the individual within shared spaces” (Till, 2005, p. 38). Storytelling, akin to autoethnography, implies a combination of autobiographical and ethnographic (participant observation) writing practices that purposefully trouble the relations of self and other to break through dominant representations of practice to shape new knowledge (Denshire, 2014, p. 838). It symbolises that true participation is reciprocal and that the researcher-practitioner’s role and experience is contingent upon participatory encounters. It also implies consideration of the social interactions between the researcher-practitioner and participants that shape how the stories are presented (Gilbert & Stoneman, 2015).

In this way, storytelling can help identify the power relations within participatory practice, recognising the diversity of voices as both different and equal (Rancière, 2009). It shapes a research approach that attempts to move beyond idealised representations of interdisciplinary, event-based practices to illustrate the “warts and all” richness of activity. Thus, events are appreciated for the multiplicity of experiences they elicit in individuals and groups across different times, settings, and circumstances. Stories provide a multi-voiced, multi-layered account of activity that can lead to a rich, contextualised understanding “that enable evaluative judgements to be made” (Gaver, 2009, p. 176). Nevertheless, Florczak (2016) cautions that despite the relationship between the qualitative researcher and the researched being considered one of mutual exchange and collaboration, the researcher maintains authority over which stories are worthy of study and subsequent processes of interpretation and dissemination (p. 194). I argue that this is not something to be remedied rather acknowledged as an inescapable feature of situated research practice.

As I will discuss in the following section when addressing the research’s methodological

concerns, because Fatberg events amount to a wide range of activities, participation comes in various forms, implying a variety of motivations. This might range from passing observers and guest experts with little to no prior knowledge of the work to project partners and routine collaborators. Not only this, but something also addressed more directly in the substantive chapters is that Fatberg events claim to recognise the expressions and proclivities of vibrant matter. It follows that encounters with this exalted material influence the content and direction of events and their constituent activities and forms of participation. For practical purposes, however, let us primarily distinguish between established participants - those who previously and or regularly contribute to the practice - and unestablished participants - those who newly or temporarily engage with the work. While limited in their understanding of participants' existing knowledge, experiences, and expectations, such characterisations help frame participants' initial engagements within events and provide a reference point from which other roles and forms of participation emerge.

Several theories and concepts from the lexicon can also help identify the types of participation occurring within Fatberg events. A prominent example is the spirit of carnival, which refers to the playful subversion, defiance, and critique of prominent social and political structures. As will become evident, the spirit of carnival can help determine a variety of participant characters, including the carnivalesque performance of building the island of fat, the non-participant, or fat's apparent misbehaviour at *Float Fest*. Likewise, playfulness, as an attitude and way of being within the world, provides a way of identifying how people respond to and appropriate the Fatberg as an opportunity for play. The ecology of play additionally provides a resource for identifying and describing the types of participation and stories occurring within events. It establishes the context, attitude, and features of play, enabling consideration of the interrelations between things, people, ideas, and happenings. Most importantly, these interrelations and stories occur with or through engagements with fat. Fat is provided with a status and form distinct from ordinary life to generate a multiplicity of experiences and stories in individuals and groups. In this way, Fatberg addresses and redistributes the expert-user paradigm by triggering storytelling and story-making.

3.5 METHODOLOGICAL CONCERNS

As the earlier discussion on my situatedness within the practice indicates, the adopted approach intends to produce an on-the-ground, in-depth understanding, and interpretation of activity. However, the approach is not without its challenges, and several ethical considerations relevant to participant observation arise.

THE TROUBLE WITH PRE-ESTABLISHED PRACTICE

A criticism of research focused on pre-established practice is that it can lead to biased, anecdotal, unreliable, and ungeneralisable outcomes (Gilbert & Stoneman, 2015). I argue that it is more productive to consider the research in terms of how it addresses the practice and its features and exposes novel attributes and insights for event-based practice research. On this account, I have outlined a research approach grounded in a micro-social and ethnographical sensibility. Consequently, my situational familiarity is used constructively for the research opportunities and insights that it affords.

To avoid potential bias, I have avoided earlier practice examples to focus and construct the research around a distinct set of events. The discourse analysis within the introductory chapter identified three complementary features that need unpacking to shed light on the practice's discrete logic. The lexicon of terms and research methodology has been designed from scratch, responding to the three features and the practice's open and endless character. While born from necessity, the design is consistent with Gilbert and Stoneman's (2015) contention that participatory approaches encourage researchers to adopt a more reflexive and transparent approach toward practice by challenging conventional notions of research. The open and endless nature of Fatberg events helps in this respect because the multiplicity of activities and emergent and evolving roles act as a leveller, inviting participants into the same mode of exploration.

MULTIPLICITY OF PARTICIPATION

With participant observation central to the research, and a broad range of participation

occurring across the events, it is necessary to address issues of competency, informed consent, confidentiality, ethical publication and duty of care (DeWalt & DeWalt, 2010). Conscious of the fluid nature of participation within the open and endless activity, it is helpful to distinguish between the different actors that engage with Fatberg. As stated earlier, these roughly fall into two categories: established participants and unestablished participants. Established participants refer to those with recognised and ongoing involvement with the practice. These include Arne and myself, who co-author and lead the practice; official project partners, such as Stichting NDSM who contribute to the production of the work; colleagues who routinely support our activities; and co-owners, who pledge their financial or in-kind support to the Fatberg. Then there are unestablished participants or those who newly and temporarily engage with the practice. These include guests, specially invited to participate because of their knowledge and expertise on a specific subject, theme, or activity, and members of the public. Members of the public further subdivide into visiting members of the public, namely, those who purposefully attend an event and passers-by, those who inadvertently stumble across an event in action. These distinctions are helpful because they highlight the primary modes of engagement that exist at the start of events and enable consideration of how participants are informed of the nature of the activity, risk, and duty of care, and how consent is obtained. They also underline the power relations between different actors - the practitioner and the participant, the researcher and the researched - which inform understandings of and relations to the work.

DUTY OF CARE

With island-building central to the practice, the Fatberg acts as a site and participatory object where participants meet and engage in dialogue. Depending on the specifics of an event, activities may require interaction with (melted) fat and the use of tools and equipment, including plastic buckets, a steel pan and camping stove (for melting fat) and other assorted utensils and tools. Therefore, care and attention were made to minimise the potential risk to participants.

For example, the practice exclusively uses food-grade fats to minimise the risk of allergens or bacteria from handling fat. Further, Arne and I predominately carry out island-building activities, with the occasional support of established participants who have prior knowledge and experience of the associated risks. Unestablished participants, such as visiting members of the public and passers-by, do not engage in hands-on activities without prior notification of the nature of the activity. This occurs through a verbal introduction to the work by Arne and myself. In the case of guests who participate by invitation, they are asked to read, sign, and return an information sheet in the days preceding the activity.

INFORMED PARTICIPATION AND CONSENT

In situations where participant observation is used to study events, it is necessary to obtain participant consent to record dialogue and visual documentation. Bearing in mind that the practice entails making with biological material, there is also a duty of care to inform participants of the details of the activity and any potential risks. However, the nature of the practice, particularly the regularity of passers-by inadvertently stumbling across events, implies that consent forms are both impractical and inappropriate, for they potentially produce concerns that undermine the participant experience. Consequently, both established and unestablished participants were informed of the nature of the activity, their role and the intention to document activities through a mix of pre- and in-event methods. These included promotional flyers, posters, targeted email campaigns and social media posts, and in-event communications comprised of verbal explanations of the work by my collaborator and myself and exhibition graphics. In such cases, participants' verbal consent was deemed satisfactory. Consent is, however, an ongoing process; therefore, while the initial act of consent signalled the start of activity and data collection, where necessary, for instance, due to a change of activity, participants' agreement was reaffirmed periodically throughout the research process (Gilbert & Stoneman, 2015). This was particularly important in the instance of emergent activities, such as the impromptu invention of the video pledge at *Float Fest*, where the documentation of participants required not only their express consent but discussion as to the scope of their consent and representation.

In the instance of unestablished participants such as guests, who were directly invited to participate in an event, individuals were requested to read, sign, and return an Information Sheet and Consent Form. These documents made the guests aware of in-event activities, relevant health and safety issues, the intention to observe and document activities for research purposes, and guidelines for the safe, anonymised handling of research data. The distinction between established and unestablished participants implies that certain individuals are known to the practitioners. Consequently, all participant data is anonymised in this text by removing names and identifying particulars and using pseudonyms to refer to participants.

APPROPRIATION OF IDEAS

Fatberg is conceived as a setting where lay and expert participants meet to critically reflect upon their knowledge and experiences with fat. Fatberg events are thus designed as spaces for dialogue and exchange, meaning that the appropriation of ideas is an appropriate concern. The practice already takes great care about this, with collaborators and their contributions announced through pre- and post-event communications and documentation, such as promotional materials or citing contributions on the project blog or in event exhibits. These conventions were extended for the events connected with the research. For example, at the *Float Fest* event, with the introduction of the Pledge Certificates, individuals were invited to become co-owners of the Fatberg. Moreover, the *DesignLAB* workshop, which marked the beginning of a semester-long academic collaboration, invited students from Gerrit Rietveld Academy to co-author future project activities. Mindful that Fatberg is a collaborative project, I have also ensured that Arne's contributions are appropriately credited as well as being transparent about our shared work and where our contributions to the delivery of events differ.

3.6 CONCLUSION

The research capitalises on my situational familiarity within a design-art practice that

employs the building of an island of fat as a conceptual-analytical inquiry into relations with a socio-cultural, biological substance. The practice contains distinctive features that suggest an inherent logic for engaging with vibrant matter, affecting the relations between designer-artist, participants, and material. Starting from the basis that the practice comprises a succession of playful events, in the previous chapter I provided an overview of the culture and ecology of play, showing that play possesses a transgressive quality used by artists, designers, activists, and sociologists to promote creativity, collaboration and critique. The discursive concepts, theories and methods examined within the literature review produced a preliminary lexicon of terms supporting narrative and analytical accounts of practice.

Because this is research about practice conducted through practice, a compact set of events act as the focus of the study. The mixed-method approach developed in this methodological chapter responds to the diverse motivations, contexts, activities, and multiplicity of experiences to contribute to Fatberg events. It is primarily composed of methods concerned with participant observation, which exploit my entanglement and situatedness as both researcher and practitioner. Such an approach implies a reflective conversation with the present situation, adjusting perspectives and methods to suit the circumstances. It recognises that the research is contingent upon the actions and expressions of an assemblage of human and nonhuman agents and acknowledges the power relations between the practitioner and the participant, the researcher and the researched. The notion of the assemblage enables movement away from the customary, authoritative role of the practitioner, recognising that knowledge is co-developed.

Concerning the diversity of activities, participation and data materialising within the performance of events, a mix of data collection methods was developed as a standard supporting account writing. Such methods yield a variety of stories, details, and insights. The annotated slides were subsequently developed to collate, annotate, classify, and cross-reference the captured data to shape a narrative description of activity. This reconstruction of the event narrative is essential because storytelling combines autobiographical and

CHAPTER 4

Fat and Food:

A dialogic space for fat

ethnographic elements, describing personal and social worlds, challenging typical characterisations of practice to shape new knowledge (Denshire, 2014, p. 838).

The following substantive chapters provide narrative and analytical accounts of a triptych of practice events. Each event provides the context to examine one of the features shaping the research enquiry: a dialogic space for fat, fat as a construction material, and fat as an agent. The lexicon provides conceptual and analytical terms to study the practical effects of these features upon people and material and discuss how they advance novel tactics and methodologies for event-based research.

4.1 INTRODUCTION

Fat is one of THE iconic materials of our time ... Yet, the culture surrounding fat is poorly developed ... Over the coming months we will pursue fat's true meaning, starting Friday, June 2nd with our first public "Fat and..." session, focused on something we all think we know about: Fat and Food (@buildingfatberg, 2017a).

The following three substantive chapters present an empirical account of Fatberg activities. A three-pronged approach is employed to support a robust study of this design-art practice. First, I emphasise how the concepts and methods discussed in the literature review raise specific issues, theories and approaches that shed light on the practice's inherent logic. Second, I apply the mixed-method approach discussed in the methodological chapter to collect data to support an evidential discussion of the practice aligned with the issues outlined in the thesis introduction. Third, I critique, refine, and expand upon the approach through written accounts of practice. This results in empirical accounts and practical resources, including new additions to the lexicon, that deepen our understanding of the role of material as a participant and collaborator within participatory events.

This chapter concerns *Fat and Food: From Lardo di Colonnato to lipohypertrophy*, the first of three practice events held in summer 2017. This public-facing discussion examined fat via the most basic interrelations, food, combining the unscripted and explorative quality of a late-night talk show with a range of sensory activities and performances. To begin (section 4.2), I establish the background and underlying motivations that informed the event's production and communication. I detail the prospective roles of myself, my collaborator (Arne) and participants, the activity and stage design, promotional activities, and the requisite methods for data collection. I then deliver a narrative account of the event (section 4.3) as a storied representation of activity.

Before discussing the intricacies of the *Fat and Food* event, I expand upon the chapter's main

practice feature; a *dialogic space for fat* (section 4.4). For this, I examine McCarthy and Wright's (2015) interpretation of a dialogical approach to participatory practice and Ratto's (2011b; 2019; 2009) critical making as examples of collaborative, conceptual-analytical practice. The aim is to identify a dialogic space's principal functions and characteristics to establish a reference frame for reflecting upon planned and emergent engagements between people and material.

Next follows a discussion (section 4.5) of the *Fat and Food* event applying the lexicon of terms to scrutinise and detail the key features and outputs of activity. What appears is a structurally open event, where the outcomes of the dialogical encounter were less ideas or insights derived from an extraordinary experience of fat, more the groups redirecting activities in response to a perceived lack of focus and their emerging subjectivities, needs and impulses. To conclude (section 4.6), I summarise the main features and insights revealed by this review, contending that participants' simultaneous acceptance and rejection of the openness offered resulted in an unexpected by-product, a nascent community of practice.

4.2 CONTEXT, FRAMEWORK AND SETUP

Fat and Food was the opening to a triptych of Fatberg events performed in summer 2017, marking a twelve-month long residency at the former NDSM shipyard and cultural institute in Amsterdam, the Netherlands. The residency provided Arne and me with a fixed, albeit temporary, location to build the island of fat and a sustained period for research and reflection. Our objective was to grow the island as an icon and cultural reference for fat (van Daal, 2016). This appealed to our hosts Stichting NDSM, who aim, coinciding with the regeneration of this post-industrial area by BMB Ontwikkeling (the delegated developer), to position the former shipyard as *the* permanently temporary location for creative experimentation in Amsterdam and beyond (Stichting NDSM-werf, 2020). A condition of the residency was that we contribute to Stichting NDSM's ongoing public programming in the form of public-facing performances, activities, workshops, talks and exhibits in connection with the island. Using funds Arne and I had received six months earlier from

The Art of Impact to support the social impact of our activities, *Fat and Food* was proposed as the first in a series of planned “Fat and ...” events. The idea was that each event would explore humanity’s relation with fat via a specific theme, such as food, energy, beauty, and ecology, with activities designed and guest experts invited accordingly. The structure provided an opportunity to return to some of our earlier, under-explored observations and ideas. It also helped us to reconnect with and grow the project network. Food was chosen as the inaugural theme, as the most relatable topic, helping introduce the Fatberg project (to those unfamiliar with the work) and a more holistic perspective toward fat.

Like Beuys’s parallel process, where practice is shaped through a reciprocal exchange between thought and action, Arne and I envisaged the event as part discussion and part performance. Fat-related performances and sensory activities were to be introduced intermittently as triggers for the ongoing discussion. We decided that the guest experts should be approached based on their specialist knowledge and experience of the theme. Arne had had recent contact with a food journalist and professor in health and nutrition regarding connections between their work and our Fatberg research; hence the two were invited to contribute. During planning, the journalist revealed their passion for lardo di Colonnata, an Italian cured pork fat, expressing an interest in exploring the relationship between fat, taste, and consumer misunderstanding of fat’s role in nutrition. The professor proposed sharing their research on fat’s relation to health and chronic illness to complement this. With these two themes as a starting point, Arne and I chose to act as late-night talk-show hosts, moderating while adding questions, observations, ideas, and anecdotes to the discussion. The talk-show analogy helps describe the ambience that we hoped to create. Late-night talk shows typically consist of a host, a panel of expert or celebrity guests, and a participating audience who discuss a variety of topics, including the news and current affairs (Grindstaff, 2008). It is generally understood that the panel of guests represents “diverse or opposing viewpoints to maximise interest or the potential for conflict” (Grindstaff, 2008, p. 18). It is this friction or drama that makes for good television. With *Fat and Food*, we anticipated that the contrasting knowledge and expertise amongst the guest experts and Arne and I as designer/artists would spark a



FIGURE 26 Social media promotion for *Fat and Food*.

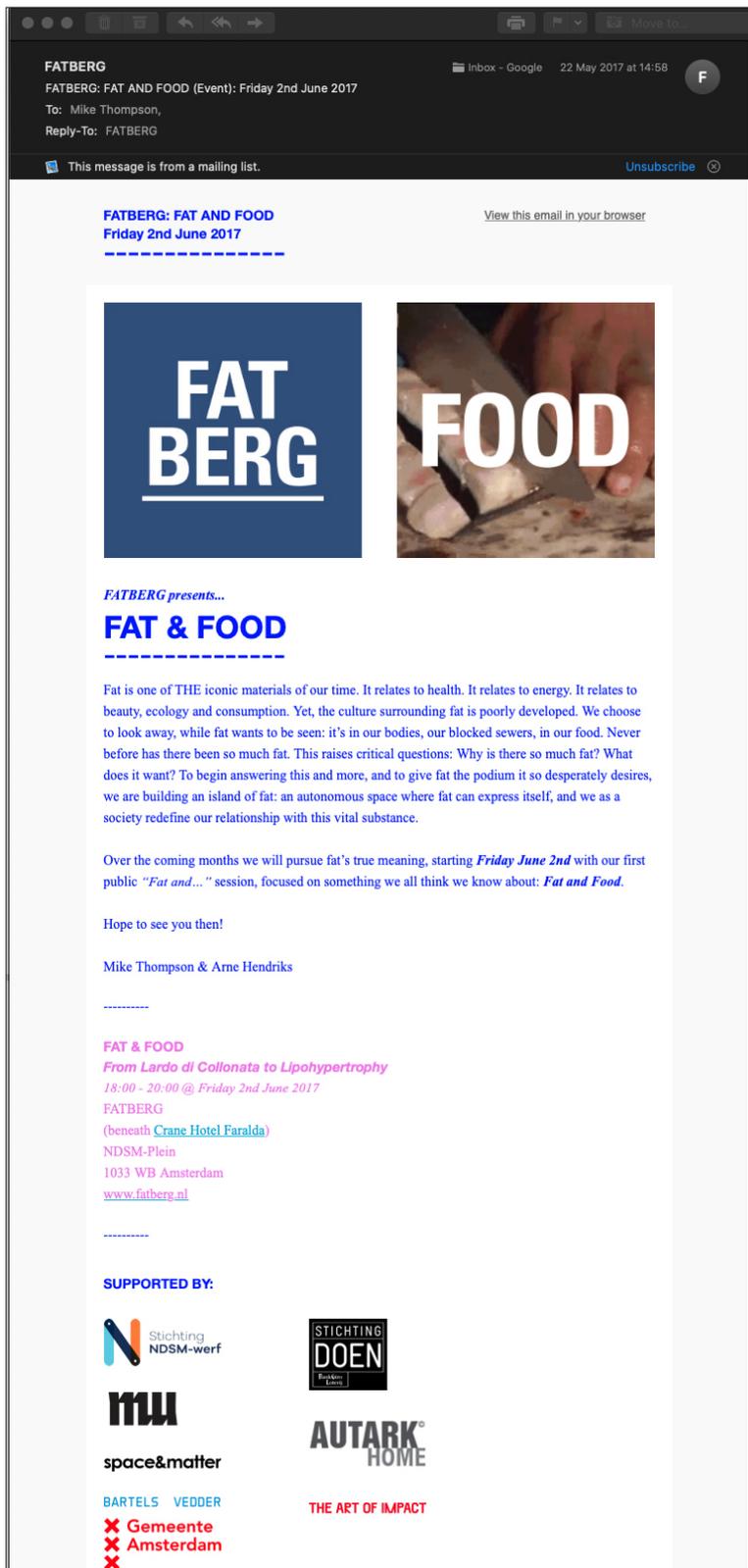


FIGURE 27 Email invitation to *Fat and Food*.



FIGURE 28 The semi-impromptu event staging at NDSM [Photo credit: Hanneke Wetzer].

lively discussion. In this spirit, we decided that the discussion should be left unscripted to encourage explorative dialogue, allowing the guests, participants, and ourselves to elaborate on the collective train of thought.

An assortment of sensory activities was planned parallel to the discussion to help situate dialogue within a material experience. These included tasting lardo di Colonnata, fat massaging (with participants handed a block of fat to touch and sculpt), and a butter churning performance conducted by Arne's intern. The hope was that these activities would provide an embodied point of reference, and defamiliarising effect, with everyday actions and processes highlighted and repositioned to stimulate reflection and drive dialogue. Given the unscripted and explorative nature of the planned discussion, our intention, in our role as hosts, was to connect to these activities as deemed appropriate or necessary.

For promotion, a set of graphic and animated advertisements (Figure 26) were designed and posted on the project website, Facebook, Instagram, and Twitter accounts in the lead-up to the event, and email invitations (Figure 27) circulated amongst the practice and NDSM Foundations professional networks. While calling attention to food, the chosen text and imagery suggested a broad interpretation of the theme, presenting cooking, curing, whale hunting, fat molecules and bodily accumulations of fat. The examples publicised *Fat and Food* and functioned as a testbed for topics and activities in development.

The event was staged semi-impromptu (Figure 28), reflecting the varied, somewhat chaotic backdrop at the shipyard. At previous events, the embryonic island of fat, floating within a custom acrylic tank (see Chapter 1, Figure 4), acted as a focal point around which fat-related activities and discussions would occur. Recognising how impractical it was to hold the event within the cramped shipping container and buoyed by the good weather, we chose to stage the event outdoors on the shipping ramp below. Unknown to us, a weekend market had begun erecting their stalls at the site. We subsequently moved and repurposed the stalls as tables and benches for seating and staging the sensory activities. However, considering the difficulty

in moving the water-filled acrylic tank to this temporary location, we decided to leave the Fatberg in the shipping container. Instead, artefacts from the project including a large pan and gas hob for rendering fat, fat boots fashioned from a pair of wellington boots, wooden tennis rackets and silver gaffer tape, and samples of lardo di Colonatta laid out on a chopping board, were displayed to create a themed setting. Finally, the event title was spray-painted onto the ramp's graffitied wall, providing the backdrop and stage for the panel discussion.

As explained in the previous methodological chapter, participant observation was employed as a strategic method to capitalise upon my situatedness as a researcher-practitioner. Practically, this meant recording a combination of mental and jotted field notes capturing participant dialogue, personal observations, and reflections. In addition, a flip chart, placed between Arne and myself, acted as both a prop supporting the discussion and means for notetaking and capturing key ideas and insights for later account writing.

Conscious of the multiple, overlapping, and evolving roles likely to occur in the delivery of the event and the impact on my documenting of activity, other indirect data capture methods were additionally employed. For example, a microphone positioned between the panel (the guests and hosts) and the audience enabled the discussion's recording. Further, a professional photographer was tasked to visually document activity and exit interviews conducted with a sample of participants for further reflection on the participant experience. These latter methods proved particularly useful, as a last-minute change to the event format led to my disconnection from the central discussion.

4.3 THE EVENT

In total, 21 participants attended the event. This comprised a mix of established and unestablished guests, including a handful of passers-by, the guest panellists, Arne and his intern, the photographer and myself. Scheduled 18:00 to 20:00 on a Friday, the total number of attendees grew from as few as six at the outset to 16 by the close, with some leaving in-



FIGURE 29 Discussing fat and food [Photo credit: Hanneke Wetzer].

between. Upon arrival, the food journalist expressed apprehension at contributing to the discussion in English. It was, therefore, agreed at the last moment that the event switch to Dutch. With my limited spoken Dutch, this, in practice, meant that I followed the discussion as a spectator rather than sharing the lead, moderating role as planned. With the issue resolved, the event opened with a short introduction to the Fatberg project, explaining the aims and character of the event and our intention to document proceedings.

Instead of working from a script of questions, the conversation evolved organically, much like a chat between friends. This meant the hosts, guests, and members of the public sharing their experiences of fat and food, contributing questions, statements, and insights in response to one another's remarks (Figure 29). The playful discussion covered a diversity of topics. This included the distinct marbling of fat on Japanese Wagyu beef and its impact on flavour and texture, the insulating effects of body fat and its effect on fertility, and fat and carbohydrate's impact on the evolution of crops. The open and associative dialogue was noted by participants, with one individual remarking post-event, "the way in which knowledge was shared ... not just given to the audience but the audience also took a role in ... bringing that knowledge into a certain direction ... stayed with me." The following extract, translated from Dutch, demonstrates the discursive nature of the conversation, with Arne in the role of host (AH), the food journalist (FJ), and professor in health and nutrition (PHN) discussing the evolution of food:

AC: Everything wants to be eaten.

FJ: Yes, but you also have those people who have the theory that wheat is the dominant organism. Wheat has arranged themselves so that we ensure that wheat is everywhere.

AC: It's not that wheat has risen against us and puts us in its service, but there are qualities within wheat and within fat that make it happen.

PHN: I once read a piece about why we find fruits tasty but not vegetables ... That is because those fruits are to be eaten for the propagation of fruit. Fruit needs someone to eat it so that those seeds will eventually be deposited elsewhere.

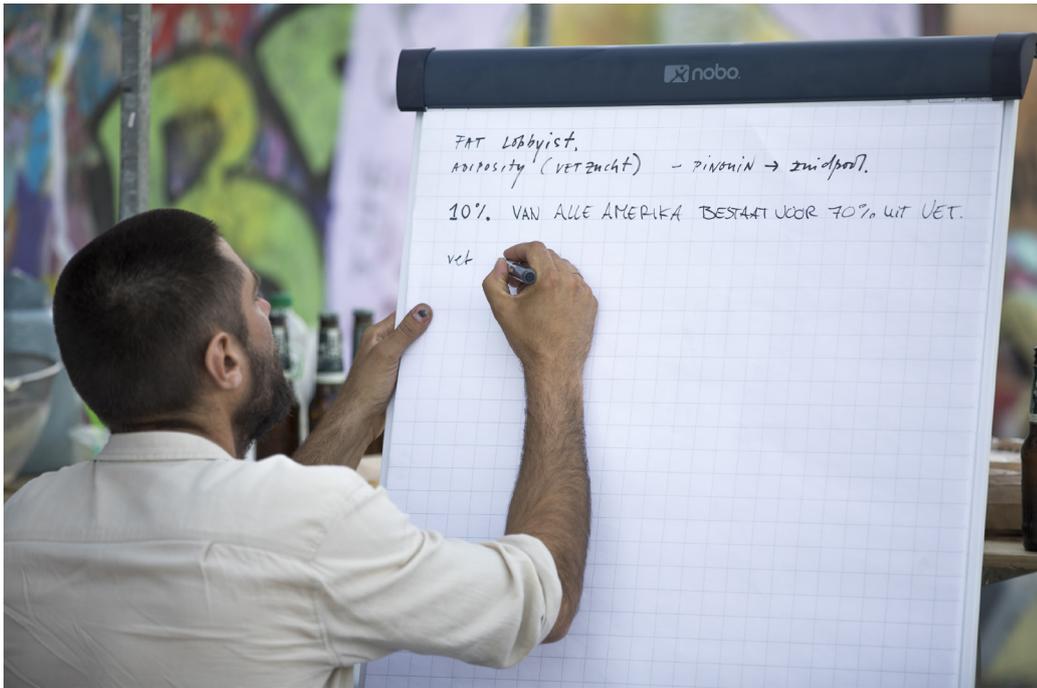


FIGURE 30 *Top* Taking notes [Photo credit: Hanneke Wetzler].

FIGURE 31 *Left* The butter churning performance [Photo credit: Hanneke Wetzler].

FIGURE 32 *Right* The fat dripping demonstration [Photo credit: Hanneke Wetzler].

AC: Temptation.

PHN: Yes ... In vegetables, it is true ... They do not have seeds that need to be scattered by humans.

AC: So pigs are actually fruit? ... We are entering a fantasy world in which pigs have a good fat or those Japanese cattle have such a good fat because we then grow them. You've inspired me with that story.

FJ: It's a nice thought experiment.

AC: The history or origin does not matter; it's about seeing the result that there are more pigs in many countries than people.

PHN: You do have a little bit right. Which food must be maintained so that the cycle of nature is.

FJ: A pig has won, mainly because ... a pig can carry everything we give them.

AC: We've just discovered that pigs are strawberries! I have to write it down ... Maybe you do not agree with me but it's interesting (Figure 30).

As the extract shows, the discussion addressed a range of concerns, as the group responded to whatever ideas appeared novel and interesting. There was, however, no definitive plan for the sensory activities other than being introduced intuitively to disrupt and inspire proceedings. The result was that the lardo di Colonnata tasting was overlooked, merging into the post-event snacks and refreshments, with the fat massaging exercise neglected altogether. By contrast, the butter churning performance was staged as an ongoing activity. However, it too was mostly ignored, save for the finale. After two hours of physical work, the performance and event reached a climax as the hand-churned cream transformed into butter. The spectacle of the intern-performer filtering the butter through their T-shirt (Figure 31) provided an improvised yet fitting finale, with fat's relation to flavour, energy and experience materialised through the shared experience of eating a buttered cracker.

Despite the lack of focused attention paid to the performance, participants seemed to grasp its relevance. One commented during an exit interview that the butter churning had helped

form an active setting, presenting and drawing attention to hidden or forgotten culinary processes. However, another experienced a disconnect between the sensory activities and the main discussion, remarking:

The physical thing of hands in butter is something. The other thing is eating the fat. It is going to give a reaction ... You pretty much covered all the senses but not in a sort of integrated way ... It was almost like the fat was there for bites afterwards.

The comment suggests that fat had generally remained an abstract point of discussion. For this reason, Arne proposed to demonstrate the island-building technique (Figure 32). Donning the pair of makeshift fat boots and clutching a tool fashioned from a broom handle, enamel pot and gaffer tape, the participants gathered to witness Arne drip molten fat into the water at the foot of the shipping ramp. Doing so, he described the techniques we had developed and shared observations concerning the characteristic behaviour of the material. The improvised demonstration established a brief connection between the panel discussion and the Fatberg while encouraging participants to contemplate fat's role beyond taste and nutrition. As one guest reflected:

It's the start of something ... A new appraisal if you like ... When you see fat as a Fatberg, you actually start to think about it. Because people never think about food in a different way than it satisfies their impulses.

4.4 A DIALOGIC SPACE FOR FAT

From the outset, I described Fatberg as a setting where lay and expert participants meet to critically reflect upon their knowledge and experiences of fat as a socio-cultural, biological substance. Based on limited evidence, I characterised this as a *dialogic space*, with creative enquiry, in this instance, island-building and other experiential activities, the catalyst for novel observations, dialogue and action. To elaborate on this characterisation, I establish

correspondence between two relevant approaches to participatory enquiry: McCarthy and Wright's (2015) dialogical approach to participatory practice; and Ratto & Hockema's (2009) critical making. The aim is to establish a reference frame to reflect upon the planned and emergent features and dialogue between people and material in Fatberg events.

To establish the notion of dialogic space, let us first refer to McCarthy and Wright's (2015) description of a dialogical approach to participatory practice. The dialogical approach refers to practices where participants' voices, meanings, and perspectives are experienced, recognised, and consequently acted upon. Such practices expand beyond conversation and interaction, concerning "an open process of coming to an understanding that shapes and forms people even as they shape and form it" (p. 11).

Bishop (2012) contends that socially engaged artworks, of which Kaprow's happenings and Beuys's social sculpture are precursors, are distinguishable for their commitment to open, reflexive questioning. Such works render everyone a participant and agent for change, with artist and spectator repositioned as collaborators or co-producers, united through the transformative power of creative practice. The work is similarly transformed, rendered no longer a finite, commodifiable product but ongoing and open-ended (Bishop, 2012). The purpose of socially engaged artworks and participatory practices more broadly is to facilitate dialogue; to engage people with other perspectives, values, ways of thinking and being (McCarthy & Wright, 2004, 2015). For this reason, dialogical encounters are often described as aesthetic experiences "imaginative and thoughtful, sensitive and sensual, emotionally fulfilling and valuable, transformative and distinctly felt by the people involved" (McCarthy & Wright, 2004, 2015, p. 12). A dialogical approach to participatory practice emphasises enquiry, openness and openendedness, and the possibility of plural and unresolved experiences and meanings (McCarthy & Wright, 2015).

The dialogical approach helps to distinguish Fatberg as a distinct type of participatory enquiry because it explains how and why the island of fat simultaneously functions as a

concept, ambition, participatory object and outcome. More specifically, Fatberg events employ making-oriented activities as the method and site through which conceptual issues and motivations are addressed. Here, I look to critical making as a comparable form of dialogic practice. Crucially, critical making is specific about how an open and open-ended enquiry is produced: through a shared making process.

First used to describe a series of design workshops that traced “connections between thinking and conceptualisation on critical social issues and shared practices of material construction” (Ratto & Hockema, 2009, p. 51), critical making has been broadly applied to practices that examine the relations between society and technology. Such practices highlight “the importance of the material in conceptual and analytic processes” (Ratto & Hertz, 2019, p. 19), emphasising “the value of material production itself as a site for critical reflection (p. 19).” Critical making prioritises process over outcomes, with shared acts of construction and analysis said to enhance and extend understandings of socio-technical issues, transforming the socio-technical imagination (Ratto, 2011b; Ratto & Hertz, 2019).

The approach reflects the push highlighted in the thesis introduction to align science and technology with the values and interests of people and society (ClickNL, 2017; European Commission, 2013). Interdisciplinarity is considered key, with creative practices playing a crucial role in inspiring collaborative research and outcomes that transcend disciplinary boundaries, develop accountability and foster innovation in the knowledge economy (Barry et al., 2008; ClickNL, 2017; Nowotny, 2001). Critical making attempts to navigate the epistemological differences between art, science, and technology to produce new objects, practices, and forms of knowledge. As a shared activity and site, making represents a “non-disciplinary middle-ground” (Ratto & Hertz, 2019, p. 21), where laypersons, experts, communities, and groups collaborate to resolve practical and theoretical issues and concerns. Analogous to Wright and McCarthy’s dialogical approach to participatory practice, critical making emphasises an open process of inquiry, where people and their understandings of socio-technological issues form through an open and collaborative experience with material.

More recently, Ratto introduced *critical making experiences* as a term to describe events “where material production and conceptual insights and vocabularies are conjoined” (Ratto & Hertz, 2019, p. 24). As an example, he refers to his educational activities at the University of Toronto and events co-curated with students in the Master of Information programme. The programme addresses the latest issues and developments in digital technologies, for instance, data privacy and surveillance (p. 24). Weekly classes comprise moments of conceptual exploration and making, including learning basic programming and electronics skills. After a few introductory classes, the focus shifts toward conceptual material explorations responding to a specific theme or prompt. For instance, “Build a moral technology” (p. 24). The students design and make a project, sharing their progress and discussing associated socio-technological concerns during weekly meetings. Additionally, they write a reflection paper describing their process and establishing links between their work and related theories and concerns. The programme concludes with a public exhibition, where students present the outputs of critical making.

The trouble with Ratto’s description of critical making experiences is that instead of establishing the approach through an account of the students’ activities and experiences, he presents an overview of the programme’s design. For this reason, it is difficult to grasp what critical making experiences specifically do or lead to, beyond an emphasis on process and the belief that participants acquire “an enhanced ability to parse the complexity of our socio-technical world” (Ratto & Hertz, 2019, p. 25). Despite a lack of empirical evidence to substantiate his claims, the term is worthy of consideration because Ratto asserts that critical making experiences possess three practical characteristics. Let us briefly inspect these qualities. How does Fatberg compare with critical making experiences as a form of material-oriented participatory enquiry? How do Fatberg events function as a dialogic space?

First, critical making experiences are said to be “engendered by an ambiguity, contradiction, or disjuncture at work within one or more conceptual theories” (Ratto & Hertz, 2019, p. 24). This trait, discussed by way of Koestler’s (1964) bisociation in Chapter 2, is evident in Fatberg events, where two ordinarily unrelated elements, “the island” of “fat”,

combine to form a disjuncture; a temporary, unstable state where emotion and thought are unsettled, inspiring creative thought (Páldi & Westphalen, 2016). In Fatberg's absence at *Fat and Food*, the sensory activities such as the butter churning performance intended to create a disjuncture to inspire the main discussion.

Second, they “require participants to engage with the above conceptual uncertainties through a construction process that is more or less materially constrained” (Ratto & Hertz, 2019, p. 24). The key distinction here is that while critical making experiences focus on conceptual uncertainties, with participants anchoring ambiguous ideas to more constrained and concrete material-oriented investigations, Fatberg, as will become apparent, embraces the uncertainties of material, fat's agency. Construction in Fatberg involves a material whose shape and characteristics are contingent upon various factors. These include the type of animal or vegetable fat used, the methods and tools employed, and environmental factors, including the temperature and microorganisms in proximity. The result is a material that melts, breaks, decays, is slippery to hold and interact with, and a foodstuff and habitat for other species. The Fatberg embodies uncertainty, calling for a mindful and creative encounter with material. However, where Ratto stresses shared material construction as the activity and site where participants engage with ambiguous conceptual issues, shared construction is not a prerequisite for creative exploration in Fatberg. Instead, fat as a material and object contextualises participatory inquiry into relations with this socio-cultural, biological substance.

Third, rather than producing objects, critical making experiences focus on process, and the “personal, sometimes idiosyncratic transformations in a participant's understanding and investment regarding critical/conceptual issues” (Ratto & Hertz, 2019, p. 24). Concerning Fatberg, island-building and its associated activities do not resolve in a bounded set of conclusions or learnings. Instead, the island embodies the open-ended nature of a work centred on the synergy between thought and action. The actual products of this process, akin to Beuys's parallel process, are not objects, but the dialogue, exchange, and collaboration that such artefacts produce.

Besides the characteristics that emerge from this brief comparison with critical making experiences, Fatberg exhibits another quality that helps to clarify, even justify, the practice's interpretation of dialogic space. Ratto and Hertz (2019) contend that critical making "directly confronts the difficult epistemological issues encountered when bridging disciplines" (p. 26). I suggest that engaging with fat, as lively, affective, and signalling matter, implies that this bridge stretches further. Making is not only a bridge between disciplines; it is a bridge between the human and nonhuman. As the account of *Fat and Food* suggested, what is distinct about this dialogic space is that fat is not merely the topic of enquiry, nor is it simply a construction material facilitating an enquiry. Fat is considered an active participant whose expressions and meanings shape and form people and events as they shape and form it (McCarthy & Wright, 2015).

Considering this interpretation of dialogic space and looking ahead to the discussion, what are the consequences of dialogic encounters between humans and nonhumans? How did participants at *Fat and Food* respond to fat and the open and open-ended enquiry? In what ways were their experiences and meanings absorbed and resolved by the activity?

4.5 DISCUSSING FAT AND FOOD

Next, I discuss the key features and outputs of the *Fat and Food* event. To do so, I reference the conceptual and analytical terms within the lexicon and the notion of dialogic space established in the previous section. The following study reveals a tension between the intentions of the practice and the nascent motivations of the group. I subsequently consider how participants interpret and appropriate, or rather play, within the context of the collaborative enquiry and how such experiences influence and are influenced by the dialogic space for fat.

AN AD HOC HABITAT

Fat and Food shared similarities with consultation events such as an open space or study circle, with the hosts, guests, and participants sitting together as a group. In such events,

the hosts solicit opinions and ideas from an uncontrolled selection of participants through facilitated group discussions, where participants' responses and outputs are left open and unstructured (Rowe & Frewer, 2005). Rowe and Frewer claim that the flow of information is one-directional in such circumstances, with participants' responses and ideas feeding back to the event hosts. However, *Fat and Food* was intended to be more open and inclusive, the combination of discussion, sensory activities and performances meant to encourage dialogue across knowledge and expertise. The ambiguous setting amongst the market stalls, the fat-related artefacts, appropriated props and furniture, and occasional references to an absent island of fat presented participants with a situation requiring interpretation. One participant's post-event reflection confirms this:

I would say the objectives are ... to create a proposal of something that's rather abstract. An object that you don't know how to behave towards. We don't know what that object wants from us, and nor do we know what we want from that object ... We can work towards trying to make sense of it and ... trying to create more knowledge around this topic of fat and how it takes a place within our lives.

This extract from an exit interview suggests that the play space communicated and performed as a provisional, emergent space, defined through participation. The event, and its subsequent direction, developed through the way that participants made sense of and negotiated the ambiguous setting.

Garfinkel's (1967/1984) breaching experiments demonstrate that underlying knowledge schemas (Tannen & Wallat, 1987) frame everyday actions and interactions and shape our expectations and understandings of social encounters. Despite the intention to situate dialogue through embodied encounters with fat, the event chiefly read as a panel discussion consisting of guests, who assumed the role of experts in dialogue with ourselves and participants. Thus, the discussion was directed by the guests' knowledge and expertise, forming a schema that provided participants with an entry into dialogue. The

following excerpt, which recounts an exit interviewee reflecting upon a discussion on fat's relationship with reproduction, exemplifies how participants drew connections between the expert's knowledge and their personal experiences:

Maybe that's also a female question because we always tend to be dissatisfied with too much fat ... if you have this specific knowledge about it, you look at it differently ... Knowledge makes you deal with insecurities.

With participants making personal connections with and building on the guests' novel facts and ideas, the discussion provided the event's momentum. It is understandable then that the discussion, rather than being informed by the eclectic materials and activities, came to dominate, and prevent their introduction. The emerging knowledge schema rendered them obsolete. The jettisoning of activities, and perhaps the absence of a conceptual anchor and corporeal presence of the Fatberg, removed the potential for a playful, disruptive experience. This consigned the butter churning and fat dripping performances as detached, parallel activities outside the play space rather than triggers for ideation within.

At the same time, the number of ambiguous elements and actions, from the repurposed market setting and open discussion to the butter churning performance and fat dripping demonstration, confused rather than communicated the event's explorative objectives. The unfocused play space meant that the group gravitated towards the panel discussion as a reference frame to focus and make sense of the situation. This is apparent in the earlier quote, where the participant, discussing *Fat and Food's* perceived objectives, recognised the event as "something that's rather abstract" and a situation that they, along with the other participants, were required to make sense of and resolve.

This is quite different from Garfinkel's breaching experiments, where "making trouble" and going "off-script" reveals the anticipated structures and mechanisms that make up everyday actions and interactions. At *Fat and Food*, the participants arguably understood that the

script was a work-in-progress. It suggests that the value in the unscripted, ad hoc habitat lies in its ambiguity which prompted the improvisation of expertise as participants negotiated their role and status within the event. The inference is that Arne and I privileged the panel discussion over the sensory activities because the collective train of thought was sufficiently inventive and beneficial to the practice's objectives. In other words, there was enough trouble and creativity within the discussion to make the disruptive sensory activities redundant.

TAKING MATTER SERIOUSLY

Typically, in Fatberg events, the island of fat acts as the prop and catalyst for a transgressive, playful form of enquiry. In its absence, the event relied upon the sensory activities to deliver an embodied experience of fat and defamiliarising effect. However, as discussed, these activities were displaced by the discussion. As one participant remarked, "It was almost like the fat was there for bites." In this way, the event unfolded more as an experience about fat than an experience with fat.

However, the butter churning performance remained as an ongoing, parallel activity. The vigorous transformation of cream to butter not only highlighted an often-overlooked culinary technique but was a subtle reminder of fat's vibrancy. With this simple act, fat was made observable as "an ontologically diverse assemblage of energies and bodies, of simple and complex bodies, of the physical and the physiological" (Bennett, 2010, p. 117). In the absence of the Fatberg and sensory activities, the performance ensured that fat maintained an active, albeit subdued, presence, as opposed to the conceptual role afforded by the discussion.

Herein lies a clash of motivations. The performance, especially in Fatberg's absence, represented the ambition and values of the practice. However, the open nature of the event meant that the sensory activities were incompatible with the emergent subjectivities of the group. Fat was supposed to be the agitator, to use the talk show analogy, the agent providing the source of intrigue and conflict. The sensory activities intended to bring participants face-to-face with a ubiquitous substance from which they have become estranged. They were

meant to trigger a defamiliarising effect.

Instead, fat's agency was limited because it was normalised, not defamiliarised, as the risky sensory activities were dropped in favour of the discussion. Moreover, the butter churning performance reinforced the norm by observing a known culinary process rather than triggering a defamiliarising effect. In a sense, the jettisoning of the sensory activities demonstrates sensitivity and seriousness towards "the call" of fat by maintaining focus. I, however, argue that this seriousness limited the potential for building a more holistic view. This recalls Beuys's approach to substances and substance processes, where multiple means of observation were used to tune into the intentions of things and their connection to the world. Fat's agency was diminished because its experience was limited to the point of discussion and observation. Side-stepping the playful encounters with material, the group neglected the opportunity to see beyond the everyday. This implies that if we are to truly take matter seriously, the way that we are serious with matter matters. I contend that this distinguishes Fatberg from other forms of interdisciplinary research. A ubiquitous, biological substance is presented in a form that does not appear serious but asks to be taken seriously; it encourages the spirit of play. In its absence, it was as if the fat was there for nibbles, and the scope to cultivate a playful attitude receded.

DEALING WITH OPENNESS

The way in which knowledge was shared, and it was not just given to the audience, but the audience also took a role in bringing that knowledge into a certain direction. That stayed with me.

The above quote, taken from a participant exit interview, portrays an event shaped by and through participation. To what extent was this collaborative shaping "by design"? The last-minute decision to switch the event from English to Dutch undoubtedly limited my abilities as co-host to help direct proceedings. Certainly, the change in the language provided a more comfortable setting for not just the guests but the predominately Dutch participants.

Furthermore, the unscripted nature of the play space and its constituent programme led to an event whose direction and character remained continuously in negotiation. By inviting participants to shape the direction and character of the event, specific topics, ideas, and risky playful activities were overlooked or omitted in service to the logic and consensus of the group. This led to a kind of groupthink that did not seek nor allow for disruption or surprise.

Considering that our ambition was to use the defamiliarising activities to stimulate ideas, associations and insights, the event was arguably too open. Control over the event shifted from Arne and me to the group. Hence the exploration represented the needs and interests of the group rather than those of the practice. This was particularly evident when Arne jotted down what he perceived as interesting or valuable insights, such as the “pigs are strawberries” analogy. With the group shaping the discussion, the recording of this insight appeared entirely subjective and self-serving. The selective capture of activity highlights the difference between our interests as project hosts and those of the group. As a data capture method, the flip chart provided selective evidence of activity instead of the reality of what the activity was. The event had evolved a different form and motivations. Ironically, this dialogical event became less open rather than more.

Discussing ludic designs and their use of ambiguity to stimulate curiosity, exploration, and learning amongst users, Gaver (2009) notes that it is the designer’s responsibility to highlight richly suggestive areas, allowing people to discover them for themselves without implying a preferred interpretation of action. However, it is difficult to predict how people will engage in situations that deliberately avoid clear explanation and allow people to find meaning for themselves. *Fat and Food*’s open and discursive ethos provided participants with a unique opportunity to discuss and unpack familiar facts and concepts with knowledgeable guests. In encouraging participants to adopt a central role in shaping and directing the event, there was an inherent risk that the planned activities and concepts would be perceived as irrelevant and thus obsolete through the emergent group logic.

Fat and Food was, in this regard, consistent with a dialogical approach to participation. The group refused the risky and playful concepts and activities while accepting the openness offered to restructure and redirect proceedings. They resolved to slow down and digest the diversity of ideas through more comfortable frames of reference. Two quotes from an exit interview support this view. First, the participant concedes that “the topic of fat is a bit of a mystery. For me, as well as for many other people, because ... we don’t look at it very closely often.” Second, they admit feeling “a sense of disgust that I think a lot of people feel ... that creates this kind of taboo sphere on fat, and I think that by knowing more about it ... can be a way to overcome that.” Rather than a thought-provoking, generative experience, the event, as appropriated and completed by participants, evolved to focus on sharing and unpacking relatable facts and concepts. An event that was intended to be productive for its defamiliarising effect was most memorable for its familiarisation. The primary outcome was not the product of an extraordinary experience of and rumination on fat, but the co-opting of the event and its shaping into a conventional panel discussion.

While the event may have diverged from the practice’s ambitions, for participants, meaning emerged via the collective resolving of the structurally open enquiry. A beneficial, albeit accidental, effect was that the event’s ambiguity helped promote co-operation amongst participants who came to recognise shared interests, associations, and absences of knowledge through the examples provided by the guests. Thus, an event that attempted to situate dialogue through an embodied and defamiliarised material experience developed an unexpected by-product: a nascent community of practice that dismissed our transgressive aims. The inference is that ambiguity not only encourages curiosity and discovery but can act as a resource to promote collaboration and shape communities of practice.

4.6 CONCLUSION

In this first of three empirical chapters, I have examined the *Fat and Food* event as a dialogic space for fat. Referencing McCarthy and Wright’s (2015) dialogical approach to participatory

practice and Ratto and Hockema's (2009) characterisation of critical making experiences, I defined this as a process emphasising enquiry, inclusivity, openness and openendedness, with the possibility of experiences and meanings being plural and unresolved (Figure 33). However, what is significant about *Fatberg* is that fat not only functions as subject matter and construction material but as an agent whose expressions and meanings contribute to the shaping of events. This caused me to ask, what are the consequences of dialogic encounters between humans and nonhumans? How did participants at *Fat and Food* react to fat and the open and open-ended enquiry? How were their experiences and understandings resolved and assimilated by the activity?

Fat and Food was envisaged as a participatory enquiry combining a panel discussion and sensory activities. However, with its diversity of props, activities, and unscripted programme, the unfocused play space suggested that the event was more structurally open than intended. What began as an open enquiry evolved into a situation where participants assumed direction over proceedings to accept and evade the very openness on offer. The guests and participants imposed a frame built on their familiarity with and expectations of a panel discussion to structure and de-risk our transgressive ambitions. With the sensory activities overwhelmed by the discussion, fat, as a tangible, vibrant matter, was confined to the margins, present as a parallel expression in the shape of the butter churning performance and as an abstract topic for debate.

In "*What Are We Busy Doing?: Engaging the Idiot*", Michael (2012a) asserts that engagement events can trigger a range of happenings or misbehaviours that, in some way, "overspill" the empirical, analytic, or political framing of the event. Misuse, hesitation, disruption, distraction, irony (heckling) or non-participation are valid, albeit hard to decipher, behaviours observable within participatory events. Referencing Stengers' (2005) notion of the idiot, whose presence "resists the consensual way in which the situation is presented" (p. 994), Horst and Michael (2011) propose that we accept participants' non-participation or "lack of seriousness" as an opportunity to look beyond what we think we know, to reflect

upon misbehaviour as a form of critique and creative problem generation.

Overspills are an often-overlooked characteristic of engagement activities, erased through “a tacit process of sanitisation whereby the engagement event is cleaned up so that the existing methodological, conceptual, and institutional frames of the engagement event remain unchallenged” (Michael, 2012a, p. 529). Michael (2012a) identifies three types of event to demonstrate how overspills are typically ignored. First is the engagement event, where inept or absent behaviour/s are unrecorded. Second is the analytic event, where data is intended for analysis, but certain traces of activity are disregarded as they do not fit into the employed analytical framework. The third is the relevance event, where data is circulated between directly related parties but not amongst broader networks. Though the three typologies expressly describe the post-event clearing away of misbehaviour, they also highlight that the messiness and incompleteness of events are often by design. Overspills are occurrences that events can be susceptible to, depending upon the degree of openness and appropriation designed into, or indeed out of, participatory activities. The overspill, as a concept, thus provides a means to consider the features of and triggers for idiotic behaviour in-situ.

For example, at *Fat and Food*, the degree of openness, and lack of synergy between the sensory activities and discussion, heightened the divergence between the project hosts’ motivations and those of the group. As a result, the butter churning performance and sensory activities resembled overspills and were considered immaterial to the emerging group logic. Unusually, in the context of an event that encouraged an open and playful attitude, overspilling also describes the appropriation of activity and its reshaping into a conventional form. An event whose defamiliarising experience was intended to be productive for its potentially novel outcomes was memorable for its familiarisation. Rather than overspilling, I reason that the event, as designed, was too open relative to its objectives and thus susceptible to *curtailment* by participants who restricted our ambitions. This curtailment constitutes a distinct type of overspill (Figure 33), signifying outputs that do not conform with our desired transgressive objectives, demonstrating the rejection or closure of activity. It suggests that the *Fat and*

TERM	DEFINITION
Curtailment	A distinct type of overspill observed at the <i>Fat and Food</i> event. Refers to outputs that do not conform with Fatberg's unorthodox methods and objectives, indicating participants' rejection, closure or reshaping of activity.
Dialogic space	An approach to participation emphasising inquiry, inclusivity, openness, and openedness, with the possibility of experiences and meanings being plural and unresolved (McCarthy & Wright, 2015). Peculiar to Fatberg events is that fat is perceived as an active participant and collaborator whose expressions and meanings shape and form people and events as they shape and form it.
Idiot	Stengers' (2005) figure of the idiot "resists the consensual way in which the situation is presented" (p. 994), demanding that "we don't consider ourselves authorised to believe we possess the meaning of what we know" (p. 995). Applied to participatory events, Horst and Michael (2011) propose that we recognise participants' misbehaviour or non-participation as a form of critique and creative problem generation. The idiot, as a conceptual character, thus provides a means to complicate and study the boundaries of participation.
Overspill	Michael (2012) argues that engagement activities can produce happenings or misbehaviours that, in some way, overspill the empirical, analytic, or political framing of the event. Thus, overspills are occurrences that events may be more or less susceptible to, contingent on the degree of openness and appropriation afforded by participatory activities.

FIGURE 33 Curtailment, dialogic space, idiot and overspill are added to the lexicon.

CHAPTER 5

DesignLAB:

Fat as a construction material

Food theme, and its constituent ideas and concepts, were sufficiently novel to participants that they required the panel discussion as a knowledge schema to grasp and reflect upon their implications. The curtailment does not represent participants' misbehaviour but their reshaping of the event into what they perceived as a more manageable and productive form.

If we consider the practice's motivations, the curtailment could be dismissed as an unfortunate consequence of the event's openness. However, as the discussion has shown, there were some beneficial effects. For example, the ambiguous play space gave the impression that the event was structurally open, a work-in-progress to be resolved. This prompted participants to navigate their different value centres to shape a community of practice to drive and focus the event. The downside was that making sense of proceedings meant falling back on common frames of reference. For this reason, I argued that if we are to develop a holistic view on fat, how we are serious with matter matters. While the group's impulse to focus on the discussion helped shape a collective mindset, this came at the expense of the sensory activities, which offered a tangible experience of fat and potentially disruptive, less anthropocentric, view.

5.1 INTRODUCTION

So far, the term *fat as a construction material* has been used to describe a practice that employs the production of an island – the Fatberg – as a site for critical reflection upon fat as a socio-cultural, biological substance. In these circumstances, the island of fat serves as a concept, ambition, participatory object and outcome. In this second empirical chapter, we leap forward in time to the third and final Fatberg event of summer 2017 to examine fat as a construction material.

Hi Mike, it seems one of the pontoons has detached itself (or perhaps someone did). This means Fatberg is probably completely lost. I've asked someone to go take a look. When will you be in Amsterdam? I return the 29th only. A.

(A. Hendriks, personal communication, 11 August 2017).

DesignLAB, a workshop with students from the *DesignLAB* undergraduate programme at Gerrit Rietveld Academy, Amsterdam, emerged amidst unlikely circumstances. A string of incidents in the month succeeding *Float Fest*, the launch event introducing Fatberg's residency at Stichting NDSM (see Chapter 6), left the Fatberg production site in ruins. Fortuitously, Arne received an invitation in the same period to lead a semester-long educational programme concerning material investigations with fat. Instead of returning the setting to its original state, the bulldozed site prompted a proposal to the students to assume co-authorship of the island rebuild. An initial workshop, on which this chapter centres, focused on acclimatising students with the Fatberg project and production site. Their task was to analyse the remains of fat, materials, and tools to imagine the island-building process and inspire personal investigations and the island's reconstruction.

The *DesignLAB* workshop provides the setting to consider playful engagements with fat as a form of situated making and socio-cultural critique. To begin (section 5.2), I elaborate on the unexpected yet opportune circumstances leading to the workshop's design and our and the *DesignLAB* department's objectives. I describe my role in the workshop, distinct

from Arne, and the subsequent data capture methods employed. Then follows a narrative account concerning the workshop's initial explorative activity (section 5.3). This comprises observational and anecdotal evidence recounting students' distinct responses to the invitation and task. Before reviewing the event, in section 5.4, I establish the characteristics underpinning the feature of fat as a construction material. To do so, I scrutinise Foote and Verhoeven's (2019) *Tactics for a more-than-human maker culture* and bioart as comparable conjoined making and reflective practices emphasising mindful engagements with material. This shapes an analytical perspective for contemplating the students' responses to embodied and situated experiences with fat. Employing this analytical perspective and the updated lexicon of terms, in the subsequent discussion (section 5.5), I examine the students' understanding of and investment in vibrant matter through encounters with traces of the Fatberg. I conclude (section 5.6) by arguing that making with vibrant matter necessitates a belief in material agency and its effects, a wilful commitment to situated play.

5.2 CONTEXT, FRAMEWORK AND SETUP

Hello all, I've asked someone to assess the situation of the free-floating pontoon. Difficult to know from here what happened. Perhaps someone unlocked one platform. In any case, it seems Fatberg has been lost, and we need to start fresh in September. I will ask a friend to secure the pontoon at the end of this week after he returns to Amsterdam. It seems alright now as it ran aground in shallow water. In September, we start with weekly working sessions with students of Rietveld Academy until the end of the year. Half September, we plan to spend two nights on the pontoons with students of the Design Academy. Also, we have some workshops lined up.

Will inform you on further developments. My best from Ko Tao (Thailand)!

(A. Hendriks, personal communication, 13 August 2017)

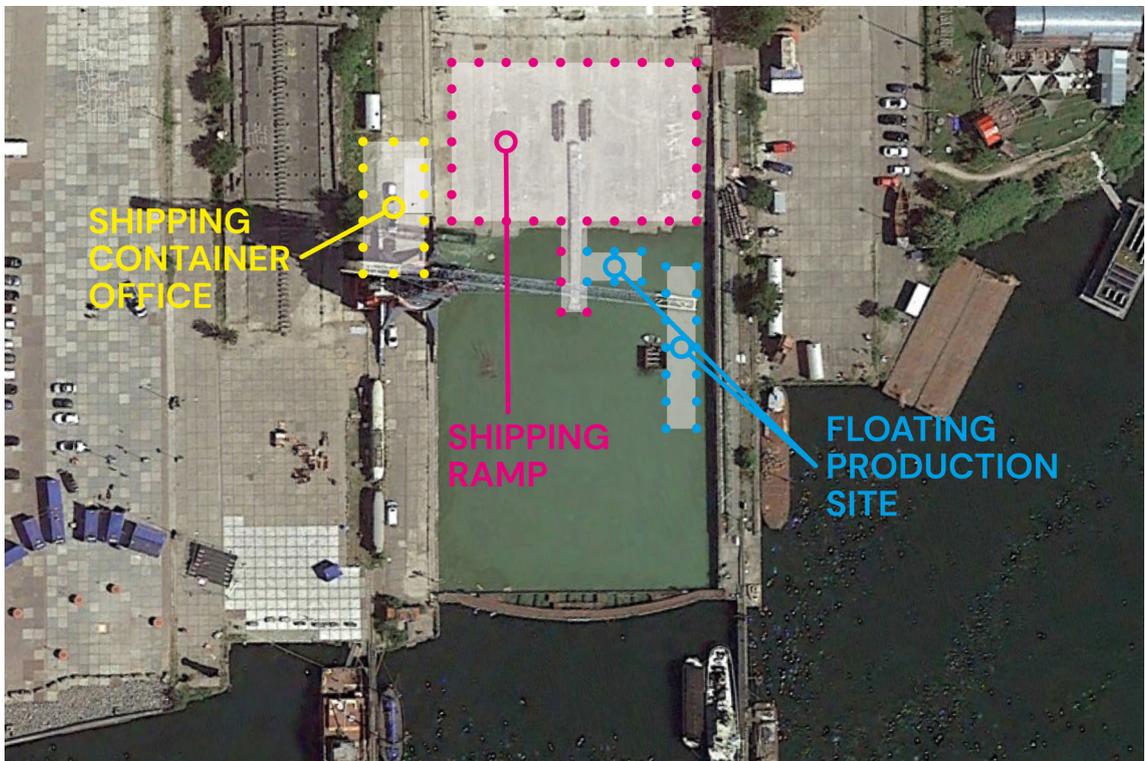


FIGURE 34 *Top* The production site lay in disarray.

FIGURE 35 *Bottom* The distinct areas of the ruined production site.

In the weeks following *Float Fest*, an unfortunate turn of events left the Fatberg and the newly completed floating production site in disarray (Figure 34). A period of heavy rain caused the promotional posters to peel from the shipping container, leaving a bare wall that resident graffiti artists were quick to colonise. Further, one evening, thieves ransacked the NDSM shipyard searching for metal to sell for scrap. The pontoons were set loose from the copper pipes they were tied to, casting the Fatberg adrift. As Arne and I and our colleagues at NDSM Foundation were away on summer vacation, we could do little to safeguard the work. In our absence, Arne asked a colleague to secure the floating production site and rescue the Fatberg, which they placed atop one of the beached pontoons. Unfortunately, the Fatberg was later found in chunks, smeared across the concrete. With the pontoons and fatty remains strewn across the site, the project lay in ruins.

Just prior to these incidents, Arne had received an invitation to teach in the DesignLAB department at Gerrit Rietveld Academy, Amsterdam, in the upcoming autumn-winter term. This led to an agreement to use the Fatberg as the basis of a 10-week-long educational programme with 2nd-year undergraduate students. For DesignLAB, which views design as an instrument for questioning, understanding and shaping the world (DesignLAB, 2017), the Fatberg production site offered a setting where students critically engage with fat as socio-cultural, biological material. The course thus comprised participatory and individual elements, with students' collaborative and reflective experiences building the island and inspiring personal investigations and projects.

The two incidents led to a programme of activities held every Tuesday at the Fatberg production site, with students taking an active role in agenda-setting, decision-making, and strategy-forming activities (Rowe & Frewer, 2005). Instead of returning the site to its original state, the misfortune prompted our invitation to the group to co-author the island rebuild. An initial workshop introduced students to the Fatberg project and semester-long programme. The students were told to be prepared to get dirty and wet and dress accordingly. They were briefed that an island of fat was once built at the location and instructed to

explore the ruins as an archaeological dig. This involved examining the shipping container studio and surrounding space, the shipping ramp below, and the scattered floating production site (Figure 35). The workshop thus comprised three pronounced phases of activity: *exploration, restoration, and preparation*.

Exploration, as an introductory activity, concerned surveying the ruined production site. The students' task was to analyse the remains of fat, materials, and tools to understand the island-building process and inspire the island rebuild. This meant engaging with the unique vernacular of the NDSM wharf. The students were encouraged to be open to the potential of the materials and things they encountered, making what they needed from what they discovered.

Restoration, which followed a scheduled lunch break, involved readying the production site for the weeks ahead. This meant wading into the water to move and secure the stranded pontoons in their resting location. Considering the size and weight of the pontoons and many submerged obstacles along the towpath, the students needed to work collaboratively to plan and execute the move.

Finally, *preparation* saw the students convene to establish weekly activities and identify associated tasks and roles. This meant discussing the learnings and insights from the earlier activities to formulate a plan of action. Top of the agenda was sourcing large quantities of fat to build the island. Other points for discussion included securing sponsorship, possible fundraising activities, and developing an efficient production process. The workshop concluded with the division of tasks and sourcing of materials in preparation for the next meet-up.

Succinctly, the exploration phase concerned the students' initial encounters with the project, fat, and the production site. By contrast, restoration and preparation centred on preparatory tasks looking ahead to the subsequent weeks' work. For this reason, the following account and discussion specifically address the exploration phase, which epitomises mindful engagements with material.

Because I was not officially tutoring on the course, Arne and I agreed that my role within the programme should be that of a fellow collaborator and consultant, someone with specialist knowledge of island-building. Conveniently in terms of the research, this allowed me to step back from directing and participating in activities to focus on participant observation. Capitalising upon my situational familiarity, I sought to use my experience to place myself “where the action is” (Bernard, 2006, p. 343) to guide observations, reflections, and understandings of students’ encounters with the Fatberg. For this reason, as explained in Chapter 3, the following workshop account comprises a mix of observational methods to establish a thick description of activity (Geertz, 1973). These chiefly consist of mid- and post-event field notes recording participant dialogue such as quotes and anecdotes, together with personal observations and reflections. Additionally, a smartphone camera was used to visually document activity where appropriate. Because this was a medium that the students used to capture their working process, in my mixed role as collaborator, consultant and researcher, the smartphone enabled both the recording of participatory activity and close-up documentation of the artefacts found and made by the students. As per my working methodology, the students were informed about the intention to document activities for research purposes. This meant obtaining their verbal consent and reaffirming the agreement periodically throughout the research and as suited the situation.

The workshop’s explorative phase provides a fitting context for studying fat as a construction material. However, it is not the most obvious setting with activity centred on scrutinising evidence and imagining the island-building process rather than island-building as an explicit practice. Nevertheless, the *DesignLAB* workshop offers something uniquely compelling. The extraordinary circumstances that prompted the programme meant that the project was more open to interpretation than ever. As the following narrative account illustrates, the island’s abstract presence loomed large as the students simultaneously grappled with the programme’s obligations and their needs, interests, and prejudices toward fat.



FIGURE 36 Students exploring the ruins of the production site.

5.3 EXPLORATION

This section provides an account of the workshop's exploration phase. It shows that the students approached the task and traces of activity in notably different ways. The distinct attitudes that emerged indicate the students' ability and will to immerse themselves in the project narrative, site and material, and their underlying motivations and prejudices.

Upon arrival, the students gathered at the foot of the shipping ramp to receive a briefing on the morning's activity. Arne's introduction was deliberately vague. The class were told that an island of fat was once built at the site and fell into disrepair. Their task was to examine the ruins to understand what previously took place to inspire an island rebuild. Numerous traces of activity were waiting to be found. These included the fat smeared pontoon grounded on the ramp, lumps of algae-infused fat floating on the water and streaks on the concrete, boxes of cooking fat, a fishing net and a sieve caked in lard, and greasy tools and equipment stockpiled in the shipping container (Figure 36). Besides the Fatberg remains, the site was awash with litter. Scattered across the ramp and out on the water lay discarded beer cans, plastic bags, old lengths of rope, tossed spray cans and paint, wooden pallets, abandoned furniture including a couch and office chair, metal fencing panels, concrete beams, and even an inflatable crocodile.

The students were encouraged to experiment with the discovered objects and materials creatively. This led to clusters of activity at the locations where material discoveries occurred. The shipping container, for example, housed an assortment of materials, tools and equipment that the students were quick to use in their forensic and creative experiments. These included numerous pots and pans, a gas cylinder, and a camping stove, which the students soon used to heat and melt clumps of salvaged fat. One student discovered a frozen chunk of a London sewer fatberg stored in a box in the freezer. However, much of the activity took place on the shipping ramp and concrete jetty, where most traces of the Fatberg were to be found.

Discovering the fatty debris, the students resolved to recycle and reuse the material. One student (S1), surveying the beached pontoon, remarked, "It's fat. It's stuck to the bottom.



FIGURE 37 *Top Left and Right* Students harvesting the fat.

FIGURE 38 *Bottom* Testing dripping fat as a building technique.



FIGURE 39 *Top Left* The sinew-wrapped island.

FIGURE 40 *Top Right* Balls of red, foraged fat.

FIGURE 41 *Bottom Left and Right* Building a fire on the jetty.

If I move it, I release it, and we can harvest it. Like fat farming.” Another, discovering the cylinder of gas, camping stove and large soup pan in the shipping container, commented, “I think you need to cook it, so it becomes more watery.” The two observations prompted three students to form an assembly line. Using a large bucket uncovered in the shipping container, S1 repeatedly shuttled foraged material from the ramp to the container, where they had arranged a pan on a gas stove outside to heat and render fat (Figure 37).

A second student (S2) acted as a further link in the chain, testing the dripping of melted fats as a construction technique (Figure 38). For this, they experimented in a small, water-filled aquarium recovered from the shipping container. Studying the repeat dripping of liquid fat, they observed, “It’s going on top of one another. It comes out different every time.” Expanding on the observation, S2 experimented with different volumes of fat, the intensity of dripping, and differences in form and temperature, to learn about the characteristics of the material, remarking, “The temperature will make a difference, right? In December, it will freeze.”

A third student (S3), who expressed an interest in coding, reflected on S2’s dripping experiments, discussing how they might use Grasshopper, a plug-in for 3D modelling software, to “calculate how it happens.” By creating mathematical models, they hoped to predict the island’s growth and shape and automate the dripping process. S3 also pondered how different pontoon formations and dripping techniques, such as dripping simultaneously from multiple sides, might influence island-building.

Other students adopted a more instinctive approach to the found materials. One pair (P1), for example, created their interpretation of the island, tethering a ball of sinew-wrapped fat to a barrier at the foot of the jetty (Figure 39). “It looks like a chicken,” one of them remarked as their prototype floated on the water. Another student (S4) nearby playfully rolled balls of foraged fat into the red paint dust deposited on the concrete (Figure 40). Realising that their hands were covered in a greasy red layer, they were seen moments later vigorously cleaning their hands with a bar of soap unearthed in the shipping container.

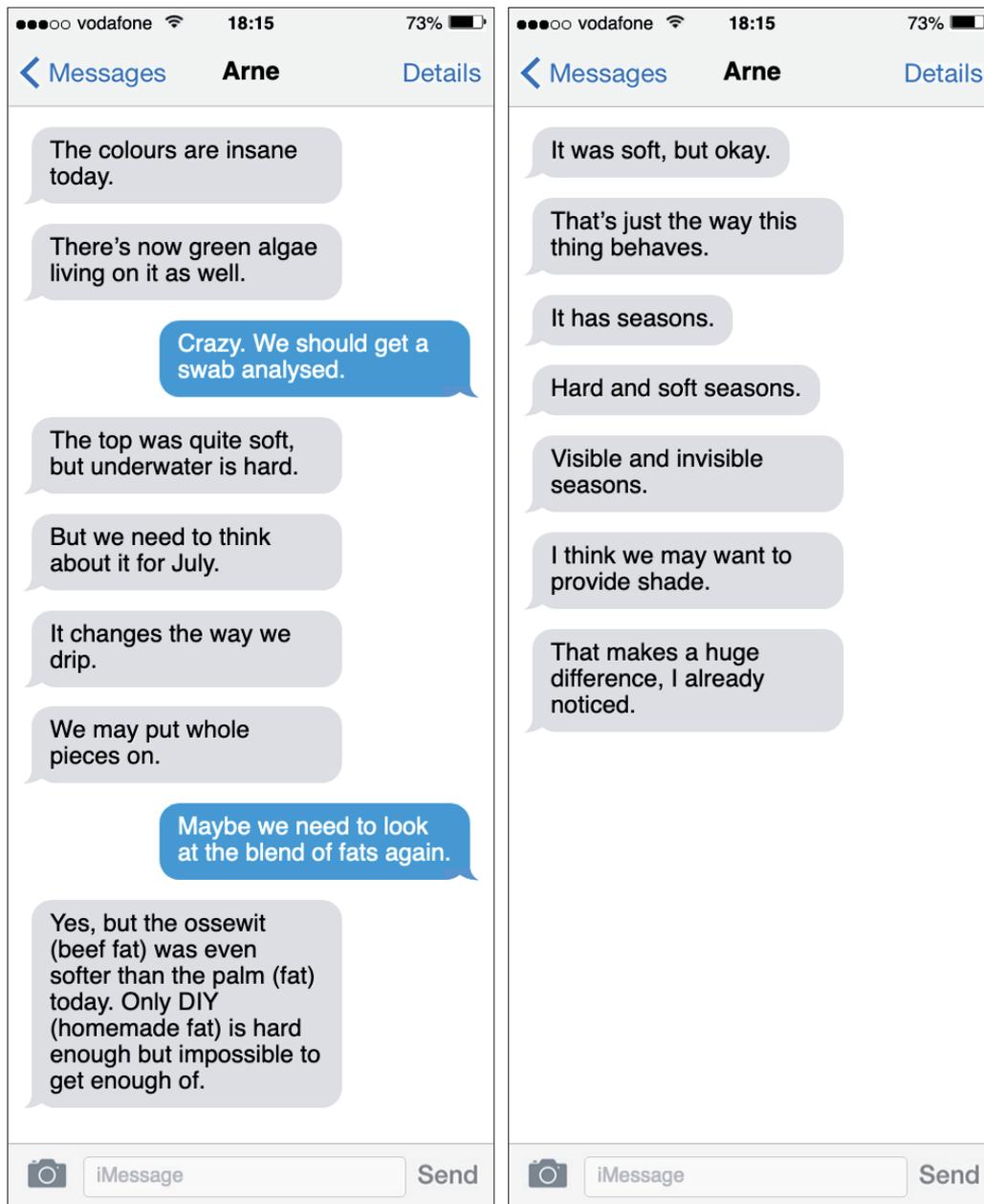


FIGURE 42 Text message conversation between Arne and myself.

Another group of five congregated on the shipping ramp (G1) built a small fire from the driftwood collecting on the banks of the jetty (Figure 41). Placing a pan taken from the shipping container directly onto the flames, they proceeded to melt a mixture of foraged fats. As the group waited and chatted, they appeared oblivious as the pan's contents began to smoke and burn before bursting into flames.

A final pair of students (P2) remained on the fringes of the other students' activities. Curious about their lack of engagement, I approached them to ask about their workshop experience. Reflecting on the day's task and the broader ten-week programme, one of the two, who mentioned that they were vegetarian, remarked, "It's going to be cold here at some point in the ten weeks. We're going to need a plan. Maybe that's where we need a community. I'm going to help make a fire." Despite their prognosis, the pair stood and watched as the group of five built a fire on the jetty. Later, when attention turned to the restoration phase, the pair did not return following a coffee break.

5.4 FAT AS A CONSTRUCTION MATERIAL

Before examining the *DesignLAB* workshop, it is necessary to elaborate on this chapter's practice feature, *fat as a construction material*. Discussing transgressive play in Chapter 2, I introduced artist Joseph Beuys's expanded concepts of material and art. Working with organic substances such as fat, felt, blood and honey as symbols of natural processes, materiality and transformation, Beuys capitalised on the agency of everyday substances and processes as the inspiration for thought, dialogue, and action to empower individuals as agents for social change (Gyorody, 2014; Harlan, 2004a; Walters, 2010). I contend that Fatberg events employ a similar approach, with an attentiveness toward fat the catalyst for transgressive play. A text message conversation (Figure 42) between Arne (Grey) and I (Blue), reflecting on a day's island-building, exemplifies this watchful approach.

The exchange typifies a practice inspired by natural phenomena that appropriates

rudimentary materials, actions, and processes to pursue a loosely defined objective. Significantly, island-building implies a mindful engagement with fat, with various objects and events considered when apprehending encounters with material and the broader consequences (Mol, 2002). To deepen my understanding of this practice, I will examine two analogous design/art practices. First, I discuss Foote and Verhoeven's (2019) *Tactics for a more-than-human maker culture* as an extension of critical making. Here, material agency is considered a means to challenge the power dynamics that perpetuate cultural, political, and environmental practices. The second, bioart, concerns process-based artworks that manipulate living bodies or systems to explore the biopolitical. Cross-referencing these practices, I identify the characteristics of making-oriented practices that emphasise embodied and situated experiences with vibrant material to establish a framework for examining the DesignLAB student's encounters with fat and the Fatberg.

MAKING WITH THINGS

Reflecting, in the previous chapter, on Ratto and Hertz's (2019) claim that critical making represents a non-disciplinary middle-ground, I argued that making not only represents a bridge between disciplines but a bridge between the human and nonhuman. In *Tactics for a more-than-human maker culture*, Foote and Verhoeven (2019) observe that despite the aim of maker culture to democratise production, consumption, and dissemination, it exists within an anthropocentric paradigm (p. 73). For this reason, maker culture reinforces long-established power relations that perpetuate "cultural, political and environmental practices that are unsustainable and unequal" (p. 77). As a corrective, the authors present a range of making practices that somehow harness or recognise nonhuman agency for its transgressive potential. The selected practices arise from "a position of uncertainty, situatedness, and relationality to surroundings and materials" (p. 83).

Their discussion of artist Felix Larsen-Jensen's *Pie Dish Oscillator* is particularly relevant to this study. Larsen-Jensen's electronic music employs DIY instruments built from an assemblage of materials, objects and electronic components found in rubbish tips or junk

shops (Snake-Beings, 2018). The artist's choice of materials reflects the display of recycled objects at his local tip, where materials are categorised by their characteristics instead of their function (Foote & Verhoeven, 2019; Snake-Beings, 2018). The materials, stripped of their customary function and context, are defamiliarised, inspiring playful readings and appropriation. So follows the *Pie Dish Oscillator*, so-called because of its recycled aluminium casing. A significant feature of the instrument was a faulty component – a frequency control potentiometer – which caused the oscillator to produce an unusually complex sound, “varying from harsh metallic grinding sounds to a sound similar to fluctuating hissing steam” (Snake-Beings, 2018, p. 134). Rather than repair the instrument, the artist chose to retain the unpredictable agency of the faulty component.

To make sense of the assemblage of agencies evident in Larsen-Jensen's work, Foote and Verhoeven turn to Bennett's vibrant matter. For Foote and Verhoeven, the tension between the malfunctioning potentiometer and other electronic components represents what Bennett (2010) describes as “the capacity of things – edibles, commodities, storms, metals – not only to impede or block the will and designs of humans, but also to act as quasi agents or forces with trajectories, propensities, or tendencies of their own” (p.viii). In other words, the noise produced by the *Pie Dish Oscillator* represents forces that exist beyond human agency. While I accept that the instrument capitalises upon the unpredictable effects of a faulty electronic component, we should be careful not to exaggerate the forces at play. Indeed, a chance element might be anticipated given that these are instruments improvised from discarded materials. More significant, however, is that accepting that the instrument has its “own language” (Snake-Beings, 2018, p. 135), Larsen-Jensen appropriates the effect within his electronic music. The forces actively contribute to the artist's music-making process. To use Beuys's term, these are forces as co-workers, material participants that play a valued role in artistic production (Beuys & Harlan, 2004).

Earlier in the research, a parallel was made between Beuys's attentiveness toward material warmth and energy and Bennett's vibrant matter. I argued, in a similar vein to Foote and

Verhoeven, that embracing the vibrancy of things means recognising that our existence as human beings corresponds with broader social, ecological, and political processes. It implies a pluralistic approach, redefining the notion of embodiment and bodies (Foote & Verhoeven, 2019). On these terms, makers, materials, tools, and the environment exist as equal, creative partners, encouraging “a less hubristic, more attentive approach to making, and a more substantive politics of material culture” (p. 84). As Larsen-Jensen’s work demonstrates, acknowledging a more-than-human agency means complicating our relationship with the world. Foote and Verhoeven’s proposition lays the theoretical ground for embodied and situated encounters with the nonhuman encounters that seek to destabilise and challenge anthropocentric ideologies and structures. Like Beuys before them, they characterise vibrant, unstable matter as the inspiration and catalyst for thought, dialogue, and action. The issue with this hypothesis, as the authors acknowledge, is that while a growing number of material-oriented works claim to challenge the anthropocentric paradigm, there are few empirical examples within maker culture to expand upon such claims (Foote & Verhoeven, 2019, p. 82). There is, however, a precedent for this type of work in art. We can look to bioart.

ART WITH A PRESENCE

Hauser (2008), by way of Kac (2007), characterises bioart as process-based art involving biotechnological methods or manipulating living biological materials or systems *in vivo* or *in vitro*. Significantly, bioart consists of displays that “allow audiences to partake of them emotionally and cognitively” (Hauser, 2008, p. 84). Bioart does not just recognise the agency of living biological materials or systems. Bioart, akin to Beuys, capitalises on materials’ vibrancy and presence. Because bioart involves living systems or biological material, the relationship between the artist, the artwork, the observer, and the socioeconomic context in which the artwork takes place is changed. In such works, “the reality of presentation (the world of art creation) is replaced by the presentation of reality (creation of the world)” (Bulatov, 2007, p. 447). Bioart deliberately plays with this tension. Coming face-to-face with semi-living artworks, spectators experience the interplay between the symbolic conventions of art and real-life processes. Hauser contends that life-based artworks possess an amplified, corporeal

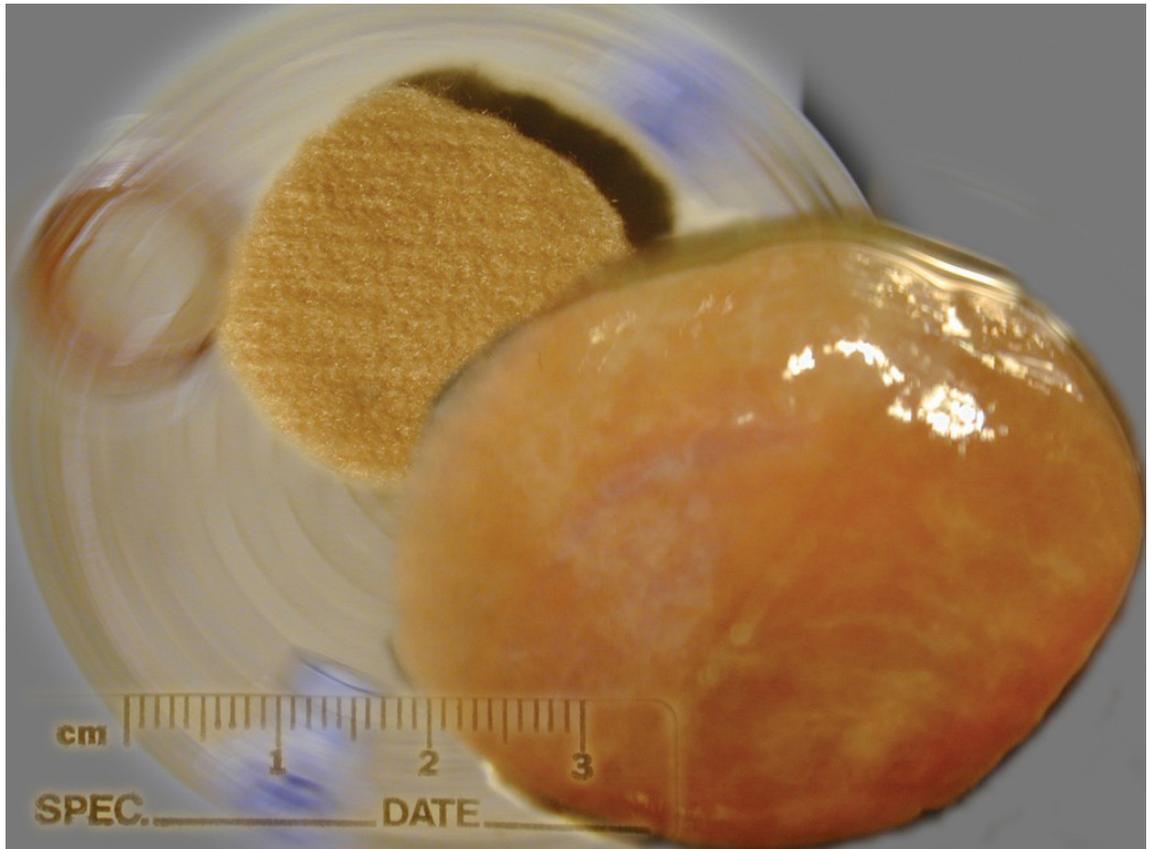


FIGURE 43 *Semi-living steak*. A study for *Disembodied Cuisine* by the Tissue Culture & Art Project (2000). From the Tissue Culture & Art Project. Retrieved from: <https://tcaproject.net/portfolio/semi-living-steak/>. Copyright 2000 by the Tissue Culture & Art Project.

presence, consisting of multisensorial effects that touch the audience (Dixon, 2009; Hauser, 2008). Through their bodily co-presence - their agency - life-based artworks draw attention to the anthropocentric rules and structures that inform their production (Hauser, 2008).

A notable example is *Disembodied Cuisine* by the Tissue Culture & Art Project (2003). Situated within the exhibition Art Biotech at Le Lieu Unique, Nantes, the artwork, consisting of a temporary lab, employed the methods used in the culture of bio-artificial body parts to produce “lab-grown meat” (Catts & Zurr, 2003). Motivating the work was the promise of victimless cultured meat, with tissue culture methods at the time contradictorily dependent upon animal-derived products to provide the nutrients required for cell growth (Figure 43). Taking tissue cells from frogs who lived alongside a purpose-built micro-gravity bioreactor, the lab-grown meat was cultivated inside the gallery for close to three months. In the climactic performance, the artists, enlisting a chef, prepared and ate the coin-sized steak as part of a nouvelle cuisine style dinner shared with the exhibition curators and six volunteers. To conclude, the tissue donor frogs were released in the local botanical gardens. The work played with cultural perceptions of edible or ethical food and the incongruity between the tradition of eating frogs and the widespread rejection of genetically engineered produce in France (Catts & Zurr, 2003). In cultivating their lab-grown meat, the artists claim to have initiated a new form of exploitation, exploiting the semi-living (Catts & Zurr, 2004).

To explain the artwork, let us briefly examine the premise of critical making. Inspired by Latour (2004), Ratto and Hertz (2019) contend that the primary motive of conjoined material and critical practices are to turn “the relationship between technology and society from a ‘matter of fact’ into a ‘matter of concern’” (p. 20). For the authors, this involves a personal investment, “a ‘caring for’ that is not typically part of either technical or social scholarly education” (p. 20). In bioart, I infer that this caring for is provoked by the precarious display and existence of the semi-living, who simultaneously possess a corporeal presence and symbolise socio-technological concerns. However, suppose we contrast our example with Foote and Verhoeven’s pluralistic approach to making. Rather than reposition the artist

and material as equal partners, the artwork exposed the hypocrisy of victimless meat by displaying the prevailing order. The artwork was symbolic of the anthropocentric paradigm. The intention was less to nurture care for the semi-living, which was destined to be eaten, as it was to nurture care for the broader concern it represents.

The trouble with Hauser's assertion that life-based artworks possess an amplified, corporeal presence is that, especially in terms of the example, it is unclear how visitors, including the participants in the climactic performance, experienced and came to care for the semi-living or the socio-technological concerns it represents. Instead, this account of *Disembodied Cuisine* relies on promotional materials and post-event reports that primarily broadcast the work's underlying message and support the myth of activity. The effect of the work appears hypothetical.

NECESSARY INSTABILITY

What is, however, consistent across the examples in this section is that the works are not inert and stable. They are purposefully active and unstable. This is particularly true of works that harness real life as art. Life-based artworks are fragile and finite. They exist and grow outside of what one might conceive as a natural body. Instead, they are sustained through technological means (Catts & Zurr, 2002; Dixon, 2009). These practical challenges often form an integral part of the artwork, for example, the display of technological equipment maintaining the biological material or system, such as the bioreactor used in *Disembodied Cuisine*, the performance of obtaining ethical clearance*, or the health and safety measures adopted in the production and display of the work. Exhibiting the processes and structures that sustain life-based artworks, such works emphasise the vibrant assemblage of human and nonhuman agencies bound up in the politics of (bio)material culture and technology.

* *Mutate or Die: a W.S. Burroughs Biotechnological Bestiary* centres on artists Adam Zaretsky and Tony Allard's attempt to gain bioethical clearance to extract DNA from deceased author William S. Burroughs' faeces. More than producing a "mutant sculpture", as the artists proposed, the work posed critical questions concerning the access to and control of potentially hazardous biomaterials and how ethical standards within the life sciences might be applied to artistic production (ter Gast, 2015).

However, of greater significance is that these practical challenges involve the element of chance, engaging with human and nonhuman agents “with trajectories, propensities, or tendencies of their own” (Bennett, 2010, p. viii). As Kaprow (2003a) might argue, while this represents a risk, risk holds transformative potential; the possibility of seeing the world anew. I argue that life-based practices are necessarily unstable because the resulting disturbance encourages critical reflection and creative engagement with associated socio-cultural-environmental concerns.

The theories and practices outlined in this section have clear relevance for Fatberg. Aside from manipulating biological material, the work similarly harnesses the agency and instability of organic matter as a setting for critical reflection upon material culture. Here, fat, a material of and from the body, possesses an amplified, corporeal presence in the form of an island, playfully imitating the sewer fatberg phenomena. The island embodies the multiplicitous nature of fat, comprising a diversity of forms, processes, actions and concerns. Indeed, the Fatberg is an amalgam of fats and materialities, whether animal (lard and tallow) or vegetable (palm oil), shop-bought pre-rendered, self-rendered or waste donations from partners and supporters. Engaging with the Fatberg means encountering fat in a continuous state of transformation, a corpus that softens, hardens, decays, and grows in tune with the seasons and activities and serves as home and foodstuff to a thriving community of aquatic life. Consequently, various materials, tools, and processes are appropriated or expressly made to support the island’s growth.

However, Fatberg diverges from critical making and bioart because the corporeal presence and chance expressions of matter elicit a further dimension. As I will discuss in the next chapter, caring for the Fatberg implies supporting fat’s claimed desire to grow. It follows that the Fatberg is not merely a participant but perceived as an autonomous entity that directs proceedings.

MAKING WITH VIBRANT MATTER

This section has examined critical making and bioart as conjoined conceptual and analytical

approaches to material. Cross-examination of these practices has shown a shared emphasis on embodied and situated experiences with material to transform participants' understanding of and investment in the nonhuman and associated socio-cultural-environmental concerns. However, I argued that because few examples outline the practical effects of repositioning people and material, claims regarding the merits of such practices are at best provisional. This is where I believe my research can make a valuable contribution.

Making with vibrant matter, as I define the approach employed within Fatberg, describes making-oriented practices that harness the dynamism and instability of biological substances, materials and processes as the catalyst and site for collective thought and action. Such sites are dialogical, emphasising enquiry, inclusivity, openness and open-endedness, producing diverse, potentially unresolved experiences, meanings and outcomes (McCarthy & Wright, 2015).

As the account in section 5.3 suggests, the *DesignLAB* workshop was representative of this dynamism and instability. In the following discussion, making with vibrant matter establishes a reference point for contemplating the students' responses to embodied and situated experiences with the nonhuman and how their understanding of and investment in matter and the task unfolds through encounters with the Fatberg's remains.

5.5 DISCUSSING *DESIGNLAB*

Having defined making with vibrant matter as a distinct way of engaging with material, let us now consider the students' varied responses to fat, the task and site within the exploration phase. As will become apparent, the students' contrasting approaches highlight a tension between their everyday expectations and the absolute and peculiar order of the workshop context (Huizinga, 1955).

ATTUNING TO THE PLAY SPACE

A crucial feature of the workshop was that it offered the students a decisive role in shaping the Fatberg project's direction and future. The exploration phase thus required the students to tune in to the echoes of prior activity (Palmer, 2011b) amongst the wreckage to shape their understanding of the project and inspire the island's reconstruction. However, the echoes were diverse in type and location and largely indistinguishable from the litter strewn across the site. This was because they represented multiple agencies and past events, which sometimes complemented, other times competed for attention. For example, the smears of algae-infused fat found along the shipping ramp constituted not only the remains of the island and evidence of its destruction but its function as habitat and foodstuff for aquatic life. Moreover, the many discarded beer cans, vast quantities of litter and the deflated inflatable crocodile hinted at prior festivities at NDSM wharf. As the examples imply, some echoes corresponded to Fatberg, others not. The challenge was identifying the once and potentially useful materials amongst the mishmash of matter and things.

This is where the Fatberg narrative, though unconventional, provided a framework to imagine and inspire the island-building process. It provided a filter for playful experimentation. However, the task obliged the students to accept materials and circumstances that were inconsistent with customary practices and expectations. This meant attuning to the circumstances and becoming aware of things, processes and interrelations that might exist beyond their everyday perception. In *Biographia Literaria*, Coleridge (1817) asserts that drama, whether a theatrical play, opera, mime or ballet, relies on the "willing suspension of disbelief for the moment, which constitutes poetic faith" (pp. 349-50). To suspend disbelief is to be drawn into and swept away by an experience as it unfolds (Kroon, 2014). The term is appropriate because the DesignLAB students responded to the abstract task, setting and echoes of activity in notably different ways. I contend that three distinct attitudes emerged during the exploration phase: pragmatism, intuition, and non-participation. These attitudes describe the students' varied understanding of and belief in the Fatberg narrative and vibrancy of fat and how they attuned to the unstable play space.

PRAGMATISM

The first recognisable attitude, pragmatism, characterises students S1, S2 and S3, who developed a strategic approach based on collaboration and self-organisation. This meant suspending their disbelief to accept the Fatberg narrative and that fat performed as a functioning building material within the present context. In this way, the narrative worked as a filter and set of constraints facilitating the reading of the echoes and cues embedded in the found materials and objects.

Working together to combine activities, including the foraging, and melting of fats (Figure 37) and experiments with different characteristics of fat and dripping techniques (Figure 38), the group methodically pieced together the traces of evidence to establish a working process. By paying close attention to and hearing the call of things and spaces “to conjoin with them, play with them, respond to them” (Bennett, 2011), the island-building logic was revealed.

Having substantiated the working process, these students subsequently reflected upon their embodied and situated experiences of making with fat to imagine alternative modes of production. S3’s idea to use mathematical models to “calculate how it happens” and automation to structure and rationalise the construction process was expedient, considering the ambition to build on a large scale. Proposing new methods and processes, the trio asserted their interests and concerns to assume the project’s co-authorship.

INTUITION

Intuition describes the attitude of the second group of students. It characterises the approach taken by S4, who rolled balls of fat on the discarded red paint (Figure 40), or the duo (P1), who remarked that their sinew wrapped Fatberg looked “like a chicken” as it floated atop the water (Figure 39). It also suitably describes the group (G1) who inadvertently set fire to fat on the jetty (Figure 41). In each instance, the students engaged with fat in a playful, arguably naive, manner.

A simple explanation is that the experiments were the students' means of apprehending the unconventional objective and construction material. More than this, though, it was as if the group willingly suspended their disbelief to encounter fat anew. I suggest that the incomplete play space, the unconventional project narrative, and the open task conspired to produce a defamiliarising effect in the group's eyes. Fat, as a mundane substance, was made strange. The defamiliarising effect meant that, coupled with the task's open nature, the students momentarily set aside ordinary frames of reference to engage in an embodied experience with their immediate surroundings. Observing S4's struggle to remove the greasy red layer from their hands or the groups' thoughtless burning of the fat, it appeared as if they were so engrossed that they momentarily forgot their existing knowledge of the material. They were swept away by the experience (Kroon, 2014).

I propose that to these students, the Fatberg narrative was not a schema but a point of departure. Instead of hearing the echoes of material, things, and spaces and recreating what had already been, the group seized upon the openness offered, instinctively playing with the discovered materials to imagine what the island of fat could be. This included creating novel processes and prototypes involving colour and mixed biological and artificial materials. The approach was not so much practical as it was speculative. The students' instinct was not to recreate but create or reimagine the island-building process.

NON-PARTICIPATION

The third and final attitude manifested with a pair of students' (P2) lack of engagement and sidestepping of the task. To reference Huizinga, to play within the magic circle is to accept the site's legitimacy. This conversely means that to evade the play space is to reject the validity of the situation. I contend that, where this duo was concerned, what occurred was less an outright rejection, more an attempt to bypass the task and justify their non-participation.

In the previous chapter, I referenced Michael's (2012a) concept of over spills - happenings or misbehaviours that, in some way, overflow the empirical, analytic, or political framing of

the event – to define the *Fat and Food* participants’ reshaping of the event as a distinct type of overflow. In an earlier paper, Horst and Michael (2011) argue that unexpected behaviour should be accepted as a legitimate, perhaps even productive, form of participation. The authors apply Stengers’ (2005) figure of the idiot to reflect upon the non-participant, whose misbehaviour or non-engagement is considered idiotic. The idiot “resists the consensual way in which the situation is presented and in which emergencies mobilise thought or action” (Stengers, 2005, p. 994), demanding that “we don’t consider ourselves authorised to believe we possess the meaning of what we know” (p. 995). As a conceptual character, the idiot provides a means to complicate and rethink the boundaries of participation. It signifies that the idiosyncrasies of an event emerge not from their coming together but from their becoming together in a particular way (Fraser, 2006). In this light, non-participation is not misbehaviour, but the unanticipated, yet potentially insightful, reframing of an issue or situation. Fraser (2006) refers to this reframing as “inventive problem-making”.

The non-participating students at the workshop present an interesting case. The pair, characterising themselves as vegetarian, arguably forewarned their non-engagement with a material partly of animal origin. Moreover, emphasising the cold weather to come, they designed a problem indirectly related to the task at hand. The two problematisations represent the pair’s attempt to circumvent a situation in which they were doubtlessly uncomfortable. Designing supplementary activities such as building a fire and forming an organised community, they articulated the class’s needs beyond the present task while positioning themselves in a peripheral supervisory role. Much like the guests and participants at *Fat and Food* imposed their expectations of a panel discussion to structure and de-risk the event, the non-participating students’ bypassing of the exploratory task represents an attempt to initiate anticipated structures and rationalise their non-engagement. It represents the duo’s adherence to life’s ordinary rules, expectations and prejudices, a refusal to trivialise their principles by suspending their disbelief.

5.6 CONCLUSION

In this second empirical chapter, a workshop with undergraduate design students provided a setting to examine the effects and products of employing fat as a construction material. The DesignLAB programme positioned the Fatberg project as the context and inspiration for a 10-week educational programme, capitalising upon the Fatberg production site's recent destruction. An introductory workshop on which this chapter focused presented the students with an incomplete setting to be resolved and appropriated (McCarthy & Wright, 2015). This was reflected by three phases of activity: exploration, restoration, and preparation. The discussion expressly focused on the workshop's exploration phase to study mindful engagements with vibrant matter.

To start, I described the disastrous events and invitation that prompted the event's design, mine and Arne's differing roles within the workshop, and the methods employed to record evidence of activity. Next followed a narrative account of the exploration phase, recounting observations and dialogue that characterised the students' responses to the task, mixed materials, and locations.

Before reviewing the workshop activity, I elucidated the motives and practices that specify fat as a construction material. For this, a correspondence was established between Foote and Verhoeven's *Tactics for a more-than-human maker culture* and bioart as conjoined conceptual, analytical practices emphasising embodied and situated experiences with material. I argued that claims concerning the potential for making-oriented encounters with the nonhuman to foster understanding of and investment in socio-cultural-environmental concerns are at best provisional, if not rhetorical. I subsequently reasoned that the transformative potential of encounters with living material perhaps lies in introducing chance, which might unsettle anthropocentric norms and biases. This led to the definition of making with vibrant matter (Figure 44) as practices that capitalise on the liveliness and instability of biological material as the catalyst and site for collective thought and action.

BELIEF IN VIBRANT MATTER

Making with vibrant matter subsequently provided a frame of reference for considering making-oriented engagements with the nonhuman. With the Fatberg narrative as a foundation, the students' task was to tune in to the echoes of prior activity to (re)construct the fragmented play space. This required the students to creatively interpret a range of sometimes complementary, other times competing, agencies and motivations. For this reason, I argued that the activity required the students' willing suspension of disbelief (Figure 44), a belief in the Fatberg narrative and the discovered material's potential. This resulted in three observable attitudes: pragmatism, intuition, and non-participation.

Some students readily submitted to the Fatberg narrative, which provided a structure stabilising the unfocused habitat. This pragmatic approach enabled them to read and draw connections between the mix of materials and locations to replicate the island-building process. With this foundation, they advanced novel methods and ideas to assert their agency upon proceedings.

By contrast, other students perceived the Fatberg narrative and objective as a starting point for material exploration. Consequently, the mixed agencies and locations collided to produce a defamiliarising effect. This caused the students to follow their intuition, drawing novel connections between their material discoveries to propose their visions for the island.

Instead of engaging with the Fatberg narrative and objectives, another duo problematised the play space to establish supplementary activities and structures to justify their non-participation and evade the explorative task.

The attitudes demonstrate that there was no one way of engaging with vibrant matter. In principle, the Fatberg narrative offered a schema to interpret the site and found materials. This required the students to suspend their disbelief, momentarily park their experiences and preconceptions, and believe in the story and echoes of activity. However, the material

TERM	DEFINITION
Making with vibrant matter	Drawing on Beuys's expanded notion of artistic production, critical making and bioart, as conjoined conceptual and analytical approaches to material, making with vibrant matter describes making-oriented practices that harness the dynamism and instability of biological substances, materials and processes as the catalyst and site for collective thought and action. Critically, making with vibrant matter necessitates a belief in material agency and its effects, a wilful commitment to situated play.
Suspension of disbelief	To suspend disbelief is to be drawn into and swept away by an experience as it unfolds (Kroon, 2014). For instance, drama, whether a theatrical play, opera, mime or ballet, relies on the "willing suspension of disbelief for the moment, which constitutes poetic faith" (Coleridge, 1817, pp. 349–50). In the research, the concept refers to participants' inclination to "play along" that it is both desirable and fat's will to build an island of fat.

FIGURE 44 Making with vibrant matter and suspension of disbelief are the latest additions to the lexicon.

CHAPTER 6
Float Fest:
Fat as an agent

that they were obliged to engage with was no ordinary construction material. It was a dynamic and unstable biological material, manifesting in various forms and locations. Because play cannot be uncoupled from the outside world, the students inevitably brought their motivations, experiences, and prejudices into the play space. It follows that they encountered a material whose stated characteristics, processes and meanings were incongruous with their everyday knowledge and experience. Fat's agency was simultaneously explained and confused by the Fatberg narrative and unstable play space.

Rather than provoke critical reflection upon socio-technological concerns, the explorative activity introduced another way of thinking, doing and being with fat. To use Beuys's turn of phrase, it was about crafting an attitude (Beuys & Harlan, 2004, p. 32). The three attitudes thus explain how the students were (or were not) able to suspend their disbelief and commit to the Fatberg narrative and vibrancy of fat. They suggest that for all the rhetoric about the transgressive potential of making-oriented encounters with the nonhuman, what is overlooked is that not all participants are willing and or able to invest themselves in vibrant matter. In short, how serious we are about matter matters. The *DesignLAB* workshop has shown that investing in matter entails momentarily setting aside one's knowledge, experience, and prejudices. It implies being cognisant of material agency and attuning to things we are unaccustomed to sensing. It means evoking the spirit of play. I surmise that making with vibrant matter requires a leap of faith, a wilful belief in material agency and a resolute commitment to situated play. Such events are necessarily open and open-ended to allow for and thus capitalise upon the multitude of experiences and meanings they produce. This contention marks a critical juncture in the research. As will become apparent in the next and final empirical chapter, making with vibrant matter entails recognising matter not only as a medium but as a subject and collaborator. Consequently, a thesis that began with the notion of interdisciplinary between people and disciplines pivots toward the interrelations and collaboration between people and things.

6.1 INTRODUCTION

Join us this Saturday 8th July at NDSM in Amsterdam Noord for FATBERG Float Fest and witness a couple of guys hoist an embryo of fat from its incubator into the water. Oh, and we'll be fat rendering, dripping and having some drinks and snacks to celebrate. Bring the kids (if they know how to swim) (@buildingfatberg, 2017b).

Previously, the term making with vibrant matter was established to describe practices that capitalise on the agency of biological material as the catalyst and site for collective thought and action. Through this definition, I alluded to another form of material agency present in Fatberg events, a synthetic agency, where my collaborator (Arne Hendriks) and I claim to be instructed by and act as representatives for fat.

In this final empirical chapter, we take a step back in time to the second event in the triptych to examine how this extension of material agency manifests in Fatberg events and shapes participatory engagements with the nonhuman. Rather than following the “Fat and ...” format established with the opening event, *Float Fest* centred on a parade-like spectacle; the island of fat’s transfer to its newly completed floating production site. Significantly, the event coincided with IJ Hallen, Europe’s largest flea market, which simultaneously took place at NDSM wharf. This presented an opportunity to engage with marketgoers, who serendipitously happened upon the event within an event. For this reason, we scheduled our preparatory activities in parallel with market hours to initiate dialogue with and invite visitors to the upcoming performance. *Float Fest* thus comprised two distinct phases - setup and performance - involving different activities and forms of participation.

To begin (section 6.2), I establish the background and ambitions for *Float Fest*, which marked the inauguration of the floating production site and the official start of Fatberg’s residency at the NDSM shipyard and cultural institute. I describe how these circumstances informed the design and delivery of the event, its marketing and promotion - which

included the sale of project-related merchandise – and the specific methods of data capture employed. I then (section 6.3) deliver a narrative account of the event, providing a multi-layered account of activity detailing the defining moments and exchanges recorded across the setup and performance phases.

In section 6.4, I return to the energy of things to examine fat as an agent. To do so, I recognise vibrant matter (Bennett, 2010) as a philosophical position used to adopt a more holistic, non-anthropocentric view of the nonhuman. This leads to the assertion that three different agencies motivate Fatberg events: fat as a lively substance or agent, the designer/artist, namely Arne and I who work to create the Fatberg, and a synthetic, fictional agency role played by Arne and myself, who claim to act on behalf of fat. Examining these different agencies, I consider the implications for practice activities and how they shape a logic that can help interpret participatory engagements with the Fatberg.

A discussion (section 6.5) follows, drawing upon the contrasting agencies' characterisation and the lexicon of terms to scrutinise the accounts, actions, behaviours, and outcomes that emerge via tangible and conceptual engagements with fat. So follows an event that is structurally open to the extent that it sometimes ignores or repels, and other times absorbs and even encourages chance interactions between people and material.

To conclude (section 6.6), I argue that the numerous chance instances and encounters at *Float Fest* served a deliberate and necessary function as a condition for creative experimentation. Further, the practice employs the imagined, synthetic agency to simultaneously manage and encourage risk to promote material participation and shape novel activities, ideas, and communities of practice.

6.2 CONTEXT, FRAMEWORK AND SETUP

To begin, I'd like to establish the background and motivations for *Float Fest* to explain the

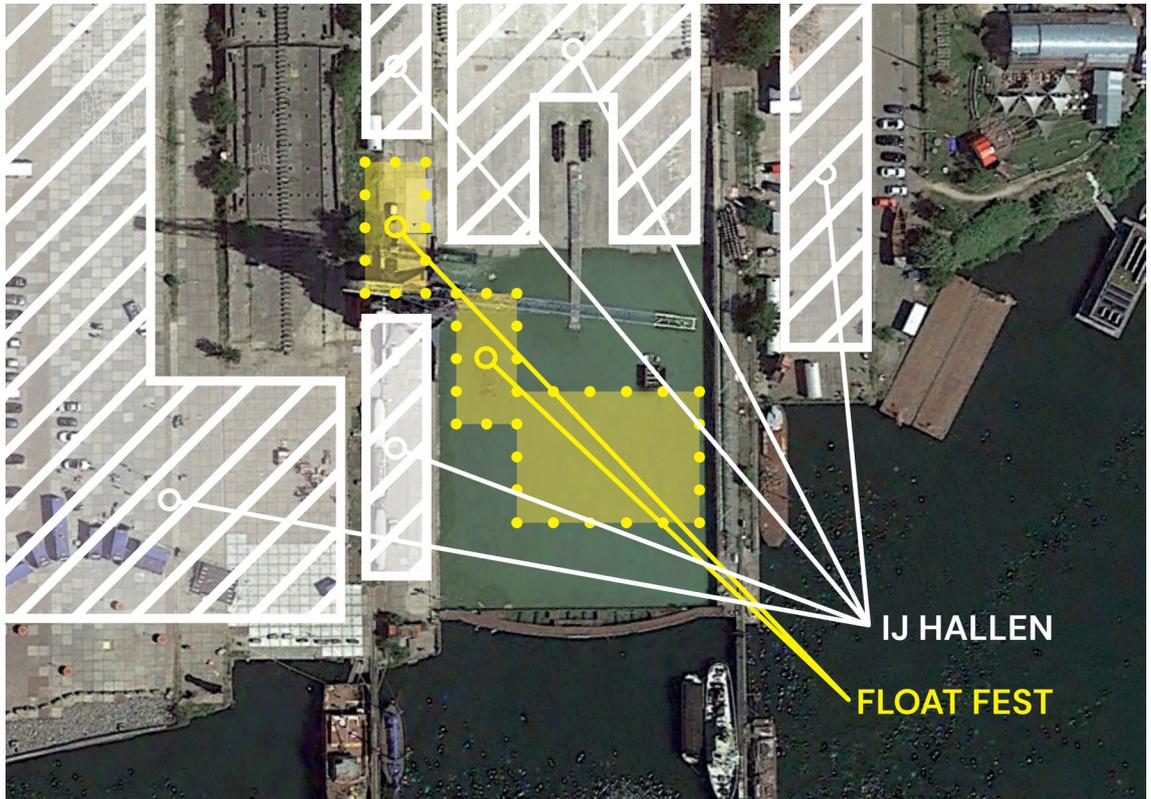


FIGURE 45 Map of the NDSM site.



FIGURE 46 *Top* Float Fest promotional image.

FIGURE 47 *Bottom* Float Fest promotional animation.

event's objectives and design. As the name suggests, *Float Fest* was devised as a celebration, marking the transfer of the island of fat from its cylindrical tank housed in the shipping container studio to the newly completed floating production site. *Float Fest* was intentionally programmed to coincide with IJ Hallen, Europe's largest flea market. Scheduled the first weekend of every month at NDSM wharf, IJ Hallen attracts several thousand visitors from the Netherlands and beyond. When in progress, the market surrounded the work, with rows of stalls lined up in front of the shipping container studio and facing the floating production site on the shipping ramp below. Our experience the previous month during the preparation of *Fat and Food* highlighted the market's potential, not only in terms of infrastructure that we might appropriate as tools or furniture but in providing access to a ready-made public. Scheduling *Float Fest* as an event within an event (Figure 45), we hoped to capitalise on marketgoers' browsing the adjoining flea market. This meant exploiting the tension between the market and the practice. Selling Fatberg-themed merchandise, we aimed to mirror market activity while using encounters with marketgoers to promote the work and upcoming festivities.

PROMOTION

A series of graphic images and animated gifs were specially designed for advance circulation via the Fatberg and NDSM Foundations websites and Facebook, Instagram, and Twitter accounts. An email invitation, using the same graphic style and imagery, was additionally produced for distribution amongst the project and NDSM Foundation's professional networks. The chosen imagery (Figures 46 and 47) intended to spark intrigue, being suggestive of the watery location and activity.

The event details, stating the title, date, time, and location, lay atop a fat backdrop, visible through or on ripples of water. The adjoining posts provided further information as to what the event entailed:

... witness a couple of guys hoist an embryo of fat from its incubator in the water. Oh, and we'll be fat rendering, dripping and having some drinks and snacks to celebrate (@buildingfatberg, 2017).

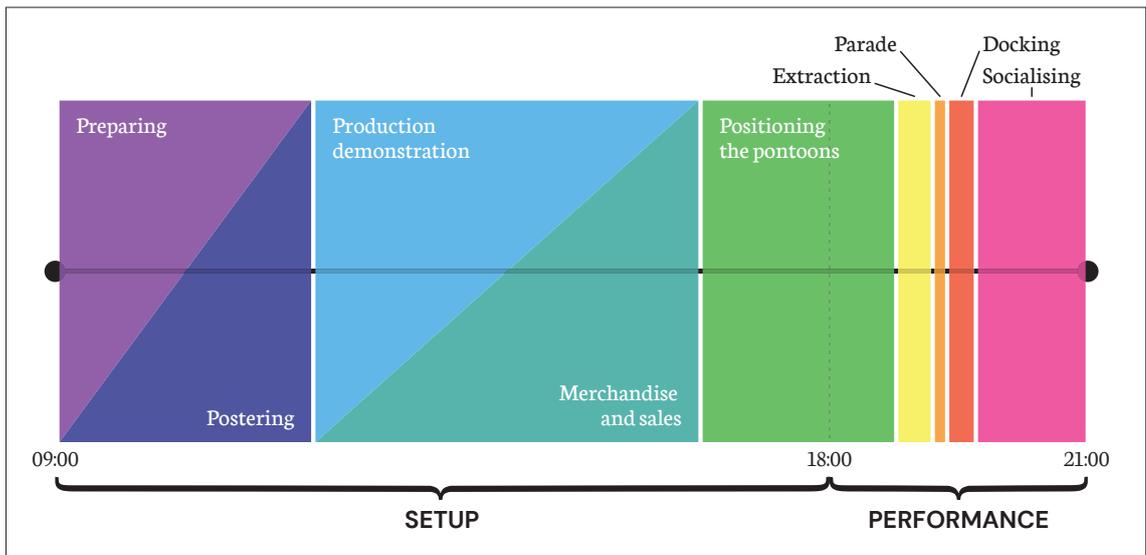


FIGURE 48 Timeline of the setup and performance phases.



FIGURE 49 *Top Left and Right* Our presence at work encouraged marketgoers to engage with the work [Photo credit: Hanneke Wetzter].

FIGURE 50 *Bottom Right* Visitors viewing the infographic posters [Photo credit: Hanneke Wetzter].

FIGURE 51 *Bottom Left* The park bench facing the container rear [Photo credit: Hanneke Wetzter].

Other promotional opportunities were identified within our planned activities and potential encounters with marketgoers. Examples of such follow within the event account (section 6.3) as they arise within the setup and performance phases.

Besides a short demonstration, the island of fat was virtually absent from the *Fat and Food* event; therefore, at *Float Fest*, the Fatberg would take centre stage. The event hinged on the parade of the island of fat as it was transferred from tank to open water. This meant our activities took place between two distinct, neighbouring locations: the shipping container studio/exhibition space, which acted as the primary location for engagements with the public; and the floating production site, consisting of four custom-built pontoons, floating on the flooded shipping ramp below, which formed the performance site. More practically, this amounted to two distinct phases of activity (Figure 48): setup, the preparation of the two sites during market hours from 09:00 am to 18:00; and performance, the official launch and happening starting at 18:00. The two phases meant an informal approach to participation consisting of a mix of activities, promotion, and encounters with the public in support of the main event, the carnivalesque parade of the island.

PLANNING SETUP (09:00–18:00)

While the island parade was the intended focal point of *Float Fest*, setup presented an additional, opportunistic engagement activity. Experience from previous events had taught that our presence “at work”, not only during island-building but also during preparation, provoked passers-by’s curiosity (Figure 49). This is reminiscent of Kaprow’s *Fluids* (1967), where participants worked to build large scale structures of ice. The work-like nature of the happening prompted chance encounters with passers-by, such as the Marine’s attempt to enlist young crew members. The individuals appeared drawn to both the obscure structures and performance of manual labour, providing a starting point for engagement. Concerning *Float Fest*, our presence at work during market hours presented opportunities to promote the event through conversations with marketgoers, who might stumble unexpectedly upon the work.

To encourage such encounters, we decorated the site with promotional posters and directional signage (Figure 50). The walls of the shipping container, for example, were covered with specially designed posters both advertising the event and providing information about the Fatberg, including a series of blog articles transposed from the project website. Branded merchandise, comprising free stickers and purchasable “Lard Pour Lard” T-shirts and “Certificates of Co-Ownership”, were displayed at the container entrance to entice passers-by. A crude production line comprised of a medium-sized pan, gas hob, and a glass aquarium tank filled with water were also staged out front to demonstrate the island-building process. Besides these direct promotional activities, we positioned a park bench facing the circular window at the rear of the container to casually draw attention to the beach ball-sized Fatberg floating in its tank (Figure 51). Finally, the four pontoons needed to be moved into position to form the floating production site in preparation for the performance. The bizarre spectacle of two bearded men in waders towing pontoons across the water presented further opportunity to draw attention to the upcoming parade. With this, we positioned a flip chart at the foot of the ramp. The handwritten message “Preparing for the Fatberg launch” pointed to the activity on display and that to come.

PLANNING THE PERFORMANCE (18:00–)

Following setup, our attention would focus on relocating the Fatberg from its tank to open water. Reflecting on the performative nature of the activity, our desire to honour the official start of the residency, and the recent completion of the floating production site, we recognised a resemblance between the moving of the Fatberg and carnival processions. Parades and processions are events where groups of people move through public space for display or ritual celebration (Riggio & Kennedy, 2011). Despite being interchangeable in practice, Riggio (2011) notes that parades and processions differ in their style and function. Parades, for instance, direct their energy outward toward spectators, for example, in the form of community festivals or displays of military strength. Processions, by contrast, direct their energy inward into the processional group. This is evident during religious ceremonies, such as funerals, observing dates in the religious calendar, or honouring saints



FIGURE 52 *Top Left* Extracting the Fatberg [Photo credit: Hanneke Wetzer].

FIGURE 53 *Top Right* Parading the Fatberg [Photo credit: Hanneke Wetzer].

FIGURE 54 *Bottom* The final placement of the Fatberg after docking [Photo credit: Hanneke Wetzer].

and deities, which are typified by a slow, rhythmical walk accompanied by song and prayer. Parades and processions do not in and of themselves serve a specific political or sociological function (Riggio & Kennedy, 2011). Aside from being occasions for celebration, worship, or displays of strength, such events might be appropriated as instruments of subversion and protest. At *Float Fest*, the performance was more akin to a parade, presenting a seminal moment in the project to the assembled mix of project partners, co-owners, guests, and visiting members of the public.

In section 2.3, I examined the carnivalesque as the playful celebration of excess and parody of high culture. Carnival is epitomised by its lavish parades, jubilant dancing, and non-stop music. Indeed, the enduring image of carnival is the elaborate floats and colourful costumes created by parade participants as they march jubilantly through the streets (Shafto, 2009). Central to the notion of carnival is folk humour, where laughter represents the parody and inversion of high culture. At *Float Fest*, the carnivalesque parade of the Fatberg amounted to the parody of a religious procession, with the assembled audience invited to pay their respects to - to worship - fat. The parade meant to convey an inversion or rejection of society's antipathy towards this substance. Much like the spirit of carnival is personified as an overweight, raucous man representing a monstrous, exaggerated form of officialdom (Lachmann et al., 1988), the Fatberg as a similarly grotesque body was to be paraded through the audience to celebrate an often maligned substance.

This review describes the performance phase in four steps: extraction, parade, docking, and socialising. *Extraction* concerned the removal of the island embryo from its cylindrical tank in the shipping container studio (Figure 52). The second step, *parade*, refers to the carnivalesque parade of the Fatberg from the shipping container onto the shipping ramp below and casting out to water (Figure 53).

As a continuation of the parade, *docking* refers to the final placement of the Fatberg at the floating production site. More practically, this meant Arne and I wading into the water to

direct and enclose the Fatberg within the floating concrete pontoons. (Figure 54). Lastly, following the final placement of the Fatberg was *socialising*, where Arne and I could mingle and share a celebratory drink with participants.

DATA CAPTURE

As noted in the methodological framework established in Chapter 3, the varied range of activities and participation in Fatberg events means that Arne and I are often deeply entangled in their delivery. This was especially true at *Float Fest*, where the practical tasks and different phases of activity required multiple, overlapping, evolving roles, including that of guide, salesperson, labourer, and performer.

As before, my situatedness as a researcher-practitioner led me to adopt participant observation as a strategy, using my proximity to the action and lived experience as means of data collection and analysis. Storytelling as a research approach thus entailed capturing autobiographical and ethnographic (participant observation) accounts to present a multiplicity of experiences across different times, settings, and circumstances.

A mix of methods was employed to document and generate creative insight and critical reflection upon activity. Central to this was a combination of mental and jotted field notes used to capture encounters with participants: these comprised quotes, anecdotes, personal observations, and reflections supporting account writing. As a corrective to my entanglement within proceedings and to form an objective overview of the event, a professional photographer was invited to observe and document visual evidence of activity. This was particularly beneficial during the performance when my involvement in the island extraction made it practically impossible to document proceedings.

Unique to *Float Fest* was that another impromptu form of data collection emerged during the event. The video pledge (video selfie recording), which I emphasise in the following sections, emerged from marketgoers discussing their contribution to a proposed Fatberg community.



FIGURE 55 Giving marketgoers a tour of the site [Photo credit: Hanneke Wetzler].

As both the video pledge and extraction of the Fatberg will show, the researcher-practitioner and participants' role, more broadly, is a work-in-progress, continually negotiated and reconstructed as events unfold. For this reason, the annotated slides, which I described in section 3.4, proved particularly useful for piecing together and cross-referencing the diverse forms of data to construct a storied account of the event.

6.3 THE EVENT

The following narrative account concerns setup and performance as separate yet interrelated phases of activity. As the description of the two phases will show, this meant the type and degree of visitor engagement varied considerably across the event, as participants attuned to the present circumstances.

SETUP (09:00–18:00)

Since setup aimed to take advantage of the buzz of market activity, we arrived at 09:00 sharp to capitalise on the rush of early visitors. The sights and sounds of our activity during setup, moving tools and equipment, packing bags of trash, pasting infographic posters to the walls of the shipping container, arranging the merchandise display, and chopping and melting blocks of fat as a part of the island-building demonstration, helped capture the attention of passers-by. Approximately 18 marketgoers stepped into the shipping container to inquire about the work, with many more stopping to read the informative posters and examine the merchandise display. This led to a diversity of conversations with individuals who, in most cases, had little or no prior knowledge of the Fatberg (Figure 55).

The first visitor (V1), triggered by the posters on the shipping container, peered through the door to inquire about the Fatberg. They were promptly given a tour of the site, with the materials, tools and staged elements from the upcoming performance used to describe the project and our future plans. This seemed to resonate with V1, who, accepting a complimentary “I Love Fatberg” sticker (and requesting a few more), asked if the project had

a website or social media accounts remarking:

*You should bring this to Gothenburg. We have problems with waste in the harbour there ...
It's great that you're doing this here today. You will speak with a lot of people.*

Other visitors, who similarly took the tour and came face-to-face with the Fatberg for the first time, reacted with bemusement as they struggled to comprehend what they saw and heard. A noteworthy example was an exchange with another marketgoer (V2). Approaching the container door, V2 enquired, "What is this about? An island of fat?" Gesturing toward the Fatberg, exhibited in the tank at the container's rear, I invited V2 inside to see the island for themselves. "That's disgusting," they uttered as they approached the container before asking, "Do you find it erotic?" "Not erotic," I replied. "I do find the shape strangely beautiful, though. I don't read it as fat particularly." "Yeah", V2 nodded, observing the Fatberg from different angles. "You know, I just want to touch it", they confessed.

In another encounter, which occurred while postering the shipping container, a couple, who initially seemed confused, gradually appeared to identify with the work. Discussing the different types of fat that make up the island and revealing their knowledge of waste management, Visitor 3 (V3) asked if I had heard of a company called AEB:

I went on a tour of AEB last year. They are a waste disposal company here in Amsterdam. They're really interesting. They are responsible for separating all of the waste. You know we have no landfill here in the Netherlands? That's because they separate and make use of everything. What we can't reuse we send to Germany (laughs).

I thanked V3 for the name and said that I would make contact. In response, I asked if V3 knew of Rotie, a waste cooking oil collector and biodiesel producer based in Amsterdam. They confessed they did not, but that they were intrigued. I suggested that V3 visit the Fatberg website to learn more about the project. "I saw. I'm going to take a photo of it (the URL on the



FIGURE 56 *Top* The merchandise display [Photo credit: Hanneke Wetzer].

FIGURE 57 *Bottom* The certificate of co-ownership.

side of the shipping container),” V3 replied. They accepted some complimentary stickers and continued their way around the market.

While many visitors happened upon the Fatberg for the first time, a small number admitted to prior knowledge of the work. One notable marketgoer (V4) stopped by, eager to see the Fatberg, and fortuitously learnt of *Float Fest* and the broader programme of activities. “Is this the Fatberg?” V4 asked. “I didn’t see it yet.” “It’s around the back,” I replied, “I can show you.” Walking to the circular window at the container rear, I presented the Fatberg displayed in its tank. “It’s not so big,” V4 remarked. “Well, it takes some time to build an island,” I countered. Pointing V4 toward the posters promoting the upcoming *Float Fest* performance, they declared, “OK, I’m coming.”

The varied response to the work was further shown by visitors’ use of the park bench. The bench deliberately faced the circular window at the shipping container rear, looking directly onto the Fatberg in its cylindrical tank. At least a handful of visitors took the invitation to sit and gaze upon the island; however, the bench was found repositioned on at least three occasions, looking out over the market stalls on the shipping ramp below.

Aside from our presence at work, the merchandise display helped lure passers-by toward the shipping container (Figure 56). An arrow directing visitors to “come see the Fatberg inside” sat perched atop the display. Complimentary I Love Fatberg stickers and purchasable items, including screen printed Lard Pour Lard T-shirts and Certificates of Co-Ownership lay arranged on a shelf on the container door, alongside promotional posters displaying their prices. A combo deal offering a T-shirt and certificate for a reduced €25 was advertised to mark the occasion, with the proceeds funding materials for island-building.

Across the event, in total, one T-shirt and four certificates of co-ownership were sold. Perhaps more valuable was that the merchandise provided a means to present the work. For instance, Arne’s teenage twins, who joined around midday to help with the preparations, were tasked

to promote *Float Fest* by handing out free stickers to passers-by. The impromptu assignment helped introduce visitors to the Fatberg, as the twins either presented the work in their own words or handed visitors over to Arne or myself for a tour.

The merchandise prompted a particularly memorable encounter with one visitor (V5). Having stopped earlier in the morning to browse the promotional display, V5 returned within an hour to ask for further information about the project and upcoming event. Recalling their curiosity, V5 received a tour, including the Fatberg displayed in its tank in the shipping container, and the newly built production site, floating atop the flooded shipping ramp below. Expressing their interest in the performance, V5 asked if there were any social media accounts where they could track the island's progress. Being handed the relevant addresses, they immediately followed Fatberg's Twitter and Instagram accounts. Noting V5's keen interest, I proposed that they consider becoming an island co-owner by purchasing a Certificate of Co-Ownership (Figure 57). I remarked that co-ownership might take other forms, such as donating or participating in the rendering of fats or engaging in island-building. V5 responded by saying that they would like to purchase the combo deal. As we prepared the items, V5 chatted with Arne in Dutch and mentioned the social media accounts once more. Switching back to English, the visitor offered to manage Fatberg's social media accounts on our behalf. Enthused by the proposal, Arne began rummaging around for some card to improvise a protective sleeve for the certificate. Taking a sheet of paper from the flip chart, he folded a simple envelope and placed the certificate inside. Writing a message on the envelope, congratulating V5 on their co-ownership, Arne (AH) asked:

AH: Can I take a photograph to remember you by?

V5: Do you mean a photograph or a video?

Sensing an opportunity, Arne spontaneously asked V5 to say their name and "I am a Fatberg co-owner" to a smartphone camera, recording a short video pledge. All new co-owners would record a video pledge from that moment on, with their name and video added



FIGURE 58 Towing the pontoons into position [Photo credit: Hanneke Wetzer].



FIGURE 59 *Top* Visitors assembled at the shipping container rear [Photo credit: Hanneke Wetzer].

FIGURE 60 *Middle* The struggle to remove Fatberg from its tank [Photo credit: Hanneke Wetzer].

FIGURE 61 *Bottom* Exiting the container with the Fatberg [Photo credit: Hanneke Wetzer].

to the project website as a record.

Come 16:30, at the market close, the stage was set for the performance. The pontoons, however, still needed manoeuvring into position to complete the floating production site. This involved Arne and I donning waders and walking out onto the flooded shipping ramp to tow and tie off the pontoons in a square formation. A flip chart displaying the message “Preparing for the Fatberg event” was placed at the foot of the ramp as we entered the water. Moving the pontoons took considerably longer than expected. There was much underwater debris that the pontoons needed guiding around before being towed into position (Figure 58). This meant that the earliest guests arrived while we were still up to our waists in water. This created a spectacle as the pontoon moving activity became the source of entertainment. When we finally exited the water some 45 minutes past the advertised start, several visitors remarked that they were concerned they had missed the event when, in fact, the main attraction had yet to occur.

PERFORMANCE (18:00–)

With everything in place, attention turned to the performance and transfer of the Fatberg embryo to the newly completed production site. Approximately 20 people assembled during the pontoons’ manoeuvring, with some sitting on the banks overlooking the water and others congregating around the shipping container studio. With limited space available within the container, except for Arne, the photographer, and myself, participants were directed toward the circular window at the rear to observe the extraction (Figure 59). Arne and I briefly addressed the crowd concerning what was about to happen. And so, the performance began.

Extracting the 25-kilo island from its tank involved the rudimentary technique of enveloping the mass of fat in a woven net before hoisting it from the water. As the Fatberg was significantly larger than the last time it was moved, the plan was to upgrade this technique, attaching a broom handle to the net to provide extra leverage. While this compensated for the increase in weight, the unexpectedly high temperature that day had caused the fat to soften. Under the audience’s gaze, the net sank into the fat like a knife through butter. As much as



FIGURE 62 *Top* Floating the Fatberg towards the pontoons [Photo credit: Hanneke Wetzer].

FIGURE 63 *Bottom* Docking the Fatberg [Photo credit: Hanneke Wetzer].



FIGURE 64 A new co-owner making their video pledge [Photo credit: Hanneke Wetzer].

half of the island's volume was shed in an instant as huge chunks broke loose in the struggle to maintain grip. Amidst the panic to save the Fatberg, Arne exclaimed: "It took two years of work to build and five minutes to destroy."

Following the failed first attempt, our response was to improvise a sling from a woven plastic shopping bag found in the shipping container. The hope was that this would be strong enough to lift the island while not cutting further into its surface (Figure 60). A member of the audience, having witnessed the chaos, approached to ask if there was any way that they might help. The individual was instantly pulled into the frenzy, as they held tightly onto the shopping bag while drainage holes were punched through the material with a knife. The makeshift sling was immediately put to the test. A second attempt was made to haul the island from the tank but to no avail. One of the bag handles tore loose. We agreed to persevere despite the further setback, and another plan was urgently hatched. Using the sling once more to raise the Fatberg from the water initially, a plastic crate gathered the hoisted mass, and the Fatberg was finally lowered from the tank.

Emerging from the shipping container with the crate in tow (Figure 61), visibly exhausted and covered in fat, Arne and I gave a quick, impromptu speech to the assembled participants, describing the struggle to release the Fatberg and announcing what was to happen next. Because of the pandemonium, we forgot the original plan to use a net and wooden pole to parade the Fatberg. Instead, clutching either side of the crate, we paraded the island through the crowd and onto the shipping ramp. With our hands caked in fat, we struggled to hold onto the heavy crate as it was carried toward and lowered safely into the water. The crate was slowly nudged forward until the Fatberg floated free (Figure 62). We then steered the island toward a central opening between the pontoons. Once docked, Arne pushed the remaining, untethered pontoon in front, enclosing the Fatberg inside. Hauling himself from the water and onto the pontoons, he tied the untethered pontoon to the others, securing the floating production site in position (Figure 63). "Congratulations" someone shouted as the audience, now assembled on the bank above the production site, broke into applause.

With the performance ended, we exited the water and headed back to the shipping container to share a celebratory drink and socialise with the audience. Two passers-by promptly approached Arne, having been drawn to the performance by the assembled crowd. As I entered the container to remove my waders, another audience member, as it turned out, Arne's neighbour, approached to ask about becoming a co-owner. As we chatted about the Fatberg and completed the co-ownership certificate, a couple, long-standing supporters of the practice, expressed their interest in becoming co-owners and purchasing a certificate jointly for €25.00. While I handled the sales, Arne captured video pledges of each new co-owner posing with their certificate (Figure 64). This brought the total to five new co-owners enrolled across the event.

By 20:30, most participants had left apart from a few remaining for drinks and a chat. While we tidied away equipment, materials, and trash, in the background, a flock of seagulls swooped down onto the water, snatching at the pieces of fatty debris floating in the Fatberg's wake. "You need to do something," one of the guests remarked. Concerned that the Fatberg might fall victim to the birds, Arne and his twins climbed down onto the pontoons. Taking branches found littered around the site, they tied the sticks across the central pool where the Fatberg was trapped to stop the seagulls from swooping down. With the Fatberg safe, we loaded the remaining equipment into the shipping container, and the event came to a close.

6.4 FAT AS AN AGENT

Before unpacking the account of *Float Fest*, it is necessary to examine the aspect of practice central to this chapter, *fat as an agent*. At the outset of the thesis, I described the multiplicitous nature of fat, a substance comprising numerous characteristics, forms, processes, and activities. Referencing Mol (2002), I came to realise that apprehending the agency of fat means "to consistently recognise that there are many entanglements in every action" (p. 156). In section 2.4, I established a parallel between Beuys's expanded notion of material and Bennett's (2010) theory of vibrant matter. I reasoned that to enter into the intention of things is to defamiliarise oneself and become aware of our inherent assumptions

and biases to shape a holistic and empirical understanding of the interconnectedness between things, humans, and the natural world.

To deepen our understanding of embodied and situated experiences with material, in the previous chapter I drew a link between Foote and Verhoeven's (2019) *Tactics for a more-than-human maker culture* and bioart as material-oriented conceptual and analytical practices. This led to the definition of making with vibrant matter as practices that capitalise on the liveliness and instability of biological material as the catalyst and site for collective thought and action. Observing students' interactions with the ruined Fatberg and its production site during the *DesignLAB* workshop, I deduced that making with vibrant matter involves a suspension of disbelief, a wilful belief in material agency and resolute commitment to situated play.

The root of this deduction lies within an aspect of the practice that has yet to be examined. In the discourse analysis opening the research, I drew attention to three phrases often repeated within the practice. "We don't know why we simply know we must", "the fat made us do it", and "lard pour lard" (Thompson & Hendriks, 2014a) specify a practical philosophy whereby fat is elevated to the status of an agent that directs proceedings. The approach attempts to enter into the intention of things and rebalance relations between humans and nonhumans. Importantly, it represents an expanded notion of participation, extending the boundaries of interdisciplinarity and collaboration from people to people and material. Practically, the phrases point to three different agencies motivating Fatberg events: fat as a vibrant thing or substance, the designer/artist, namely myself and Arne, who practically and conceptually create the Fatberg, and a *synthetic agency*, practised or role-played by myself and Arne, who claim to act as agents for fat. In this section, I expand upon the three agencies' theoretical and philosophical underpinnings to ask: what do the agency of fat, the designer/artists, and a fictional, synthetic agency mean for practising and analysing Fatberg events?

PRACTISING POLITENESS WITH FAT

In *Staying with the Trouble*, Haraway (2016) refers to Despret's (2014) work on attunement

to argue that encounters or “visits” between humans and nonhumans do not tell but create narratives. Referring to Despret’s observations of ornithologists encountering Arabian babblers, a songbird native to the Negev Desert in southern Israel, Haraway describes Despret’s practice as the cultivation of politeness. Much as things provide perceptual information that facilitates action, or a sequence of actions for those suitably equipped to act upon them (Gaver, 1991), to practice politeness is to assume that beings possess qualities and abilities that come into play in an encounter (Haraway, 2016). By being polite, asking questions, and being open to the possibilities of the encounter, the implication is that “one cultivates the virtue of letting those one visits intra-actively shape what occurs” (Haraway, 2016, p. 127). Noting the ornithologists’ politeness towards the babblers, Despret observed that the encounters between the scientists and the birds did not occur independently of one another. Instead, the scientists’ actions affect how the “animals see their scientists seeing them” (Despret, 2014, p. 36) and thus how the animals respond. It implies that what scientists and animals do, they do together; they become with one another (Haraway, 2016, p. 128).

The practising of politeness and intra-active shaping that Haraway describes is observable in Fatberg events. A text written at the outset of the project describes the island-building process, involving the repeat dripping of liquid fat into a body of water:

Upon contact with the water, the fatty solution begins to immediately solidify, building a small fat platform that functions as a scaffold for the next batch of fat. After dripping for several minutes, the weight of the tiny platform pushes itself through the surface of the water tension and starts to “sink”, effectively dividing the Fatberg into two parts: one above the surface, and one submerged. Within one hour of dripping, the majority of the berg lies beneath the surface of the water. This method of dripping is of some consequence to the rotation of the Fatberg. By building up mass on one side of the island, the heavy side will push itself underwater while the lighter side tilts towards the sky. The behaviour, at first erratic, becomes more and more predictable in time, making it possible to manipulate the direction of rotation. As the berg grows, we will be able to steer it, by virtue of which it will

almost act as an abstract clock, much like the year rings in a tree, where we know what part of the berg will be on the surface at that moment, or better said, after a specific quantity of fat has been deposited in a certain area (Thompson & Hendriks, 2015a, p. 11).

The text reads as part-empirical account, detailing fat's observed behaviour as it interacts with a body of water and part-rationalisation of these behaviours for the practical task of building an island. Just as Despret assumes that something interesting is about to happen when visiting the babblers, here, there is an expectation that by attuning to fat, that fat will reveal or manifest itself in novel ways. The politeness to which Haraway refers is evident in how the island is intra-actively shaped. The Fatberg emerges via an openness to the encounter's possibilities, with fat's properties, including its buoyancy, solidification, and rotation in the water, appropriated as practical means for production. Island-building is, within this emergent logic, a skill akin to wood carving or playing the violin, a capacity developed through sustained engagement with an instrument or material (Sennett, 2008).

There is, however, another significant aspect to the text. The logic of the Fatberg not only derives from polite, repeat interactions and observations but through the island's building. In other words, the island provides a framework through which fat's expressions and behaviours are justified, understood, and acted upon. Within this logic, other connected ideas, processes, and activities begin to make sense and gain momentum. Whether designing tools and processes, constructing the floating production site, inviting guest experts to observe and discuss the work, or selling project merchandise for promotion, fundraising, and recruiting participants, every action and activity is motivated by the commitment to help the island and our knowledge of fat to grow. This commitment suggests rationality based on not only empirical but practical and theoretical assumptions and motivations. It implies a mutually responsive practice, where the island-building process informs readings of fat, and readings of fat inform the island-building process. Island-building as a practice emerges through polite, cumulative engagements with a vibrant material.

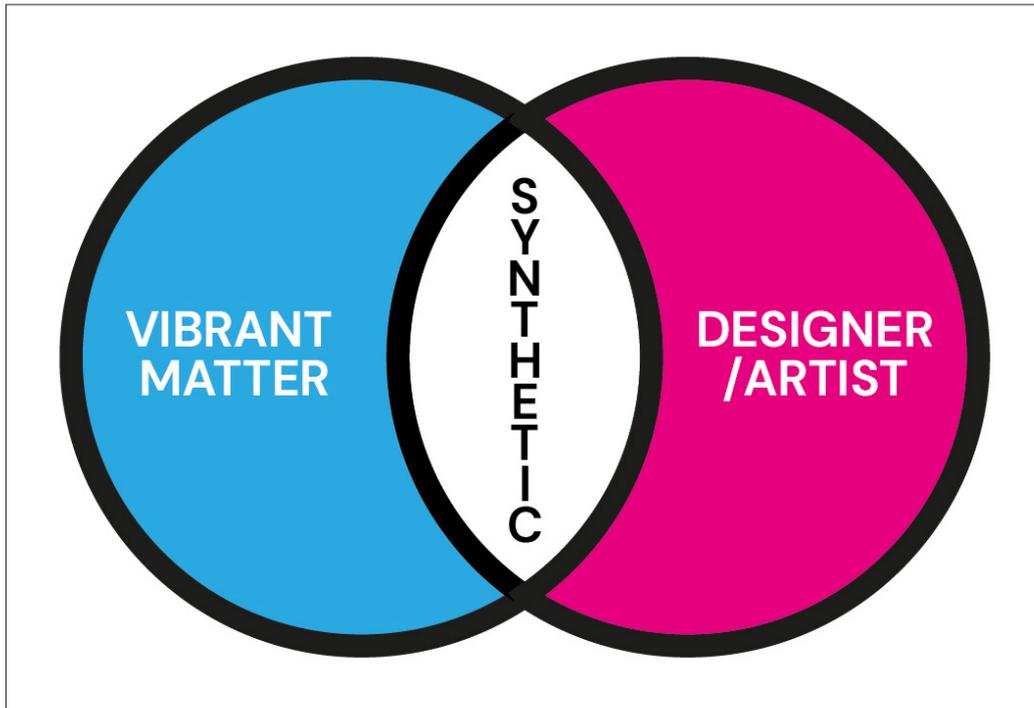


FIGURE 65 The three agencies motivating Fatberg events.

It follows that three forms of agency motivate Fatberg events (Figure 65). First is fat as a vibrant thing or substance. This was particularly evident at *Float Fest* during the island extraction when the Fatberg sometimes appeared to yield, other times resist our attempts to haul it from its tank. The second is the designer/artist's agency. As an object, the Fatberg symbolises my and Arne's ambition to build the island - our agency - projected onto fat. Thereafter, the island as an object and objective shapes how we, and participants, engage with material. Finally, a third, synthetic agency, emerges as the meeting point between designer/artist and material. Here, the Fatberg is granted a fictional agency where Arne and I claim to act as agents for fat. Crucially, as I will explain, the synthetic agency establishes a logic for reading and working with fat in service of island-building while inviting unpredictability; it promotes the spirit of play.

A SYNTHETIC AGENCY

Statements such as "the fat made us do it" (Thompson & Hendriks, 2014a) signal an attempt to adopt a less-anthropocentric position, with fat recognised as an agent that intra-actively contributes to and plays a part in the shaping of events. More than this, the phrase insinuates that fat possesses the status of an agent that directs proceedings. In other words, fat is not a co-worker, equal to other things and beings, but a director, exerting control over activity. The result is that encounters with the nonhuman purportedly define the control or direction of events and their constituent activities and forms of participation. This imaginary synthetic agency does not only signal a polite and watchful engagement with fat. It implies a perceived knowledge and understanding of fat that permits judgement upon what it wants or is assumed to be saying. It means, so to speak, placing oneself in fat's shoes to adopt an alternative view. This involves not merely playing *with* fat but playing *as* fat.

Role-play is a technique where subjects assume temporary identities to understand people better and increase sensitivity or empathy (Ivanovic & Collin, 2006; Kurian, 2013). In Fatberg, Arne and I adopt a philosophical position where fat purportedly speaks to us, pondering, "is this a language we can speak?" (Thompson & Hendriks, 2019). The statement "the fat

made us do it” signals a kind of role-play, where Arne and I claim to understand, speak for and act as agents for fat. Taking the call of matter seriously, in this case, means being open to the possibilities of encounters with fat, then acting upon them by giving voice to fat’s expressions. Thus, the Fatberg, the embodiment of synthetic agency, serves as the meeting point between the agency of fat and designer/artist, suggesting that the two integrate. At the same time, the synthetic agency helps differentiate fat’s agenda – to melt, break, decay – from our own – the desire to build the island – thus supporting activities that are hard to justify if they are solely mine and Arne’s ambitions.

If one was to be cynical, the synthetic agency could be dismissed as simply defending or rationalising unexpected or illogical instances and misbehaviours, hiding behind the mantra “the fat told us to do it”. Rationalising events in this manner undoubtedly provides a way to explain away activities that do not go to plan. For one, it presents a means to excuse the *Float Fest* performance, characterising the damage to the Fatberg as simply fat’s will. Another criticism is that by assigning leadership to the Fatberg, Arne and I are projecting our ambitions onto fat – to help the island grow – making us less attentive to the material’s authentic agency. This is certainly one way of interpreting the calamitous attempt to lift the island from its tank.

While plausible conclusions, they, however, miss the point. I contend that ceding authority to fat opens up the possibility for polite engagements with material. It does so because handing control of events, activities, and forms of participation over to the nonhuman creates the circumstances for chance instances and encounters. The synthetic agency promotes the spirit of play. Within this philosophy, chance instances are not aberrations or errors so much as they occur by design. In this way, the synthetic agency provides a standpoint to reflect upon and rationalise the ordinarily incomprehensible. It implies both an imaginative and reflective conversation with the materials of the situation as part of an ongoing process (Schön, 1991; Sengers & Gaver, 2006). The island provides a framework through which fat and its associated expressions and behaviours are understood. To role-play being an agent for fat in the context

of Fatberg means interpreting fat's expressions, and other associated encounters, in terms of their implications for island-building.

In closing, I have discussed three types of agency motivating Fatberg events: fat as a vibrant material, the designer/artist's agency, and a third, synthetic agency, role-played by my collaborator and I, who claim to understand, speak for and act on behalf of fat. In practical terms, the synthetic agency, which manifests through the island's building, facilitates the coming together of material and designer/artist (and, by extension, participants), providing an underlying philosophy that encourages, structures, and rationalises emergent activities and behaviours. Looking ahead to the discussion, the contrasting agencies provide different vantage points to consider the intricacies of emergent activities. However, as will become apparent, the three agencies sometimes complement, other times compete with one another. Bearing in mind that fat reputedly directs proceedings, what is the synthetic agency's actual purpose and effect?

6.5 DISCUSSING FLOAT FEST

Having established three distinct forms of agency motivating the practice, in the following discussion of *Float Fest*, I consider how these agencies express themselves within this open-ended event. How do they intra-actively shape, or perhaps even confuse, encounters between the Fatberg and participants?

ATTUNING TO THE FATBERG

Visitors to *Float Fest*, particularly those during setup, were predominantly marketgoers who happened upon the project. The market subsequently framed the expectations of visitors who stumbled upon *Float Fest* while browsing the stalls. In this way, setup performed as a cultural roadblock (James & Ruby, 2019, pp. 193–194), existing as a playful interlude within the flea market context, drawing passers-by into dialogue with the Fatberg. The promotional and informative posters and the merchandise display effectively captured visitors' attention and drew them towards the work. Playfully mimicking and appropriating the tropes of

retail and advertising, a much-derided substance was recast not only as a commodity but as a topic for discussion. Similarly, our presence at work, whether chopping and melting fat or towing the pontoons on the water, presented points of interest, enticing passers-by to engage in conversation. What is notable about the resulting encounters is how marketgoers attuned themselves with a play space that echoed the surrounding flea market yet existed separately, with its own distinct philosophy, sites, and activities.

Visitors V1 and V3, for example, overcame their initial sense of surprise, using their knowledge and experience of associated topics or issues to draw a connection between the Fatberg, waste, and recycling. Forming a connection with the Fatberg, the visitors proposed to visit the project website and social media accounts to learn more about the work and follow its progress. Other visitors, specifically V5, attempted to negotiate their role as island co-owner. The merchandise, notably the certificate of co-ownership, acted as a gateway into the Fatberg play space to imagine their relationship with and contribution to the project. Such encounters give substance to the remark that play is never truly detached from the outside world. Instead, play represents an ability to set aside or relax ordinary life rules momentarily. Visitors 1, 3 and 5 attuned to the Fatberg by establishing connections with their knowledge, needs, interests or concerns. They appropriated the Fatberg by bringing their experiences and expectations into the play space. Crucially, they wilfully played along with the idea that it is desirable to build an island of fat.

Naturally, the playful and appropriative spaces and activities were unfathomable, even undetectable, to some visitors. This was prominent in the frequent repositioning of the bench at the shipping container rear. The jumble of materials and furniture used in the preparation and staging of *Float Fest* was, to these individuals, indistinguishable from those of the flea market. Other visitors, who more consciously engaged with the work, struggled to enter the play space, discouraged by their pre-existing assumptions and prejudices. For example, visitor 2 (V2) encountered a substance they proclaimed to be disgusted by, and their expectations were breached. In this case, the visitor did not suspend their disbelief

and play along. Instead, they upheld their everyday frames of reference to make sense of the situation. Initially, this meant reasoning (or joking) that our motivations must be sexual. However, as they spent time with the Fatberg and I shared my thoughts and experiences, their aversion appeared to subside. By asking questions and attuning to the situation's norms and possibilities, V2's attitude toward the Fatberg changed to the extent that they confessed that they wanted "to touch it".

A final, significant encounter occurred with visitor 4 (V4), who intentionally stopped by to see the Fatberg. Like most visitors, their reaction to encountering the island for the first time was one of confusion. However, unlike the others, their sense of bewilderment was not the result of a chance encounter with an unexpected display of fat. Instead, the Fatberg did not match their expectations: "It's not so big". What is interesting about V4 is that they arrived ready to engage with the Fatberg. They were primed to play along. Their disappointment stemmed from the Fatberg failing to correspond with their conceptualisation of an island. Attuning to fat in this instance thus meant balancing their expectations with the present reality.

I conclude that the above encounters do not show how fat revealed itself to these visitors. Instead, they demonstrate how visitors revealed their sensitivities or lack thereof towards fat and how they evolved through encounters with the Fatberg and Arne and me as its representatives. The inference is that the Fatberg, as a participatory object, structures interactions requiring participants to suspend their disbelief and play along in a shared activity or game that reveals their knowledge of and attitude toward fat. Fatberg's diminished presence at the previous events gives credence to this view. In both instances, participants were compelled to make sense of abstract circumstances because they lacked the Fatberg as the embodiment of the relationship between the designer/artist, their vision and fat as vibrant matter.

OPPORTUNE ENCOUNTERS

While the activities in the performance phase created a natural separation between ourselves

as performers and visitors as observers, the activities during setup were more open and receptive to participants' subjectivities, needs, and uses (McCarthy & Wright, 2015). The encounter with visitor 5 (V5) provides an interesting case in point. While the purchase of the certificate of co-ownership and spontaneous recording of the video pledge recognised the co-owners' commitment to the Fatberg, what co-ownership meant, if anything, beyond initial sponsorship, remained ambiguous. However, with ambiguity came the potential for interpretative openness. For V5, the offer to become an island-co-owner was an invitation to negotiate their potential contribution to the work. At the same time, Arne recognised the proposal as a novel opportunity to support and promote the project. The spontaneous introduction of the video pledge represents an effort to exploit a memorable encounter.

In Chapter 3, I argued that Fatberg events can, and often do, drift from their planned trajectory and that this opportunistic quality is a value in itself. What I did not recognise at the time was that opportunism is not the sole preserve of the practitioner. As the encounter with V5 shows, participants bring their unique life experiences and interests to situations or events. The perceived openness of co-ownership meant that the visitor felt able to exploit, and thus offered to contribute to, the project in unforeseen ways. The practitioners' and participants' responses reflect Horst and Michael's (2011) contention that practitioners, participants, and works change and are changed through the event of their coming together. Here, the practitioner and participant maintain a reflective conversation allowing events to co-develop via the actions and ideas of one another. Despite this, a power relation between the practitioner and participant remains. As revealed by the encounter with V5, the practitioner remains open to being open in so far as the products of the encounter are beneficial to the aims and needs of the project. While giving the perception of being open to the readings, interpretations, and appropriation of others, *Float Fest* was, in fact, open to the extent permissible within the logic of the synthetic agency. That is to say, the belief that the island "wants to grow" represents a conceptual framework through which visitors' encounters with the Fatberg as an object and practice are interpreted and subsequently acted upon.

CONFLICTING AGENDAS

I have argued that there are three kinds of agency driving Fatberg events: fat's effect as a vibrant thing or substance; the designer/artist, whose needs and ambitions shape encounters with material; and an imagined, synthetic agency, representing the meeting point between material and maker, where my collaborator and I role-play that fat's expressions inform the direction of events. There are numerous instances across *Float Fest* where fat's vibrancy was unmistakable, not least: the visceral reactions stirred amongst visitors as they encountered the Fatberg; the struggle to hold onto the greasy crate during the parade; the buoyant Fatberg floating with guidance toward the pontoons; or fat's call to the seagulls who instinctively recognised the floating debris as food. However, fat's agency was most keenly felt during the struggle to extract the Fatberg from its tank. The failure to check the day's weather resulted in our failure to anticipate fat doing what fat inevitably does; it softens in the heat. Consequently, the performance unfolded in an improvisatory fashion as we struggled to haul the island from its tank. More importantly, the lapse highlights a shift from adopting politeness towards fat, recognising that fat possesses qualities and abilities that come into play during an encounter (Haraway, 2016), to role-playing a synthetic agency that interprets such encounters in terms of their implications for island-building.

Fatberg events are driven by the principle that the island of fat "wants to grow". This ambition resulted in a practical issue; the island needed relocating, having reached its tank's capacity. The task of moving the island formed the basis of *Float Fest*. Propelled by this imaginary motive, the planned activities formed a logic through which ordinarily incompatible actions and behaviours were justified. This explains the initial three steps of the planned performance - extraction, parade, and docking - tasks that resembled the moving, lifting, and lowering of materials, goods, even large animals by crane. In addition, the synthetic agency provided a perspective from which to interpret chance circumstances and rationalise a practical response. For example, the island's extraction began with a rudimentary attempt to haul the mass from the water by hand using a net. When this proved detrimental to the Fatberg, various tools and strategies were improvised, such as

the shopping bag sling, enacting an approach that was both reflexive (Schön, 1991) and opportunistic (Riemer, 1977). In this way, an activity that may have otherwise ended abruptly averted disaster and turned adversity into an advantage.

However, the decision to save the Fatberg exposes a tension between the three types of agency. Despite the apparent damage to the Fatberg, our resolve to continue the performance demonstrates the expression of our agency as designer/artists rather than fat or Fatberg's will to escape the tank. This is corroborated by Arne's exclamation that the Fatberg was "ruined" in the struggle. If one practices politeness towards fat, then the idea that the Fatberg was ruined is counter to the substance's behaviour. From this view, fat, rather poetically, expressed its agency by causing the Fatberg to shed its outer layers like a butterfly emerging from a cocoon. From another perspective, the Fatberg's breaking apart was reminiscent of a petulant toddler who shed their coat in defiance at being lifted. This latter interpretation implies that the island extraction was more than a battle between fat's will and our own. In this context, the Fatberg appeared conflicted, caught between two competing agendas, or perhaps daunted by the need to shed its body mass to grow. Whatever the reading, here lies a contradiction between what fat did and what we as agents claimed the Fatberg wanted to do. It implies that the Fatberg was not ruined, which testifies to Arne and I interpreting this behaviour concerning its implications for island-building. On the contrary, what materialised was what fat and the Fatberg chose to do. While this conclusion leans toward the fanciful, the inference is that even fictions have agency that must be factored into rationalisations of collaborative engagements between people and vibrant matter.

In short, our actions and utterances show fat's agency, the designer/artist's agency and Fatberg's synthetic agency working at cross-purposes. Fat signalled one thing, and we purportedly opted for another on its behalf as fat's representatives. It characterises a "synthetic-synthetic agency", where our desire to build the island ultimately supersedes other voices and expressions. However, that is not to say that the practice is not open to chance instances and encounters. The tension between the different types of agency and

V5's exploration of the nature of the nascent Fatberg community points to an opportunistic practice that appropriates whatever knowledge, ideas, or activities seem advantageous at that moment. From this perspective, the synthetic agency primarily provides a means to structure and capitalise upon chance occurrences. It does so not by a set of rules but through encounters with a shared object, the Fatberg, which serves as a meeting point between fat and the designer/artists, and visitors, creating the conditions for open and situated play.

PLAYING WITH DISASTER

An unexpected consequence of the near-disastrous performance was the sense of empathy stirred amongst those in attendance. The audience member who offered their assistance when improvising a functional sling, and the increase in co-owners, which more than doubled following the performance, point to a spirit of collegiality catalysed by the encounter. The shared, farcical experience, the inescapable damage to the Fatberg, and the successful retrieval of the situation, ostensibly helped trigger empathy and solidarity amongst participants.

Discussing the clown's acute understanding of empathic attunement and the notion of a collective "laugh of recognition", Berky and Barbre (2000) note that the pratfall reverses the expected, enabling something new to happen. In terms of the *Float Fest* performance, the fine line between success and failure arguably stimulated a collective empathic experience. The chaos that materialised did not seek to embarrass but rather to invite, seeking to understand by being with, not being at (Berky & Barbre, 2000). This follows Haraway's (2016) cultivation of politeness, whereby being open to the possibilities of the encounter, one cultivates the virtue of letting those who visit intra-actively shape what occurs (p. 127). It means that what transpired was not the Fatberg's, nor mine or Arne's brush with disaster, but a brush with disaster for all those in attendance.

Above all, through this becoming together, through the uncertainty, new ideas, tools, and alliances emerged. The relatively open nature of the event presented an entanglement of risk and opportunity. It is not an exaggeration to state that *Float Fest* was notable for its instability.

There was tension caused by the event's simultaneous symmetry and competition with the adjacent market. There was the opportunistic co-creation of the terms of island co-ownership. Further, fat's expressions as vibrant matter were clearly at odds with the planned performance. The peculiarity of the event was that chance departures and additions were frequent and arguably encouraged. The nature and regularity of these chance occurrences suggest that they were not only necessary but desirable and perhaps even the critical feature of the event.

Central to this play with risk were the three contrasting agencies. Fat's vibrancy provided a dynamism and instability that inspired encounters between people and material. The designer/artist's agency, symbolised by the Fatberg, shaped how people engaged with fat. Finally, the synthetic agency functioned as an underlying philosophy and conceptual framework to create, read, and react upon (or not) encounters between people and material. It structured events and enabled the appropriation of chance occurrences such as V5's negotiation of the terms of co-ownership or the near-disastrous performance. Together, the three agencies required visitors to play along that it was desirable to build the island of fat. For this reason, I contend that *Float Fest* was unstable by design. By remaining wide open to the possibilities of chance instances and encounters, the practice played on the border between risk and opportunity as a condition for creativity and experimentation.

6.6 CONCLUSION

Building upon the previously established theory of making with vibrant matter, *Float Fest*, the second in the triptych of events, has provided the context to examine the practical implications of recognising fat as an agent. Designed to mark the inauguration of the newly completed floating production site, the event centred on the preparation and performance of the Fatberg's transfer from tank to open water. I advanced that there were three different agencies in play during the event: fat as a lively, affective, signalling thing or substance (Bennett, 2010); the designer/artist, who conceptually and tangibly creates the Fatberg; and a third, synthetic agency (Figure 66), embodied by the Fatberg which Arne and I claim directs proceedings. The

distinction prompted the study of visitors' encounters with the Fatberg to expose the emergent logic and effects of practising polite, cumulative engagements with vibrant matter.

Role-playing is a technique where subjects temporarily assume an identity and mindset to promote understanding and empathy (Ivanovic & Collin, 2006; Kurian, 2013). With this definition, the synthetic agency is characterised as an attempt to adopt a non-anthropocentric position, to empathise with and promote empathy toward an often-derided substance. Thus, the goal to build the world's first purpose-built island of fat and associated activities, including the invitation to become an island co-owner, is a provocation, a call to reflect upon a fundamental, life-enabling substance. Practically, the island-building objective provides a framework through which fat's expressions are interpreted and acted upon. The discussion in section 6.5 thus examined how the three different agencies transpire and intra-actively shape encounters between visitors and the Fatberg.

Float Fest was an event marked by instability (Figure 66). Indeed, instability is an apt term for describing various instances across the event and appropriate addition to the lexicon. Coinciding with the surrounding IJ Hallen flea market, the market framed the expectations of most visitors who happened upon *Float Fest* by chance while browsing the stalls. The simultaneous confrontation and echoes between the flea market and the actions and activities displayed during the setup stage required visitors to orient themselves relative to two competing yet complementary events. This tension produced a range of responses as visitors attuned to, and even capitalised upon, the Fatberg and its (our) ambitions. Reactions such as V3's sharing of their knowledge on recycled waste, the audience member offering help when extracting the Fatberg from the tank, or the increased interest in co-ownership following the near calamitous performance, demonstrate visitors' attempts to attune to the practice through a perceived shared interest or experience.

I reason that this instability meant that visitors interpreted *Float Fest* as literally and figuratively open to interpretation. Perhaps the most fitting demonstration was V5's attempt

to negotiate the terms of their island co-ownership. Because of a perceived instability, the visitor sensed an opportunity concerning their personal interests. The proposal to manage the project's social media accounts represents V5's creative attempt to resolve and capitalise on unstable circumstances by establishing a role for themselves within a nascent community.

Instability also refers to Fatberg's material expressions and subsequent interactions. Fat's vibrancy and the substance doing what it naturally does in high temperatures created the unstable conditions for novel ideas, tools, and alliances to emerge. The hasty, improvised way Arne and I interacted with and attempted to care for a material that quite literally broke apart, melted, and slipped out of our grasp resulted in a performance that teetered on the brink of failure. Moreover, our clumsy attempt to manage fat's instability demonstrated the real and fictional agencies working at cross-purposes. The material's actual behaviour contradicted fat's imagined desire to become an island. I advance that this tension and flirtation with disaster had a fortuitous effect. It helped to stimulate empathy toward the Fatberg. Through this shared experience, participants' concerns were, if only momentarily, attuned to fat, not directed at fat, as is customary. However, because the key tenet of the synthetic agency is that Arne and I claim to be directed by and speak for fat, participants' attunement to the Fatberg was partially informed by how we as fat's representatives managed the material's instability and gave voice to its expressions. Attuning to the Fatberg as a third, fictional character meant attuning to fat and attuning to, or rather playing along with, Arne and I as a purported extension of the material. From this perspective, the synthetic agency helped structure and reconcile the conflicting desires of people and material while allowing for chance occurrences and readings.

However, the most striking aspect of this open and unstable event was that chance departures and embellishments were numerous and even encouraged. In Chapter 4, I introduced Michael's (2012a) assertion that engagement events often contain happenings or misbehaviours that, in some way, overflow the empirical, analytic, or political framing of events. The overflow theory helped explain participants' curtailment and reshaping of

TERM	DEFINITION
Instability	To be unstable; prone to change (Reber et al., 2009). Refers to the variability of biological substances and the extent to which events are open to external effects and chance occurrences.
Synthetic agency	Describes a third, fictional agency, embodied by the Fatberg, facilitating the coming together of material and designer/artist. It explains the role-play performed in Fatberg events where Arne and I claim to be directed by and speak on behalf of fat. The synthetic agency encourages a way of thinking about and engaging with fat that perpetuates novel happenings and enables reading embodied and situated experiences with people and material in terms of their serviceability for island-building.

FIGURE 66 Instability and synthetic agency are the final additions to the lexicon.

CHAPTER 7

Chewing the fat:

Discussion and conclusions

the *Fat and Food* event into a conventional form. At first glance, overspilling appears an apt description of the activities and encounters observed at *Float Fest*, which similarly overspilt the event's frame. Given how open and unstable Fatberg events appear, I argue that chance encounters and instances cannot be interpreted in this way. Instead, the synthetic agency serves as an underlying philosophy and logic through which planned and chance actions, activities and behaviours are interpreted and rationalised. Driving this logic is a participatory object - the Fatberg - which structures interactions, insisting that people suspend their disbelief and play along that is desirable and necessary to build an island of fat. As the chaotic island transfer demonstrates, the practical purpose of the synthetic agency is not to fantasise or play-act but to read embodied and situated experiences with people and material in terms of their serviceability for island-building. It means that activities such as the extraction and parade of the island of fat and associated materials and items such as the certificates of co-ownership are not only justified and gain meaning through this logic. Importantly, the synthetic agency encourages a way of thinking about and engaging with fat that perpetuates novel happenings. As the diversity of responses to the Fatberg at *Float Fest* show, how people respond to and play along with such happenings sheds light on their orientation towards fat as a vibrant material and related socio-cultural-environmental concerns.

7.1 INTRODUCTION

Through the research, I have developed an understanding of Fatberg as a material-oriented participatory practice. A practice emerged predicated on open and open-ended engagements with unstable, vibrant matter by examining a trilogy of events. The events required participants to not only recognise fat as an active collaborator but grant it a synthetic, fictionalised agency that served as an underlying philosophy and logic through which the material's actions and behaviours were interpreted and rationalised. It follows that Fatberg events were not just susceptible to but actively encouraged chance incidents and encounters as a condition for creative enquiry. The research has emphasised the contribution of fat as a participant and collaborator within the three events, precipitating a shift from an initial concern with hybridity and interdisciplinarity to notions of material participation. Consequently, the research presents practical learnings and resources for researchers and practitioners interested in material-oriented participatory practices. I forward that this thesis makes four notable contributions.

The first contribution is the lexicon of terms, which submits a vocabulary and blueprint for writing empirical and analytical accounts of events centred on making with vibrant matter.

The second concerns the degree of openness, appropriation and instability designed into Fatberg events. Referring to Michael's (2012a) notion of overflows, I argued that the participants' collective focus on the panel discussion at *Fat and Food* demonstrated their ability to overcome their different values and interests to initiate a nascent community of practice. Similarly, at *Float Fest*, the calamitous island transfer promoted empathy and collegiality amongst audience members. I assert that Fatberg events are necessarily open and unstable. They actively encourage chance additions and departures to provoke mindful engagements with vibrant material. The result is a practice that possesses an innate resilience to overflows and digressions, presenting a model and insight into the effects of material participation.

The third contribution involves scrutinising practices that claim to exercise material participation as a form of conceptual-analytical inquiry. Providing warts-and-all accounts of practice activities, I submit that artists and designers can practically demonstrate the value of material-oriented participatory practices beyond serviceable products. This, however, means addressing the complexities and messiness of such practices to expose what they entail and produce. I forward that Fatberg events provide a reference point for creating space for and studying the actual effects and tensions that arise from embodied and situated encounters between people and material.

The fourth contribution concerns the practical effects of the fictionalised, synthetic agency. The research has shown that the synthetic agency functioned as a meeting point between people and material, which inspired and structured chance events. However, at *Float Fest*, the calamitous island transfer revealed a tension between human and nonhuman agents' real and imagined expressions. The incident signals that when interpreting such encounters, we must be cognisant about where the real agency of people and material begins and ends. I subsequently reason that fictions have agency that must be accounted for when deciphering entanglements between people and vibrant matter.

In this concluding chapter, I discuss the key learnings and insights revealed by the research, reflecting upon the opportunities and challenges they present for material-oriented participatory practice to foreground the study's contribution to interdisciplinary, participatory research. The word *hufferproof*, translated as idiot-proof, is introduced as an analytical frame and overarching theme to elaborate on these findings. I consider Fatberg's contributions to event-based research explaining how the established concepts and methods provide valuable resources for the production, delivery and analysis of participatory activities that harness the instability and dynamism of living matter. Finally, I present recommendations for developing these resources and avenues for further research.

7.2 THESIS SUMMARY

The primary aim of this thesis was to examine the discrete features, mechanisms, and logic of Fatberg events to establish its merits as a form of interdisciplinary, participatory research. At the outset, I characterised Fatberg as a playful practice that emphasises the agency of fat as a driving influence. Recognising the distinctive backgrounds Arne and I come from (art, design and public engagement with science and technology (PEST) respectively) and the contexts in which the practice operates, I defined Fatberg as a hybrid practice that appropriates the materials and concepts of science yet operates as an independent, creative, participatory research. I subsequently asked if Fatberg events represent a practice indefinable as PEST, design, or art, where should this practice be situated, and how does it present an innovative form of participatory research?

Three practice features emerged from an initial discourse analysis: a dialogic space for fat, fat as a construction material, and fat as an agent. Each practice feature specified a distinct approach toward or perspective on material. Together, they pointed to an open and open-ended practice whose processes and activities emerged through situated engagements with and critical reflection upon a vibrant, socio-cultural, and biological material. This led me to ponder, what are the methods and logic of this practice, and how do they advance novel tactics and methodologies for interdisciplinary event-based research?

The three features influenced a selection of theories, concepts and practices drawn from art, design, and sociology, informing the creation of a lexicon of terms in support of account writing and the analysis of practice activities. To study the basis of this playful practice, I looked to Huizinga's (1949/2016) treatise on play. This established a set of descriptive terms for identifying the features and boundaries of playful activity - the ecology of play (Sicart, 2014) - and studying participatory engagements; why and how we play. I then introduced a series of theoretical and practical examples, including defamiliarisation, the carnivalesque, critical design, and Garfinkel's breaching experiments, to show play's transgressive potential; how play as an activity and attitude can be used as a form of situated critique

and knowledge creation. Discussing Kaprow's artistic happenings and Beuys's expanded concepts of art and material, I demonstrated how play's transgressive qualities had been appropriated as a philosophy and method within creative practices to reconnect with the habitual and spark social transformation.

The resulting lexicon provided an analytical perspective for reviewing Fatberg events and informed a design methodology for delivering and capturing practice activities. So followed a mixed-methods approach to the research capitalising on my situational familiarity as a researcher-practitioner. Using storytelling to trouble the relations between self and other and present a more holistic view of practice, the resulting methodology recognised that Fatberg events are contingent upon an assemblage of human and nonhuman agents (Clifford, 1983; Denshire, 2014; Till, 2005, 2009). Under cover of participant observation, the approach combined autobiographical and ethnographic accounts of practice by creating sets of annotated slides to shape a narrative depiction of activity.

In the substantive chapters, I examined a triptych of Fatberg events performed in conjunction with a residency at the NDSM shipyard and cultural institute in Amsterdam, the Netherlands. Each chapter centred on one of the three practice features, establishing their practical and theoretical underpinnings, and examining their implications for practising participatory events.

Chapter 4 centred on *Fat and Food*, which provided the context to examine the characteristics of a dialogic space for fat. This loosely scripted event explored fat's relationship with nutrition and health by combining a panel discussion with a sensory performance and activities to situate dialogue within an embodied, material experience. However, as *Fat and Food* unfolded, the participants worked together to discipline proceedings. Simultaneously accepting and evading the openness offered, they imposed a frame built on their perception of a panel discussion to de-risk the event. To deepen my understanding of this event, I referenced McCarthy and Wright's (2015) dialogical approach to participatory practice

and Ratto's (2011a; 2019; 2009) critical making as corresponding conceptual-analytical participatory practices. This helped establish the features of dialogic space to support the study of encounters between people and material. In the discussion, I argued that the participants' curtailment of proceedings represented a distinct form of overflow and nascent community of practice, albeit a community that dismissed an alternative view upon material.

Chapter 5 fast-forwarded to the summer's final event, *DesignLAB*, to study fat as a construction material. This explorative workshop doubled as the kick-off to a semester-long fat-centric programme with undergraduate students from Gerrit Rietveld Academy. The chapter centred on the students' exploration of the ruined production site, which obliged them to evaluate the discovered materials and tools in terms of the planned island rebuild and as inspiration for personal projects investigating fat. To explain fat as a construction material, I examined Foote and Verhoeven's (2019) *Tactics for a more-than-human maker culture* and bioart as conceptual-analytical practices grounded in embodied and situated material experience. Hence making with vibrant matter was coined as a term describing practices that harness the dynamism and instability of living material as the catalyst and site for collective thought and action. With this reference frame, *DesignLAB* offered the setting to examine making-oriented engagements with the nonhuman and the students' attunement to and wilful belief in the Fatberg narrative and vibrancy of fat. This chapter marked a turning point in the research. Here, I came to recognise fat not only as a subject and medium but as a participant and collaborator within Fatberg events. Thus, the research shifted from interdisciplinarity and collaboration toward material participation: the interrelations and collaboration between people and material.

Finally, Chapter 6 returned to the second event in the triptych to consider fat as an agent. *Float Fest* involved the preparation and performance of the island of fat's transfer to its newly completed floating production site. What transpired was an event marked by openness and instability. The tension between our activities and the surrounding flea market, the expectations and interests of marketgoers, and fat's expressions, encouraged chance

departures and embellishments. This required participants to suspend their disbelief and play along that it was necessary to build an island of fat. To consider fat's agency, I referred to Haraway (2016) and Despret's (2014) practising of politeness towards things to identify three types of agency that motivate Fatberg events: fat as a vibrant material, the designer/artist's agency, and a synthetic agency, role played by Arne and I, who claim to understand, speak for and act on behalf of fat. *Float Fest* subsequently presented the backdrop to study the practical consequences of material participation and how the synthetic agency shaped encounters between people and vibrant material.

7.3 HUFTERPROOFNESS

Mate, this sucks and is so incredibly unlucky. But as always, I'm confident we can turn a negative into a positive ;) I've been speaking with my dad (who was an engineer) about other methods for securely tying up the pontoons and have some ideas using metal rope. As I mentioned, I'll fly back on the 3rd of September and will leave the 4th open to be at NDSM. This might be a good moment to switch to a new fastening method. What do you think?

As far as rebuilding FATBERG, we know what to do, BUT this is possibly a good moment to think carefully about how to build the island so it's more robust. For example, perhaps it's wise to only use the 70/30 blend? We also previously considered "reinforcing" the fat with another material, e.g., hair, and this might be worth looking at once more. Both ideas naturally create more work (e.g., rendering fat), but given that we will have extra hands from September thanks to your students, I am confident we can manage things in a way where Fatberg comes back better than ever.

Thanks, and hope you're enjoying Ko Tao!

(M. Thompson, personal communication, 13 August 2017)

While the damage to the Fatberg and floating production site in the weeks after *Float Fest* was regrettable, the disruption was temporary. With the help of the DesignLAB students, the floating pontoons were returned to their original site and configuration, and the walls of the shipping container studio decorated with a fresh layer of posters. The Fatberg was rebuilt from the scattered remains and quickly surpassed its starting size and weight. The lasting consequence of the catastrophe was the opportunities it created to progress the practice. As the above communication shows, the events prompted reflection on the island-building process and how the nascent collaboration with the DesignLAB department might benefit the island's growth. However, our immediate concern was protecting the permanently accessible site and public artwork. Discussions with NDSM Foundation thus focused on minimising vandalism and making the Fatberg "hufferproof".

In Dutch, *huffer* describes a rude, bad, or idiotic person; a shithead, asshole, jerk, or moron (Van Dale, n.d.-a). *Huffer* is also used to form the compound word *hufferproof*, or vandal-proof in English (Van Dale, n.d.-b); the ability to withstand vandalism and generally antisocial behaviour, to be idiot-proof. "Hufferproofness" is a useful concept not because it represents an anecdotal attempt to safeguard the Fatberg. Instead, hufferproofness speaks to playfulness, the appropriative nature of play. It refers to Stengers' (2005) concern with the idiot, whose misbehaviour "resists the consensual way in which the situation is presented" (p. 994).

What is significant about Fatberg events is that idiocy, in the Stengers sense, occurs in various ways. For example, idiocy is discernible in the doings of fat, whose transformations and apparent misbehaviour affects the unfolding of events. In these circumstances, fat embodies the idiot, whose actions challenge the conduct of participants and their relations with material. Idiocy also manifests through encounters with the island, whose presence precipitates a range of actions, activities, and participant behaviours distinct from everyday experience. Further, idiocy is embodied by the synthetic agency, which provides an underlying logic and framework to structure and apprehend the often-incomprehensible encounters between people and vibrant matter. In short, instead of merely recognising the idiot, Fatberg events empower the idiot.

They permit the idiot to play. The implication is that because Fatberg events assimilate the actions of idiots, they are, for all intents and purposes, hufferproof. This resonates with Horst and Michael's (2011) contention that idiotic behaviour is productive because it provides a means to complicate and thus rethink the idiosyncrasies of participation. I argue that hufferproofness is a relevant concept because it helps us consider what it means to incorporate idiots and idiocy in participatory events. This leads me to ask: in what ways are Fatberg events idiot-proof? In the following section, hufferproofness provides a narrative thread that helps align and expound the key insights and characteristics emerging throughout the research.

7.4 INSIGHTS AND METHODOLOGICAL CONTRIBUTIONS

This study makes a timely contribution to event-based practice research because it provides both empirical accounts of practice and practical tools and methods concerning entanglements between people and material. This, I contend, results in four original contributions: a lexicon of terms supporting account writing and analysis of events rooted in material participation; insight into the effects of employing openness and instability to inspire mindful engagements with material; scrutiny of art/design practices that claim to recognise nonhuman agency; and the synthetic agency as a method to foster and decipher engagements between people and vibrant matter.

A LEXICON FOR EVENTS CENTRED ON MATERIAL PARTICIPATION

An introductory discourse analysis pinpointed three discrete practice features motivating Fatberg events. In Chapter 2, the features motivated the selection of a range of art, design, and sociological literature and practices to shape a lexicon of terms for writing empirical and analytical accounts of practice. The purpose of the lexicon was not to justify Fatberg as a practice but to examine its features and learn from its distinct form of material-oriented enquiry. This resulted in a lexicon that helped describe incidents and provoked critical reflection upon event activity and the efficacy of the terms, resulting in revisions and additions. Moreover, it provided a standard to reflect upon the features and dimensions of

events and describe the impromptu goings-on within material-led practices. Limitations and gaps within the lexicon were revealed through its use, prompting the sourcing or creation of additional terms to support account writing and analysis and provide deeper insight. Thus, the lexicon has functioned as a resource and blueprint for thinking about the often hard to decipher goings-on within and products of events centred on making with vibrant matter. It has performed as a serviceable prototype, a work-in-progress, refined and expanded upon through its application.

Concerning the lexicon's contribution to event-based practice research, it should be stressed that it is a bespoke tool germane to Fatberg events. Be that as it may, it presents a resource that might be appropriated to suit other event-based practices. The practical and provisional nature of the lexicon means that it offers a benchmark and template that practitioners might edit and expand upon to support narrative and analytical accounts of interdisciplinary research events. As the research has shown, specific terms and concepts naturally come to the fore according to the practice activity's particularities. The lexicon's value lies in its versatility, with the initial set of terms open to refinements and additions as practitioners develop their practice accounts. Its primary contribution is offering a foundational vocabulary to describe and unpick the intricacies of engagements between people and vibrant matter. My hope is that the final iteration of the lexicon (see the Appendix) proves a practical resource and catalyst for open and honest reflection upon the consequences of practices and events that claim to collaborate with lively and unstable biological material.

INSTABILITY AS A CONDITION OF MATERIAL PARTICIPATION

Throughout the research, I have described Fatberg as a practice emphasising open and open-ended encounters with a vibrant, socio-cultural, and biological material. I identified this as a dialogic space for fat and a distinct practice feature. I expanded on this conjecture by establishing a parallel between McCarthy and Wright's (2015) dialogical approach to participatory practice and Ratto & Hockema's (2009) characterisation of critical making. So followed a description of dialogic space as a participatory approach emphasising

enquiry, inclusivity, openness and open-endedness, with the prospect of experiences and meanings being both plural and unresolved. Crucially, in Fatberg, fat is a subject matter, construction material and recognised participant whose expressions and meanings actively contribute to events. In short, Fatberg's dialogic space exploits fat's conceptual and corporeal presence (embodied by the island of fat) to promote critical reflection, improvisation, and collaboration between people and material. However, the study has demonstrated that Fatberg events are susceptible to chance occurrences. The diversity and frequency of such instances, whether participants refocusing activities, marketgoers reimagining the terms of island co-ownership, the calamitous island transfer, or the razing of the floating production site, indicate that Fatberg events are predisposed to disturbances, diversions, and overflows. This, I have argued, is an unavoidable feature of making-oriented practices that harness the vibrancy and instability of biological materials and processes. Characterising the approach employed within Fatberg events as making with vibrant matter, I reasoned that practices that embrace material participation are purposefully unstable because variability encourages reflective, imaginative, and collaborative engagements with material and associated socio-cultural-environmental concerns. In this context, chance departures and embellishments are not undesirable by-products of life-based practices but essential to nurturing mindful engagements with material.

Discussing engagement events' susceptibility to overflowing, Michael (2012a) asserts that there is often "a tacit process of sanitisation whereby the engagement event is cleaned up so that the existing methodological, conceptual, and institutional frames of the engagement event remain unchallenged" (p. 529). Studying Fatberg events, I have shown that the practices' methodological, conceptual, and institutional frames typically adapt to and even absorb chance happenings and encounters. This, counter to Michael's characterisation of engagement events, does not signal a process of sanitisation but assimilation. I submit that Fatberg events possess an inherent resilience to disturbances and overflows, with resilience expressed through how they accommodate, absorb, and bend with chance occurrences. Fatberg events are, in effect, hufferproof.

Hufferproofness connects the research to my earlier examination of Garfinkel's (1967/1984) studies in ethnomethodology. Breaching experiments appropriate and distort everyday social situations to draw attention to the underlying frames and assumptions that compose commonplace interactions. Fatberg events are comparable to breaching experiments because they unsettle participants by taking them outside their typical frame of reference. However, whereas Garfinkel's objective was to expose the frameworks of everyday social interactions, Fatberg events destabilise participants as a condition for collaborative creative enquiry. These events typically consist of multiple, loosely scripted, or incomplete activities that participants interpret and appropriate. They actively encourage chance encounters and digressions.

For this reason, I argue that Fatberg events are effectively beyond breaches; they are hufferproof. Evidence for this exists across the three practice events. For instance, at *Fat and Food*, the variegated setting, ambiguous sensory activities, and the obscure purpose impelled participants to synthesise their different value centres to form a collective resolve and focus the event. Similarly, the derelict production site, loosely defined project brief and nonsensical Fatberg narrative required the DesignLAB students to creatively interpret the echoes of prior activity to assume co-authorship of the project and (re)design the island. While at *Float Fest*, the marketgoer's negotiation of the terms of island co-ownership and the impromptu video-selfie revealed that opportunism could be mutually beneficial. Moreover, the near-disastrous island extraction adventitiously fostered empathy and collegiality amongst participants. In each instance, participants attuned to the present reality by projecting their interests and motivations onto the open and unstable play space to establish a nascent community of practice.

Be that as it may, the triptych also demonstrates a limit to hufferproofness. The obvious example is the destruction of the floating production site between the *Float Fest* and *DesignLAB* events. Outside the confines of Fatberg events, the island of fat and floating production site were exposed to the weather and impulses of visitors to NDSM wharf. While the wanton destruction presents a valid reaction to the work, particularly when applying



FIGURE 67 Top *Refuge for Resurgence* (2021) by Superflux. From Superflux. Retrieved from: https://superflux.in/wp-content/uploads/2021/06/SF_VB-Centre-Wide-2000x1333.jpg. Copyright 2021 by Superflux.

FIGURE 68 Bottom *The Marble Arch Mound* (2021) by MVRDV [Photo credit: Michael Thompson].

Stengers' (2005) conceptualisation of idiotic behaviour, the Fatberg, stripped of an event to contextualise and explain itself, proved less hufterproof, more "hufterprone". However, significant about the mishap is that it led to an event (*DesignLAB*) that sought to use the work's destruction to challenge and shape new communities of practice. This signals a practice that is both reflexive (Schön, 1991) and opportunistic (Riemer, 1977), where methods and perspectives adapt, or in some instances emerge, in response to the circumstances.

It follows that Fatberg events evolve according to a mix of motivations and happenings. These primarily concern what Arne and I, as practitioners and proclaimed agents for fat, deem conducive to island-building. However, as the examples indicate, this implies being open to participants' needs, interests, and whims, provided they suit the practice's broader objectives. The result is that visitors are casually drawn into proceedings as collaborators, contributing to and sharing responsibility for the work. Practically, this means that an event's hufterproofness is determined by the reflexive ability of the practitioner. In other words, Fatberg events are contingent upon the practitioner's ability to identify and respond to chance instances and opportunities, their proficiency at practising politeness (Haraway, 2016).

MATERIAL PARTICIPATION IN PRACTICE

Concluding the research, I have been struck by the sudden increase in art and design projects promoting multispecies engagements. As wildfires swept across California and swathes of Western Australia in 2021, the response of artists and designers to the reality of climate change was, often citing Haraway, to champion the nonhuman, asserting that consideration of other agencies and events is essential to nurturing an ecological mindset and climate-resilient society. Design for the nonhuman has gone mainstream.

An example of such work is *Refuge for Resurgence* by speculative designers Superflux (2021). First presented at the Biennale Architettura, La Biennale Di Venezia 2021, the work (Figure 67), described as an invitation to a more-than-human future, consisted of a dining table laid for an imagined multispecies banquet. The spectator, entering the installation,

was said to encounter a chorus recital of a poem introducing the origins and story of the banquet (Superflux, 2021). In the absence of living guests, fourteen species-specific place settings adorn the table. Each imaginary guest, including a man, woman, child, fox, rat, wasp, pigeon, cow, wild boar, snake, beaver, wolf, raven, and mushroom, was presented with a different food offering and bespoke cutlery produced from reclaimed materials, and an illustrated ceramic plate, depicting their journey of survival (Hahn, 2021; Superflux, 2021). With their evocative installation, the designers proposed that instead of tackling climate change through the established frameworks and philosophies of the Anthropocene, we might mitigate its effects by reimagining our relationship with nature (Superflux, 2021). The work is a call to practice politeness toward nonhumans, to recognise that they too possess qualities and abilities that contribute to events (Haraway, 2016).

However, despite the promise of works that embrace multispecies agency, the concern is that they, like several works discussed in the research, perpetuate the rhetoric of the effects of nonhuman agency instead of sharing empirical evidence and reflection on what such practices entail and produce. The trouble with *Refuge for Resurgence* is that it epitomises the aesthetics of engagement. The designers, quite literally, offer nonhumans a seat at the table – a seat they are, in practice, unable to sit in – play-acting multispecies participation without engaging with the messiness and complexity of such encounters. Perhaps anticipating this criticism, the designers describe the work as “an invocation and a prayer for a different kind of world” (Superflux, 2021), a call-to-arms rather than insight into an imagined non-anthropocentric world.

The *Marble Arch Mound* (Figure 68) arguably offers a more insightful example of multispecies participation. Commissioned by Westminster City Council and designed by Dutch architectural studio MVRDV, the mound, a temporary scaffolding-cum-green-wall construction built alongside the Marble Arch in London, inspired much derision in the summer of 2021. In a rush to open to the public, the mound could not hide its immaturity with the vegetation lacking the time and conditions to bed in and grow, exacerbated by

a heatwave (Ravenscroft, 2021). Instead of the lush greenery depicted in promotional renderings, visitors encountered a “thin sedum matting clinging desperately to the sheer walls of the structure, punctuated by occasional spindly trees” (Wainwright, 2021). In other words, this recreation of the great outdoors stood as an archetype of the dynamism and instability of biological matter. It was as if this semi-living structure refused to be shoehorned between the confluence of roads and applied as a greenwash to lure shoppers toward London’s busiest shopping street. Like the calamitous island transfer, the *Marble Arch Mound* exposes the tension between what vibrant matter does and what the designers who create and perpetuate the myth of vibrant matter claim it does. In both cases, it is as if vibrant matter resists the forced agency of people. This signifies that to make with vibrant matter, we must learn to listen to and work with the proclivities of nonhuman agents “with trajectories, propensities, or tendencies of their own” (Bennett, 2010, p. viii). The mound exemplifies the difficult and potentially embarrassing discussions that can emerge from attempts to harness vibrant matter. This is not something to shy away from. If, as Superflux propose, we must reimagine our relationship with nature to mitigate against climate change, difficult and embarrassing discussions are unavoidable and necessary.

I submit that Fatberg events offer a reference point for practising and studying the effects of material participation. In Chapter 5, I coined the term “making with vibrant matter” to describe making-oriented practices that harness the instability and dynamism of biological materials and processes as the catalyst and site for collaborative enquiry. Making with vibrant matter implies coming to view matter not only as a medium but as a subject and collaborator. As I have shown, human and nonhuman participants at Fatberg events unite through a shared process of making and the products of such activities. I have argued that this requires participants to suspend their disbelief (Coleridge, 1817) and play along that building an island of fat is desirable and necessary.

The clearest example was the three attitudes observed at the *DesignLAB* workshop. The pragmatic students readily accepted the Fatberg narrative, which provided a logic to interpret

and structure the echoes of prior activity. This helped the group successfully recreate the island-building process, empowering them to submit novel ideas and methods to assume co-authorship of the project. By contrast, the intuitive students regarded the Fatberg narrative as the starting point for material exploration. However, in their case, the mix of locations, material agencies, and the abstract narrative and task conspired to produce a defamiliarising effect. This caused the students to look upon fat anew, prompting numerous proposals asserting their creative vision on the work. Finally, the non-participating students' inventive problem making and sidestepping of the explorative task represented a refusal to set aside their beliefs and engage with vibrant material momentarily. The three attitudes thus demonstrated the students' adherence to and politeness (or lack thereof) toward material agency.

An apprehension toward vibrant matter was also evident at *Fat and Food*. The guest experts and participants gravitated toward the panel discussion to stabilise the open and ambiguous event. This relegated the risky sensory activities to the margins. While the groups' co-opting and familiarising of the event represented an emerging community of practice, I argued that the sidestepping of the sensory activities meant that the participants forewent a less anthropocentric, more holistic view of material. Instead, the group restored familiar themes and frames of reference, adhering to the conventional idea of fat rather than the enigmatic vision embodied by the absent Fatberg. This signals politeness toward the established identity of fat but the rejection of an alternative embodied experience and view.

Float Fest, much like *DesignLAB*, revealed participants' varied adherence to material agency. Because *Float Fest* occurred as an event within an event, the chance nature of encounters required marketgoers to expressly play along (or reject) that it was desirable to build an island of fat. While some struggled to comprehend what they saw and heard, others adapted to the play space, assigning their unique associations and interests to the Fatberg, revealing their biases. The most striking example, however, came with the calamitous island extraction. The shared, farcical experience, the inescapable damage to the Fatberg, and its successful recovery stimulated empathy and solidarity amongst participants, with some

offering their immediate or longer-term support. Significant here was that the island of fat structured encounters between people and fat by obliging participants to suspend their disbelief and play along in a shared making-oriented activity. As I elaborate in the following subsection, the key to this empathic attunement (Berky & Barbre, 2000) was the synthetic agency, which helped balance and interpret the contrasting motivations and expressions of the Fatberg, people, and material.

The above examples underline the importance of the island of fat to Fatberg events. There was little provocation or reference frame to prompt critical reflection upon fat in its absence. Fostering belief in material agency is challenging, particularly when endeavouring to trigger critical reflection upon and creative engagement with a famously divisive material. However, the research has shown that peoples' initial encounters with the Fatberg as a concept and thing revealed their orientations towards fat as a vibrant, socio-cultural-biological substance. Notable here was the duo at *DesignLAB* whose inventive problem-making and non-participation signalled their discomfort toward the fat-oriented task; the visitor at *Float Fest* who, observing the Fatberg up close, reasoned that our motivations must be sexual; and the encounter with V5, whose interest was less in the material, more how they might negotiate a role for themselves within a nascent Fatberg community. The examples emphasise the value of conceptual-analytical practices that capitalise on the liveliness and instability of biological material, advancing a method for establishing relevant concerns and routes for creative inquiry.

Initiating the research, I argued that if practitioners operating relative to innovation trajectories are to justify interdisciplinary events as a mode of research, they must address the nature of events and their agency to expose the virtues of independent, creative research. This echoes Kerridge's (2015) contention that claims that speculative design engages the public and enables debate are rhetorical and anticipatory because they lack grounding in the analysis of the actual circumstances of making, installation, exhibition, and promotion (p. 175). I similarly contend that designers and artists must provide warts-and-all accounts

of events and activities that make with vibrant matter. Such accounts aim not to aggrandise or denigrate practices and methods but to share and learn from one another's experiences. This means being honest and modest about the reality of material participation. A necessary contribution of the research is that it scrutinises practices and methods that engage with lively and unstable material. Examining Fatberg events, I have detailed the practice's unique interpretation of material agency, offering insight into the effects and tensions that arise within practices that probe the anthropocentric paradigm. This is but a start, and I hope that other practitioners feel compelled to disclose their experiences of entanglements between people and vibrant matter.

THE SYNTHETIC AGENCY AS A METHOD

What is conspicuous about the practice is that it expands notions of interdisciplinarity and collaboration to embrace material participation. Three forms of agency have thus proven to drive Fatberg events: fat as a vibrant material, the designer/artist's agency, and a third, synthetic agency, role-played by Arne and me, who claim to understand, speak for and act on behalf of fat and the Fatberg. I advance that the synthetic agency contributes to event-based practice research by offering an innovative method for practitioners who employ material agency as the subject and catalyst for conjoined conceptual, analytical practices.

Practically speaking, the synthetic agency supports material participation, serving as the meeting point between the agency of people and material. The two unite through encounters with the Fatberg, which possesses the status of an agent that reputedly directs proceedings. Besides this, the synthetic agency helps mediate between the contrasting agendas of fat - the impulse to melt, disintegrate, decay - and the designer/artists - the impulse to build an island. The synthetic agency thus functions as an underlying framework through which fat and its associated expressions are interpreted. It provides a logic to scrutinise engagements with vibrant matter in terms of their benefit for island-building, supporting activities that are likely inexplicable if solely attributed to Arne and myself. This implies a connection with and reading of material that is idiotic in the Stengers sense. The claim to understand,

speak for, and act on behalf of fat “resists the consensual way in which the situation is presented” (Stengers, 2005, p. 994). It represents an attempt to momentarily set aside one’s knowledge, experience, and prejudices to practice politeness toward a ubiquitous socio-cultural-biological material.

The most prominent display of the synthetic agency came during the island transfer at *Float Fest*. The actual actions and expressions of fat (which melted in the heat) and the Fatberg as an imagined synthetic agent (which broke apart) were evidently at odds with Arne’s and my ambitions because we pressed on with the extraction, claiming it was fat’s will, despite the unmistakable damage to the island. Fat as vibrant matter supplanted the synthetic agency by breaking apart and not hurrying to its new home. However, Haraway’s (2016) practising of politeness suggests that what transpired cannot be regarded as a calamity but what fat wanted. What manifested did not demonstrate the presence of a synthetic agency, but a synthetic-synthetic agency, where the impulse to build the island outranked other voices and expressions.

Although I did not reference it at the time, the synthetic agency was naturally present during the *DesignLAB* workshop. It offered a means to perceive and decipher the traces of fat, materials, and tools amongst the ruined production site. For example, the task required the students to attune to the echoes of prior activity – the agency of material – at the ruined production site to apprehend the former production process to inspire the island-rebuild and personal projects. The myth of the Fatberg aided the exploration, providing a narrative – a synthetic agency – that structured and inspired engagements with the students’ material discoveries. Thus, the students responded to the mix of locations, materials, and the abstract narrative and task with markedly different attitudes, as they projected their concerns – their agency – onto the project. The three observed attitudes revealed the students’ ability and will to relax life’s rules momentarily and practice politeness toward vibrant matter. They represented the total acceptance, partial acceptance, or outright rejection of material and synthetic agency.

This reading of the students' encounters with Fatberg's remains offers another slant on the *Fat and Food* event. The unscripted programme comprised a diversity of props and activities that signalled to the guests and participants that the event was a work-in-progress to be resolved. I speculate that the group's reshaping of the planned event partly resulted from the absence of the Fatberg. While the sensory activities at *Fat and Food* endeavoured to produce a defamiliarising effect, they lacked Fatberg's disruptive, corporeal presence and unifying narrative, the obligation to play along in a shared game. Rejecting the transgressive aspects of the event, the group instead imposed a frame based on their expectations of a panel discussion to redefine the game's rules.

Consistent across the three events was that there were moments when the synthetic agency appeared at odds with the urges of people and material. Primarily, the synthetic agency structured and inspired material participation. However, role-playing that fat possesses an elevated presence and command over events, Arne and I imposed a break from the habitual. Fat was not only a construction material or topic of enquiry but an active participant whose expressions and meanings shaped and formed people and events as they shaped and formed it (McCarthy & Wright, 2015). The result was a dialogic space that compelled participants to momentarily set aside their preconceptions and play along that it was desirable to build an island of fat. By observing this simple rule, a play space emerged that emphasised collaborative inquiry, inclusivity, openness, and openendedness. Thus, how people attuned to the present reality shed light on their orientation towards fat as a vibrant material and its associated socio-cultural-environmental concerns.

I forward that the primary function of the synthetic agency is to support the cultivation of politeness. It does so by establishing an imagined reference frame. It serves as a lens to interpret ordinarily incomprehensible material expressions by considering their benefit to the immediate task and broader project aims. While the approach may appear counter to cultivating "the virtue of letting those one visits intra-actively shape what occurs" (Haraway, 2016, p. 127), I argue that this is not the case. Marres, Guggenheim and Wilkie (2018) point

out that as “philosophers of science such as Karl Popper, Alfred North Whitehead and Isabelle Stengers have long reminded us, imagination is not the opposite of truth; fiction is not the opposite of fact” (p. 29). In other words, all research begins with fiction, a “what if?” (Marres et al., 2018). In this context, the value of the synthetic agency lies in its ability to spark the imagination, to engage “with what is already ongoing, already happening in the world with an explicit view to what might be in the world in a different mode” (Marres et al., 2018; Rosengarten, 2018). It helps us imagine what the agency of material could be. Practising politeness means experiencing and remaining open to the real and imagined qualities, abilities, and possibilities that vibrant matter contributes to the encounter. The research thus demonstrates that the fictions produced by the synthetic agency must be accounted for when interpreting comings together between people and material.

Another crucial insight is that the synthetic agency’s blurring of fiction and reality creates the conditions for chance occurrences to flourish. It encourages playfulness. It motivates and enables the assimilation of chance occurrences, resulting in novel readings of and experiences with material. It inspires chance events which inspires chance outcomes. In other words, the synthetic agency encourages Stengers’ form of idiocy as a condition for creative inquiry. It is this quality, I have argued, that makes Fatberg events ostensibly hufferproof. There are, however, patent risks to this approach. Fatberg events have proven particularly prone to spontaneous happenings and digressions, some of which, for example, at *Fat and Food*, leading to the redirection or replacement of the planned activities and objectives. This, I contend, emphasises the importance of the documentation and the post-event analysis of participatory activities to identify and interpret the actual products and insights of events that actively encourage idiocy.

A further risk of employing the synthetic agency is that it might exaggerate or misrepresent material expressions, particularly conflating those expressions with other conflicting, anthropocentric motivations. This was the case during the island extraction, where fat’s agency, the designer/artist’s agency and Fatberg’s synthetic agency memorably worked at

cross-purposes. A synthetic-synthetic agency was exposed, where fat signalled one thing, and we, as fat's representatives, purportedly opted for another on its behalf. I contend that we must be honest about such inconsistencies. The study has emphasised the practical difficulties of shedding the anthropocentric position, recognising matter and things as equal partners, and the need to describe when and how they act together or at cross-purposes. Crucially, in terms of my practice, I now recognise the contradictions and blind spots that exist within our sometimes-overstated attempts to give focus and agency to material. These tensions, however, point to another concern. If, as demonstrated, Fatberg events encompass forces that extend beyond fat, human intervention, and human imagination, where should the assemblage of agencies conceivably end? What forces are excluded and why? This is where the synthetic agency can prove helpful. Role-playing the identity and mindset of vibrant matter, the synthetic agency provides a reference frame for identifying the things and effects that contribute to events beyond human agency. It can expose the tensions and contradictions that emerge within practices that claim to adopt a non-anthropocentric view. However, as noted, there is the risk that it blinds us to the real agency and nature of material. I, therefore, argue that the true value of the synthetic agency is that it supports practising politeness toward vibrant matter and consideration of the real and imagined relationalities between people and material.

7.5 RECOMMENDATIONS

Initiating the research, I stated that this thesis could contribute learnings to fields beyond art and design, which share an interest in the event as a context for interdisciplinary, participatory research. However, as the research evolved, my understanding of interdisciplinarity and participation has changed. Fat's real and imagined agency has shown the importance of vibrant matter as a participant and collaborator in participatory events. The lexicon of terms, empirical study of Fatberg events, and the methods and theoretical concepts established through the research thus contribute practical resources for practitioners interested in material participation as a stimulus and site for creative enquiry. Above all, the resources serve as a guide, helping practitioners unpick the tangled actions and

products of open and open-ended events and identify the virtues of their material-oriented practices. However, as I have emphasised, these resources are tailored to Fatberg events and may require revision or expansion to support practitioners' research activities.

At the outset, I described Fatberg as a hybrid design/art practice that draws upon methods and ideologies from PEST, design, and art yet is uncategorisable as any. On this account, the research presented a range of practical resources derived from art, design and sociological theories and practices that are distinct from yet complementary to STS thinking on practice-based research and material agency. In highlighting this, my intention is not to dispute the merits of STS thinking. Instead, I advance that where practices are interdisciplinary and do not descend from an STS lineage, there are other, equally valuable, and in some cases more appropriate, resources available that can offer unique insight into activities rooted in material participation.

Absent from the research was a Fatberg event centred on island-building as a participatory activity. Hence, the triptych does not reflect the practice's routine activities, but complementary activities designed in connection with the NDSM residency. Be that as it may, while a making-oriented event might have provided a focused setting to scrutinise the three practice features, I argue that such a case study would have lacked the multifarious character of the activities observed in the research. The benefit of the triptych has been that I have built on preceding observations, concepts, and theories to establish a series of resources that, while germane to Fatberg events, may be useful to practice-based researchers more broadly.

Central to the practice examined in this thesis is that fat, as an exemplar of vibrant matter, serves as a construction material, a site for creative inquiry, and as a provocation promoting a broad spectrum of concerns, emotions, and responses. I have argued that the practical value of the synthetic agency is that it encourages participants to interpret material expressions that lie beyond everyday comprehension. This begs the question, Fatberg aside, how might the synthetic agency affect encounters with other forms of vibrant matter? For example,

what might the synthetic agency of a paintbrush, a painting, a car, a building, or a stage set look like, and what interrelations and effects might emerge? Further research is, therefore, required to examine the practical implications and outputs of applying the synthetic agency as a method for practising material participation.

This prompts my final recommendation. Earlier in the chapter, I introduced “hufferproof” as an expression roughly translating from Dutch to English as vandal- or idiot-proof. I claimed that the term is productive because it encourages reflection on what it means to incorporate idiots and idiocy within participatory events. This, I argue, is particularly relevant to practices that recognise material agency, where the impromptu actions and expressions of material challenge the conduct of participants and their interrelations. The case studies discussed in this thesis present an initial outline of hufferproof events, the features that such events may comprise, the degree of openness and appropriation designed into the constituent activities and their constraints, the resulting participant behaviours, and the demands this poses on practitioners.

Nevertheless, Stengers’ (2005) conceptualisation of the idiot and other associated behaviours and characters (Michael, 2012a, 2012b; Wilkie et al., 2015) indicate that the research’s observations and insights are only the tip of the iceberg. For one, it is worth examining how such events unfold within more formalised settings to contrast the mostly autonomous practices studied in this research. Naturally, this raises the question of whether constrained events that are only semi-open or semi-open-ended can be hufferproof? Indeed, can an event ever be truly hufferproof? More research is required to answer these questions, to identify and unpick such events’ underlying logic, activities, and products.

7.6 CONCLUSION

This thesis set out to examine a design-art practice consisting of a programme of interdisciplinary, participatory events. Prominent about the practice was that it employed the

CHAPTER 8

In case you were wondering:

Afterword

building of an island of fat as a form of conceptual-analytical inquiry into fat and its associated concerns. The research asked: what are the methods and logic of this practice, and how do they advance novel tactics and methodologies for interdisciplinary event-based research? Three features were identified as central to this practice. A lexicon of terms was developed via a study of relevant literature to establish a vocabulary for describing and deciphering entanglements between people and material. By examining the underpinnings of the three practice features and their effects on a triptych of events, the research has emphasised the crucial role of fat as a participant and collaborator within a making-oriented practice. In doing so, the research shifted from an initial concern with hybridity and interdisciplinarity to notions of material participation and the relations between people and things.

The main contribution of this thesis is that it advances a holistic notion of participation, one that genuinely grapples with the agency and contributions of material. Scrutinising events that claim to recognise nonhuman agency – that make with vibrant matter – the research offers insight into the effects and tensions arising within entanglements between people and material. The research additionally provides conceptual insights and analytical tools that support practices rooted in material participation.

This thesis is a blueprint, contributing resources that enable practitioners to navigate and decipher the multifaceted, seemingly idiotic goings-on within material-oriented participatory activities. Above all, it is a call to practitioners to embrace the instability and complexities of material participation to consider critically the real and imagined interrelations that exist in entanglements between people and vibrant matter.



FIGURE 69 *Top Left* 820kg - the weight of the iconic Volkswagen Type 1 Beetle (2018).

FIGURE 70 *Left Middle* 3 Days of Fat (2018).

FIGURE 71 *Bottom* Fatberg leaves NDSM. Video still (2019).

FIGURE 72 *Top Right* Dismantling the Fatberg (2019).

WHAT BECAME OF FATBERG?

Dear Arne & Mike,

Mike, hope you had a nice program in London last month. I was wondering, Fatberg is starting its second life and a safe haven for birds. What should we do with it? It would be nice to make some plan for the future. Is there any way we can take it out of the water at some point?

Warmly,

Rieke

(R. Vos, personal communication, 26 November 2018).

As this thesis draws to a close, you might be wondering: what became of the Fatberg? Most pressing beyond the summer of events was the DesignLAB programme, which moved ahead as intended. However, as the weeks progressed, the students' interests shifted toward their personal projects. Perhaps inevitably, the shared island-building task faded into the background, and students' participation at the floating production site fell as the pressure of evaluations drew near.

In the months that followed, Arne and I met weekly at the site to continue island-building, occasionally joined by a guest or intern. In this period, it was as if each week meant another milestone: 500kg; 635kg, the heaviest recorded human; 820kg, the weight of the iconic Volkswagen Beetle, the peoples' car (Figure 69); 1 metric tonne, and beyond. Meanwhile, while Fatberg continued to swell, we received invitations to participate in various public events, including the Over Het IJ Festival 2018, which, somewhat fortuitously, took place at NDSM wharf.

Aside from our routine practice at the floating production site, various satellite activities and events were produced to facilitate and promote the work. Prominent was *3 Days of Fat*, a 'live' art-science research event, series of public experiments, performances, and discussions, focused on constructing an all-new island of fat, held at King's College London's Arcade at Bush House from 10-12 October 2018. Produced in partnership with King's College London's Department of Nutritional Sciences and Somerset House Studios, with additional support from Creative Industries NL, the event brought guests from seemingly disparate disciplines and backgrounds, including a molecular biophysicist, electrochemical engineer, hula dancer and cured sausage maker, together with members of the public to discuss our complex relationship with fat (Thompson, 2019b) (Figure 70).

All the while, in Amsterdam, the island continued to grow. What began as a year-long residency at NDSM wharf stretched into two, with a change in management at NDSM Foundation supplanting the desire to move us on. By the time of receiving the above email, the Fatberg had enlarged to approximately 2.2 metres in diameter, weighing over two metric tonnes, attracting a recurrent flock of seagulls and family of ducks, as well as less appealing creatures. In truth, Fatberg had overstayed its welcome.

Despite our best efforts, the lack of a suitable new home and the considerable costs of orchestrating the move left us with only one option. On the 22nd-23rd March 2019, we regrettably dismantled the island. However, before doing so, we took one last opportunity to spend time with the berg, taking the island for a final spin around the flooded shipping ramp (Figure 71).

With that, the Fatberg was unceremoniously hacked apart. As the island diminished, chunks of fat were tossed into pallet boxes awaiting transport for waste processing and the next chapter in its lifecycle as biofuel. However, despite the disappointing end to Fatberg's time at NDSM wharf, there was solace in this final act. Peeling back the layers of fat and hours of work, the embryonic island we had transferred to water at *Float Fest* remained intact (Figure 72). Today,

this nucleus, this seedling island, lives in Arne's freezer, ready to sprout again.

Since then, Fatberg has regenerated in new forms, ideas, and events. For instance, in summer 2019, an all-new Fatberg materialised in south-eastern Australia (Figure 73), as part of Science Gallery Melbourne's Disposable: Reimagining Your Waste programme, a month of pop-up art/science experiments, installations and events presenting "creative solutions to our throwaway culture" (Science Gallery Melbourne, 2019). More recently, in spring 2022, Fatberg formed the basis of *10 weeks of fat*, a term-long design research project and public engagement event produced by students in MA Design: Expanded Practice at Goldsmiths University of London in collaboration with myself and fellow design researcher Sarah Pennington. In this way, Fatberg continues to mutate and grow, much like its inspiration.



FIGURE 73 Fatberg at Testing Grounds, Melbourne (2019) [Photo credit: Nicole Cleary].

REFERENCES

- Adams, D. (1992). Joseph Beuys: Pioneer of a Radical Ecology. *Art Journal*, 51(2), 26–34.
- Agar, M. (1986). *Speaking of Ethnography*. SAGE Publications, Inc. <https://doi.org/10.4135/9781412985895>.
- Andreotti, A. (2013, September 8). *Interview Arne Hendriks*. Next Nature Network. <https://nextnature.net/2013/09/interview-arne-hendriks>.
- Appel, P. (2016, September 7). *The future anatomical lesson with Agi Haines* [Interactive Resource]. Waag; Waag. <https://waag.org/en/article/future-anatomical-lesson-agi-haines>.
- Ars Electronica Futurelab. (2020, March 17). *Lab for Art And Science*. Futurelab. <https://ars.electronica.art/futurelab/en/about/>
- Audrey Chieza, N., & Thompson, M. (2018, September). Fatberg. A conversation between Natsai Audrey Chieza and Mike Thompson. *MOLD*, 3, 17–22.
- Bakhtin, M. (1984). *Rabelais and his world* (H. Iswolsky, Trans.). M.I.T. Press. (Original work published 1968).
- Barry, A., Born, G., & Weszkalnys, G. (2008). Logics of interdisciplinarity. *Economy and Society*, 37(1), 20–49.
- Bell, G., Blythe, M., & Sengers, P. (2005). Making by making strange. *ACM Transactions on Computer-Human Interaction*, 12, 149–173. <https://doi.org/10.1145/1067860.1067862>.
- Benford, S., Greenhalgh, C., Crabtree, A., Flintham, M., Walker, B., Marshall, J., Koleva, B., Rennick Egglestone, S., Giannachi, G., & Adams, M. (2013). Performance-Led Research in the Wild. *ACM Transactions on Computer-Human Interaction*, 20(3), 15. <https://doi.org/10.1145/2491500.2491502>.
- Bennett, J. (2010). *Vibrant matter: a political ecology of things*. Duke University Press.

- Bennett, J. (2011, September 13). *Powers of the hoard: Artistry and Agency in a World of Vibrant Matter*. <https://www.youtube.com/watch?v=q607Ni23QjA>.
- Berky, B., & Barbre, C. (2000). The Clown's Use of Empathy: An Interview with Bob Berky. *Journal of Religion and Health*, 39(3), 239-246. <https://doi.org/10.1023/A:1010310624002>.
- Bernard, H. R. (2006). *Research methods in anthropology qualitative and quantitative approaches* (4th ed.). AltaMira Press.
- Beuys, J. (1964). *Fat Chair* [Wood, glass, metal, fabric, paint, fat and thermometer]. Tate and National Galleries of Scotland.
- Beuys, J. (1973). I Am Searching for Field Character. In C. Harrison & P. Wood (Eds.), *Art in theory 1900-2000: An anthology of changing ideas* (New ed, pp. 929-930). Blackwell.
- Beuys, J. (1974). *I Like America and America Likes Me* [Performance]. René Block Gallery, New York.
- Beuys, J. (1977). *Honigpumpe am Arbeitsplatz* [Electric motors, painted and unpainted metal, plastic tubes, glass, electronics and honey]. Documenta VI, Kassel, Germany.
- Beuys, J., & Harlan, V. (2004). Conversation with Joseph Beuys: What is art? In *What is art? Conversation with Joseph Beuys* (pp. 9-74). Clairview Books.
- Biddle, E. (2014). Re-Animating Joseph Beuys' 'Social Sculpture': Artistic Interventions and the Occupy Movement. *Communication and Critical/Cultural Studies*, 11(1), 25-33.
- Bishop, C. (2012). *Artificial hells: Participatory art and the politics of spectatorship*. Verso.
- Branzi, A. (2006). *No Stop City*. Librairie de Architecture et de la Ville.

Brockmann, M. (2011). Problematising short-term participant observation and multi-method ethnographic studies. *Ethnography and Education*, 6(2), 229-243. <https://doi.org/10.1080/17457823.2011.587361>.

@buildingfatberg. (2016, January 23). #FATBERG research lab @KABKnews Open Day Illustrations by Daniel Kuiper [Photo]. @buildingfatberg. <https://www.instagram.com/buildingfatberg/>

@buildingfatberg. (2017a, May 22). Fat is one of *THE* iconic materials of our time... [Video]. @buildingfatberg. <https://www.instagram.com/buildingfatberg/>

@buildingfatberg. (2017b, July 4). Join us this Saturday 8th July at NDSM in Amsterdam Noord for FATBERG Float Fest and witness a couple of guys hoist an embryo of fat from its incubator into the water. Oh, and we'll be fat rendering, dripping and having some drinks and snacks to celebrate. Bring the kids (if they know how to swim). FATBERG FLOATFEST Saturday 8th July (Official Launch @ 18:00) FATBERG (beneath Crane Hotel Faralda) NDSM-Plein 1033 WB Amsterdam www.fatberg.nl [Image]. @buildingfatberg. https://www.instagram.com/p/BWlQJ_YACqg/

@buildingfatberg. (2017c, July 7). Day 3—#concrete #fatberg #floatfest [Image]. @buildingfatberg. <https://www.instagram.com/buildingfatberg/>

@buildingfatberg. (2018, February 23). #office #refit #Fatberg [Image]. @buildingfatberg. <https://www.instagram.com/buildingfatberg/>

Bulatov, D. (2007). Genetic engineering and contemporary art: Structural aspects and the problems. *Trames- Journal Of The Humanities And Social Sciences*, 11(4), 443-456.

Catts, O., & Zurr, I. (2002). Growing Semi-Living Sculptures: The Tissue Culture & Art Project. *Leonardo*, 35, 365-370. <https://doi.org/10.1162/002409402760181123>.

Catts, O., & Zurr, I. (2003). *Disembodied Cuisine - The Tissue Culture & Art Project*. The Tissue Culture & Art Project. <https://tcaproject.net/portfolio/disembodied-cuisine/>

- Catts, O., & Zurr, I. (2004). Ingestion/Disembodied Cuisine: Toward victimless meat. *Cabinet Magazine*, 16. https://www.cabinetmagazine.org/issues/16/catts_zurr.php
- Certeau, M. de. (1984). *The practice of everyday life* (S. Rendall, Trans.). University of California Press.
- ClickNL. (2017). *Knowledge & Innovation Agenda: Top Sector Creative Industry 2018-2021* (No. 1). CLICKNL.
- Clifford, J. (1983). On Ethnographic Authority. *Representations*, 2, 118-146. JSTOR. <https://doi.org/10.2307/2928386>.
- Coleridge, S. T. (1817). *Biographia Literaria* ([E-reader version]). Project Gutenberg. Retrieved from: <http://www.gutenberg.org/ebooks/6081>.
- Cruikshank, J. (2005). *Do glaciers listen?: Local knowledge, colonial encounters, and social imagination*. UBC Press; University of Washington Press.
- Deleuze, G., & Guattari, F. (2013). *A thousand plateaus: Capitalism and schizophrenia* (B. Massumi, Trans.). Bloomsbury Academic.
- Deleuze, G. (2004). *The logic of sense*. Continuum.
- Denshire, S. (2014). On auto-ethnography. *Current Sociology*, 62(6), 831-850.
- DesignLAB. (2017). *DesignLAB*. Gerrit Rietveld Academie. <https://rietveldacademie.nl/en/page/382/designlab>.
- Despret, V. (2014). Domesticating Practices: The Case of Arabian Babblers. In M. Garry & S. McHugh (Eds.), *Routledge Handbook of Human-Animal Studies* (pp. 23-38). Routledge. <https://doi.org/10.4324/9780203101995>.

- DeWalt, K. Musante., & DeWalt, B. R. (2010). *Participant Observation: A Guide for Fieldworkers*. Altamira Press. <https://www.dawsonera.com:443/abstract/9780759119284>.
- Dewey, J. (2005). *Art as experience*. Perigee Books. (Original work published 1934).
- Dixon, D. P. (2009). Creating the Semi-Living: On Politics, Aesthetics and the More-than-Human. *Transactions of the Institute of British Geographers*, 34(4), 411-425. JSTOR.
- Doré, G. (1873). *At Gargantua's Parisian meals, four men shovel mustard into his mouth* [Wood engraving]. Granger. <https://www.grangeracademic.com/results.asp?image=0324659&itemw=3&itemf=0001&itemstep=1&itemx=1>
- Doucet, A., & Mauthner, N. (2012). Ethics in Qualitative Research. In T. Miller, M. Birch, M. Mauthner, & J. Jessop (Eds.), *Ethics in Qualitative Research* (2nd ed., pp. 122-139). SAGE Publications Ltd. <https://doi.org/10.4135/9781473913912>.
- Dunne, A. (2008). *Hertzian tales: Electronic products, aesthetic experience, and critical design* (Rev. ed.). MIT.
- Dunne, A., & Raby, F. (2009). 'What If...'. In M. J. Gorman (Ed.), *What If....* (p. ii). Science Gallery.
- Dunne, A., Raby, F., & Gorman, M. J. (2009). 'A Conversation Between...'. In *What If....* (pp. iii-vi). Science Gallery.
- Dutton, D., & Tetreault, C. (2009). Who will act badly in toxic situations? *Journal of Aggression, Conflict and Peace Research*, 1(1), 45-57.
- Eco, U. (1989). *The open work*. Harvard University Press.
- EPSRC. (2021). *Public Engagement Guidance*. Engineering and Physical Sciences Research Council.
- European Commission. (2013, October 23). *What is Horizon 2020?* [Text]. Horizon 2020 - European Commission. <https://ec.europa.eu/programmes/horizon2020/en/what-horizon-2020>.

- European Commission & Directorate-General for Research and Innovation. (2017). *LAB - FAB - APP: investing in the European future we want: Report of the independent High Level Group on maximising the impact of EU research & innovation programmes*. Publications Office. <https://doi.org/10.2777/403189>.
- Extinction Rebellion. (n.d.). About Us. *Extinction Rebellion*. Retrieved 27 April 2020, from <https://rebellion.earth/the-truth/about-us/>
- Extinction Rebellion (2019). *Rebellion Day 4 Oxford Circus* [Photograph]. xrmediaarchive. <https://bit.ly/3vzubCQ>
- Fatberg. (2015, November 3). *FATBERGs 1st Birthday Party: THANK YOU | Fatberg*. Fatberg. <http://fatberg.nl/fatbergs-1st-birthday-party-thank-you/>
- Florczak, K. L. (2016). Power Relations: Their Embodiment in Research. *Nursing Science Quarterly*, 29(3), 192–196. <https://doi.org/10.1177/0894318416647167>.
- Foote, G., & Verhoeven, E. (2019). Tactics for a more-than-human maker culture. In L. Bogers & L. Chiappini (Eds.), *The Critical Makers Reader: (Un)learning Technology* (pp. 72–85). The Institute of Network Cultures.
- Fraser, M. (2006). Event. *Theory, Culture & Society*, 23(2–3), 129–132. <https://doi.org/10.1177/026327640602300222>.
- Gad, C., & Jensen, C. B. (2014). The Promises of Practice. *The Sociological Review*, 62(4), 698–718. <https://doi.org/10.1111/1467-954X.12200>.
- Garfinkel, H. (1984). *Studies in ethnomethodology*. Polity. (Original work published 1967).
- Gautier, T. (1835). *Mademoiselle de Maupin*. Project Gutenberg.
- Gavelin, K., Wilson, R., & Doubleday, R. (2007). *Democratic Technologies? The Final Report of the Nanotechnologies Engagement Group (NEG)* (pp. 1–10). Involve.

- Gaver, W. (1991). Technology Affordances. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 79–84. <https://doi.org/10.1145/108844.108856>.
- Gaver, W. (1996). Situating Action II: Affordances for Interaction: The Social Is Material for Design. *Ecological Psychology*, 8(2), 111–129. https://doi.org/10.1207/s15326969eco0802_2.
- Gaver, W. (2009). Designing for Homo Ludens, Still. In T. Binder, J. Löwgren, & L. Malmborg (Eds.), *(Re)Searching The Digital Bauhaus* (pp. 163–178). Springer London. https://doi.org/10.1007/978-1-84800-350-7_9.
- Gaver, W., Beaver, J., & Benford, S. (2003). Ambiguity as a Resource for Design. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 233–240. <https://doi.org/10.1145/642611.642653>.
- Gaver, W., & Bowers, J. (2012). Annotated Portfolios. *Interactions*, 19(4), 40–49. <https://doi.org/10.1145/2212877.2212889>.
- Geertz, C. (1973). *The interpretation of cultures: Selected essays*. Basic Books.
- Gibson, J. J. (1966). *The senses considered as perceptual systems*. Houghton Mifflin.
- Gibson, J. J. (1979). *The ecological approach to visual perception*. Houghton Mifflin.
- Gilbert, N., & Stoneman, P. (2015). *Researching Social Life: 4th Edition* (N. Gilbert & P. Stoneman, Eds.; Kindle DX version). SAGE. <http://epubs.surrey.ac.uk/820496/>
- Griffiths, A. (2013, October 25). *The Incredible Shrinking Man by Arne Hendriks*. Dezeen. <https://www.dezeen.com/2013/10/25/the-incredible-shrinking-man-by-arne-hendriks/>
- Grindstaff, L. (2008). *The money shot: Trash, class, and the making of TV talk shows*. University of Chicago Press.

- Groth, C., Pevere, M., Niinimäki, K., & Kääriäinen, P. (2020). Conditions for experiential knowledge exchange in collaborative research across the sciences and creative practice. *CoDesign*, 16(4), 328–344. <https://doi.org/10.1080/15710882.2020.1821713>.
- Gyorody, A. (2014). The medium and the message: Art and politics in the work of Joseph Beuys. *The Sixties*, 7(2), 117–137.
- Hahn, J. (2021, May 19). *Superflux imagines multi-species banquet for Venice Architecture Biennale*. Dezeen. <https://www.dezeen.com/2021/05/19/superflux-refuge-for-resurgence-venice-architecture-biennale/>
- Haines, A. (2016, September 24). *The Anatomy Lesson: Dissecting Medical Futures*. Agihaines.com. <https://www.agihaines.com/home>
- Haraway, D. (1988). Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective. *Feminist Studies*, 14(3), 575–599. JSTOR. <https://doi.org/10.2307/3178066>.
- Haraway, D. J. (2016). *Staying with the trouble: Making Kin in the Chthulucene*. Durham: Duke University Press.
- Harlan, V. (2004a). A note on the text. In *What is art? Conversation with Joseph Beuys* (pp. 1–4). Clairview Books.
- Harlan, V. (2004b). Art at the threshold. In *What is art? Conversation with Joseph Beuys* (pp. 75–79). Clairview Books.
- Hauser, J. (2008). Observations on an Art of Growing Interest. In B. Da Costa & K. Philip (Eds.), *Toward a Phenomenological Approach to Art involving Biotechnology* (pp. 83–103). MIT Press. <https://mitpress.mit.edu/books/tactical-biopolitics>.
- Helder, N. (2016, July 6). *Fat Interceptor: The Sewer As Production System #2*. Fatberg. <http://fatberg.nl/grease-interceptor-the-sewer-as-a-production-system-2/>

- Hendriks, A. (2008a). *Restaurant* [Mixed media]. https://www.the-incredible-shrinking-man.net/?page_id=83.
- Hendriks, A. (2008b). *The Incredible Shrinking Man | Researching the implications of downsizing the human species to better fit the earth*. <https://www.the-incredible-shrinking-man.net/>
- Hendriks, A. (2015, June 29). *Lardo di Colonnata*. Fatberg. <http://fatberg.nl/lardo-di-colonnata/>
- Hendriks, A. (2017, July 10). *Fat Art*. <http://fatberg.nl/fat-art/>
- Hendriks, A. (2017, August 11). *Fatberg* [Personal communication].
- Hendriks, A. (2017, August 13). *Freeberg* [Personal communication].
- Henri, A. (1974). *Total Art: Environments, Happenings, and Performance*. Praeger.
- Henricks, T. S. (2006). *Play Reconsidered*. University of Illinois Press.
- Horst, M., & Michael, M. (2011). On the Shoulders of Idiots: Re-thinking Science Communication as 'Event'. *Science as Culture*, *20*(3), 283-306. <https://doi.org/10.1080/09505431.2010.524199>.
- House of Lords (HofL) Select Committee on Science and Technology. (2000). *Science and Society* (No. 3). Stationary Office.
- Huizinga, J. (2016). *Homo Ludens: A study of the play-element in culture* (First Beacon paperback ed). Beacon Press. (Original work published 1949).
- Huybrechts, L., Dreessen, K., & Schepers, S. (2014). Chapter 1: Participation and Risky Trade-offs. In *Participation is risky: Approaches to joint creative processes* (pp. 7-56). Valiz.
- Ivanovic, A., & Collin, P. H. (Eds.). (2006). Role Play. In *Dictionary of human resources and personnel management* (3rd ed.). A&C Black. Credo Reference: https://search-credoreference-com.gold.idm.oclc.org/content/entry/acbhrmanage/role_play/0?institutionId=1872.

- James, & Ruby. (2019). 18/ Cultural roadblocks. In C. Farrell, A. Green, S. Knights, & W. Skeaping (Eds.), *This is not a drill: An Extinction Rebellion handbook* (pp. 193-201). Penguin Books.
- Jönsson, L. (2015). *Design events: On explorations of a non-anthropocentric framework in design* [PhD Thesis]. The Royal Danish Academy of Fine Arts, Schools of Architecture, Design and Conservation.
- Kac, E. (2007). *Signs of Life: Bio art and beyond*. MIT.
- Kaprow, A. (1961). *Yard* [Tyres]. Martha Jackson Gallery, New York.
- Kaprow, A. (1967). *Fluids* [Ice]. Pasadena Art Museum.
- Kaprow, A. (1968). *Transfer* [Empty oil and chemical barrels]. Wesleyan University.
- Kaprow, A. (1988). *18 Happenings in 6 Parts* [Mixed media]. The University of Texas at Arlington, Center for Research on Contemporary Art.
- Kaprow, A. (1992). *7 environments*. Studio Morra.
- Kaprow, A. (2003a). Happenings in the New York scene (1961). In J. Kelley (Ed.), *Essays on the blurring of art and life* (Expanded ed., pp. 15-26). University of California Press.
- Kaprow, A. (2003b). Performing life (1979). In J. Kelley (Ed.), *Essays on the blurring of art and life* (Expanded ed., pp. 195-198). University of California Press.
- Kaprow, A. (2003c). The education of the un-artist, part II (1972). In J. Kelley (Ed.), *Essays on the blurring of art and life* (Expanded ed., pp. 110-126). University of California Press.
- Kaprow, A. (2003d). The happenings are dead: Long live the happenings! (1966). In J. Kelley (Ed.), *Essays on the blurring of art and life* (Expanded ed., pp. 59-65). University of California Press.
- Kaprow, A. (2003e). The legacy of Jackson Pollock (1958). In J. Kelley (Ed.), *Essays on the blurring of art and life* (Expanded ed., pp. 1-9). University of California Press.

- Kaprow, A. (2003f). The meaning of life (1990). In J. Kelley (Ed.), *Essays on the blurring of art and life* (Expanded ed., pp. 229–242). University of California Press.
- Kaprow, A. (2008). *Allan Kaprow – Art as life*. Getty Research Institute.
- Kaprow, A., Knowles, A., & Goldberg, S. (2007). *How to make a happening* (Rep. c.2007 Limited edition of 1000.). Something Else Press.
- Kelley, J. (2003). Introduction. In J. Kelley & A. Kaprow (Eds.), *Essays on the blurring of art and life* (Expanded ed., pp. xi–xxvi). University of California Press.
- Kelley, J. (2004). *Childsplay: The art of Allan Kaprow*. University of California Press.
- Kerridge, T. (2015). *Designing Debate: The Entanglement of Speculative Design and Upstream Engagement*. Goldsmiths, University of London.
- Kirkham, P. (1996). *The gendered object*. Manchester University Press.
- Klein, N. (2008). *The shock doctrine: The rise of disaster capitalism* (Kindle DX version). London: Penguin Books.
- Koestler, A. (1964). *The act of creation*. Hutchinson of London.
- Kroon, R. W. (2014). Willing Suspension Of Disbelief. In *A/V a to z: An encyclopedic dictionary of media, entertainment and other Audiovisual terms*. McFarland. Credo Reference: https://search-credoreference-com.gold.idm.oclc.org/content/entry/mcfav/willing_suspension_of_disbelief/0?institutionId=1872.
- Kurian, G. T. (2013). Role-play. In *The AMA Dictionary of Business and Management*. AMACOM, Publishing Division of the American Management Association. http://search.credoreference.com/content/entry/amadictbm/role_play/0.

- Lachmann, R., Eshelman, R., & Davis, M. (1988). Bakhtin and Carnival: Culture as Counter-Culture. *Cultural Critique*, 0(11), 115.
- Latour, B. (2004). *Politics of nature: How to bring the sciences into democracy*. Harvard University Press.
- Lefebvre, H., & Nicholson-Smith, D. (1991). *The production of space*. Blackwell.
- Levi Strauss, D. (1990). American Beuys: 'I like America & America likes me'. *Parkett : the Parkett series with contemporary artists = Die Parkett-Reihe mit Gegenwartskünstlern*, 26, 124.
- Macdonald, D. (2007). *In Your Hands*. Dash N' Dem. <https://dashndem.com/in-your-hands>.
- Macdonald, D. (2007). *In Your Hands* [Photograph]. Dash N' Dem.
- Malpass, M. (2016). Critical Design Practice: Theoretical Perspectives and Methods of Engagement. *The Design Journal*, 19(3), 473-489.
- Marres, N., Guggenheim, M., & Wilkie, A. (2018). 1. Introduction. In N. Marres, M. Guggenheim, & A. Wilkie (Eds.), *Inventing the Social* (pp. 17-37). Mattering Press.
- McCarthy, J., & Wright, P. (2004). *Technology as experience*. MIT Press.
- McCarthy, J., & Wright, P. (2015). *Taking [A]part the politics and aesthetics of participation in experience-centered design*. MIT Press.
- Michael, M. (2012a). "What Are We Busy Doing?": Engaging the Idiot. In *Science, Technology, & Human Values* (Vol. 37, Issue 5, pp. 528-554).
- Michael, M. (2012b). De-Signing the Object of Sociology: Toward an 'Idiotic' Methodology. *The Sociological Review*, 60(1_suppl), 166-183. <https://doi.org/10.1111/j.1467-954X.2012.02122.x>.
- Milgram, S. (1974). *Obedience to authority: An experimental view* ([1st ed.]). Tavistock.

- Mol, A. (2002). *The body multiple: Ontology in medical practice*. Duke University Press.
- MU. (2015, February 7). *FATraiser—Pledge You Fats*. MU. <http://mu.nl/en/about/news/fatraiser-pledge-you-fats>.
- MU. (2020, March 16). *About*. MU. <http://mu.nl/en/about/mu>.
- MU Hybrid Art House. (2021). *MU | About*. MU. <https://mu.nl/en/about/mu>.
- NDSM. (2017). *Fatberg (2017) | Arne Hendriks & Mike Thompson*. NDSM. <https://www.ndsm.nl/en/location/fatberg/>
- Next Nature Network. (2015). *Arne Hendriks*. Next Nature Network. <https://nextnature.net/people/arne-hendriks>.
- Nicolis, G., & Prigogine, I. (1989). *Exploring Complexity: An Introduction*. W.H.Freeman & Co Ltd.
- Nowotny, H. (2001). *Re-thinking science: Knowledge and the public in an age of uncertainty*. Cambridge: Polity Press.
- Nussbaum, M. (2007). Cultivating Humanity and World Citizenship. *Forum Futures 2007*, 37, 37–40.
- Orbach, S. (2012, May 3). Fat is a prejudice issue. *The Guardian*. <https://www.theguardian.com/commentisfree/2012/may/03/fat-prejudice-issue>.
- Páldi, L., & Westphalen, O. (Eds.). (2016). *Dysfunctional comedy: A reader*. Sternberg Press.
- Palmer, S. (2011a). '3.3 Audience space / scenographic space'. In J. Pitches & S. Popat (Eds.), *Performance Perspectives: A Critical Introduction* (pp. 74–87). Palgrave Higher Ed M.U.A.
- Palmer, S. (2011b). 'Chapter 3 Space'. In J. Pitches & S. Popat (Eds.), *Performance Perspectives: A Critical Introduction* (pp. 52–54). Palgrave Higher Ed M.U.A.

- Pilmis, O., & Menger, P.-M. (2009). Le travail créateur. S'accomplir dans l'incertain: European Journal of Sociology European Journal of Sociology. *Archives Européennes de Sociologie*, 50(3), 550-554.
- Pytlík Zillig, L. M., & Tomkins, A. J. (2011). Public Engagement for Informing Science and Technology Policy: What Do We Know, What Do We Need to Know, and How Will We Get There? *Review of Policy Research*, 28(2), 197-217. <https://doi.org/10.1111/j.1541-1338.2011.00489.x>.
- Raijmakers, B., & Miller, S. (2016). *Viewfinders: Thoughts on Visual Design Research*. STBY.
- Ramaswamy, V., & Gouillart, F. (2010). Building the Co-Creative Enterprise. *Harvard Business Review*, 88, 100-109.
- Rancière, J. (2009). *The emancipated spectator*. Verso.
- Ratto, M. (2011a). Critical Making. In B. van Abel, L. Evers, R. Klaassen, & P. Troxler (Eds.), *Open design now: Why design cannot remain exclusive* (pp. 202-213). BIS. <http://opendesignnow.org/index.html%3Fp=434.html>.
- Ratto, M. (2011b). Critical Making: Conceptual and Material Studies in Technology and Social Life. *The Information Society*, 27(4), 252-260. <https://doi.org/10.1080/01972243.2011.583819>.
- Ratto, M., & Hertz, G. (2019). Critical Making and Interdisciplinary Learning: Making as a Bridge between Art, Science, Engineering and Social Interventions. In L. Bogers & L. Chiappini (Eds.), *The Critical Makers Reader: (Un)learning Technology* (pp. 19-30). The Institute of Network Cultures.
- Ratto, M., & Hockema, S. (2009). FLWR PWR - Tending the Walled Garden. In A. Dekker & A. Wolfsberger (Eds.), *Walled Garden* (pp. 51-62). Virtueel Platform.
- Ravenscroft, T. (2021, July 29). *Council suspends bookings to MVDRV's Marble Arch Mound*. Dezeen. <https://www.dezeen.com/2021/07/29/mvdrv-marble-arch-mound-suspend-bookings/>

- Riemer, J. W. (1977). Varieties of Opportunistic Research. *Journal of Contemporary Ethnography*, 5(4), 467. Complementary Index.
- Riggio, M., & Kennedy, D. (2011). Parades and processions. In *The Oxford Companion to Theatre and Performance* (1st ed.). Oxford University Press, Inc. Credo Reference: https://search.credoreference.com/content/entry/oupotap/parades_and_processions/0?institutionId=1872.
- Robinson, A. (2011, September 9). In Theory Bakhtin: Carnival against Capital, Carnival against Power. *Ceasefire Magazine*. <https://ceasefiremagazine.co.uk/in-theory-bakhtin-2/>
- Rosengarten, M. (2018). 10. The Sociality of Infectious Diseases. In N. Marres, M. Guggenheim, & A. Wilkie (Eds.), *Inventing the Social* (pp. 234-252). Mattering Press.
- Ross, K. (1991). Translator's introduction. In J. Rancière, *The ignorant schoolmaster: Five lessons in intellectual emancipation*. Stanford University Press.
- Rowe, G., & Frewer, L. J. (2005). A Typology of Public Engagement Mechanisms. *Science, Technology, & Human Values*, 30(2), 251-290. <https://doi.org/10.1177/0162243904271724>.
- Sanders, E. B.-N., & Stappers, P. J. (2008). Co-creation and the new landscapes of design. *CoDesign*, 4(1), 5-18. <https://doi.org/10.1080/15710880701875068>.
- Schechner, R., & Kaprow, A. (1968). Extensions in Time and Space. An Interview with Allan Kaprow. *The Drama Review: TDR*, 12(3), 153-159. JSTOR. <https://doi.org/10.2307/1144364>.
- Schön, D. A. (1991). *The reflective practitioner: How professionals think in action*. Ashgate. <https://doi.org/10.4324/9781315237473>.
- Schutz, A. (1971). *Collected papers/with a preface by H.L. Van Breda* (3rd ed.). Nijhoff.
- Science Gallery Melbourne. (2019). *Disposable*. Science Gallery Melbourne. <https://melbourne.sciencegallery.com/disposable>.

- Sengers, P., & Gaver, W. (2006). Staying Open to Interpretation: Engaging Multiple Meanings in Design and Evaluation. *Proceedings of the 6th Conference on Designing Interactive Systems*, 99-108. <https://doi.org/10.1145/1142405.1142422>.
- Sennett, R. (2008). *The craftsman*. Yale University Press.
- Shafto, D. (2009). *Carnival*. Chelsea House.
- Shklovsky, V. (1986). Art as Technique. In R. Con Davis (Ed.), *Contemporary Literary Criticism. Modernism Through Poststructuralism* (pp. 15-29). Longman Press. (Original work published 1917).
- Sicart, M. (2014). *Play Matters*. MIT Press.
- Snake-Beings, E. (2018). Maker Culture and DiY technologies: Re-functioning as a Techno-Animist practice. *Continuum (Mount Lawley, W.A.)*, 32(2), 121-136.
- Spinoza, B. de. (1960). *Ethics*. Heron Books.
- Stachelhaus, H. (1991). *Joseph Beuys*. Abbeville Press.
- Stengers, I. (2005). The cosmopolitical proposal. In B. Latour & P. Weibel (Eds.), *Making Things Public: Atmospheres of Democracy* (pp. 994-1003). MIT Press.
- Stichting DOEN. (2018). *DOEN - What we DO*. Doen. <http://www.doen.nl/what-we-do.htm>.
- Stichting NDSM-werf. (2020). *Stichting NDSM-werf*. NDSM. <https://www.ndsm.nl/en/practical-information/wegwijzer/stichting-ndsm-werf/>
- Stokes, P. (2011). Participant Observation. In *Palgrave Key Concepts: Key Concepts in Business and Management Research Methods*. Macmillan Publishers Ltd. http://search.credoreference.com/content/entry/macbamm/participant_observation/0
- Superflux. (2021). *Refuge for Resurgence* [Mixed media]. Superflux. <http://superflux.in/index.php/work/refuge-for-resurgence/>

Sutton-Smith, B. (1986). *Toys as culture*. Gardner Press.

Szeemann, H. (1993). *Joseph Beuys*. Pro Litteris with the Kunsthaus Zürich.

Tannen, D., & Wallat, C. (1987). Interactive Frames and Knowledge Schemas in Interaction: Examples from a Medical Examination/Interview. *Social Psychology Quarterly*, 50(2), 205-216. JSTOR. <https://doi.org/10.2307/2786752>.

ter Gast, E. (2015, October 26). It Takes Guts and Trust: The ethical assessment of the Mutate or Die: a W.S. Burroughs Biotechnological Bestiary project by Adam Zaretsky. *Ellen Ter Gast*. www.ellentergast.com/it-takes-guts-and-trust-the-ethical-assessment-of-the-mutate-or-die-a-w-s-burroughs-biotechnological-bestiary-project-by-adam-zaretsky/

The Art of Impact. (2015). *Organisatie*. The Art of Impact. <https://theartofimpact.nl/over-the-art-of-impact/>

The Tissue Culture & Art Project (2000). *Semi-living steak* [Pre-Natal sheep skeletal muscle and degradable PGA polymer scaffold]. The Tissue Culture & Art Project. <https://tcaproject.net/portfolio/semi-living-steak/>

Thompson, M. (n.d.). *Life and Ecology (No. 1)*. Retrieved 7 January 2022, from <https://soundcloud.com/user-321810245/sets/3-days-of-fat>.

Thompson, M. (2014, December 2). *Dripping, Time and Manipulation | Fatberg*. Fatberg. <http://fatberg.nl/dripping-time-and-manipulation/>

Thompson, M. (2015a, February 7). *For those about to render (we salute you)*. Fatberg. <http://fatberg.nl/for-those-about-to-render-we-salute-you/>

Thompson, M. (2015b, July 20). *Fatcrete*. Fatberg. <http://fatberg.nl/fatcrete/>

Thompson, M. (2017). I'm with stupid. In D. Arets, M. Thompson, & I. Makay (Eds.), *Radical ecologies: Designing for the risk society: The readership in strategic creativity at Design Academy Eindhoven* (pp. 35-44). Eindhoven: Design Academy Eindhoven.

Thompson, M. (2017, August 13). *Re: Freeberg* [Personal communication].

Thompson, M. (2019a, January 23). *What are we doing?* [Keynote]. Industry Insights: Multidisciplinary Approaches to Design, The Design Museum, London.

Thompson, M. (2019b, February). A molecular biophysicist. A feminist activist. A nutritional scientist. A sociologist. A queer artist. An electrochemical engineer. A biodesigner, a hula dancer, and a cured sausage maker. What do these talented individuals share in common? They all have an intimate knowledge of and interest in fat - that most divisive of substances... *3 Days of Fat: Chewing the Fat, 2*.

Thompson, M., Cámara Leret, S., & Young, D. (2015). *The Rhythm of Life* [Interactive Artwork]. <http://thoughtcollider.nl/project/rhythm-of-life>.

Thompson, M., & Hendriks, A. (2014a). *Fatberg*. Fatberg. <http://fatberg.nl/>

Thompson, M., & Hendriks, A. (2014b, December 1). *Launch @ MU: 23rd Oct. 2014 (Dutch Design Week) | Fatberg*. Fatberg. <http://fatberg.nl/blog-post-example/>

Thompson, M., & Hendriks, A. (2015a). FATBERG: Chapter 1. *Proceedings of Research Through Design 2015*. RTD 2015. <https://doi.org/10.6084/m9.figshare.1327972.v1>.

Thompson, M., & Hendriks, A. (2015b, June 15). *FATBERG Pledge Calculator*. Fatberg. <http://fatberg.nl/fatberg-pledge-calculator/>

Thompson, M., & Hendriks, A. (2017a, May 15). *Lard Pour Lard: T-Shirt now on sale | Fatberg*. Fatberg. <http://fatberg.nl/lard-pour-lard-t-shirt-now-on-sale/>

- Thompson, M., & Hendriks, A. (2017b, May 16). *Fat & Food: From Lardo di Collonata to Lipohypertrophy (Event) | Fatberg*. Fatberg. <http://fatberg.nl/fat-food-event/>
- Thompson, M., & Hendriks, A. (2017c, July 3). *Own an Island | Fatberg*. Fatberg. <http://fatberg.nl/become-an-island-owner/>
- Thompson, M., & Hendriks, A. (2017, May 16). *Fat & Food: From Lardo di Collonata to Lipohypertrophy (Event) | Fatberg*. Fatberg. <http://fatberg.nl/fat-food-event/>
- Thompson, M., & Hendriks, A. (2019). *Fatberg: Building an Island of Fat* [Video]. Retrieved from: <https://vimeo.com/311533222/9d573547d0>.
- Thompson, M., Hendriks, A., & Mills, C. (2018, October 10). *King's College London—3 Days of Fat*. Kings College London. <https://www.kcl.ac.uk/cultural/-/projects/3-days-of-fat>.
- Thota, H., & Munir, Z. (2011). Co Creation. In *Palgrave Key concepts: Key concepts in innovation*. Macmillan Publishers Ltd. https://search-credoreference-com.gold.idm.oclc.org/content/entry/maci/co_creation/0?institutionId=1872.
- Thought Collider. (2015a). *About*. Thought Collider. <http://thoughtcollider.nl/about>.
- Thought Collider, & Branscombe, S. (Eds.). (2019). *3 Days of fat: Chewing the Fat*.
- Till, J. (2005). The Negotiation of Hope. In P. Blundell-Jones, D. Petrescu, & J. Till (Eds.), *Architecture and participation* (pp. 23–42). Spon Press.
- Till, J. (2009). *Architecture depends*. MIT.
- Tolstoy, G., Leo. (1887). Kholstomír. In *The Invaders, and Other Stories* (pp. 283–343). Thomas Y. Crowell & Co. Retrieved from Project Gutenberg: <http://www.gutenberg.org/ebooks/56797>.
- Tweakfest. (2008a, September 8). *Dash MacDonald in den Händen der Kids*. Tweakfest. https://www.youtube.com/watch?v=5txN_Qtp-ik.

Tweakfest. (2008b, September 8). *Dash MacDonald in den Händen der Kids*. Tweakfest. <https://www.youtube.com/watch?v=CzIqMgeG-3I>.

Tweakfest. (2008c, September 8). *Dash MacDonald in den Händen der Kids*. Tweakfest. <https://www.youtube.com/watch?v=V8ecaAyvWMs>.

van Daal, S. (2016, November 10). *Fatberg: An island of fat to redefine the substance of our age*. Designboom. <https://www.designboom.com/art/fatberg-island-arne-hendriks-mike-thompson-amsterdam-11-10-2016/>

Van Dale. (n.d.-a). Hufter. In *Van Dale: Gratis woordenboek*. Van Dale. Retrieved 2 August 2021, from <https://www.vandale.nl/gratis-woordenboek/nederlands-engels/vertaling/hufter>.

Van Dale. (n.d.-b). Hufterproof. In *Van Dale: Gratis woordenboek*. Van Dale. Retrieved 2 August 2021, from <https://www.vandale.nl/gratis-woordenboek/nederlands-engels/vertaling/hufterproof>.

Vidal, J. (2013, August 6). Fatberg ahead! How London was saved from a 15-tonne ball of grease. *The Guardian*. <https://www.theguardian.com/environment/2013/aug/06/fatberg-london-sewer-grease-blockage>

Vos, R. (2018, November 26). *FATBERG* [Personal communication].

Waag. (2016, September 24). *The anatomy lesson: Dissecting medical futures* [InteractiveResource]. Waag; Waag. <https://waag.org/en/event/anatomy-lesson-dissecting-medical-futures>.

Waag Society. (2019). *Public Research Agenda*. Waag Society.

Wainwright, O. (2021, July 23). *Mound zero: What is Marble Arch's new landmark all about?* The Guardian. <http://www.theguardian.com/artanddesign/2021/jul/23/marble-arch-hill-mound-london-oxford-street>.

Walters, V. (2010). Working 'in the opposite direction': Joseph Beuys in the field. *Anthropological Journal of European Cultures*, 19(2), 22-43.

Wiles, R. (2013). *What are Qualitative Research Ethics?* (1st ed.). Bloomsbury Academic; Bloomsbury Collections. <https://doi.org/10.5040/9781849666558>.

Wilkie, A., Michael, M., & Plummer-Fernandez, M. (2015). Speculative Method and Twitter: Bots, Energy and Three Conceptual Characters. *The Sociological Review*, 63(1), 79-101. <https://doi.org/10.1111/1467-954X.12168>.

Wilsdon, J., & Willis, R. (2004). *See-through Science: Why public engagement needs to move upstream*. DEMOS.

Wright, P., & McCarthy, J. (2005). The value of the novel in designing for experience. In A. Pirhonen, P. Saariluoma, H. Isomäki, & C. Roast (Eds.), *Future Interaction Design* (pp. 9-30). Springer London. https://doi.org/10.1007/1-84628-089-3_.

APPENDIX

The updated lexicon of terms

TERM	DEFINITION
Affordance	Gibson's (1966; 1979) ecological approach to perception refers to the perceptual (sensory) information or properties of things, objects and the environment that facilitate an action or sequence of actions for those suitably equipped to act upon (Gaver, 1991). These "affordances" enable consideration of how actions and social behaviours are shaped by and occur within the physical world.
Appropriation	Huizinga contends that the true spirit of play is appropriative. Appropriation refers to the action of taking something and adapting it to one's objectives. It describes how participants take and adapt things, objects, situations and or their surroundings as opportunities for play. Appropriation can be both self-initiated, for example, when participants transform their surroundings into an opportunity for play, or by design, in the form of objects or situations purposefully left open for participants to interpret.
Autotelic	An activity or work with an end or purpose in itself. Play is an autotelic activity. Its motivations and logic are expressed within its own pronounced spaces, conditions and timespans (Sicart, 2014; Henricks, 2006).
Breach of expectancies	When an individual's social environment is unsettled and their expectancies breached, an attempt is made to recapture anticipated structures and mechanisms rationally and objectively (Garfinkel, 1984). Such breaches demonstrate that routine social situations might be manipulated to provoke participant improvisation and unearth and upend latent views and experiences.
Carnavalesque	A performative expression, where the celebration of excess and parody of high culture creates a break from and critique of prevailing social and political structures. Carnavalesque play is necessarily disruptive, existing to demonstrate that things might be different.

TERM	DEFINITION
Chance	One of the four qualities of Kaprow's artistic happenings. Refers to the inherent unpredictability within participatory practices. It signals an unstable state, a necessary feature of creative experimentation and condition that an activity can be more or less susceptible. Chance might be encouraged or designed as a feature of interdisciplinary events, employed for its disruptive potential and ability to evolve thinking and debate, obliging participants to be in the moment.
Curtailment	A distinct type of overspill observed at the <i>Fat and Food</i> event. Refers to outputs that do not conform with Fatberg's unorthodox methods and objectives, indicating participants' rejection, closure or reshaping of activity.
Defamiliarisation	A literary technique displacing the reader's gaze upon the habitual to confront them with the subject from which they have become estranged. Employed within design, both as a tool to confront assumptions and prejudices embedded in the design of objects or as the intended effect of design – a defamiliarising effect.
Dialogic space	An approach to participation emphasising inquiry, inclusivity, openness, and openendedness, with the possibility of experiences and meanings being plural and unresolved (McCarthy & Wright, 2015). Peculiar to Fatberg events is that fat is perceived as an active participant and collaborator whose expressions and meanings shape and form people and events as they shape and form it.

TERM	DEFINITION
Expanded notion of art/social sculpture	Building upon the notion of parallel process, which foregrounds the experiential as a catalyst for thinking, dialogue and action, Beuys forwards his expanded notion of art and material. The philosophy does not propose an end to formal divisions between life, art, science and other domains and processes, but their expansion, offering different means to observe the world and communicate. The philosophy, which aims to inspire new ideas, connections, processes and insights, provides the impetus for the broader concept of social sculpture. Social sculpture reimagines sculpture as an evolving, social process, positioning creative practice as <i>the</i> politically productive force, with everyone deemed a participant and agent for change; everyone is an artist. In this research, social sculpture provides a useful theoretical tool to reflect upon the interrelations between things, people, processes and ideas in the context of playful events.
Habitat	One of the four qualities of Kaprow's artistic happenings. Concerns the performance of space, being not only a physical space but a set of relationships, values, atmosphere and echoes of prior activity that permeate the event space and the experiences of those who perform within.
Hufferproofness	Derived from the dutch term <i>hufferproof</i> , which means to withstand vandalism or antisocial behaviour – to be idiot-proof – hufferproofness as an analytical concept enables consideration of the role and the effects of idiocy in participatory events and how the events structure and features facilitate such behaviour.
Idiot	Stengers' (2005) figure of the idiot "resists the consensual way in which the situation is presented" (p. 994), demanding that "we don't consider ourselves authorised to believe we possess the meaning of what we know" (p. 995). Applied to participatory events, Horst and Michael (2011) propose that we recognise participants' misbehaviour or non-participation as a form of critique and creative problem generation. The idiot, as a conceptual character, thus provides a means to complicate and study the boundaries of participation.

TERM	DEFINITION
Impermanence	Another of the four qualities of Kaprow's artistic happenings, impermanence, describes an activity's existence as a one-off, autotelic pursuit. It signals that an activity's value lies in its ephemeral and emergent character; when participants immerse in unrepeatable actions.
Instability	To be unstable; prone to change (Reber et al., 2009). Refers to the variability of biological substances and the extent to which events are open to external effects and chance occurrences.
Magic circle	The context of play. An autotelic domain defined by aims, conventions and boundaries that differentiate play from ordinary life. Inside the magic circle, an absolute and peculiar order reigns, yet, its boundaries need not be fixed, for play is often a negotiated activity. Here lies a distinction between two types of magic circle: a game space, where there are stakes at play and where rules and objectives are absolute; and a play space, an emergent space that comes into existence when a space is appropriated by play (Sicart, 2014). Such spaces differ in openness and constraint: the extent to which the space is open to appropriation.
Making with vibrant matter	Drawing on Beuys's expanded notion of artistic production, critical making and bioart, as conjoined conceptual and analytical approaches to material, making with vibrant matter describes making-oriented practices that harness the dynamism and instability of biological substances, materials and processes as the catalyst and site for collective thought and action. Critically, making with vibrant matter necessitates a belief in material agency and its effects, a wilful commitment to situated play.
No plot or obvious philosophy	Another of the four qualities of Kaprow's artistic happenings. Related to openness, no plot or obvious philosophy expresses the appropriative nature of happenings, where rudimentary plans and instructions oblige improvisation of the unfolding situation and relations between material, things, spaces and people.

TERM	DEFINITION
Openness	A dimension used to describe the level of control asserted over activity and the extent to which that activity is open to appropriation. McCarthy and Wright (2015) contend openness is a multi-layered construct observable in three ways: open activities refer to works that are open to the readings and interpretations of others; structurally open activities encourage participants to appropriate materials and tasks to suit their needs and interests; and, incomplete works, which prompt participants to create, compare and perform their own outputs.
Overspill	Michael (2012) argues that engagement activities can produce happenings or misbehaviours that, in some way, overspill the empirical, analytic, or political framing of the event. Thus, over spills are occurrences that events may be more or less susceptible to, contingent on the degree of openness and appropriation afforded by participatory activities.
Parallel process	Contrasting the German words <i>bildhauerei</i> (to sculpt by taking material away) and <i>plastiker</i> (to shape flexible material), artist Joseph Beuys traces a link to the creation of will, speech, thought and action. With this analogy, the artist perceives the shaping of practice and theory as a reciprocal exchange, a parallel process occurring between objects, their associated actions, and dialogue.
Play	In <i>Homo Ludens</i> , Huizinga (1955) depicts play as an innate part of human culture, a specific form of activity, with an inherently social function. Play, as an activity, exists as an interlude, a set of temporary actions and behaviours distinct from ordinary life. As opposed to being rooted in competition, within the research, play is understood as a carefree, self-determined pursuit, evolving extemporaneously according to the circumstances and intrinsic motivations.
Playfulness	Playfulness describes the attitude of play; play performed outside of the context of play. It specifies a way of being in the world, of inciting the spirit of play, yet remaining respectful of the conditions in which it interacts. To be playful is to treat the world as a plaything, transform one's surroundings into an opportunity for play, and evoke a sense of curiosity, love of diversion, exploration, creation and wonder.

TERM	DEFINITION
Props (toys)	<p>Props (toys) facilitate a way of being in and making sense of the world. They encourage appropriation and the reading and changing of one's surroundings into an opportunity for play. Props are the things that make play and are made for play, inspiring or filtering specific actions and behaviours. A prop's filtering potential derives from its functionality and how the prop adapts to the actions and behaviours that emerge through play (Sicart, 2014). Recognising how props filter play is essential for understanding the actions of participants within play or playful activity; the why and how we play.</p>
Suspension of disbelief	<p>To suspend disbelief is to be drawn into and swept away by an experience as it unfolds (Kroon, 2014). For instance, drama, whether a theatrical play, opera, mime or ballet, relies on the "willing suspension of disbelief for the moment, which constitutes poetic faith" (Coleridge, 1817, pp. 349–50). In the research, the concept refers to participants' inclination to "play along" that it is both desirable and fat's will to build an island of fat.</p>
Synthetic agency	<p>Describes a third, fictional agency, embodied by the Fatberg, facilitating the coming together of material and designer/artist. It explains the role-play performed in Fatberg events where Arne and I claim to be directed by and speak on behalf of fat. The synthetic agency encourages a way of thinking about and engaging with fat that perpetuates novel happenings and enables reading embodied and situated experiences with people and material in terms of their serviceability for island-building.</p>
Vibrant matter	<p>Specifies the energy of matter and things, where "all forces and flows are or can become lively, affective, and signalling" (Bennett, 2010, pp. 116–117). It expresses that no one body or agent is the privileged site of agency, but "an ontologically diverse assemblage of energies and bodies, of simple and complex bodies, of the physical and the physiological" (Bennett, 2010, p. 117). To enter into the intention of matter is to decentre oneself from an anthropocentric perspective and recognise that various modes of observation are required, beyond the scientific, to comprehend things and events in their entirety.</p>