



Norwegian University
of Life Sciences

Master's Thesis 2021 60 ECTS

Faculty of Biosciences

Towards sustainable food provisioning: An exploration of socio-material agencies shaping household shopping practices in Norwegian supermarkets

Kaja Ludvigsen

Master of Science in Agroecology

Abstract

The current agri-food system is intricate and immensely complex, with human and planetary health unravelling at an unimaginable pace. At its centre, grocery stores mediate the exchange of food items between farmers, manufacturers, suppliers, and consumers. Occupying 96% of the Norwegian grocery retail market, NorgesGruppen, Rema 1000, and Coop possess considerable power in transforming consumers' relationship to food. Therefore, working towards sustainable food provisioning will require a greater understanding of the meanings and agencies that shape household shopping practices. Using a social practice theory approach, this study investigates the ways in which nine households embody sociocultural meanings of sustainable food consumption and how that interacts with the materiality of food provisioning. Through semi-structured interviews, shopping logs and photovoice, the participants' accounts of navigating Norwegian supermarkets exemplify the highly moralized and contested landscape in which food choices are negotiated. The study found that sustainable food values, shaped by beliefs and attitudes, are informed by a myriad of direct experiences and discourse. In sourcing sustainable food items, the participants' practice of grocery shopping is contingent on stores supplying a variety of local, seasonal, organic, or package-free items. Furthermore, it requires households to be knowledgeable, skilled, reflective, and efficient in navigating strategically designed stores that primarily promote the consumption of meat and processed food items. This study suggests that, for sustainable food consumption to become an everyday practice, households require equal access to a variety of sustainable food items that are affordable, visible, and marketed. From a policy standpoint, efforts should go towards creating a sociocultural environment that encourages participatory learning, community engagement and environmental sensitivity towards our living Earth.

Acknowledgments

There is a great number of people whom I wish to thank for their guidance, help and encouragement while writing this thesis.

First, I would like to thank all the participants who took part in my research, for allowing me to unpack their 'grocery basket', and for sharing their stories, visions, and experiences. Their actions and convictions give me hope for the future.

An enormous thanks to my advisors, Åsmund Lægreid Steiro, with his aspiring guidance and constructive feedback, he challenged me to be bold, to stand up for my work and to keep on growing – as a researcher, a writer, and thinker. And Anna Marie Nicolaysen, for consistently allowing me to follow my own course, while gently steering me in the right direction.

A special thanks to Unni Kjærnes and Gunnar Vittersø for the insightful interviews, their passion for food and agriculture inspired a great deal of my work.

Thank you to Bob van Oort from CICERO for his encouraging words and boost of confidence for pursuing this research topic.

Additionally, I thank Knut Lutnæs for sharing vital insight from the standpoint of Coop. His honest take on the food systems was humbling and opened new avenues of inquiry in my study.

And finally, my deepest appreciation to my family, friends, and community at Gruten and Håndslag for cheering me on and providing perspective in the thesis bubble. What could have been an isolating year of conducting research amidst a global pandemic, became one of new friendships, deeper connections, and the start of exciting work opportunities.

“Grocery shopping then and now”



“Potato for sale at the market, Bergen, 1920s”



“Sausages in J. Andersen’s butcher shop, 1904”
Images from Vintage Norway (2021)

Table of Contents

- 1 INTRODUCTION 6**
 - 1.1 SYMPTOMS OF A FLAWED FOOD SYSTEM 6
 - 1.2 RESEARCH PURPOSE..... 7
 - 1.3 THE NORWEGIAN FOODSCAPE..... 9
 - 1.3.1 Sustainability Among Norwegian Grocery Retailers 10
 - 1.4 PRACTICE THEORY AS AN ALTERNATIVE PERSPECTIVE 15
- 2 RESEARCH DESIGN 19**
 - 2.1 MULTIPLE CASE STUDY 19
 - 2.2 SAMPLING PLAN..... 20
 - 2.3 RESEARCH METHODS..... 21
 - 2.3.1 Semi-Structured Interviews 22
 - 2.3.2 Shopping Log and Photovoice..... 23
 - 2.4 DATA ANALYSIS 24
 - 2.5 RESEARCH QUALITY AND ETHICS..... 25
- 3 RESULTS AND DISCUSSION 27**
 - 3.1 PARTICIPATING HOUSEHOLDS 27
 - 3.2 EMBODYING SUSTAINABLE FOOD VALUES 28
 - 3.2.1 Informed Meaning..... 30
 - 3.2.2 Sustainable Food Values 42
 - 3.2.3 RQ1 Concluding Remarks..... 44
 - 3.3 PERFORMING SUSTAINABLE FOOD PROVISIONING..... 46
 - 3.3.1 Material Systems..... 47
 - 3.3.2 Competence 55
 - 3.3.3 Expressing Sustainable Food Values..... 58
 - 3.3.4 RQ2 Concluding Remarks..... 69
- 4 CONCLUSION..... 70**
 - 4.1 TOWARDS SUSTAINABLE FOOD PROVISIONING 71
- 5 REFERENCES 73**
- APPENDIX..... 79**

List of Tables

TABLE 1: OVERVIEW OF PARTICIPANTS' DEMOGRAPHICS	21
TABLE 2: SUMMARY OF RESEARCH METHODS AND DATA COLLECTION	22
TABLE 3: DESCRIPTION OF PARTICIPANT BACKGROUND	27
TABLE 4: DESCRIPTION OF PARTICIPANT SHOPPING CHARACTERISTICS.....	28

List of Figures

FIGURE 1: FLOW CHART ILLUSTRATING WHAT SUSTAINABLE FOOD MEANS TO THE PARTICIPANTS, AND HOW THESE MEANINGS ARE INFORMED	29
FIGURE 2: FLOW CHART ILLUSTRATING THE SOCIO-MATERIAL AGENCIES INFLUENCING HOW SUSTAINABLE FOOD PROVISIONING IS PERFORMED IN NORWEGIAN SUPERMARKETS.....	46

Appendices

APPENDIX 1: INTERVIEW 1 GUIDELINE	79
APPENDIX 2: INTERVIEW 2 GUIDELINE	81
APPENDIX 3: SHOPPING LOG	83
APPENDIX 4: PHOTOVOICE	84
APPENDIX 5: RESEARCH QUALITY METRICS.....	87
APPENDIX 6: SAMPLE CODING INTERVIEW 1	88
APPENDIX 7: SAMPLE CODING INTERVIEW 2	89

Grocery Store Categories

Supermarkets: Coop, NorgesGruppen, Rema 1000

Big-chain stores: Coop, NorgesGruppen, Rema 1000

Grocery stores: Coop, NorgesGruppen, Rema 1000

Organic stores: E.g., Røtter

Independent stores: E.g., Mølleren Sylvia

International stores: E.g., Grønland Torg Frukt og Grønt

Alternative food networks: E.g., REKO ringer, Community Supported Agriculture

1 Introduction

1.1 Symptoms of a Flawed Food System

Symptoms of our inherently flawed industrialized agri-food system are taking shape in the form of climate change, loss of biodiversity, environmental degradation, and the dissolution of rural livelihoods. Today's food supply chain is responsible for nearly one-third of anthropogenic GHG emissions and 80% extinction threats to mammal and bird species (Poore & Nemecek, 2018). On a societal level, we are experiencing the paradoxical double-headed spear of famine and obesity (Otero et al., 2018). These two seemingly independent symptoms of our flawed food system are inextricably linked. Western diets perpetuate the consumption of commodities subsidized in agriculture which is often produced in destructive ways. In other words, our health reflects environmental sustainability or lack thereof.

The transformation of our agri-food system demands a shift in how we produce and consume food. If we are to reach healthy diets by 2050, it will require a greater than 50% reduction in global consumption of unhealthy foods, such as processed meat and sugar, and a greater than 100% increase in consumption of healthy foods, such as nuts, fruits, vegetables, and legumes (Willett et al., 2019). Unfortunately, this dietary shift challenges the corporations and retailers who provide unhealthy food and work hard to undermine public health information and manipulate consumers (Koch & Sprague, 2014). Further, it employs the false assumption that sovereign consumers can achieve social change by 'voting' with their dollar (Johnston, 2008). However, this supposed economic democracy disregards socio-material structures that influence what we buy (Koch, 2012). Climate change, an evidently systemic problem, often gets framed as an individual one; take shorter showers, use public transport, and eat less meat, for example. Nonetheless, it is widely understood that making sustainable choices is not nearly as easy as it seems.

In addition to making sustainable choices, households need to acquire the necessary food products. As a result of market liberalisation and the commodification of food, a substantial portion of household diets in OECD¹ countries are procured at grocery stores (Clapp, 2016). As a marked example, Norway reflects a country where neoliberal forms of

¹ Organisation for Economic Co-operation and Development

food governance have emerged (Richards et al., 2013). In the last few decades, supermarkets have drastically increased their retail power and are now the key players in the Norwegian grocery sector. The three most prominent supermarket groups (NorgesGruppen, COOP Norge and Rema 1000) hold a combined market share of around 96%, which the average Norwegian shopper visits four times a week (Myrset et al., 2015). With almost 4000 stores across the country and nearly NOK 200 billion in annual revenue (Nielsen, 2020), the resultant market power and exceptional concentration of food retail have become a concern for consumers and producers nationwide. In other words, Norway now finds itself in a position of large private grocery stores 'self-governing' what food is placed on our plates (Richards et al., 2013).

1.2 Research Purpose

Until recently, most social scientific analyses of (un)sustainable consumption concentrate on understanding the drivers behind consumption growth and the environmental impacts of modern lifestyles (Spaargaren & Mol, 2011). This reductionist approach views consumption as cause and effect where sovereign individuals carry out isolated actions. Grocery shopping, a practice that occurs among and between more explicit forms of consumption (e.g., eating, driving, using energy to cook or store food), often gets neglected in consumption research (Tjärnemo & Södahl, 2015). Mundane by nature, grocery shopping proves to be a form of consumption that requires skilled labour organized by powerful social and economic actors (Kock & Sprague, 2014). Likewise, Jackson et al. (2006) framed shopping as a social practice enacted by individuals knowledgeable of the (explicit or implicit) rules that govern their conduct. Approaching their research through theories of social practice, they demonstrated how individual choice is highly constrained by social and spatial circumstances. Understanding how consumers experience choice and their associated meanings reveal how grocery shopping is socially embedded within households' increasingly complex everyday lives (Jackson et al., 2006; Elms et al., 2016).

Approaching this topic from another angle, Hjelmar (2011) investigated how consumers' shopping practices are influenced by their views on society, the role of organic food, eco-labels, mass media and social interactions within the household. His analysis discerned between convenience and reflexive behaviours. The latter reflects a type of practice in which price and convenience are of lesser importance, and broader personal and societal

concerns are of more importance. Nevertheless, findings from consumer research indicate that reflexive consumers, while trying to shop in environmentally conscious ways, do not always act on their values, an anomaly known as the attitude-behaviour gap (Tjärnemo & Södahl, 2015; Kollmuss & Agyeman, 2002; Warde, 2017). Factors influencing the attitude-behaviour gap range from social to economic and spatial circumstances. Moreover, research by Vittersø and Tangeland (2015) illustrates how sustainable food consumption can, in some cases, be politically constrained. Exploring organic food consumption in Norway, their findings indicate that despite increased sales in organic food, the market share has risen marginally. Competitive strategies promoting local Norwegian products, in addition to economic and political conflicts of interest, could explain why Norway continues to fail in meeting its goal of 15% organic food consumption.

Grocery shopping is a crucial form of economic activity ensuring household's survival and the functioning of larger social institutions (Kock, 2013). Food retailers weave households, suppliers, retailers, and producers intricately in a complex food system that acts and relies on one another (Tjärnemo & Södahl, 2015). A point could be made that grocery shopping, a practice that takes place between and among key actors, has the potential to transform our food system. Therefore, working towards sustainable food provisioning requires a greater understanding of the meanings and agencies that shape household shopping practices. Recognizing that the environmental issue of grocery shopping hinges on social and material factors, this thesis presents a qualitative practice-theoretical investigation into how nine households perform their sustainable food purchasing practices within the Norwegian grocery market.

Two overarching research questions have guided this study:

- 1. What does sustainable food mean to the participants, and how are these meanings informed?*
- 2. How do socio-material agencies act on the participants' grocery shopping practices?*

The objective of this research is thus twofold: Firstly, it aims at describing the participants' definition of a sustainable diet and how these meanings are informed. Secondly, it attempts to uncover socio-material agencies which enable and constrain the

participants' ability to perform sustainable food provisioning. Overall, this study contributes to the literature on consumer research studies by elaborating on the complexity of sustainable consumption practices and the capitalistic power struggles that is evident when discussing and defining sustainable food provisioning.

The thesis is organized as follows: In the following section, I contextually map the Norwegian food system in which grocery shopping takes place and describe the theoretical framework of this research. This is followed by the methodology and the research methods that have been used. Thereafter, the empirical findings are presented and discussed, including a note on the implications of the study for future research.

1.3 The Norwegian Foodscape

Norway has one of the highest grocery stores to inhabitant ratios in Europe (Skogli et al., 2020), a point that reflects the country's vast geography and spread population. Fifty years back, households were catered by nearly 9000 stores, double that today, of which many were independently owned (Lavik & Jacobsen, 2015). Then came the rise of globalization, changes in economic security, and technological advancements, which forced grocery stores to adapt structurally and operationally. During Norway's late 1980s economic downturn, retailers started optimizing their businesses to be more efficient, streamlined and centralized with larger integrated units than independent merchants (Lavik & Jacobsen, 2015). Consequently, this time also paved the way for the 'low-price' grocery market (KIWI, COOP Extra, Rema 1000). Representing a significant share of the retail space, low-price stores highlight Norwegians' tendency to be concerned about the price of food (Vittersø & Tangeland, 2015). With increased market power, supermarkets can lower their transaction costs through strategies such as slotting fees (for shelf space), vertical integration (e.g., creating home brands) and setting standards regarding food safety, the cosmetic appearance of fruit and vegetables, animal welfare, land management practices and agricultural inputs (Richards et al., 2013). Today, many large retailers have an influence on the entire supply chain, for instance, NorgesGruppen own's the wholesaler and distributor, ASKO. Evidently, this form of food governance dictates what items customers can buy, and which suppliers get access to these key food markets. With growing concern of climate change, the practices, and ethics constitutive of our capitalistic systems (marked by large corporations), are increasingly under question. In response, the

grocery sector has placed sustainability at the forefront of their business, and in some cases, is used as greenwashing strategies, a point which Gunnar Vittersø voiced in an interview:

"I believe the food sector considers organic as a niche market and that they benefit from marketing it towards certain conscious consumers, it acts as a competitive advantage among retailers. Furthermore, they see organic as part of their profile and as a message to society and politicians that they are socially responsible." (G. Vittersø, personal communication, January 19, 2021)

Defining what constitutes a sustainable diet is highly subjective and contested amongst research and public discourse. According to the FAO (2019, p.9), sustainable healthy diets are, "Dietary patterns that promote all dimensions of individuals' health and wellbeing; have low environmental pressure and impact; are accessible, affordable, safe and equitable; and are culturally acceptable (...)". In Norway, they envision sustainable diets to: "Promote the development of safe and healthy foods and strive for healthy and environmentally friendly practices in the production and consumption of food" (Regjeringen, 2017, p.5). Startling data indicates that Norwegian households are eating as low as 13% of the ideal amount of vegetables, and nearly 80% of adults have a higher consumption of saturated fats than recommended (Regjeringen, 2017). Therefore, the report recommends a varied diet of whole-grains, vegetables, fruit, berries, and fish with limited amounts of processed meat, red meat, salt, and sugar (Regjeringen, 2017). Rather than denoting the urgency of eating less meat and more plant-based options, as accentuated by the EAT Lancet Commission (Willett et al., 2019), the report primarily lists practices households can follow in reducing food waste (Regjeringen, 2017, p.12). While important, the recommendations are redundant and further individualizes systemic problems.

1.3.1 Sustainability Among Norwegian Grocery Retailers

The largest retail group, NorgesGruppen, conveys ambitious goals of supplying their daily 1.2 million customer visits a shopping experience that is cheaper, better, and easier to make green and healthy choices (NorgesGruppen, 2021). Listed on their website under 'Sustainability in NorgesGruppen' are three focal areas they intend to work on relating to

the "environment, health, and people". Among all grocery retailers, an emphasis is placed on reducing waste, energy use and packaging. NorgesGruppen has eliminated nearly 800 tonnes of packaging since 2018 and cut 38% of food waste since 2015. Other activities include improve animal welfare, sustainable fish, toxic-free products, and increased sale of local produce. In 2020, NorgesGruppen sold NOK 2.5 billion (2020 revenue accounted for NOK 102 billion) in food items from 675 local producers. The demand for Norwegian fruit and vegetables increased by 9% from 2019 to 2020, a growth they claimed was constrained by the limited supply of produce from the farmers' side. This argument contradicts recent articles citing stories of Norwegian farmers disposing of crops (e.g., carrots and onion; see Krosby & Høye, 2017) due to strict retailer guidelines regarding fruit and vegetable aesthetics. NorgesGruppen's manager declined to be interviewed in January 2021.

Coop Norway, comprising approximately 30% of the total grocery market, caters 1.4 million cooperative members across the country. Coop's recent sustainability report (Coop, 2021) outlined their 2025 sustainability strategy as "creating positive values for people, environment and Coop". When specifically asked about which food types they perceive as climate smarter, Coop's Environmental manager, Knut Lutnæs, mentioned:

"We do not have a formal decision on definitions within the company. When we talk about sustainable food, we often talk about certified products, certified organic, Nordic SWAN label, MSC, FSC, rainforest alliance and other international recognized third party certifications," (K.Lutnæs, personal communication, January 25, 2021)

Rather than reducing consumer choice, Coop intends to offer healthier alternatives, including more fruit, vegetables, whole-grain products, and seafood while decreasing salt, sugar and saturated fat. Further, they claim these products are more sustainable and counter the adverse effects of social inequality (Coop, 2021). In 2020, Coop reduced their use of plastic by 185 tonnes, and food waste by 2.2%. Where they stand out from the other retailers is their impressive growth of Änglamark² products (63% increase) and Coop Vegetarian Day³ (177% increase) in the last year. Additionally, sales from local food rose 139%, and organic products grew 31%. Coop's home brands' success and rapid expansion

² Coop's home brand of organic, sustainable and allergy-free products

³ Range of meat-substitute products such as burger patties, hotdogs, sandwich toppings and vegan cheese

lend attention to how policies and practices are developed internally with the Nordic cooperation (across Sweden, Denmark and Finland). Knut continued by sharing:

“A lot of the organic products we have are imported which means that a common product development makes it easier and cheaper for us rather than doing it individually. The product range available in Denmark and Sweden is huge compared to ours, as long as the products are on the shelves in Denmark, except for some fresh agricultural products, we could also source it, which is a huge advantage for us.” (K. Lutnæs, personal communication, January 25, 2021)

Interestingly, Knut also mentioned the challenge of sourcing Norwegian produce. Unlike NorgesGruppen, he referred explicitly to the low availability of local *organic* produce. Voicing his opinion that Norwegian agriculture is highly politicized, he believes neither farmer organizations nor politicians are dealing seriously enough with the issue of organic production decreasing in Norway.

Rema 1000, accounting for 24% of the market, represents one low-price store-brand spread across the country in 647 locations visited by 3,7 million weekly customers. Rema 1000's recent 2020 sustainability report (Rema 1000, 2021, p.6) began by addressing their role in climate change, “Food production accounts for 30% of global greenhouse gas emissions and puts pressure on resources such as water, forests, land and sea. We emit too much, consume too much and often affect those who have the least. There is no doubt that we as a grocery chain are part of the biggest challenge of our time. Fortunately, this also means that we can be part of the solution.” In being part of the solution, they intend to be climate-positive (no food waste, sustainable packaging and circular) and improved customer health (less salt, sugar and saturated fat and sustainable food) by 2030. Their organic range, Kolonihagen, grew 40%, with 63 new products launched in 2020. Similar growth took place across their frozen vegetarian section and plant-based brand, ‘Grønne folk’. 2020 also marked the year they introduced their own range of organic fruit and vegetables and reduced packaging, which resulted in cutting 792 KG of plastic. Recognizing that nearly 70% of the Norwegian population is overweight, Rema 1000 intends to inspire customers to buy healthier choices through marketing campaigns, product placement and offering a wider selection of nutritious goods. Instead of removing obesity-culprit food items, retailers place responsibility on individuals to avoid purchasing these products in the first place (Koch, 2012). This point is supported when Rema 1000 mentioned that they will continue to sell chocolate but will “stretch ourselves

further so that healthy choices are easy to make in everyday life.” (Rema 1000, 2021, p.45). Rema 1000's manager declined to be interviewed in January 2021.

As for-profit corporations, Norwegian supermarkets are unlikely to encourage ‘ecological-citizenship’⁴. Instead, stores maximise the ideology of consumerism by providing a retail space that supports individual choice and the need for variety. NorgesGruppen, Coop, and Rema 1000 expressed intentions of providing more sustainable options; however, they presuppose that their customers are educated, knowledgeable and have the skills to navigate rows of food items stocking sustainable and unsustainable goods. Moreover, they assume that customers are willing to restrict their self-interest or economic means in the name of achieving more sustainable or socially just outcomes (Johnston, 2008).

I argue that stores wanting to increase organic and vegetarian options contradicts their heavily marketed meat and processed food campaigns. As I write, Norwegian grocery stores are advertising the summer ‘grill season’ where, upon entering the store, customers can buy 3 for 2, tin-foiled packaged BBQ chicken wings. The research institute SIFO found that Norwegian grocery chains average advertising budget for promoting meat was three times the amount spent on marketing fruits and vegetables (SIFO, 2014). By heavily emphasizing meat in their marketing campaigns, they are nudging consumers to buy more meat, thus maintaining and strengthening a current unsustainable food norm (Tjärnemo & Södahl, 2015). Promoting consumer pleasure and commodity choice is a much more democratic sell for Norwegian supermarkets than promoting citizenship ideals that restrain consumer choices to a limited range of local, organic or package-free food (Johnston, 2008). As Wilk (2014, p.332) put it, “Until we think about the limits of wealth, a sustainable consumer culture remains an oxymoron, and sustainable consumption a term that allows science to say one thing and the public to hear another”

Supermarkets often come under scrutiny from the Norwegian Competition Authority on unfair competition and cooperating in raising grocery prices to consumers. Recently, the three corporations were issued a fine of NOK 21 billion, which is now being appealed (Bugge, 2020). In an interview with Unni Kjærnes, she elaborated on how annual negotiations take place between manufacturers and retailers. With an emphasis on

⁴ the need for affluent consumers to consume less in the interest of achieving social and ecological integrity (Durning 1992).

efficiency and costs, the streamlined food market competes on prices rather than quality and diversity (Kjærnes, personal interview, 20/1/2021). As such, unfair competition, in addition to promoting ‘conservation through consumption’⁵, perpetuates a homogenous retail market which discourages alternative forms of consumption to take place (e.g., REKO-ringen⁶, Andelslandbruk⁷, independently owned stores).

Retailers are not isolated in viewing consumers as self-regulating, reflective actors with the power to change the food system (Vittersø & Tangeland, 2015). Additionally, the agricultural sector, economic actors, and policy have to a greater extent relied on households to act as agents of change. The irony, however, is that Norwegian consumers express that they have little responsibility for food issues and embody high levels of trust in their government and food systems (Kjærnes et al., 2007). Moreover, there is a widespread understanding that the food in Norway is safe. Good food and sustainable food have been included in notions of Norwegian origin (Nyt Norge⁸), with Norwegian food being presented as almost organic (U. Kjærnes, personal communication, January 20, 2021). Paradoxically, promoting Good Norwegian products made other sustainable activities more demanding and unpopular to carry out, such as buying expensive organic goods and reducing meat consumption (Niva et al., 2014, p.477; Ursin et al., 2016). Power practised by conventional farmer cooperatives (Tine in dairy and Nortura in meat) often conflict with political objectives to promote sustainable agriculture (Vittersø & Tangeland, 2015).

Also benefiting from agricultural policy is the retail and manufacturing industry. The protected Norwegian market, consisting of a few influential players, makes it difficult for international markets to enter. Due to low competition, producers can set higher prices, which translates to higher profits for retailers (Kjærnes, personal interview, 20/1/2021); essentially, it’s a win-win situation for Norwegian retailers; low competition and high profits. Currently, NorgesGruppen, Rema 1000, Bama and Orkla top Norway’s wealthiest families (Frøyd & Bu, 2020).

⁵ The paradox of commodifying nature in an attempt to save it (see: Johnston, 2007).

⁶ Sales channel and market where customers shop directly from producers

⁷ Community supported agriculture

⁸ Quality label on items that are Norwegian produced and sourced

1.4 Practice Theory as an Alternative Perspective

Using social practice theory as a conceptual framework, this study looks at the sociocultural meanings behind food and how that interacts with the materiality of sustainable food provisioning and human agency in Norwegian supermarkets.

Consumption is a controversial topic, and with the pressing reality of global unsustainability, actors across disciplines are synthesising theories of consumption that derive beyond the traditional economic realm. In respect to the theme of this research, I will use Warde's definition of consumption as a moment in the many practices of everyday life which shifts attention to the appropriation, appreciation and the acquisition of goods and services (Warde, 2017). Until recently, consumption theories were studied primarily through individual, social and cultural perspectives. Individual choice theory identifies consumption as need's driven behaviour bound to a marketplace of possibilities (Wilk, 2002). Meanwhile, social, and cultural theories reveal how consumption maintains and challenges social groups' boundaries or is used to communicate to others, express feelings, and create a culturally ordered environment (Wilk, 2002). These theories have provided vital insight in understanding evolving societies; however, they are limited by their inability to bridge the gap between human knowledge and actions with material structures (Warde, 2005).

Individuals were once understood as self-interested, utility-maximisers, autonomous and well-informed consumers. Then came about opposing postmodern views of the consumer as subjectively flexible, inventive, and more or less unbound by the material properties (Fine, 2013). Both views, while comprehensive, leave us with a limited and skewed understanding of the habits and routines underpinning the modern-day consumer (Warde, 2017). Alternative theories have since integrated the social element of being a consumer as carriers of practice, as seen in social practice theory, which attempts to give substance to the 'skewed understanding' previously mentioned. Ackerman (1997, p.662) hence defines the consumer as "not isolated autonomous individuals; our tastes are not exogenous to our interactions, but reflect long-standing customs, contemporary symbols of status, the demonstration effect of consumption by our peers, overt pressures from advertisers, and the frustrating processes of positional competition".

In this study, the participants' diets were shaped by the notion of habitus, which accounts for how practices are taken up by individuals through social experiences, inscribed in space and over time (Sahakian & Wilhite, 2014). The extent to which these practices are of habit depends on how deeply anchored they are to the three pillars of practices: the social world (settings, norms, values, and institutions), the body (cognitive processes and know-how) and the material world (including technology and infrastructure) (Sahakian & Wilhite, 2014). Social structures are made up of cultural schemas and frameworks of meaning, which play a crucial role in this research. Acknowledging that people's thoughts and actions are shaped by their history, fellow citizens, and situational factors (Spaargaren, 2011), we must explore the values, beliefs, and attitudes that inform and guide household grocery shopping practices.

The second pillar, bodies, are a necessary component of a practice. Bodies are a repository of experiential histories embodying knowledge shaped by social relations, cultural learning, and past experiences (Wallenborn & Wilhite, 2014). These experiences, also termed as 'fractures', are defined as 'moments of transition' in a practice due to specific events such as having children, changing jobs, and exposure to new perspectives (travel, social networks, the media) (O'Neill et al., 2019). Direct experiences immerse bodies in new perceptions and contribute to creating new memories or narratives (Wallenborn & Wilhite, 2014). Another important point considers how bodies determine an individual's capabilities (i.e., competence, skills) to act on, and negotiate among, consumption choices. For example, cooking skills dictate the extent to which households can prepare meals from scratch. When consumption is disconnected from the presence of a body through automation it usually leads to food-alienation and un-sustainable practices (e.g., frozen meals, take-away food) (Wallenborn & Wilhite, 2014).

Material structures embody non-human resources subject to the consumer's physical surroundings. These include material agency (e.g., objects, technology) and infrastructure (the boundaries in which we act) that enable and constrain specific practices. Material systems in food provisioning, such as driving to a grocery store, can influence consumers' food shopping. In one study, households with lengthy driving trips tended to over-purchase (i.e., on bulk packaging and marketing promotions) and, as a result, threw out more food. Meanwhile, individuals walking to local markets were less inclined to over-

purchase and consumed more of their food items (Lee, 2018). Unni shared an interesting example in Norway drawing parallels between meal patterns and infrastructure:

"Food culture is a stabilizing factor; with food and meals being important parts of everyday life and the organization of society. An example of this is the packed lunch, which was introduced in schools before WW2 and has become part of the modern food culture. If you look at a Norwegian grocery store, the fresh food section is smaller than other countries and most food is prepacked. Another key feature is the long shelves stocked with sandwich toppings, this is a result of political influence, market strategies and the food culture where many people eat open sandwiches twice a day. If you want to transform the Norwegian lunch to something like France, you would have to re-structure a lot, food culture is about meal patterns and meal structures, not about the products." (U. Kjærnes, personal communication, January 20, 2021)

In areas like food consumption, global systems of provision are essential in structuring diets and meals (Shove, 2014). Systems of provision is defined as a holistic approach that situates the analysis of consumption in relation to production, distribution, and retail (Evans, 2011). 'Meatification'⁹ and the industrialisation of livestock exemplify how government policies favouring farm specialisation, agricultural mechanisation, and the up-scaling of production have enabled cheap commodification and increased meat consumption (Weis, 2016). Gunnar gave the example of:

"Policy in Norway has a history of influencing consumption, such as the meat industry in the '90s. As a result of expensive meat, tariffs on fodder decreased and farms were allowed to become bigger leading to greater efficiency. Production costs fell along with prices which reflects the subsequent increase in consumption of pork and poultry." (G. Vittersø, personal communication, January 19, 2021)

Relating to this paper, grocery stores represent both an infrastructural boundary in which the practices occur and a system of provision supplying household diets. Therefore, food norms, which express social groups and national identity, are shaped, and in turn shaping, the specific context formed by the food-provisioning system (Kjærnes et al., 2007).

⁹ 'Meatification' reflects what Weis (2016) describes as the "Dramatic shift of meat from the periphery of human diets to the centre, something which is deeply embedded in everyday life and has been a powerful but underappreciated measure and aspiration of modernity, nourished by long-held views about the superiority of animal protein together with some potent cultural attitudes about meat."

“Grocery shopping then and now”



“Christmas shopping in the meat bazaars, Oslo, 1910”



“Vegetable stall at the market square, Youngstorget 1959”
Images from Vintage Norway (2021)

2 Research Design

This chapter outlines the methodological foundation of this study and the research methods that have been used. Approaching this research based on a constructivist perception, empirical data has been gathered from nine case studies with the use of in-depth semi-structured interviews, shopping logs, and photovoice.

2.1 Multiple Case Study

Case studies are typically distinguished by the unique features of a particular setting or object of interest (Bryman, 2012) and allow investigators to retain the holistic and meaningful characteristics of real-life events (Yin, 2009). In this paper, Oslo and big-chain supermarkets represent a material and social setting in which the nine participants, each representing a single case study, perform their practice of sustainable food provisioning. In studying the practice of grocery shopping, the primary unit of analysis should be the practice itself, that is, observing the act of grocery shopping. Several studies have employed novel methods from focus groups, accompanied shopping trips, and kitchen visits (Jackson et al., 2006; Koch, 2012; Carroll & Samek, 2018; Elms et al., 2016; Kendall et al., 2016). These methods allow the researcher to participate in the social phenomenon under study, thus, gaining a deeper understanding of how the participants construct social meaning and action in everyday life (Mathews & Ross, 2010). Under different circumstances, an ethnographic approach may have been fruitful in gaining a more holistic and rich account of the participants' grocery shopping practices. However, considering the global pandemic, I capitalized on using multiple case studies with the support of in-depth semi-structured interviews.

In this study, the practice of grocery shopping can be seen as an independent variable and having environmental motives as another, both of which could be reflected onto diverse demographics of people or regional areas in Norway. However, on the grounds that I used purposive sampling and a limited sample size, the findings from this research pertain to the phenomena experienced and expressed by the participants.

2.2 Sampling Plan

I used purposive sampling to seek participants relevant to the field and questions being asked (Bryman, 2012). The criteria for selecting the participants were that they must live in the Oslo area¹⁰, attempt to buy sustainable food and shop at either Rema 1000, NorgesGruppen or Coop. Oslo was chosen for its characteristics as a city active in environmental initiatives, representative of different demographics and comprising of supermarkets, alternative food networks, independent grocery retailers, online shopping, and restaurants. In other words, Oslo represents a landscape where most forms of procuring and consuming food are available. Additionally, I chose supermarkets within NorgesGruppen, Rema 1000 and Coop because they represent the majority of the retail market and where most households buy groceries.

To find my participants, I started by creating an Instagram account under the name @_provisioning. It was assumed that, through social media and the extended network active on these platforms, I would find my sample quickly. The Instagram account served a double purpose; to introduce my research topic through informative posts and as a 'neutral' profile that separated me, as an individual, from the research. Nevertheless, the latter point was not entirely successful as I had to use my personal Facebook account to share the "anonymous" @_provisioning account. In recruiting participants, I posted on relevant Facebook groups such as 'Framtiden i våre hender// Oslolaget', 'Expats in Oslo' and 'Nordic Agroecologists (NMBU)'. In addition, friends and family shared my research on their social media accounts, and an excerpt was written in the Oslo International School newsletter. Due to using my social media and that of friends and family, four of the final nine participants were of my social network¹¹, and three were of my extended social network¹². Moreover, I must consider my own social and ethnic heritage, which unintentionally recruited participants of similar backgrounds. Nevertheless, I attempted to remember that people have had different experiences, and because of this, our views of the world differ.

¹⁰ I considered participant 9, living in Asker, as 'Oslo area'.

¹¹ Friends on Facebook

¹² Friends of friends on Facebook

As a precursor for the interviews, I sent out a questionnaire for the participants to fill in. The questionnaire asked for simple, descriptive data such as name, age, household status, and supermarkets they shop at, and more descriptive questions such as defining their diet and how it is sustainable. A further set of quantitative questions was asked in the second interview related to household income, grocery shopping, how often they shop, and average spending.

A summary of the research participants and basic demographic data is listed below.

Table 1: Overview of Participants' Demographics

Participant	Age	Gender	Individuals in household	Annual household income (NOK)	Location shopping takes place in
1	27	M	1	< 350,000	Grunerløkka & Gamle Oslo
2	35	M	1	350,000 - 500,000	Grunerløkka & Gamle Oslo
3	25	F	1	650,000 - 800,000	Alna
4	31	F	1	< 350,000	Gamle Oslo, Sentrum, St. Hanshaugen
5	28	M	1	500,000-650,000	Nordre Aker
6	35	F	3	> 800,000	Gamle Oslo
7	38	F	1	350,000 - 500,000	Alna
8	57	F	1	500,000-650,000	Gamle Oslo & Sentrum
9	35	F	3	650,000 - 800,000	Asker

Determining a sample size can be challenging when seeking theoretical saturation (Bryman, 2012) and is often limited by the researchers' time and resources (Mathews & Ross, 2010). Eleven individuals showed interest in the research project, of which two withdrew. As such, I felt confident that the remaining nine participants would represent a diverse and rich account of sustainable food provisioning in Oslo.

2.3 Research Methods

Nine participants were interviewed on two separate occasions from January to March 2021. In addition, they were asked to fill out two shopping logs and capture five to ten photographs. These methods are illustrated below and for further details please see Appendices 1-4.

Table 2: Summary of Research Methods and Data Collection

Participant	Interview 1	Shopping logs completed	Photographs taken	Interview 2
1	In person	2	7	In person
2	Online video call	1	0	Online video call
3	Online video call	2	14	Online video call
4	Online video call	2	14	In person
5	Online video call	2	0	Online video call
6	Online video call	2	13	Online video call
7	Online video call	2	20	Online video call
8	Online video call	1	7	Online video call
9	Online video call	2	11	Online video call

2.3.1 Semi-Structured Interviews

Semi-structured interviews are widely used among social researchers in grasping people's experiences and understandings of the social world through hearing what is said (content) and how it is said (words used) (Mathews & Ross, 2010). In exploring material and sociological factors which influence grocery shopping practices, a focus was placed on collecting empirical data concerning the participants' beliefs, attitudes, and behaviours. As such, their 'sayings' and 'doings' can be seen as expressions of social action performed in different social spaces (Halkier & Jensen, 2011). While participant observation grants direct access to the participants' actions, Halkier & Jensen (2011) demystify the assumption that it is a superior method to interviewing in social practice research. They suggest that both methods are equally entangled in social interpretations and that the data can each be seen as social practitioners' performances but in different contexts (Halkier & Jensen, 2011). Regardless, in both methods, heuristic categories such as 'habitus', 'institutions' or 'structure' are used by researchers to help understand social phenomena (Smagacz-Poziemska et al., 2021). Applying heuristic categories commonly mentioned in other social practice studies allowed me to ask questions that attempted to capture the participants' explicit and tacit knowledge regarding their shopping practices without observing them.

The data generation process began with a life course interview which lasted between 20 minutes – 47 min. After receiving consent, all interviews were recorded with a recording device and then uploaded to my secured NMBU OneDrive account. Kendall et al. (2016)

define life-course interviews as interviews that encourage households to verbalise personal accounts of their lifestyle, present their meanings and understandings and identify triggers and points of transition during their life that may have resulted in a pivotal moment of change. Because shopping practices are deeply embedded within people's daily lives and that of other consumption practices, it was essential that this first interview was conducted to better understanding the participants choice of diet, their views on sustainable food and what points in their life informed or influenced their beliefs. These topics were probed through a combination of descriptive questions: 'can you please describe your diet?', structural questions: 'how do your culture and heritage influence your diet?' and contrast questions: 'how would you describe sustainable food?' as examples.

A second semi-structured interview took place approximately four to six weeks later, which lasted between 28 minutes – 1 hr 4 min. In theory, I could have conducted a single interview; however, I contend that splitting the interview was best suited for my research strategy and topic choice. Firstly, the initial interview acted as an 'ice-breaker'. Considering that semi-structured interviews often elicit people's experiences and feelings, conducting several interviews may act as a bridge in encouraging more expressive and honest accounts (Mathews & Ross, 2010, p. 226). Secondly, I wanted to distinguish the first interview topic, namely their diets and views on sustainable food, from the second interview topic, their shopping practices. The intention in creating this distinction was twofold, a) it allowed the participants to fill in the shopping logs with limited knowledge of the study's overarching research questions, and b) I was able to use data from the first interview, shopping log, and photovoice in designing a more coherent and structured second interview guideline. The second interview was explanatory in that the participants were asked questions centred around explaining their attitudes and behaviours when grocery shopping. Effectively, I was more concerned with why and how they perform grocery shopping than evaluating their purchases.

2.3.2 Shopping Log and Photovoice

Images (photovoice) and diary entries (shopping log) are often used as supporting tools for further reflection and in providing a meaningful context for discussion (Bryman, 2012). In this study, the participants were asked to fill out two shopping logs in addition to taking 5 – 10 photographs of their experience grocery shopping. Both activities were

verbally explained to the participants at the end of the first interview, followed by an email with an attached link to a shared Google drive folder where all data was entered. The participants had approximately four weeks to complete the activities. Jackson et al. (2006) found the diary to be a helpful research tool in recording routines and everyday shopping practices. Meanwhile, images act as prompts that entice people to reflect on things that might not come up naturally in an interview (Bryman, 2012). On the basis that I could not conduct participant observation, the photographs and shopping logs were primarily used as a means of peering into the participants' experience of grocery shopping.

Upon completion of the second interview, all participants received a NOK 300¹³ Amoi¹⁴ gift card for taking part.

2.4 Data Analysis

The interviews were transcribed manually into MS Word documents. Data from the shopping logs were entered into an Excel spreadsheet, and the photos were uploaded to my secure NMBU OneDrive account. Data analysis consisted of manual line-by-line and axial coding of 18 transcribed interviews. As an ontological position, constructionism implies that social reality is an ongoing accomplishment of social actors that are in a constant state of revision (Bryman, 2012). This statement lends meaning to the ideology of abandoning traditional schools of thought which privilege the individual consumer. Instead, social constructivist practice theory appreciates how food activities and ways of consuming are "entangled in webs of social change and reproduction in everyday life" (Halkier & Jensen, 2011, p.105). Kendall et al. (2016) interestingly illustrates how using social practice theory can contribute to a form of qualitative data analysis that ranges from descriptive to theoretical interpretation. The study presented in this paper demonstrates descriptive content analysis, upon which conceptual development created categories and theoretical insights. Employing grounded theory, where concepts are generated from codes and categories, acted in tandem with my theoretic framework of social practice theory, each repeatedly referring to one another. See Appendices 6 and 7 for coding examples.

¹³ Self-funded

¹⁴ Online local and artisanal food delivery platform

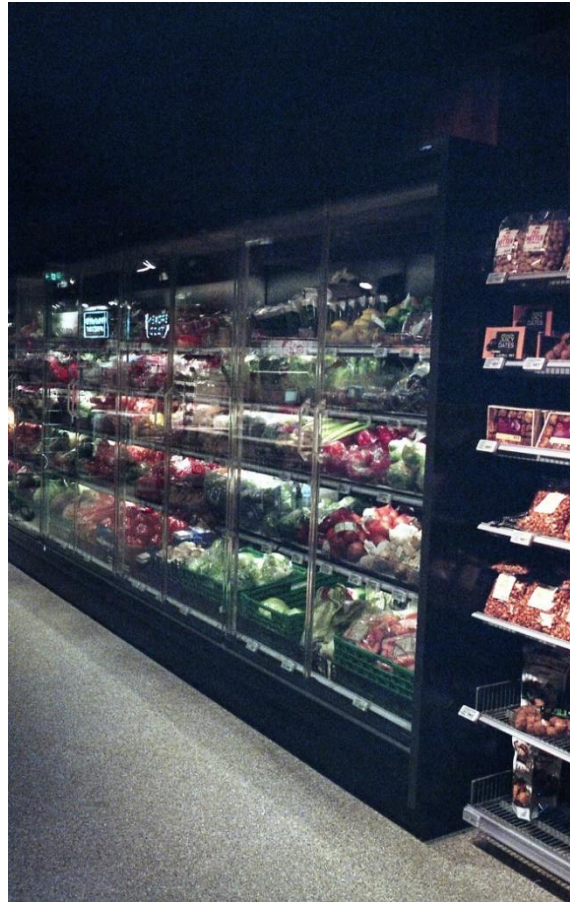
2.5 Research Quality and Ethics

As an agroecologist and customer at grocery stores, I must recognize my ontological starting point for this research. Being deeply immersed in the study and adverse to neo-liberal capitalistic systems, has to a certain degree, both implicitly and explicitly, influenced my approach to this paper. In carrying entrenched beliefs towards Norwegian supermarkets and household diets, I have applied Bryman's (2012) trustworthiness metrics to ensure research quality throughout this study. The dimensions of trustworthiness are mapped out in Appendix 5.

Applying these dimensions to my research, first, the credibility of my analysis lends attention to the use of manually transcribed and coded interviews. The "sayings" of the participants were respectively left whole with small grammatical nuances edited for clarity and flow. Second, while the findings cannot be generalized to a broader population, the results can be oriented to the contextual uniqueness and significance of the studied phenomenon (Bryman, 2012). In this case, the socio-material agencies informing the participants' practices may share qualities of an equivalent practice in another setting. In terms of dependability, records of my problem formulation, fieldwork notes, interview transcripts and data analysis decisions are securely uploaded to NMBU OneDrive account. Finally, while I recognize that research cannot be value and bias-free, I have done my best to remain objective (Bryman, 2012).

The project and research methodology were formally approved by and meets the ethical criteria set by the Norwegian Centre for Research Data (NSD) and follows considerations for informed consent, data protection, and anonymity. The participants' names have been changed to numerical labels, and information about employers or personal health have been sensitized. All audio recordings were deleted upon completion of the project. Given the morally charged debates around sustainable food and diet, it was vital that the participants did not feel moralized or critiqued in sharing their experiences. To circumvent any judgments, I reminded the participants that my project was not about evaluating their actions; instead, it addressed the socio-structural contexts in which their practices occurred. When fitting, I shared personal anecdotes, demonstrating that I also struggle with emotionally driven dilemmas around sustainable food and ethical consumption.

“Grocery shopping then and now”



“Vegetable display at Meny, Oslo, 2020”
Personal photographs

3 Results and Discussion

This section will summarise the participating households and the themes that emerged for the research questions in this study. In total, nine households took part in this research: seven single participants and two families. Given the rich diversity of the participating households, a short account of each participants' shopping habits and characteristics are outlined below.

3.1 Participating Households

Table 3: Description of Participant Background

Participant	Heritage	Years lived in Norway	Diet	Occupation
1	Central America	11-20	Plant-based	Hospitality
2	Northern America	<5	Omnivore	Hospitality
3	Northern Europe	>20	Vegetarian	Chemist
4	Northern Europe	6-10	Plant-based	Graphic design and hospitality
5	Northern Africa	<5	Omnivore	Researcher
6	Northern Europe	6-10	Vegetarian	Yoga teacher
7	Northern Europe	11-20	Pescatarian	Student
8	Northern Europe	11-20	Pescatarian	Occupational hygienist
9	Northern Europe	11-20	Omnivore	Holistic health coach and office manager

For purposes of anonymising the participants, their heritage was classified under geographic areas rather than individual countries. In addition, the number of years lived in Norway was placed in ranges. The participants' diets reflect what was expressed in the interviews. However, it should be noted that participant 3 described her diet as vegetarian but occasionally eats meat on special occasions. Participant 2 eats meat yet is primarily vegetarian and leaning towards plant-based. Finally, participants 7 and 8 predominantly follow a vegetarian diet but supplement with fish.

Table 4: Description of Participant Shopping Characteristics

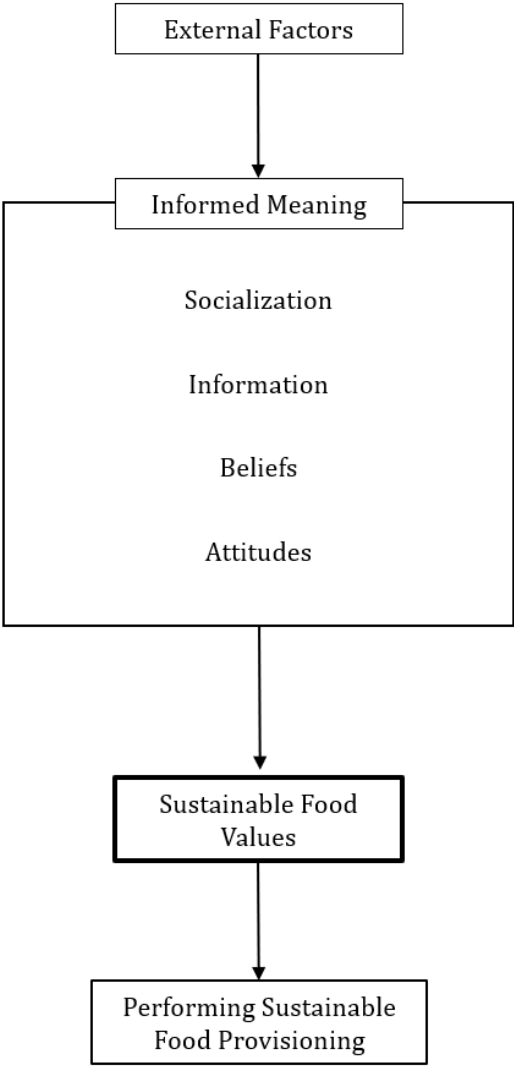
Participant	Monthly shopping trips	Average spending per month (NOK)	Percentage of total shopping spent at supermarkets (%)
1	2-4	2000-4000	75-100
2	9+	Lower end of 5000-10,000	25-50
3	2-4	2000-4000	50-75
4	9+	Between 2000- 4000 and 5000-10,000	25-50
5	5-8	2000-4000	75-100
6	9+	Between 2000- 4000 and 5000-10,000	75-100
7	5-8	2000-4000	50-75
8	5-8	2000-4000	25-50
9	5-8	5000-10,000	50-75

The data in table 5 were collected through structured interview questions asked at the beginning of the second interview. While precisely recalling habitual shopping practices is difficult, these responses indicate that the participants' shopping habits vary in frequency, average spending, and proportion of total shopping spent at supermarkets.

3.2 Embodying Sustainable Food Values

In working towards sustainable food systems, a crucial question to ask is how sustainable food provisioning practices take hold in society and how they change (Shove, 2014). Thus, the multitude of meanings and practices relating to food and eating needs be unravelled as a key first step in understanding how the practice of sustainable food provisioning is performed and re-enacted (Niva et al., 2014). Such insight might facilitate a wider mobilization for sustainable agri-food cultures involving production and distribution as well as everyday patterns of food provisioning, cooking, and eating (Niva et al., 2014).

Figure 1: Flow chart illustrating what sustainable food means to the participants, and how these meanings are informed



Considering the three pillars of a practice (social, material and body), Figure 1 depicts the process by which sustainable food values are socially informed and integrated among the participants. Research question two (RQ2) will expand on the social pillar in addition to exploring the material and body pillars. The arrows in Figure 1 indicate the direction of influence. The findings suggest that the participants’ food values are shaped by their beliefs and attitudes which, in tandem, are informed by their learnt histories (socialization) and discourse (information). Encompassing this, are external factors (economic, political, institutional, social, environmental) that structure the setting in which meaning is informed. Finally, the participants’ sustainable food values are assumed to be embodied while performing sustainable food provisioning in RQ2.

3.2.1 Informed Meaning

The findings indicate that through socialization and information, the participants' values relating to food have shifted with time. In addition, these values are further contextualized by their entrenched beliefs and expressed attitudes. The task of understanding how social arrangements come to be as they are, and how they develop, is central to social practice theory (Shove, 2014). Individuals' narratives are intertwined with collective, institutional structures to which they lend time and energy (Shove, 2014). This chapter serves as a 'historical map' demonstrating the participants process of embodying sustainable food values.

3.2.1.1 Socialization

Some cultivation takes place in every society as an aspect of socialization and aging, as individuals learn new tastes and needs for each stage of life (Wilk, 2018). In the first interview, the participants were probed questions concerning situations, experiences and pivotal moments that informed or transformed their diet. I contend that an isolated experience rarely defines our values and beliefs. Instead, they are informed by a myriad of implicit and explicit encounters throughout the entirety of our lived lives. The following examples are shared to demonstrate how some 'fractures' contributed towards defining the participants' values around sustainable food.

3.2.1.1.1 Heritage

The participants diets and food norms are coloured by their heritages' local cultures and available produce. Participant 1 described how his diet, which comprises of beans and stews, among other dishes, was likely subconsciously influenced by his central American heritage, where meat was not often consumed due to its high price. Participants 3 and 7 mentioned they would not eat as much dairy, bread, and potato if not from Northern Europe. However, participant 3 contended that as a vegetarian, her dinners did not reflect her traditional heritage. She argued that northern European dinners are typically meat-based. Participant 8 highlighted that growing up in a country where "45 million lorries travel through with half-empty Kettle Chip bags" has greatly influenced her views on diet. Dramatic shocks, like the distressing notion of consuming 'air' travelled unsustainably across long distances, can cause deeper 'fractures' that substantially change practices and

help to facilitate a greater shift towards sustainability (O'Neill et al., 2019). The way in which meals are structured and shared was predominantly shaped by participant 5's northern African heritage:

“There is the culture of providing a lot of food, if you come to my home, I have to offer you everything I have otherwise I won't be generous. So that has shaped the behaviour of over-cooking and over-consuming.” (P5, interview 1)

He continued by sharing that lunch is a social gathering where a warm meal of protein and carbohydrates are consumed. Despite his heritage, it is evident that participant 5's diet has been dramatically influenced by the countries he has lived in, including Norway, where he stated that he now eats more vegetables.

3.2.1.1.2 Education

Institutions and educational courses act a social setting in which norms are established and knowledge is disseminated. For several participants, this setting allowed them to learn more about the environment. Joining the green party¹⁵ in high school and having a teacher make his own biodiesel may have inspired participant 2's subsequent interest in sustainable food systems. Participant 8 recognized that she does not need much input regarding food choices because of her extensive educational background in environmental science. Similarly, participant 3 took part in a course at university where they created an app measuring climate-related food emissions. Finally, participant 6 recalled her time studying yoga and went on to share:

“When you study yoga there is this thing called Ahimsa, it's like nonviolence. If you do yoga, you basically sign that pact, so that had an influence on my side, thinking that everyone should be doing only good to the planet, especially in terms of the way we eat.” (P6, interview 1)

3.2.1.1.3 Household Changes

The participants experienced disruptions with the birth of a child or a move to a new dwelling. In these experiences, narratives are refreshed, material settings change and opportunities for new practices develop (Wallenborn & Wilhite, 2014). Both participants 2 and 5 described how they used to consume more quantities and varieties of food before

¹⁵ An activity which took place at school

living in Norway. Now, in aligning with Norwegian culture, their lives have transformed with a focus on simplicity and rationalizing their choices:

“The first time when I travelled outside my home country, I was in Kuwait at the time, I would do my shopping every week and 20% of my fridge was thrown away. Then I was lucky, and I moved to Switzerland, there I learnt that you chose what you need, and you don’t spend more (...) Now in Norway, I have adapted to the concept of no plastic bags, being more environmental and thinking about recycling and organic, these are new trends for me.” (P5, interview 1)

Attending university, a distinct household change for many young people, allowed participants 3 and 4 to have “full control over what was in the fridge”, making it easier for them to integrate changes in their diet. The power of such ‘cultural contrasts’ stimulated by moves, or visits, to new places can generate possibilities for reflection on the taken-for-granted ways of doing things, thus challenging discourses of ‘normality’ (O’Neill, et al., 2019). Lastly, for participants 6 and 9, having children was significant for their food practices. The rhythms of family life and an ethics of care in providing ‘proper’ food for one’s family subsequently changed what was eaten (Hjelmar, 2011). Participant 9 recalled:

“I think my interest in nutrition came from my time in the US and it’s kind of stuck with me, then as soon as I got my son things became more serious. I was asking what he was getting as a small child, I became stricter when I became a mother.” (P9, interview 1)

Attempting to eat a sustainable diet may conflict with household food preferences. While wanting to buy organic and local food, participant 9 recounted examples of having to prioritize her family’s food needs over her personal food values. She expressed that they probably would consume more fish had it not been for a picky son.

3.2.1.1.4 Community

Many participants detailed accounts that included their community or social interaction that shifted their perspective on food and diet. Research indicates that individuals' food practices are strongly associated with the normative standards of the group with which they socially belong and identify with (Dubuisson-Quellier & Gojard, 2016). These normative standards are shaped by fellow citizens, objects, and situational factors that structure their behaviours' contexts (Spaargaren, 2011, p.814). For example, participants

3, 7 and 8 cited how their roommates inspired them to eat new food items. Participant 3, driven by her competitive yet curious nature, recognized that her habits are easily influenced by others. Similarly, participant 7 was called to start taking supplements after a discussion she had with her ex-flatmate about the health benefits of Omega 3. Travelling to India, in addition to living with her best friend whose Korean husband often cooked for them, are participant 8's principal vegetarian diet influences. Participant 9 mentioned how her boyfriend, who has considerable respect for fishing and hunting, swayed their household in not supporting farmed fish.

3.2.1.1.5 Work

The participants' narratives of work indicate they belong to distinct social groups with shared views around sustainable food (e.g., yoga, agriculture, and gastronomy). Food norms are thus strengthened and enacted by the group and social-situational setting in which they take place. Participant 1, who has a vast background of working in the gastronomy industry expressed:

“I have been much more aware since working in the industry about all these connections and am making more conscious choices. I feel like now adays there is so much food and you don't see any of the process behind it, it's just a product, you don't think about where it came from. Working on the other side of the industry, you become a bit more aware. So, without working in the industry, I feel like that connection would not be there.” (P1, interview 1)

Participant 2, equally entrenched in the gastronomy industry, conveyed that his diet has been part of his life since the summer of 2008 when he worked for a farm in Seattle. He continued by saying that the experience of being “deep in it” transformed his relationship with food. Sharing this passion is participant 4, who, while being a graphic designer, has entered the culinary world as a self-taught plant-based chef. Her intuitive journey of researching and working with food exposed her to various encounters, further educating and inspiring her commitment to following a sustainable diet.

3.2.1.1.6 Travel

Travelling engages individuals through participatory and emotional experiences. The exposure to other cultures or witnessing memorable encounters elicited new perceptions and memories among the participants (Wallenborn & Wilhite, 2014). Participant 4

recalled her experience of travelling to Seoul, where seeing that they eat cats and dogs shocked her. From this, her perspective drastically changed:

“I started questioning how it would relate to other animals and then I started doing research and found out about the dairy and egg industry and wasn’t so happy about it.” (P4, interview 1)

Participant 6 described how her household’s diet is greatly inspired by their travelling, for example, eating curry one night and pasta the next. Undoubtedly, many households prepare different cuisines without having travelled to that country. Taco Friday, a notorious Norwegian tradition reflects food norms established by systems of provision and globalized food cultures. Therefore, participant 6’s diet reflects globalized food norms and an emotional connection to memories of travelling and experiencing other cultures. Likewise, participant 8’s anecdote of travelling left an impact:

“One of the main reasons I avoid long transport is because in 1993 I drove from Berlin to Italy, and we came over the Brenner Pass where all the lorries go over from north of the Alps. I thought to myself this is not possible, this line of road traffic, and thought I will never buy anything from Italy coming over this pass again. So now I am buying dried food because maybe it travels by ship and doesn’t need air conditioning or cooling.” (P8, interview 1)

3.2.1.1.7 Health

The final sub-category within socialization presents how views on health and nutrition prompted changes in their diet. At the age of 14, participant 7 stopped eating meat due to witnessing mad cow disease. While eradicated in Norway, she continues to not eat meat for ethical and sustainability reasons. At the time of the interview, participant 9 was pregnant and mentioned that she was eating more meat and dairy than usual but emphasised that it is always organic. Likewise, participants 7 and 8 shared that their diets have often been dictated by various health conditions such as hormones and inflammation. In these examples, having a baby and illness governed much of their diet, even if that meant re-introducing animal products as a vegan or vegetarian.

3.2.1.2 Information

According to Johnston (2008), discourse structures space in which agency and subjects are constituted. She illustrated how discourse could be understood as a shared way of understanding the world and shapes how social agents respond to social and ecological

issues. In disagreement, Kollmuss & Agyeman (2002) made a case that more knowledge (through discourse) does not often lead to more pro-environmental behaviour. In challenging their assumptions, I asked the participants if and how discourse shaped their views on sustainable food.

The findings indicate that most participants were able to cite impressionable sources of information that influenced their views on food, which opposes Kollmuss & Agyeman (2002) previous argument that more knowledge does not translate to more action. Several participants mentioned that watching documentaries and reading books had a significant impact on their diet:

“I watched Blackfish, which is one documentary which converted me, especially when it comes to fish. Cowspiracy, which is very famous, and the Cove. After that I was a bit more radical. Once you believe in something you start searching for stuff that strengthens your result.” (P1, interview 1)

Most participants listed famous documentaries and widely read books, indicating that their answers reflect the social and material space they are part of (e.g., having access to Netflix). It could be argued that mass-media depicts exaggerated and superficial accounts of climate change. Several participants expressed recent feelings of hopelessness, confusion, and saturation from today's vast amount of information. However, participant 6 made an interesting point that these ‘commercialized’ sources of discourse allow greater groups of people to learn about today’s destructive food systems. Overall, many participants highlighted that in most cases, documentaries and books merely supported their previously held beliefs rather than transforming them. Therefore, considering that perceptions are distributed through learnt histories and material arrangements, changing mind-sets through discourse is not enough (Wallenborn & Wilhite, 2014).

Of the 9 participants, only two mentioned actively reading political and institutional publications related to the environment and healthy eating. Participants 5 and 8 stated that they gather information from online news sources and databases. Food labels (i.e., list of ingredients and source) are also significant in gathering information for participant 8. Seeing how few engage with information published by the government and organizations echoes the flawed assumption that communication campaigns elicit behavioural change.

Consequently, participants 2, 3, 4 and 9 described their venture of gathering information as an intuitive one where they seek information which makes sense to them:

“I follow some other food interested food profiles, but I focus more on what I think is best for myself.” (P9, interview 1)

Participant 3 discussed how her practices were mainly influenced by the fact that many people were talking about the environment in 2017. What others are discussing and content on social media, such as *Framtiden i Våre Hender*¹⁶, seems to inform several of her beliefs and values around sustainable food:

“I heard that rice is not that sustainable as it is really heavy and takes a lot of water to grow it. I also heard that soybeans are not that sustainable, they are over-produced and used in feed for cows. I also try not to buy products with palm oil, like safari crackers.” (P3, interview 1)

The participants' engagement with discourse illustrates how information is embedded in their experience of being socialized. To articulate this point, and in agreement with Johnston (2008), discourse co-shaped spaces in which the participants' understanding of sustainable food was constituted.

3.2.1.3 Beliefs

Beliefs, grounded in trust, often take shape in the form of thoughts and judgments shared by the collective and structures social life (Kjærnes et al., 2007). Trust is associated with how people relate to each other, how they interact in social networks and how they develop their relationship to political institutions (Kjærnes et al., 2007). The theme of trust is central in food systems as it illustrates how and to what degree individuals consume various products and services. The participants' beliefs, primarily marked by a sense of mistrust and confusion, help to explain why certain values and behaviours are established among them.

3.2.1.3.1 An omnivore diet is not sustainable

Predictably, most of the participants are either vegetarian or pescatarian and leaning towards eating more plant-based. In introducing this study, I referred to research (Willett et al., 2019) which indicated that vegan and vegetarian diets were associated with the

¹⁶ Norway's largest environmental and solidarity organization that work with ethical and environmental issues

most significant reductions in greenhouse-gas emissions, land, and water use. Therefore, it is of no surprise that many of the recruited participants believe that eating meat is unsustainable. Participant 1 discussed this theme in our interview from several interesting angles. He started by mentioning how veganism has become trendy due to movies that have changed people's perspectives. While many vegetarians avoid meat for animal welfare reasons, he contended that now, many do it for the environmental aspect. When probed about organic meat, participant 1 argued that it is not that much better than regular meat:

“For me, all these animal products are not sustainable at all. To produce a KG of meat uses so many resources, it doesn't make any sense, regardless of how you brand them.” (P1, interview 1)

Acknowledging his position, he raised the debate regarding the unsustainable and unethical production of avocados but argued that:

“Even if you have to send an avocado all the way across the world, it doesn't compare to meat, it's still so much lower and more sustainable than the alternative.” (P1, interview 1)

Participant 1's avocado and organic meat reference illuminates how food beliefs are highly subjective and construed through discourse. Whether or not avocados are more sustainable than local and organic pork, for example, will continue to be debated. The only participant who did not express a desire to reduce his meat intake was participant 5. Seeing that his diet is principally driven by nutritional requirements (i.e., animal protein fuels exercise) coupled with his heritage, participant 5, thus, continues to eat meat.

3.2.1.3.2 Norway is hiding behind a good image

Norway's agricultural policy regarding protecting local farmers and limiting antibiotics and pesticides is often revered among the Norwegian public (Ursin et al., 2016). In the background chapter, I described how the national label 'Nyt Norge' has created the impression that Norwegian agriculture is sustainable. Several participants oppose this view and believe that Norway is hiding behind a false 'good image'. Participant 7 voiced her thoughts on this topic when she said:

“When I moved here, I had this impression that Norwegians think that there is this romanticized idea of farming, like cows out in the field, so they don't really feel like they have to buy organic food. Even the Nyt Norge label makes

me feel a bit better, like at least I am not buying it from Spain but from Norway.” (P7, interview 2)

Similarly, participant 9 expressed:

“I have a feeling that, for example, the US is a lot worse than it is in Norway, but at the same time I know it’s not perfect. They kind of hide behind that its Norway and that everything is done properly here, and all the animals are happy, which is just not true.” (P9, interview 1)

Taking this topic from another angle, participant 2 asserted his belief that Norway is riding the wave of the organic trend that happened ten years ago in the United States. While great to see, considering these pressing times, he argued that it feels like it is just a Band-Aid. Further, participant 8 added:

“In Norway, they are still not very conscious about the environment and what their impact is on the environment. It is just part of their lifestyle, and you might say is has become gentrification of the mental part, it became something you can sell.” (P8, interview 1)

Here, she expressed her belief that Norway has lost their moral dimension where a good conscious has become a product to be exploited, “it’s not prosumer, its consumer” (P8, interview 1). The participants’ accounts concerning Norway’s false image of being sustainable reveal deeper structures and processes of capitalist society. In this context, ‘Nyt Norge’ is viewed as Norway’s strategy in green-washing some of their traditional and prevailing practices of conventional agriculture.

3.2.1.3.3 Mistrust in food system

In this category, I coded participants’ expressions of confusion and doubt as areas of mistrust in the food system. Participants 6, 7 and 9 voiced perplexities regarding why organic food is wrapped in plastic and why factory farming is subsidized when it is evidently unsustainable. For the latter point, participant 9 recognized that the system is structured that way because “they are there to make money and to make it in the cheapest way possible in order to make more money.” Her mistrust is further fuelled when she described watching programs on TV about factory farming yet sees false marketing of grazing cows on the side of milk cartons.

Relating to the debate of veganism, participants 7 and 9 expressed confusion respecting whether it is better for the environment or not:

“You could say vegan is the best for the environment, but I don’t necessarily agree with that, it’s such a complex system, nothing seems correct really.”
(P9, interview 1)

This point may result from recent debates around regenerative agriculture which contend that animals are integral in combating climate change. The de-stabilized knowledge with which environmental practices are associated, thus translates to food practices that hinge on changing fads and collective perceptions. Participant 7 added her opinion that veganism might not be better for our health. She shared a story of when she was vegan and purchasing items at the health food store. To her disappointment, many of the vegan items were highly processed and full of sugar. As we see here, participants 7 and 9’s confusion mirror’s Kjærnes’s (2007, p.24) point, which states that “trust emerges, and ebbs and flows, in accordance with a dynamic associated with social activities.” In other words, the participants’ beliefs’ shift as new experiences and information challenges their views. Finally, participant 8 asserted her sense of mistrust when she declared that transporting water in the form of almonds (i.e., almond milk) to Norway was nonsense; she continued by saying:

“I won’t ever buy strawberries from Israel, it’s nonsense, not only political nonsense but also it doesn’t make sense at all.” (P8, interview 2)

These examples were coded as mistrust considering that almonds and strawberries reflect commodities that support unethical practices and disputed political affairs.

3.2.1.3.4 It is difficult to eat local and seasonal in Norway

Globalization and evolving food cultures have normalized meals comprising of foods and flavours from around the world year-round. While delicious, it presents both an ethical and environmental dilemma. As a developed post-modern country, Norway’s food culture has rapidly adapted to the demand for a diverse diet, including many food items not locally or seasonally produced. This paradox of wanting to eat a local yet diversified diet was shared among certain participants. Participants 1, 4 and 6 conveyed their belief that Norway lacks biodiversity and flavours due to the harsh growing climate and being cut off to the world when herbs and spices were traded. They acknowledged that one could probably live off Norwegian produce, yet it would not be a tasty or diverse diet. Meanwhile, participant 2 framed Norway’s lack of diversity as an opportunity for change. He voiced this when he said:

“The hardest transition of me living here is the food culture and the relationship to food. There is so much opportunity to change the food system in Norway and land that can be used for farms. One thing I disagree with most that some people are saying, is that it’s too expensive to grow food in Norway, and two, that soil quality in Norway is bad. I think that’s what frustrated me the most, that there is a lack of education around it.” (P2, interview 2)

This final belief casts a light on one of the more prominent barriers in eating a sustainable diet. Norway relies heavily on imported goods in meeting households’ desire to eat a diversified diet. Thus, moving towards a more sustainable food system requires that consumers purchase less imported goods and farmers’ drastically increase local production.

3.2.1.4 Attitudes

Where beliefs refer to the information one holds about a person, object, or issue, attitudes are the positive or negative expression of these beliefs (Newhouse, 1990). Therefore, the recounts described below reflect the participants’ ‘pains’ and ‘gains’ which determine the extent to which participants act on their food values.

3.2.1.4.1 Pains

A “pain” shared among several participants was the dislike of spending time cooking for oneself. Much of mundane consumption is neither conspicuous nor glorious, occurring mostly as a derivative of other activities which have greater significance for social organisation and personal experience (Warde, 2017). As participant 1 put it:

“Generally, when you are living by yourself you sort of lose the spark of making food. I don’t want to spend 30 min to make food for myself and then eat it in 5 minutes. If I make it for others, it’s obviously a bit more interesting.”
(P1, interview 1)

In agreement, participant 3, who also enjoys cooking on the weekend or for others, mentioned she tends to be a bit lazier on her own and instead prioritizes extra time for rest. Participant 7 expressed that she mostly enjoys the eating part but does not enjoy cooking for herself. Not wanting to cook for oneself could be a barrier for households wanting to eat a sustainable diet. As we will see later, preparing dishes with sustainable produce requires skills and time on the practitioner's part. Lack of time or a sense of laziness occasionally translated into eating more processed food and take-out for several

participants. For them, ready meals offered variety and convenience, which meant that they could spend time doing things other than cooking.

For other participants, compromise was voiced as a "pain" when deliberating between food choices. Buying, preparing, and eating food involve a range of choices, where there is not always an explicit order of priorities, but instead mostly implicit compromises between different values and wishes (Niva et al., 2014). The participants providing for others in their household, expressed their concern about conforming to what they considered 'the right thing to do' in terms of food (Dubuisson-Quellier & Gojard, 2016). Participant 9 described how she tries to do the best she can while finding balance between efficiency, health and making everyone happy. She gave the example of purchasing avocados:

"We do the best we can, we try to buy locally. But I do buy avocados as well, it's that balance in that avocados are good for me, and we like them. It's that nutrition versus the fact we live in Norway and yes there is tons of good stuff we produce here but there is also a long period of time without, and add in a child that only eats peppers, if they are going to come from another country then they will come from another country and hopefully they are organic."
(P9, interview 2)

Health concerns were expressed by a number of the participants as triggers which led them to re-introduce food items they previously avoided. Participants 6 and 7 retold their experiences of not striving on a vegan diet, and as such, had to flow with their health and adapt to what they felt they were missing. This situation mirrors Kollmuss & Agyeman (2002, p. 250) statement that "Most practices that generate consumption are both routinized and reflexive. We hypothesize that primary motives, such as altruistic and social values, are often covered up by the more immediate, selective motives, which evolve around one's own needs (e.g. being comfortable, saving money and time)."

3.2.1.4.2 Gains

All participants demonstrated in one form or another a passion for food, whether eating, cooking, or connecting with others over a meal. Their shared attitude of appreciating food supports Niva et al. (2014) findings that adopting sustainable diets may be associated with an interest in food and cooking in addition to a concern for health and well-being. While some participants experienced cooking as an occasional "pain", participants 4, 5

and 6 spoke of their relationship with cooking as something enjoyable (“gain”), especially when shared with others. Participant 5 recounted his story:

“I love to make food, I really enjoying cooking for my friends, especially Norwegian friends, your food (Norwegian food) is just salt and pepper, its flat, the cuisine that I make is with lots of spices.” (P5, interview 1)

Additionally, participant 4 described her journey of exploring new spices and flavours as something that “blows your mind and fascinates me”. Previously, we looked at how some participants struggled following a vegan diet. On the other hand, participants 1, 3 and 4, shared that they felt better and did not miss nor crave eating meat. Not missing meat made the transition towards a sustainable plant-based diet more manageable. Relating to the theme of cravings, participant 2 reflected on how being challenged by Norway’s food culture has brought him deeper into his subconscious in understanding cravings and aversions. He stated that he has “embraced more of the simple foods because of the seasons here.” Participant 2’s attitude of embracing local food cultures reflects how positive attitudes towards food translate to more synergies and opportunities to learn and adapt to a sustainable diet.

3.2.2 Sustainable Food Values

In social practice theory, the social world comprises of values, which are responsible for shaping our intrinsic motivation. Fuhrer et al. (1995) proposed the following premise: A person's values are most influenced by the 'microsystem', which comprises one's family, peer groups and community. To a lesser extent, values are influenced by the 'exosystem' such as the media and political organizations in addition to the 'macrosystem', the cultural context in which the individual lives (Fuhrer et al., 1995, as quoted in Kollmuss & Agyeman, 2002, p. 251). Above, I attempted to illustrate how socialization (microsystem and macrosystems) in addition to information (exosystem) informed the participants' views and attitudes towards sustainable food. Taking these factors into account, this section defines their sustainable food values. The participants predominantly discussed values which fell under three sub-categories: ‘source of origin’, ‘farming practices’, and ‘packaging’. However, reflective of what participant 1 answered, "you can ask that question (what is sustainable food?) to 20,000 people and get 10,000 different answers", highlights the ambiguity of this highly moralized topic.

3.2.2.1.1 Source of origin

Source of origin was expressed as a concern for many participants. Participants 1 and 9 stated that for them, sustainable food is seasonal and locally produced. In agreement, participant 3 added that she tries to buy produce from Spain instead of Brazil because Norwegian is not always possible. In this context, the local parameters are extended to Europe due to Norway's limited local production and reliance on imported goods. She added that she checks the source and distribution chain when purchasing fish because she knows that some fish travel around the world "could be caught in Alaska and packaged in China." On the other axis, participant 2 described his relationship with meat as something which is best when it is "organic, local and sustainably raised, and if I can kill it myself, the better." The challenge, however, is sourcing sustainable and affordable meat in Norway, thus, why participant 2 generally eats a vegetarian diet but is leaning towards plant-based. Considering the sustainability of communities, participant 4 reflected on the pandemic and supporting local businesses:

"Sustainable for communities is to be able to buy local and support small businesses, especially now given the current pandemic in the world where a lot of people are going out of business and along with that a lot of food traditions and knowledge from different backgrounds being lost. Also, the fact that most of the things in the supermarket are being shipped across the world so that we can be eating salad in December in Norway which makes no sense for our bodies or for the planet." (P4, interview 1)

Lastly, participant 8 remarked that she considered the transport and local use of water when sourcing goods. From this standpoint, eating sustainably includes sourcing goods that conservatively uses water and avoids air transport, such as dried tomatoes in winter instead of fresh ones.

3.2.2.1.2 Farming practices

The origin of organic food was also of importance for many participants. While contested among researchers and policymakers, organic food is widely viewed as sustainable food. Confidence in organic food products is of central importance for many participants because they need to believe that organic food is produced under optimum conditions and has the quality they expect (Hjelmar, 2011). Participant 2 takes this point a step further when he argued that we need to move towards regenerative farming practices. In their own words, participants 6, 7, 8 and 9 mentioned organic as one of their most important

food values. Nevertheless, several of them point to the difficulty of finding organic and, therefore, cannot always act on their values when shopping:

“We occasionally buy organic wild caught salmon but it’s so expensive and it’s not readily available. If we do buy that, we don’t get it at the supermarket, but we go to a REKO-ringen.” (P9, interview 2)

For participant 8, eating organic serves several purposes. In addition to supporting sustainable farming practices, she can avoid genetically modified food while consuming high quality and tastier produce. She gave the example of organic carrots, which she goes out of her way to purchase from Meny because they taste better than conventional ones. Her example supports Hjelmars’ (2011) research where environmentally minded consumers typically found the quality and taste of organic food products were better than conventional products.

3.2.2.1.3 Packaging

Buying local food and avoiding excessive packaging are among the most popular activities among households in Norway (Niva et al., 2014). Findings from my study further support this point, where all participants mentioned packaging in one form or another. However, avoiding packaging often comes in juxtaposition to sourcing organic food. Participants 6 and 7 both acknowledged the challenge of finding organic package-free produce:

“So, if I go to the grocery store, I try to buy as much organic as possible but I also really like going to these Asian markets and what I love there is that nothing is wrapped in plastic, but I know very little is organic, I try to find a balance with that” (P6).

Participants 3, 5 and 8 avoid processed food and avoid plastic as a means of reducing waste from packaging. Further, the type of packaging is negotiated among them, where some packaging is contested as being more sustainable than others. The ability to recycle the packaging (e.g., paper or cardboard) or the product's utility (such as participants 8's earlier example of consuming packaged dried tomatoes rather than fresh in winter) justifies their choices.

3.2.3 RQ1 Concluding Remarks

Research question one explored what sustainable food means to the participants by discussing how their learned histories shaped their values. Through socialization and

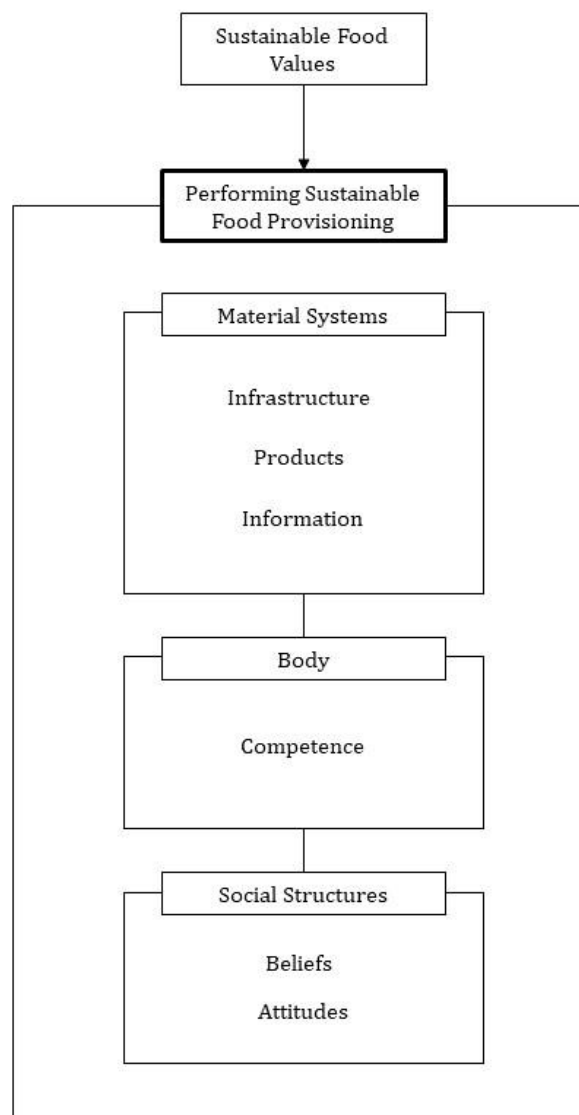
information, the participants internalized beliefs of mistrust and confusion towards our globalized food systems. As a result, many share food values relating to eating less meat and more local and seasonal produce, preferably organic and without packaging. However, most expressed that their values often lie in discordance to the belief that it is difficult to eat organic, local, and seasonal in a country that hides behind the false image of being sustainable and limited by harsh growing conditions. Moreover, the results illustrated how positive and negative attitudes support or inhibit the consumption of sustainable food.

Much attention has been placed on eliciting behavioural change through marketing, nudging and educational campaigns. However, Poore & Nemecek (2018, p.5) warn that "widespread behavioural change will be hard to achieve in the narrow timeframe remaining to limit global warming and prevent further irreversible biodiversity loss." In order to accelerate positive environmental change, it requires a better understanding of how material structures constrain sustainable consumption. Given that the participants seek sustainable food, the next chapter explores how grocery stores either limit or support their values.

3.3 Performing Sustainable Food Provisioning

Building on the findings from the analysis above, RQ2 will focus on the socio-material agencies that enable or constrain the participants' grocery shopping practices. In Figure 2, it assumes that the participants seek items that align with their sustainable food values while performing sustainable food provisioning. The arrow illustrating this connection bridges the gap between RQ1 and RQ2. Individual agency in performing sustainable food provisioning is distributed between material systems (infrastructure, products, information), the body (competence), and social structures (shopping beliefs, attitudes). A change in any of these three pillars can shift a practice, thus why it is paramount to identify how each element either support or inhibit sustainable food provisioning.

Figure 2: Flow chart illustrating the socio-material agencies influencing how sustainable food provisioning is performed in Norwegian supermarkets



3.3.1 Material Systems

In conjunction with interconnected systems of provision, grocery stores represent an embedded material structure within the infrastructural landscape it is placed. Food retailers' opening hours, amenities, physical accessibility, as well as the transportation mode used, can influence when and how often consumers do their grocery shopping (Lee, 2018). In this study, the store location, store design and product placement emerged as immediate factors that influenced the participants shopping habits. Further, agency is distributed between brands, variety of produce available and information marketed by retailers. This chapter draws a relationship between the participants' human knowledge and actions with material structures (Warde, 2005).

3.3.1.1 Infrastructure

3.3.1.1.1 Store location

Modern lifestyles coupled with urban development and technological advancements (e.g., online shopping) have drastically transformed how and where we shop. O'Neill, et al. (2019, p.231) highlight "Place does not only create cultural differences in food practices and discourses, but the available infrastructures can affect practices." In this study, store location presents either a material constraint or opportunity for households wanting to be their customer. Pressed for time, households are seeking one-stop, accessible grocery stores. All the participants living in Oslo use either public transport, bike or they walk to the grocery store. For this reason, many explained their preferred store was due to its proximity to home, work, or their children's day-care. Participant 6 recounted a challenge she faced when moving from one apartment to another:

"I think one of the bigger changes for me was when we lived closer to these exotic stores, it was much easier to make fun Indian curries when we lived closer to Grønland, for example. I mean, I don't live far away, only 10min, but convenience is really important." (P6, interview 2)

The store location is essential for participant 2, who avoids public transport to save money. While many of the participants expressed a desire to procure their groceries from one store, preferably one nearby, several of them have the practice of shopping at many different stores and neighbourhoods around Oslo. Participant 8 is an example of someone who travels further to buy her groceries from more sustainable retailers. However, she

mentioned that she also enjoyed shopping at the nearby Rema 1000 because “it is a really nice walk, a small part of my daily movement, I just buy milk there and can put it in my bag.” It could be assumed that, if Rema 1000 supplied more food items that align with her values, participant 8 would be buying more than just milk there. Hence, shopping at Rema 1000 reflects a practice embedded in her desire for daily movement rather than meeting her provisioning needs.

Unlike big-chain grocery stores, which you find liberally spread across Oslo, independent grocers and organic shops are harder to come by. Many expressed a desire to shop at these stores due to their wide range of sustainable produce, however, are limited by the store’s location. Participant 1 said:

“An alternative would be these places like Møller Sylvia, but they are very niche, I would rather go there than the supermarket, but the problem is that they are very far away, not very accessible for everyday life.” (P1, interview 2)

Similarly, participant 9, who lived in Oslo but now lives in Asker, misses having access to these alternative stores and would have liked to shop more often at them if they were available nearby.

3.3.1.1.2 Design of store

The design of a store, sales and promotions, aisle and product placement, and signage all considerably influence shoppers' experience (Koch, 2012). Despite retailers' attempt to encourage 'unnecessary' purchases, the participants' recounts demonstrate highly routinized behaviour when navigating the retail environment. Many described the habit of 'walking the same route' while shopping, whereas the more efficient shoppers tended to seek out the required food items immediately. Recalling where things are placed, and relying on the standardization of the store, ensures that the participants effectively can perform their shopping practice. Otherwise, as participant 6 expressed, she finds it very confusing when things are moved. The material agency of a store's layout was humorously shared by participant 3 when she said:

“Yes, I think I walk around the store exactly how they want me to, because I start where the vegetables are, and I always walk the same route. Even when I am only going to get a beer and chocolate, I still go the same route which is really weird.” (P3, interview 2)

The store layout, notably where sustainable items are placed, evidently influences the degree customers come across and identify sustainable food items. Coop Mega, in Bislett Oslo, stocks a large variety of organic produce and Ånglamark items that fill an entire aisle in the store (see photo D and E in appendix 4). The visibility of these items facilitated participant 4's practice of buying sustainable food. As a vegan, she starts her grocery shopping in the fresh fruit and vegetable section before moving to the plant-based milk shelf and ending with the Ånglamark aisle. She was able to save time and effort by skipping aisles that did not align with her diet or food values. Participant 5 gave an interesting example of the store's layout influencing his practice of recycling:

“When you have the green and blue recycling bags at the entrance of the store, it is sort of nudging you to think about recycling, but now they are moved to the back of the store which is a bit irritating.” (P5, interview 2 and shopping log).

Store layout, however, can also act as a barrier to finding sustainable food. The organization of most stores typically encourages shoppers to make their trips as long as possible by leading them through different sections, often those that are more profitable (Koch, 2012). Data indicates that the most profitable foods, with a gross margin of 35 per cent, are found at the perimeter of the store, compared to the middle of the store where the gross margin of the products placed there is only 15 per cent (Koch, 2012). A cited example is how grocery stores place milk at the back of the store so that customers must walk through other tempting food aisles to reach it. Participants 4 and 8 described frustrating shopping experiences at stores that tend to move items around and “lack logic” in how it is set up. Furthermore, cramped aisles, crowdedness, dirty or mouldy produce and unpleasant smells often led some of the participants to feel anxious and, as a result, shop more quickly and occasionally acted on impulse purchases.

3.3.1.1.3 Product placement

Remembering where things are placed extends beyond store layout, where many participants recalled describing exactly where on the shelf products are found. Adding to that, most participants admitted that they purchase items at eye level or below. Both examples highlight the value and cost associated with where products are placed for producers and retailers. Knowing that customers seek familiar products often at eye-level

or below, retailers place items that sell the most in volumes and profit per product in these lucrative shelf slots (Vittersø, 2001). Reflecting on this point, participant 2 uttered:

“Surprisingly the organic corn chips were at eye level and non-organic chips on the bottom, so that was nice. Although I think it was also because they were Änglamark brand.” (P2, interview 2)

His comment highlights an interesting example of how an organic product was placed more strategically, albeit, most likely because it is a home-brand and hence more profitable for Coop. Above, I have argued how stores that designate aisles to organic food encourage sustainable consumption. Incongruent to this statement, participant 3 claimed that placing organic or plant-based options next to the conventional product would be more effective in promoting sustainable purchases:

“I really like that the vegetarian leverpostei¹⁷ was next to the normal meat leverpostei. I thought that was nice because it makes it easier for people who are not vegetarian and not looking for it to just try the other one. Having all the options next to each other is a better way of doing it, because if you have a section which says ‘here is what is sustainable corner’ than people who don’t care about that won’t try those products.” (P3, interview 2; see photo B in appendix 4)

Ironically, she continued by giving another example that unintentionally contradicted her previous argument. When shopping for a specific type of cheese, she mentioned that she is tempted by all the options and buys more than anticipated. Seeing a myriad of products next to each other can either encourage someone to try a sustainable product or lead them to act on impulse purchases. Participant 7, alluding to a sense of mistrust in the stores, says she gets the impression they are sometimes hiding products, like oat milk, to encourage customers to buy dairy-based milk (see photo C in appendix 4). In this example, the power exercised by Tine mandates, through monetary incentives to supermarkets, where their products are placed and potentially what products are not placed in the vicinity (Richards et al., 2013). Following participant 3 and 7’s argument, one might speculate whether Tine wants customers to question if they should choose between their milk and another plant-based option. With stores’ profitability based on product turnover, the competition for shelf space is fierce and, therefore, often excludes niche food items (Vittersø, 2001). In addition, the standardization of stores across brands means that

¹⁷ Liver pâté

low-cost products purchased in volumes are favoured over small and local producers (Vittersø, 2001). Stocking and nudging customers to purchase sustainable items suddenly becomes expensive and high-risk for retailers.

Alternative food networks and organic stores represent distinction among social groups (i.e., consumers who embody pro-environmental values and can act on them), whereas grocery stores reflect a form of alienated everyday consumption (Cheney, 2016). Nearly all participants expressed that they would rather support the former examples of food retailing. However, they acknowledged that the ease of their practice is embedded in big-chain grocery stores' material structure marked by accessibility, standardization, and familiarity. To articulate this point, grocery stores provide a sense of reliability and efficiency that alternative food networks struggle to meet.

3.3.1.2 Products

3.3.1.2.1 Variety of products and fresh produce

Second to store location, another point raised by many participants was the importance of variety in supermarkets. Variety in this context reflects a range of fresh produce, plant-based products, and organic options. As households who primarily consume vegetarian diets, the grocery store's vegetable section is the first stop for many participants in drawing inspiration:

“I definitely spend the majority of the time in the vegetable section and the rest kind of goes from there, so I base it around the vegetables more than anything else.” (P9, interview 2)

Several participants mentioned shopping at Meny for their range of organic meat or Coop for their selection of organic vegetables and fruits. In disagreement, participant 7 expressed her dislike for her nearby Coop because it is dirty, and the range of vegetables and fruits are not good. Participant 9 raised the point that each Coop is different, where some offer a better variety and quality over others. In the last 15 years, Norwegian grocery stores have drastically increased their selection and range of products, an observation that participants 6, 7, and 9 remarked. Nevertheless, they feel that Norway lacks options compared to their previous home country and are needing to grocery shop at several different stores to acquire the desired food products:

“When I first moved here there wasn’t so much choice, I don’t even think they had organic products 13 years ago, it was kind of a new thing. So that changed now, there is more choice in the normal shops, but I still sometimes go to Life and these other eco shops.” (P7, interview 2)

Recognizing that the participants procure food items from several different retailers emphasises how products embody material agency. In addition to product variety, participants expressed an interest in stores that provided sustainable-related services, such as a discounted vegetable section at Coop Mega. According to participant 4, this service is “super popular and always goes super quick”.

3.3.1.2.2 Brands

The brands' that a store carries attract and build loyalty among several participants. Branding is a strong source of habitual behaviour (Jackson et al., 2006) and a strategy used by retailers and manufacturers to satisfy needs and build relationships with customers (Koch, 2012). Rema 1000 and Coop were often mentioned as being a preferred stores due to their range of organic brands:

“I tend to go to Rema 1000 if I am looking specifically for seeds and nuts and things on their organic range, Kolonihagen. Otherwise, I am going to Coop Mega because they have a big Änglamark section.” (P4, interview 2)

Participant 1 added that his preferred store, Coop Extra, carries a wide selection of Änglamark items, making it a bit easier to spot what is sustainable. On the other hand, participants 6 and 9 prefer Rema 1000 because of Kolonihagen’s interesting assortment of products and their development of new ones. Participant 9 continued by sharing:

“They also have Grønnefolk which is a Norwegian vegetarian brand, they just have a lot of brands which I enjoy which is why I go to Rema1000, or when I go there, I go there specifically for that reason.” (P9, interview 2)

3.3.1.3 Information

Information, in the form of marketing, labels, images and texts, reflects materiality that co-shapes shopping practices within the infrastructural boundaries of a grocery store. Supermarkets tend to use in store labels on shelves, annual reports, corporate publications, their website, market products in weekly promotional leaflets and communicate deals through social media (K. Lutnæs, personal communication, January 25, 2021).

3.3.1.3.1 Marketing

The findings indicate that discourse and technology interact with systems of provision to influence individual decision-making and lifestyles (Lee, 2018). All participants noticed stores advertising discounts and deals, whether through signage, weekly promotional catalogues, or social media. However, few buy into these deals as they do not concern products that interest or align with their values. As a curious shopper, participant 7 enjoys trying newly launched products, like banana chips, but rarely buys marketed or discounted products as they do not align with her desire to eat healthier. Participants 6 and 9 shared that they only buy into marketed deals if it is something they already consume:

“Only if it something that we use. I know that Meny often has a cheese one, like parmesan and mozzarella, and we use that one a lot which makes sense. Coop has 2 for 1 on Røros milk which makes sense. So only if it makes sense, something we will use, never just because.” (P9, interview 2; see photo H in appendix 4)

They both continued by voicing their appreciation for Coop’s membership app, which tailor’s offers based on the customers shopping history. Technology, and in participant 6’s case, a coupon waiting to be used on her Coop app, possesses material agency. Membership apps embody a certain form of knowledge and influence, which leads to new reciprocal dispositions between people and things (Sahakian & Wilhite, 2014). Stating that she is probably “selling her soul”, she recounts the feeling of needing to shop at Coop so that she can use her coupon “spend more than 200nok, get 30nok off”. Furthermore, as a cooperative, Coop pays out ‘membership dividends’ at the end of the year, a pleasant surprise for participant 9, who received NOK 1200. Considering what the participants shared, I contend that advertisement acts insignificantly in promoting sustainable food. At most, it plays a minor role in prompting occasional spontaneous purchases or in receiving small discounts on favoured goods.

From in-store observations, the participants found little or no environmental themes; instead, what is most communicated related to value for money or newly launched products (Tjärnemo & Södahl, 2015). Participant 3 underscored her thoughts on stores not providing adequate information concerning sustainability. She would like to see more signage or pamphlets that covered where items are sourced, shipped from, and produced.

While promising, studies suggest that even if stores were to provide information, people may not draw the intended or appropriate conclusions about ensuing action (Warde, 2017). Information tends to be an ineffective spur to better behaviour because individuals do not engage much in rational deliberation and reflection (Warde, 2017). Regardless, the discrepancy between online and in-store communication, where sustainability is among the first themes to be presented when reviewing grocery store websites and their yearly reports, further supports claims that stores use environmental issues as greenwashing (Jones et al., 2011).

3.3.1.3.2 Quality labels

The final sub-category in material systems looks at the role of quality labels and how they influence the participants' behaviours. In this study, labels act as an indicator for what products are organic or Norwegian. Historically, labels were developed in measuring and ensuring a products level of quality or specific criteria met. Many participants subconsciously used labels to find sustainable products yet shared a sense of mistrust towards them. I consider it a subconscious influence because several participants mentioned they do not look at labels, and yet, are buying organic food (evidently marked by the Debio¹⁸ label). Knut shared his thoughts on the matter:

“Most people don’t look for labels, I don’t know if it is because they are kind of blind to them or if they don’t think about it. Labels have a mission, but in my opinion, it is not enough. I think we need to talk more about labels, sustainable food and how to find it, it is very complex, and more data and knowledge are needed on it.” (K. Lutnæs, personal communication, January 25, 2021)

On the other hand, labels are particularly informative for participant 1, who is instantly drawn to them. He acknowledged that he feels biased and is easily manipulated by green brands and eco-labels (see photo A, appendix 4).

This chapter has demonstrated that, for the participants, their practice of sustainable food provisioning is co-shaped by various overarching material structures. Based on actual retail practices, the participants are not sovereign consumers driving the process of shopping (Koch, 2012). Store location embodies high material agency in that most participants shop at the nearest retailers. The participants are nudged, by a strategically

¹⁸ Organic quality food label

designed store, to browse the many different aisles in search of their desired food items. The material agency is further distributed between product variety and branding. However, with each store carrying their own line of eco-brands and organic produce, many participants shop at several different stores to acquire these various goods. Finally, I contend that information in the form of marketing, labels, images, and texts are agentive in presenting and selling 'everyday' products yet do little in encouraging sustainable consumption. Most participants cited that they do not use membership apps or buy into weekly discounts unless it applies to goods they already purchase.

Six of the nine participants purchase less than 75% of their groceries at supermarkets, indicating that many continue to shop at other retailers seeking more sustainable options. Because grocery stores embody material agency in the sense of being convenient, standardized, and reliable, most households continue to be loyal customers. In the last decade, Norwegian grocery stores have increased their organic range and variety of eco-products. Many participants expressed that while great to see, stores continue to prioritize selling low-quality, unsustainable food items. Hence, relating to this research and the participants' accounts, grocery stores reflect more of a material constraint than an opportunity in sourcing sustainable food. Considering that the continuity of a practice is distributed between social frameworks, material structures and embodied knowledge, I've attempted to illustrate that the participants demonstrate strong socio-cultural values relating to eating sustainably yet are constrained by systems of provision supplying and manufacturing food items.

3.3.2 Competence

Above, I presented how the store's material structure confines the participants' ability to perform sustainable grocery shopping. In addition, "skills", which refer to the level of competency and know-how on the practitioner's part (Kendall et al., 2016), play an equally important role in ensuring the ability and continuity of a practice. Given the general rules which govern a sustainable diet (eat whole foods, locally, seasonally, package-free or organic), one must possess certain skills in sourcing and preparing dishes with those food items. It is presupposed that all households have first-hand knowledge about the guidelines and resources implied in the shopping practice (Spaargaren, 2011). However, the sourcing and preparation of meals is subject to complex social arrangements, domestic divisions of labour and influenced by distinct supply chains,

technologies, expert knowledge, regulatory regimes and public discourse (Kjærnes et al., 2007). Undoubtedly, households also require the necessary infrastructure (an equipped kitchen), time to prepare and financial means to purchase the food items. Therefore, sourcing and preparing sustainable meals are highly contingent on the practitioner's ability to plan, come prepared, find substitute food items, and know how to cook meals from scratch as the Norwegian seasons change.

In the study, many participants underlined that shopping had to be efficient in order to fit into their daily schedule. The ecological habitus of efficiently shopping begins with planning meals and writing shopping lists (see photo G in appendix 4) (Ford, 2019). The planning aspect is used to follow the seasons for food stuff and to regulate food waste – to eat what is in the fridge before buying more and in avoiding unnecessary purchases (Halkier, 2009). The positive normative engagement of bringing a backpack or reusable bags has become habitual for many participants. In this type of environmental performances, reflections upon consequences of sustainable food provisioning have become routinely appropriated and incorporated into their mundane practice of everyday grocery shopping (Halkier, 2009). For several participants, shopping is understood as an activity that needs to be organised and scheduled to fulfil important social, pleasurable and regulatory purposes (Halkier, 2009). Coming prepared for participants 6 and 9 meant making sure that they can shop alone and not during rush hour. They expressed that shopping with their kids or partners often resulted in buying items that were not on the list or taking more time than anticipated.

Sustainable food consumption practices, including buying food, cooking, and eating are embedded in highly mundane everyday routines. The participants' ability to use substitute goods to replace unsustainable options reflect a form of everyday political consumption involving norms and actions relating to environmental or social impacts of food production and consumption (Niva et al., 2014). Participant 8 expressed that it feels like common sense to avoid goods transported in water, such as canned chickpeas. Instead, she maintains the practice of buying dried chickpeas and has the know-how of preparing them. In addition, she possesses knowledge regarding sprouting buckwheat in winter to substitute salads that are "moved around in plastic bags from Romania", which to her, "just makes sense". The same relates to participant 9, who purchases frozen blueberries from Norway rather than fresh berries shipped from Chile. Additionally,

participant 2 wild forages in spring, winter and fall, which substitutes some food items typically purchased in supermarkets.

The final skill participants possess relates to food preparation. Overall, the participants mentioned that they prepare simple and easy meals on weekly rotations that don't require many skills. The participants' habits indicate that cooking practices must be manageable as they are manoeuvred in relation with the crossings of all other practices of a busy everyday life (Halkier, 2009). Participant 2 gave an example of a simple dish recently cooked:

“Buckwheat, boiled cabbage, potatoes and parsnip with organic butter and salt and pepper, it was so delicious and simple.” (P2, interview 1)

The above example may sound simple, however, preparing a frozen pizza or microwave meal might be more straightforward for other households. Evidently, we are reminded that 'simple food' remains subjectively defined from person to person. Participant 2, who has worked, and grown up, around agriculture and chefs, embodies high cultural capital regarding produce and gastronomy. With this prior knowledge, he moved to Norway and quickly adapted to the local produce and food culture. However, as I've attempted to demonstrate, his ability to do so lends attention to how he was socialized, lived experiences, and learnt information. He supported this argument when he announced:

“I learned how to cook food from the gourmet standpoint. It's not necessarily about gourmet but it's about what's fresh and in season, where its coming from is such a big part of how we build society and identity” (P2, interview 1).

It is no surprise that all the participants possess a range of shopping and culinary skills, which I argue, is a requirement in eating a sustainable diet. Lacking this embodied knowledge makes it challenging to eat dishes comprised of seasonal, local, organic, and package-free produce. In Norway, expenditure on food is relatively low, as is time spent cooking the main daily meal in the evening (Kjærnes et al., 2007). As such, grocery stores and manufacturers have attempted to bridge the gap between eating sustainable food and lacking the skills or time to prepare these dishes. For example, households are no longer required to make their own plant-based meat patty with the rise of Beyond Burger¹⁹. The recent growth of plant-based manufactured goods allows greater groups of people to

¹⁹ American company producing plant-based burgers that resemble beef

access what was once 'niche' food items. Sadly though, sustainable food in this sense continues to be commodified as processed and alienated from living Earth. If policy interventions are to be successful in transforming practices, bodies need to be re-engaged and exposed to sustainable food production activities (Wallenborn & Wilhite, 2014).

3.3.3 Expressing Sustainable Food Values

The participants' sustainable food values, encompassing their learned histories, beliefs, and attitudes, revealed what sustainable food means in RQ1. The subsequent section explores how these meanings, in addition to the participants' shopping beliefs and shopping attitudes, express themselves while performing sustainable food provisioning.

3.3.3.1 Beliefs

3.3.3.1.1 Trust in brands

Plant-based and eco-brands (e.g., Oatly, Kolonihagen, Änglamark, Helios and Beyond Burger) have increasingly filled supermarket shelves and household shopping carts. Due to appealing visual identity, unique product offerings and reasonable prices, participants expressed trust and loyalty towards brands. For many, Kolonihagen and Änglamark stood out as their favoured choice. Trust in Kolonihagen stems from having started as an independent brand with many exciting products, however, some doubt was expressed due to their recent ownership by Rema 1000:

“I’ve loved their brand for a long time, but they are owned by Rema 1000. So, that’s the thing, then it goes back into big business and making money and then I know for example, they get milk from Jersey cows in Denmark, but you could get the milk from cows in Norway.” (P9, interview 2)

In addition, participant 6 acknowledged that her trust in Kolonihagen comes from their packaging, “really plain, simple and stylish, which must mean it’s good” (see photo D in appendix 4), which she then stated is a bad thing, as it is strategic marketing.

3.3.3.1.2 Mistrust in labels

In juxtaposition to the participants trust in brands, many shared a sense of mistrust in quality labels. With numerous different Norwegian and European food quality labels available, consumers report that it is hard to navigate the “jungle” of different labelling

schemes (Vittersø & Tangeland, 2015). Participant 3, sharing this sense of confusion, eluded that her distrust towards them is due to a general mistrust in marketing and the belief that they do not uphold strict guidelines. To add to that, participant 4 shared:

“It’s a tricky one though, because I know in terms of labelling, sometimes if it says natural it only means that perhaps 10% of the ingredients are natural, so it can be very misleading. In other places when people put organic on their products, they might not be certified organic, but in order to get the certification it costs them a lot of money, so in some ways they can be organic without the certification.”

False advertisement and food scams resulted in participants 6 and 9 losing trust in labels. They shared anecdotes of their mistrust towards the Keyhole label²⁰ due to seeing it on Grandiosa pizza²¹ and concentrate juice, both not the healthiest choice of foods. Participant 9 made an interesting point saying:

“As far as I know from just following a lot of nutrition people in Norway, the way that Keyhole is measured is not really aligned, its misinformative for your normal person that doesn’t know much about nutrition.” (P9, interview 2)

3.3.3.1.3 Mistrust in stores

Collectively, the participants were, to some degree or another, cynical towards Norwegian retailers. These expressions of distrust may stem from growing societal scepticism towards powerful corporations and our destructive capitalistic systems. Regardless, consumers are increasingly aware that the goal of retailers is to shape shoppers’ behaviour and develop strategies that maximise profit (Koch, 2012). Participant 2 recalled his time working at a cooperative and shared:

“When I worked at the coop, when we had pictures of the cheese maker or the farmer and a little bio, it pulls you in and you understand not only where it is coming from but also the practices of the farmer. At big supermarkets it is harder to discern whether it’s a marketing practice or real information.” (P4, interview 2)

In line with the topic of marketing, participant 5 contended that store discounts are a psychology trick used to influence your consumption behaviour. He voiced his frustration

²⁰ Products with more dietary fibre, less saturated fat, salt, and sugar

²¹ Norwegian frozen pizza brand

towards what he saw as retailers' inefficient operational practices and their marketing efforts to entice and manipulate shoppers (Elms & Hallsworth, 2016). Participant 7's aversion towards retailers relates to the use of packaging. She mentioned that she thinks it's possible not to use packaging; it's just the politics of the store that need to change. In addition, participant 4 expressed a sense of distrust towards store politics when she remarked that retailers do not compete fairly on prices:

“Even if one product is cheaper that week than something else might be more expensive, so your overall shopping ends up costing about the same.” (P4, interview 2)

Participant 8 added that she believed the price between organic and conventional is so large that it causes some criminal activity. In these examples, the participants internalized aspects of the store in which they are embedded, which shaped their dispositions—the things they think, believe, feel, and know (Ford, 2019).

3.3.3.1.4 Homogeny in stores

When asked their impressions of Norwegian supermarkets' branding and values, all participants answered that they had no opinion or could not tell the difference between the stores. Unlike the United States, where certain supermarket brands stand out from others, Norwegian supermarkets are very homogenous. Participant 2, having grown up in Northern America, had an interesting point to make:

“There's definitely more food waste in Northern America because there's this culture of abundance and more variety and options. It's a delicate balance between having more variety and less variety. I think in Northern America, there's too many options to choose from and it's too much competition. Here I feel like there's not enough competition to help drive both the variety on your plate up and the cost of things down.” (P2, interview 2)

Participant 1 reasoned there is redundancy in grocery stores where too many aisles are filled with low-quality items. He continued by explaining how there is also homogeny within the organic and sustainable options as there are few options to choose from. Participant 6 agreed to the latter point, where she said:

“I have less options here than I would have back home, so for a lot of these products I really only have one choice, which is easy but also a tiny little bit sad.” (P6, interview 2)

However, she highlighted supermarkets tendency to have a large variety of things to make pizza at home, “you can choose from five different sauces”. Her remark casts a light on dominant food norms among Norwegian households, in this case, their love for pizza. Finally, participant 8 primarily shops at international shops (see photo I in appendix 4) because she can find more variety and is better catered for vegetarian diets. The present analysis argues that the consumption of food is one need that can be understood as a site of struggle against capital. However, the potential for struggle at supermarkets is not fully developed because of the limited nature of food options available to the consumer as an output of capitalist production (Cheney, 2016).

3.3.3.1.5 You can't have it all

The deeply felt, ‘you can have it all’ cultural norm creates an immense challenge when it comes to mobilising consumer demand in the direction of significant environmental change (Johnston, 2008). The theme grasps the participants' dilemma of negotiating between contradictory food choices and casts a light on our flawed food system, which creates an opportunity cost for those attempting to consume in a more environmentally friendly way. Participant 7 referred to the latter point when she uttered:

“I feel like you have to compromise, either organic food packaged in plastic or products produced in Norway that maybe have pesticides. And if you want to buy from an organic shop, its 3 or 4 times more expensive.” (P7, interview 2; see photo F in appendix 4)

Most participants recalled similar stories of having to negotiate between options, here participant 6 expressed:

“When I thought about it after our last conversation, sometimes you really can't have it all, you cannot have organic, unwrapped stuff almost.” (P6, interview 2)

Further, participant 4 voiced her desire for more inclusion of different cultures in supermarkets but then questioned if having more variety is not the best in terms of sustainability. Wilk (2014, p.328) imparted the observation that “The high-level of consumption in western Europe and North America is better characterized as a kind of precarious balance between equally strong culturally-mediated impulses towards both frugality and indulgence, saving and spending.” Expanding on this, sustainable

consumption could be characterized as a balance between consumers desire to have more variety which often lies in contradiction to eating locally and seasonally.

3.3.3.1.6 The ideal store

The final interview question probed the participants to reflect and share their thoughts on the ideal grocery store. Many mentioned having less packaging, more bulk options, and the standard for all fruit and vegetables to be organic. Participant 8 expressed her desire that stores stop washing fruit and vegetables as it's "spooky", not smelling their earthy fragrance when shopping. Participants 1 and 2 described a store that would resemble a farmer's market, a place to go and get inspired while meeting the people behind the products. In line with this, participant 7 shared that she would like to see more local and seasonal items, similar to REKO-ringen. Participant 4 added:

"I would love it to be only the things that are in season, I don't think we need salad in December, we don't need watermelon. I would only want the things in season, although that sounds like a place of depravation, it's so much fun that when it is cherry season then all the cherries are in the store and there is this excitement of getting to eat the cherries again." (P4, interview 2)

Having more variety and the ability to get everything in one place were also expressed, where participants 6 and 9 added that a place like Wholefoods or Trader Joe's²² would be ideal:

"We just need a Trader Joe's or Wholefoods like we spoke about, that would be very convenient. Although I would still make the effort to go to a zero-waste store to buy dry goods and then if there was a butcher that had organic cuts I would go there." (P9, interview 2)

Conclusively, participant 4 described a system in which customers are incentivized to make better choices, such as making sustainable products cheaper.

The participants' vision of 'the ideal grocery store', in many ways, supports consumption patterns that run counter to consumer demand and presents a commercial and financial risk for retailers. Jones et al. (2011, p.945) profess that "food retailers are, at best, pursuing a 'weak' model of sustainable consumption." They argue that retailers focus on sustainable initiatives like energy and transport efficiency rather than addressing sustainable diets (Jones et al., 2012). Reviewing the Norwegian retail market further

²² American grocery retailers supplying an extensive variety of organic and healthy options

supports their findings. Regardless, 'the ideal grocery store', in many ways, may be used as a vision for retailers to aspire to.

3.3.3.2 Attitudes

There is a common understanding of behaviour as something driven by factors like attitude/motivation, rational self-interest, or habit (Shove, 2014). Grocery shopping, essentially, hinges on the practitioners performed behaviour subject to the socio-material setting it takes place in. Thus far, I have contextualized various factors influencing the participants' grocery shopping practices (i.e., their learned histories, embodied skills and access to multiple retailers and food items). Additionally, the participants' attitudes towards grocery shopping proved to play a significant role in how and to what extent they acted on their food values. In RQ1, attitudes were expressed as 'pains' and 'gains', with each inhibiting or supporting sustainable food consumption. This final chapter will elaborate on the participants' attitudes as expressions of 'reflective behaviour', 'convenient behaviour', and 'emotional behaviour' in the store. It should be noted that all behaviours support and inhibit sustainable food provisioning. Whereas in RQ1 I made a distinction between 'pains' and 'gains', in this section, they are intertwined.

3.3.3.2.1 Reflective behaviour

Reflective behaviour, in this research, refers to a type of shopping practice where participants stop and think about aspects of the product not merely related to price and convenience but also regarding their sustainable food values (Hjelmar, 2011). The extent to which participants acted on reflective, convenient, or emotional behaviours varied among them.

Most participants' reflective behaviour took place when negotiating between similar food items differentiated by source, packaging, or price. When asked to describe what components most influence their choice of products, all participants gave conflicting examples. In some instances, purchasing plastic-wrapped organic tomatoes was justified over package-free conventional ones. Participant 2 explained:

"I do tend to go for stuff that has less plastic, but if it's local and organic, and it happens to be in plastic, I'd rather support that producer, and then recycle the plastic, even though it's sort of still contentious." (P2, interview 2)

On the other hand, in certain cases, avoiding plastic trumped organic. The irregularities of the participants' choices, while difficult to explain, casts a light on the highly moralized setting in which food choices are made (Johnston, 2008).

In addition to packaging and organic, the price was primarily mentioned as a determining factor when choosing items. For example, with the contested avocado, participants justified buying them if they were discounted. In other cases, the price was a reminder not to purchase the desired, but potentially unsustainable, food items. Participant 7 recalled an example of wanting to buy dragon fruit but gratefully did not purchase the exotic, “flown around the globe” fruit due to its high price. Considering that the price for a healthy and sustainable weekly food basket is significantly higher compared to a standard one (Hoek et al., 2017), several participants had to sacrifice their sustainable values in meeting other values, e.g., financial means and household expectations:

“I don't want to put too much pressure on myself either. My boyfriend sometimes has to tell me that its ok it's not organic. If I can't find organic or if I see its super overpriced, you know I'm not working full time right now, so sometimes I have to make the decision of price over quality.” (P9, interview 2)

Depending on the type of products, price changes seem to have the most significant impact on point-of-purchase actions (Hoek et al., 2017). Research by Hoek et al. (2017, p.105) indicates that “if the choice for an alternative product does not involve a loss of highly valued product-specific benefits (i.e. flavour preference, convenience), the balance can be tipped to the healthy and sustainable alternative by price measures.” In an experiment conducted by KIWI, cutting the tax on fruit and vegetables resulted in a 23% increase sale of these food-items (KIWI Minipris, 2008).

Having to compromise, was a theme many participants touched on when describing their reflective shopping habits. As participant 7 put it, negotiating is like “making the choice of two levers, I try to balance it out.” For participant 3, not wanting to buy avocados because of its unethical connection to crime is overlooked when shopping with friends who want to make guacamole. Similarly, participant 2 will sometimes rationalize his purchases based on what he has already eaten that week or plans to eat over the weekend. For example, he will justify buying conventional and non-local purchases if most of his meals eaten that week were sustainable or if he plans on preparing a special dinner containing exotic Asian ingredients. Rationalizing choices is also subject to individual shopping trips.

Participant 4 will occasionally negotiate her options based on what is in her shopping basket. She shared:

“Sometimes I feel like, ya I’ve been good, I’ve bought something organic so I will buy something non-organic. Sometimes my basket will be organic tomatoes and pasta and then I will buy the loose lemons so that I’m not using the additional plastic.” P4

Reflective behaviour demands that consumers have both time and knowledge in navigating food choices (Hjelmar, 2011). The consumption of certain food items such as soy, palm oil, conventional meat, farmed fish, and avocados are imbued with moral and ethical overtones (Elms & Hallsworth, 2016). Avoiding these food items requires consumers’ time to read ingredient lists and food labels. Such judgements reflect both pragmatic, utilitarian evaluative measures, and the extent to which they were expected to use their knowledge as a skilled shopper (Elms & Hallsworth, 2016). Participant 9 cited:

“My boyfriend sometimes complains because I use a lot of time, I check things, I check ingredients (...) I think I have that conversation with myself every time I buy something, where is it from, do we need it, will he eat it, do we have too many things at home?” (P9, interview 2)

Finally, reflectivity for several participants was expressed as moments of observation and self-reflection. Participant 4 enjoys seeing what others purchase as a means of discovering new food items or learning about other food cultures. Meanwhile, participant 1 takes pride in being the one observed:

“Part of me does take pride when I buy all these ecologic things and put it on the register and the people behind me in the line see this.” (P1, interview 2)

The purchase of symbolically-charged items is a manifestation of participant 1’s wish to enact culturally-bound customs of what is deemed sustainable (Elms & Hallsworth, 2016). This traditional stereotype, buying organic food to signify social status – reinforces the emotional dimension of food (Elms & Hallsworth, 2016).

Participant 5, who is mainly driven by price and nutrition, has started considering environmental factors too. However, he mentioned that while he does not necessarily act on these considerations, he values the process of reflection and learning about environmental issues. Lastly, participants 1 and 2 voiced contempt towards self-checkout machines and other forms of technology that automate shopping and makes products feel less valuable. Their observations point to a key distinction between where food

provisioning is headed (automation and food alienation) and what is needed (engagement and reconnecting with food) (Wallenborn & Wilhite, 2014).

3.3.3.2.2 Convenient behaviour

While reflective shopping behaviour was dominant among the participants, many also exhibited habits characteristic of convenient shopping practices. Reflective shopping behaviour asks consumers to deliberate or rationalize their choices based on held values, while convenient behaviour relies on routines and embodied practical consciousness (Johnston, 2018). How we grocery shop, clean our bodies and get around are often accomplished on 'auto-pilot' and are characteristic of being deeply anchored in habitus and resistant to change (Sahakian & Wilhite, 2014). Knut concurred in saying:

"We shop mostly on auto-pilot, to some extent people resist being told what to choose, they don't like it. I would say from a more personal point of view that we are sometimes too afraid to tell our customers you should buy this instead of that, due to environmental or health reasons. You kind of have to do the careful nudging strategy." (K. Lutnæs, personal communication, January 25, 2021)

In this type of environmental performance, the potential burden of environmental reflexivity is eased by the help of routinised food consumption practices where households do not have to sacrifice time, effort, and resources to accomplish everyday tasks (Halkier, 2009). This form of behaviour can either support or prevent sustainable food provisioning. Convenient behaviour, in the form of being efficient, proved to support the participants attempt in buying sustainable food (remembering where items are placed, writing shopping lists, cooking simple meals). Unfortunately, convenient behaviour, in the form of being a habitual practice without much need for engagement of the cognitive self, may inhibit sustainable food consumption (Jackson et al., 2006; Sahakian & Wilhite, 2014). Retailers capitalize on the latter point by strategically designing stores which compliment households' desire to shop efficiently, quickly and without much deliberation. Automation and homogeny further fuel what I contest as being a pandemic of mindless consumption. Participant 7 shared an interesting point regarding convenient habits when shopping:

"If you want to buy mango, it's from Chile, and because I am used to it, like most people, you just go to the supermarket and buy this stuff. I'm not so good at not doing it." (P7, interview 2)

Examples of convenient behaviour among the participants include shopping at the most accessible stores, buying food online and having it delivered, not planning meals, not reading food labels, and buying repeated food items. Considering the modern and pragmatic consumer, convenient shopping behaviour is a potential barrier in purchasing sustainable food as they are unlikely to deviate from their habitual practices. Thus, sustainable options must be available and visible if buying these goods is to become a 'normal' part of shopping for the convenient consumer (Hjelmar, 2011, p.340).

3.3.3.2.3 Emotional behaviour

The final attitude identified among the participants was their expression of emotional behaviour while grocery shopping. The findings indicate that the participants make nuanced adjustments to their shopping behaviour in light of their household circumstances, socially-constructed peer pressure, mood and the consumption of certain foods for personal pleasure (Elms et al., 2016; Hoek et al., 2017).

Several participants expressed that the physical state of hunger or various emotions triggered cravings for sweet or comforting foods while shopping. Participant 1 explained how his different moods influence how much time he spends and what items he buys. For him, a negative emotional state may elicit a shopping experience where he wanders around a bit more. Similarly, participant 3 recounted:

“Well, if I am hungry, I will buy a lot more and will usually buy brie or something that I love. If I am stressed and anxious, I will try to get out of there as fast as possible, but I think shopping makes me a little bit happier if I am stressed, I usually find it to be a really nice experience.” (P3, interview 2)

Participant 8 shared that she prefers to have space when shopping and buys less when the store is not hectic. On the other hand, participant 2 would rather take part in a shopping experience which resembles a farmer's market, full of people and “good energy and vibes, more of a festival feeling.”

Most participants stated that they enjoy grocery shopping as it reflects the beginning of the creative process in preparing a meal. Their shared love for food elicits a myriad of emotional states, memories, and feelings that may go against their sustainable food values under certain circumstances. Participant 3 shared examples of buying items against her

principles because of her love for that food item, like caviar, for instance. Likewise, participant 4 shared:

“I always want mushrooms and that is quite hard to find organic and not in plastic, so often I am buying the cheap mushrooms that comes in plastic boxes and isn’t organic, but I really like mushrooms, so that kind of goes against my values.” (P4, interview 2)

Interestingly, the most rational shopper of the study, participant 5, stated that needs, rather than emotions, steer his practices. For him, grocery shopping reflects a form of consumption that meets nutritional requirements. Contrary, he commented that while shopping for clothing, his purchases are emotionally driven and stem from a desire to be fashionable. Buying clothes to be stylish or organic food to represent environmental values reflects Bourdieu’s (1984) term ‘cultural capital’ which is the “acquisition of social status through cultural practices that involve social distinctions of taste or the exercise of moral judgment” (Jackson et al., 2006, p.56). To articulate this point, rather than just performing an individual assessment of price, risk, justice, and ecology in front of the supermarket shelves, the participants engage with food in relation to questions of lifestyle and practices of care (Ursin et al., 2016).

Pleasing others and meeting socially constructed expectations of preparing and eating food were the final emergent emotional themes. Participants 6 and 9, who provide for several household members, expressed various accounts of meeting other’s needs. Participant 6 recalled:

“I don’t drink Coca Cola but if I have guests or know my dad is coming and loves a glass of coke in the evening, then sure if he wants to drink that then I’ll buy it for him, I don’t mind.” (P6, interview 2)

She continued by sharing that, while vocal about her values, she does not want to scare people away and, as such, must find balance in how and what she consumes. Likewise, participant 6 will buy conventional meat for guests or milk for her partner if she cannot find organic options. Drawing onto participant 2’s point: “I think I often emotionally shop; I am driven by the culture that food brings into one’s house or moment, family or friends”, highlights underlying social and emotional factors that influence food choices. In this context, “‘choice’ emerges as a more complex phenomenon than is often assumed in simplistic notions of price sensitivity” (Jackson et al., 2006).

3.3.4 RQ2 Concluding Remarks

In my second research question I analysed the socio-material setting in which sustainable food provisioning practices are performed. The results indicate that most participants continue to shop at alternative food networks or international shops because of supermarkets limited supply of desired food items. Had it not been for their high prices or lack of accessibility, the participants expressed they would shop more often at these independent and local retailers. While big-chain supermarkets have increased their organic and local range in recent years, participants continue to feel that their values are contested due to retailers use of excessive packaging and limited choice. Store layout and product placement both limit and support the participants practices. All participants described routinized behaviour while shopping. As such, it was difficult to source their desired food items when products were moved around or 'hidden'. The analysis continued by revealing how brands and food quality labels represent material agency. Overall, many participants trusted brands over labels when choosing food items and go out of their way to seek specific brands at different stores. Finally, information as a material structure proved to have limited agency in influencing the participants practices. Considering that retailers primarily market meat and processed food, it is of no surprise that most participants were unaware of information campaigns and promotional deals.

In addition to navigating the infrastructural and material boundaries supplying food, participants demonstrated a range of embodied skills pertaining to procuring and preparing meals. Sourcing sustainable food items requires the practitioner to be an efficient shopper; meal-planning, writing shopping lists, remembering where items are placed and shopping alone. Additionally, it requires them to be knowledgeable; know how to cook with local and seasonal produce and find substitute products.

Finally, the results indicate that despite embodying shopping skills and having access to sustainable food, the participants must also negotiate choices based on expressed attitudes while shopping. Sustainable food provisioning demands that consumers are reflective, efficient and dismiss certain emotional, convenient, and socially constructed expectations of what to eat. Evidently, being a 'perfect' shopper is nearly impossible. Many participants described situations of having to compromise between conflicting choices of meeting planetary or personal needs.

4 Conclusion

Norwegian grocery stores play a potent role in mediating everyday production and consumption in today's complex food system. Considering the dominant mental model of capitalism, food-related climate change continues to be framed as an individual issue solved by sovereign consumers. By now, it is widely recognized that households do not act on rational, autonomous choices but are (explicitly and implicitly) nudged to maintain needless consumption. I began this paper by casting light on grocery stores' role as agents of change. At the heart of our food systems, grocery stores connect farmers, manufacturers, suppliers, and consumers in a socio-material setting that co-shapes diet and shopping practices. This thesis presented a qualitative practice-theoretical investigation into how nine households performed their sustainable food provisioning practices within the Norwegian grocery market. The enquiry aimed to understand underlying perspectives, fractures and multiple meanings that shaped the participants' food values. It continued by revealing how their performance of sustainable food provisioning is situated in both material and cultural systems of power. The main takeaway from this analysis pertains to the relative agency of consumers to act on their sustainable food provisioning practices.

To this end, the study found that through socialization and information, the participants fabricated and embodied various meanings of sustainable food. Without these fractures (largely defined by household changes, work, travel, community, and mass media), I argue that the participants' internalized beliefs and attitudes towards our destructive food systems would not be present. Engaging in these participatory experiences evoked the emotional connection required to act on pro-environmental behaviour. Overall, the participants defined sustainable food as local, seasonal, package-free, and/or organic items. In eating a sustainable diet, most participants were vegetarian or ate small amounts of meat and fish. The second research question presented the Norwegian grocery market as a system of provision and infrastructural boundary in which shopping practices occur. Store location, shelf layout, product placement, produce variety, brands available, and to a certain degree, information in the form of quality labels and membership apps, demonstrate material agency influencing the participants' shopping habits. As such, navigating this retail space in sourcing sustainable food items proves to be a form of

consumption that requires skilled, knowledgeable, efficient, and reflective practitioners. However, despite embodying these qualities, most participants recounted difficulties aligning with their food values when shopping at big-chain supermarkets. They voiced the belief that stores supply a limited and homogenous range of sustainable food items, many of which are imported and not package-free. Adding to the complexity, the participants must negotiate food choices based on context-specific situations influenced by emotional or convenient needs and socially constructed expectations of what to eat and how to feed others.

Challenges encountered in this study include conducting research during a global pandemic, which made it difficult to find research participants. Additionally, I felt distanced from the participants when interviewing them via online video calls; poor connection, background noise and the computer screen, at times, acted as a virtual wall. While this thesis has built further on a vast body of consumption and grocery shopping studies, it has only scratched the surface of research on sustainable food provisioning. Moreover, the research is limited by several factors such as its limited sample. I am aware that a larger timeframe and inclusion of more case studies could enhance representativity. As I argue above, the fundamental causes of unsustainable diets are structural constraints, but I have omitted several other structural issues such as gender roles and income inequality. To further evolve the body of work, future research could, for instance, implement a larger sample with more diverse participants; consumers from different social-economic groups, urban and rural settings, age-profiles, household compositions, and/or implement alternative research methods, e.g., through participant observation, focus groups or discourse analysis. Furthermore, to complement the conceptual framework applied here, a systems thinking approach would be of interest in illustrating a more holistic and coherent picture of our agri-food systems.

4.1 Towards Sustainable Food Provisioning

In working towards more equitable and environmentally friendly agri-food systems, sustainable consumption practices must take hold in society. By studying consumers who attempt to purchase sustainable food at Norwegian grocery stores, this thesis identified socio-material agencies that enable and constrain their habits. Considering the pillars of

practice, I suggest three recommendations relating to social, body and material factors that may instigate widespread pro-environmental behaviour change.

Broadly speaking, the results indicate that sustainable food values are predominantly informed by distinct experiences, exposure to pro-environmental social settings and engagement with food. As such, Norway should evaluate the socio-cultural environment which structures how and where experiences and participatory learning takes place (Sahakian & Wilhite, 2014; O'Neill et al., 2019; Wallenborn & Wilhite, 2014). For instance, encouraging youth to volunteer at organic farms may act as a 'fracture' that triggers environmental-sensitivity towards local agri-food systems.

Second, recognizing that sustainable food provisioning requires skilled and knowledgeable practitioners, retailers and the government must work collectively towards making sustainable choices more accessible (Hjelmar, 2011). This could be done in two ways; a) providing more services which educate consumers on how to buy and cook with sustainable food items, b) make the sustainable option, the easier option. Essentially, the aim is to transform the practice into one which is employed without much need of deliberation or costs the consumer extra time and money. As an example, and lending on what the participants recommended, organic could become the standard for all fruit and vegetables. Moreover, in Norway, where households are sensitive to price, making sustainable food more affordable is paramount in encouraging sustainable consumption.

Finally, infrastructurally and materiality, the food provisioning system must dramatically change. It is paramount that we re-imagine our relationship with food and begin to see the exchange of food items as a site of possible non-alienation within alienated social relations (Cheney, 2016). As such, moving away from capitalism's relentless treadmill of production is the first step (Johnston, 2008). In ending this paper, I boldly suggest that the grocery retail sector be incorporated into the Norwegian social welfare system. Access to healthy, sustainable food should be an equal right to education and healthcare. In this context, grocery stores would be subsidized by the government and act as non-profit retailers. The resulting provisioning landscape might assist in transcending the rift in our global food systems between alienation and re(connection) with living Earth.

5 References

- Ackerman, F. (1997). Consumed in Theory: Alternative Perspectives on the Economics of Consumption, *Journal of Economic Issues*, 31(3), 651-664.
<https://doi.org/10.1080/00213624.1997.11505958>
- Bourdieu, P. (1984). *Distinction: A Social Critique of the Judgment of Taste*. London: Routledge
- Bryman, A. (2012). *Social research methods* (4th ed. ed.). Oxford: Oxford University Press.
- Bugge, W. (2020). *Konkurransetilsynet varsler gebyr på til sammen 21 milliarder kroner til Norgesgruppen, Coop og Rema 1000*. Available at:
<https://finansavisen.no/nyheter/bors/2020/12/15/7598244/norgesgruppen-far-gebyr-pa-8-75-milliarder-kroner> (Accessed on 25.5.2021).
- Carroll, K. A., & Samek, A. (2018). Field experiments on food choice in grocery stores: A 'how-to' guide. *Food Policy*, 79, 331–340.
<https://doi.org/10.1016/j.foodpol.2018.03.004>
- Cheney, T. (2016). Historical Materialism and Alternative Food: Alienation, Division of Labour, and the Production of Consumption. *Socialist Studies*, 1(11), 22.
<https://doi.org/10.18740/S4JK5K>
- Clapp, J. (2016). *Food*. Cambridge: Polity.
- Coop Norge. (2021). *Coop Bærekraftsrapport*. Available at:
<https://ipaper.ipapercms.dk/CoopNorge/coopnorge/aarsrapport-baerekraft-coop-norge-20202/> (accessed: 07.08.2021).
- Dubuisson-Quellier, S., & Gojard, S. (2016). Why are Food Practices not (More) Environmentally Friendly in France? The role of collective standards and symbolic boundaries in food practices. *Environmental Policy and Governance*, 26(2), 89–100. <https://doi.org/10.1002/eet.1703>
- Elms, J., de Kervenoael, R., & Hallsworth, A. (2016). Internet or store? An ethnographic study of consumers' internet and store-based grocery shopping practices. *Journal of Retailing and Consumer Services*, 32, 234–243. <https://doi.org/10.1016/j.jretconser.2016.07.002>
- Evans, D. M. (2019). What is consumption, where has it been going, and does it still matter? *The Sociological Review*, 67(3), 499–517.
<https://doi.org/10.1177/0038026118764028>

- FAO, Food and Agriculture Organization of the United Nations & World Health Organization. (2019). *Sustainable healthy diets: Guiding principles*. Available at: <http://www.fao.org/3/ca6640en/ca6640en.pdf> (Accessed on 27.07.2021).
- Fine, B. (2013). Consumption Matters. *Ephemera*, 13(2), 217-248.
- Ford, A. (2019). The Self-Sufficient Citizen: Ecological Habitus and Changing Environmental Practices. *Sociological Perspectives*, 62(5) 627–645. <https://doi.org/10.1177/0731121419852364>
- Frøyd, K., & Bu, F. (2020). *Tjener fett på dine handleturner*. Available at: <https://www.tv2.no/a/11824915/> (Accessed on 09.08.2021).
- Fuhrer, U., et al. (1995). *From social representations to environmental concern: the influence of face to face versus mediated communication*, in: U. FUHRER (Ed.) Basel: Oekologisches Handeln als sozialer Prozess.
- Halkier, B. (2009). A practice theoretical perspective on everyday dealings with environmental challenges of food consumption. *Anthropology of food*, S5, Article S5. <https://doi.org/10.4000/aof.6405>
- Halkier, B., & Jensen, I. (2011). Methodological challenges in using practice theory in consumption research. Examples from a study on handling nutritional contestations of food consumption. *Journal of Consumer Culture*, 11(1), 101–123. <https://doi.org/10.1177/1469540510391365>
- Hjelmar, U. (2011). Consumers' purchase of organic food products. A matter of convenience and reflexive practices. *Appetite*, 56(2), 336–344. <https://doi.org/10.1016/j.appet.2010.12.019>
- Hoek, A. et al. (2017). Healthy and environmentally sustainable food choices: Consumer responses to point-of-purchase actions. *Food Quality and Preference*, 58, 94–106. <https://doi.org/10.1016/j.foodqual.2016.12.008>
- Jackson, P. et al. (2006). Retail Restructuring and Consumer Choice 2. Understanding Consumer Choice at the Household Level. *Environment and Planning A: Economy and Space*. 38(1), 47–67, <https://doi.org/10.1068/a37208>
- Johnston, J. (2008). The citizen-consumer hybrid: Ideological tensions and the case of Whole Foods Market. *Theory and Society*, 37, 229–270. <https://doi.org/10.1007/s11186-007-9058-5>
- Johnston, J. (2018). Can consumers buy alternative foods at a big box supermarket? *Journal of Marketing Management*, 33(7–8), 662–671. <https://doi.org/10.1080/0267257X.2017.1297033>

- Jones, P., Hillier, D., & Comfort, D. (2011). Shopping for tomorrow: promoting sustainable consumption within food stores. *British Food Journal*, 113(7), 935-948. <https://doi.org/10.1108/00070701111148441>
- Jones, P., Hillier, D., & Comfort, D., (2012). In the public eye: sustainability and the UK's leading retailers. *J. Public Affairs*, 13(1), 33-40. <https://doi.org/10.1002/pa.1440>
- Kendall, H. *et al.* (2016). Behind the kitchen door: A novel mixed method approach for exploring the food provisioning practices of the older consumer. *Food Quality and Preference*, 53, 105-116. <https://doi.org/10.1016/j.foodqual.2016.06.005>
- KIWI Minipris. (2008). *KIWI-eksperimentet: Momskutt økte salget av frukt og grønt med 23 prosent!*. Available at: <https://kommunikasjon.ntb.no/pressemelding/kiwi-eksperimentet-momskutt-okte-salget-av-frukt-og-gront-med-23-prosent?publisherId=89290&releaseId=107073> (Accessed on: 28.08.2021).
- Kjærnes, U., Harvey, M., & Warde, A. (2007). *Trust in Food*. Hampshire: Palgrave Macmillan.
- Koch, S. (2012). *A Theory of Grocery Shopping: Food, Choice and Conflict*. New York: Berg.
- Koch, S. L., & Sprague, J. (2014). Economic Sociology vs. Real Life: The Case of Grocery Shopping. *American Journal of Economics and Sociology*, 73(1), 237-263, <https://doi.org/10.1111/ajes.12065>
- Kollmuss, A., & Agyeman, J. (2002). Mind the Gap: Why Do People Behave Environmentally and What Are the Barriers to Pro-environmental Behavior. *Environmental Education Research*, 8(3):239-60. <https://doi.org/10.1080/13504620220145401>
- Krosby, S., & Høye, E. (2017). *Disse gulrøttene ble aldri menneskemat*. Available at: <https://www.nrk.no/livsstil/disse-gulrøttene-ble-aldri-menneskemat-1.13305023> (Accessed on 07.08.2021).
- Lavik, R. & Jacobsen, E. (2015). *Endringer i dagligvaremarkedet på 2000-tallet – holdninger og handlinger*. Oslo: Statens Institutt for Forbruksforskning.
- Lee, K. C. L. (2018). Grocery shopping, food waste, and the retail landscape of cities: The case of Seoul. *Journal of Cleaner Production*, 172, 325-334. <https://doi.org/10.1016/j.jclepro.2017.10.085>
- Mathews, B., & Ross, L. (2010). *Research Methods*. Essex: Pearson Education Limited.
- Myrset, B., Hortling, B., & Maric, S. (2015). From Waiting in-line to Going Online: Norway's Grocery Market Disruption. Accenture. <https://www.accenture.com/no-en/insight-waiting-in-line-to-going-online>

- Newhouse, N. (1990). Implications of attitude and behavior research for environmental conservation. *The Journal of Environmental Education*, 22(1), 26–32. <https://doi.org/10.1080/00958964.1990.9943043>
- Nielsen. (2020). *DAGLIGVAREFASITEN 2020*. Available at: https://dagligvarehandelen.no/sites/default/files/dagligvarefasiten_2020.3.pdf (Accessed on 18.02.2020).
- Niva, M. *et al.* (2014). Eating Sustainably? Practices and Background Factors of Ecological Food Consumption in Four Nordic Countries. *Journal of Consumer Policy*, 37(4), 465–484. <http://dx.doi.org.ezproxy.uio.no/10.1007/s10603-014-9270-4>
- NorgesGruppen. (2021). *NORGESGRUPPEN ÅRS- OG BÆREKRAFTSRAPPORT 2020*. Available at: <https://www.norgesgruppen.no/barekraft/> (Accessed on: 12.5.2021).
- O’Neill, K.J. *et al.* (2019). ‘Fractures’ in food practices: exploring transitions towards sustainable food. *Agric Hum Values*, 36, 225–239. <https://doi.org/10.1007/s10460-019-09913-6>
- Otero, G. *et al.* (2018). Food security, obesity, and inequality: Measuring the risk of exposure to the neoliberal diet. *Journal of Agrarian Change*, 18(3), 536–554. <https://doi.org/10.1111/joac.12252>
- Poore, J., & Nemecek, T. (2018). Reducing food’s environmental impacts through producers and consumers. *Science*, 360(6392), 987–992. <https://doi.org/10.1126/science.aag0216>
- Regjeringen. (2017). *Norwegian National Action Plan for a Healthier Diet – an outline. Healthy diet, meal enjoyment and good health for everyone!* Available at: <https://www.regjeringen.no/en/dokumenter/norwegian-national-action-plan-for-a-healthier-diet--an-outline/id2541870/> (Accessed on 22.05.2021).
- Rema 1000. (2021). *Ansvarsrapport 2020*. Available at: <https://www.rema.no/nyheter/ansvarsrapporten-2020-er-her/> (Accessed on 15.05.2021).
- Richards, C. *et al.* (2013). Retailer-driven agricultural restructuring—Australia, the UK and Norway in comparison. *Agriculture and Human Values*, 30(2), 235–245. <https://doi.org/10.1007/s10460-012-9408-4>
- Rojek, C. (2004). The Consumerist syndrome in Contemporary Society. An interview with Zygmunt Bauman, *Journal of Consumer Culture*, 4(3), 291 – 312. <https://doi.org/10.1177/1469540504046516>

- Sahakian, M & Wilhite, H (2014). Making practice theory practicable: Towards more sustainable forms of consumption, *Journal of Consumer Culture*, 14 (1), 25-44. <https://doi.org/10.1177/1469540513505607>
- Shove, E. (2014). Putting practice into policy: Reconfiguring questions of consumption and climate change. *Contemporary Social Science*, 9(4), 415–429. <https://doi.org/10.1080/21582041.2012.692484>
- SIFO. (2014). *Kjøtt og reklame - en studie av annonsering og reklame for kjøtt i det norske matmarkedet*. Oslo: SIFO.
- Skogli, E. et al. (2020). *Grossist- og distribusjonvirksomhet i norsk dagligvare: analyse av dagens organisering og vurdering av innspill knyttet til regulering*. Oslo: Menon-Publikasjon NR.
- Smagacz-Poziemska, M., Bukowski, A. & Martini, N. (2021) Social practice research in practice. Some methodological challenges in applying practice-based approach to the urban research, *International Journal of Social Research Methodology*, 24(1), 65-78, <https://doi.org/10.1080/13645579.2020.1760577>
- Spaargaren, G., & Mol, A. P. J. (2011). Environmental Social Sciences and Sustainable Consumption. *Encyclopedia of Consumer Culture*, 539-545 <https://doi.org/10.4135/9781412994248.n206>
- Tjärnemo, H., & Södahl, L. (2015). Swedish food retailers promoting climate smarter food choices—Trapped between visions and reality? *Journal of Retailing and Consumer Services*, 24, 130–139. <https://doi.org/10.1016/j.jretconser.2014.12.007>
- Ursin, L., Myskja, B. K., & Carson, S. G. (2016). Think Global, Buy National: CSR, Cooperatives and Consumer Concerns in the Norwegian Food Value Chain. *Journal of Agricultural and Environmental Ethics*, 29(3), 387–405. <https://doi.org/10.1007/s10806-016-9609-8>
- Vintage Norway. (2021). *Photos from Norway's Past*. Available at: <https://vintagenorway.tumblr.com/> (Accessed on 22.08.2021)
- Vittersø, G. (2001) *Fra Helios til Prix Begrensninger og muligheter for salg av økologisk mat i dagligvarehandelen*. Oslo: SIFO.
- Vittersø, G., & Tangeland, T. (2015). The role of consumers in transitions towards sustainable food consumption. The case of organic food in Norway. *Journal of Cleaner Production*, 92, 91–99. <https://doi.org/10.1016/j.jclepro.2014.12.055>

- Wallenborn, G., & Wilhite, H. (2014). Rethinking embodied knowledge and household consumption. *Energy Research & Social Science*, 1, 56–64. <https://doi.org/10.1016/j.erss.2014.03.009>
- Warde, A. (2005). Consumption and Theories of Practice. *Journal of Consumer Culture*, 5, 131-153. <https://doi.org/10.1177/1469540505053090>
- Warde, A. (2017). *Consumption: A sociological analysis*. Manchester: Palgrave
- Weis, T. (2016). Tony Weis: Towards 120 billion / Radical Philosophy. Available at: <https://www.radicalphilosophy.com/commentary/towards-120-billion> (Accessed on: 16.09.2020).
- Wilk, R. (2002). Consumption, human needs, and global environmental change. *Global Environmental Change*, 12(1), 5-13. [https://doi.org/10.1016/S0959-3780\(01\)00028-0](https://doi.org/10.1016/S0959-3780(01)00028-0)
- Wilk, R. (2014). Consumer Cultures Past, Present, and Future. *Sustainable Consumption*, 315–336. <https://doi.org/10.1093/acprof:oso/9780199679355.003.0014>
- Wilk, R. (2018). Global junk: Who is to blame for the obesity epidemic? *RAE-Revista de Administração de Empresas*, 58(3), 332-336. <https://doi.org/10.1590/S0034-759020180311>
- Willett, W. *et al.* (2019). Food in the Anthropocene: The EAT–Lancet Commission on healthy diets from sustainable food systems. *The Lancet*, 393(10170), 447–492. [https://doi.org/10.1016/S0140-6736\(18\)31788-4](https://doi.org/10.1016/S0140-6736(18)31788-4)
- Yin, R. K. (2009). *Case study research: design and methods*. Thousand Oaks: Sage.

Appendix

Appendix 1: Interview 1 Guideline

Time (min)	Outline
0-4	Welcome, consent form signed, explain today's interview, introduce myself, purpose of research
4-5	Start recording device
5-10	Part 1: Background
10-20	Part 2: Diet
20-25	Part 3: Sustainable food
25-35	Part 4: Discourse
35-40	Explain shopping log and photo voice
40-45	Questions and ending interview, stop recording device

Welcome:

- Consent form signed? (if not, have them give verbal consent over recording)
- The purpose of today's interview is to, in some ways, 'break the ice' and initiate the start of what will hopefully be 4 weeks of reflection, questions and valuable dialogue between you and myself.
- I will start by asking general background questions concerning you and your household. I then will proceed by asking questions about your diet, sustainable food and what discourse influences your practices. The interview will end with me explaining the shopping log and answering any questions or concerns you may have.
- Please do not hesitate to ask questions or clarifications during the interview.
- Once I start the recording device, all your answers will be recorded. However, as a reminder, you will not be identifiable in the written paper.
- Before starting the interview, I would like to briefly introduce myself and the purpose of this study.
 - My name is Kaja Ludvigsen, half Norwegian, half American but grew up in Belgium and Switzerland. I am in my final year of my masters in Agroecology and have a bachelor's in hospitality management. I've always been fascinated by human behaviour and consumption; I love to explore themes centered around "why we are who we are". Which led me to this research project.
 - If consuming sustainable food is vital in addressing climate issues, why is it challenging to adopt sustainable practices and who should be held responsible?
 - Grocery stores act as an interesting point of study, they represent the meeting point between consumers, producers, farmers, and policy, in addition to this, the three largest actors make up 96% of the Norwegian grocery market.
 - I will be studying you as a reflection of the 'ideal consumer' who is purchasing sustainable food at these grocery stores. I hope to find out what grocery shopping means to you, what the experience is like, how this relates to your diet and how this compares to what grocery stores are doing to promote more sustainable forms of consumption.

Part 1: Background

- Please state your name and can you tell me a bit about the following:
 - Age

- Profession/occupation
- Number of people living in household and who are they

Part 2: Diet

- How would you describe your current diet?
 - Does food (whether that be eating, cooking, nutrition) interest you, and in what way?
 - Are there any restrictions, if yes, for what reason?
 - Are there certain likes and dislikes which shape your diet, explain?
 - How does your diet differ (if at all) from those in your household?

Part 3: Sustainable food

- How would you define sustainable food?
- What is sustainable food to you and how do you integrate it into your diet?
- Which foods do you refuse to eat for sustainability reasons, explain?

Part 4: Discourse

- Where did you first learn or hear about sustainable food? Why did this change your viewpoint?
- What forms of discourse (any source of information: news/books/marketing/social media/presentations/academic courses, government publications...) influence your understanding of food and eating?
- What forms of discourse do you read/watch/listen to, to learn more about your diet?
- How do people in your community influence your understanding of food?

Shopping log and photo voice

- After our interview, I will send you an email with two shopping logs attached as a word document.
- The shopping log consists of short questions concerning your experience while grocery shopping.
- Photovoice is a research method which asks you, as the participant, to document an experience through photography. This experience is that of grocery shopping, it can include the steps before (such as planning, travelling to the store) during (what you experience in the store) and after (such as getting home, putting food away, eating). I would like to emphasize that these photos should represent what grocery shopping is to YOU, try not to think about what you think is expected of you, as there are no expectations, no right or wrong! This is your own personal documentation of what grocery shopping looks like when practiced by you. The email will also include an example of photovoice with a definition of the method.
- The method in completing one full shopping log will be as follows:
 1. Read the document questions before going grocery shopping
 2. Remember that you must ask for the receipt of your purchases
 3. Take 10-15 photos of your experience grocery shopping
 4. One photo must include the receipt of final purchases
 5. When you have time (preferably the same day you went grocery shopping) fill in the shopping log and insert the photos/or attach the photos to the email
 6. Repeat steps 1-5 for the second entry
 7. Send the two shopping logs (and photos) back to me by February 1st

Appendix 2: Interview 2 Guideline

Part 1: Background Questions

1. What is your household income bracket?
 1. 200,000
 2. 200,000 – 350,000
 3. 350,000 – 500,000
 4. 500,000 – 650,000
 5. 650,000 – 800,000
 6. < 800,000
2. What area do you shop in?



3. How often do you grocery shop per month?
 1. 1
 2. 2-4
 3. 5-8
 4. < 9
4. How much do you spend per month (NOK)?
 1. > 2000
 2. 2000 – 4000
 3. 5000 – 10,000
 4. < 10,000
5. Of this amount, how much is spent at supermarkets (Rema 1000, Norgesgruppen, Coop)?
 1. > 25%
 2. 25% – 50 %
 3. 50% – 75%
 4. 75% – 100%

Part 2: Choice

1. Why do you shop at Kiwi, Rema, Meny and Coop?
2. Please describe a recent shopping experience where you were deliberating what item to purchase (can refer to shopping log) (spend some time here)
 - What were the items?
 - What criteria were most important for each item? For example: price, quality/taste, packaging, origin, labelling/certification, brand, seasonality.
 - Why did you choose the item you purchased?

- Note to self: try to get 1-2 example of a 'pain' purchase and 1-2 'gain' purchase.
3. Have you experienced a situation where you purchased something against your values?
 4. Do you look for labels when you shop?
 - Why do you look for these labels, what do they mean to you?
 5. Do you look for certain eco-brands?
 - Why do you look for these brands, what do they mean to you?

Part 3: Influences “environmental cues”

6. I will describe various elements which may or may not influence how you grocery shop. For each one, please describe if and how it influences your practice, give examples:

Material:

- Grocery store layout – do you have a strategy walking around the store?
- Shelf layout
- Smells/sounds/lighting/temperature/cleanliness
- Carrying and transporting groceries
- Self-checkout machines
- Apps/technology

Social:

- Other shoppers
- Customer service
- COVID or other disruptions (personal, health, crisis)
- Shopping with friends, family or being seen by someone you know

Information:

- Deals/discounts
- Images, labels, texts in store
- Seeing what other shoppers are buying

Body:

- Shopping in a good mood/relaxed/curious
- Shopping in a bad mood/stressed/anxious/angry/frustrated

Part 4: Habits

7. Have you adopted new or different shopping habits as a result of your chosen diet? Explain?
8. Do your shopping habits change as a result of when you get paid during the month/bills are due? Explain?
9. Do they change relative to different seasons of the year? Explain?

Part 5: Views and Meaning

10. Do you enjoy grocery shopping?
 - Why/why not?
11. What changes would you like to see to make it easier/more suitable for you to practice sustainable grocery shopping at X store?
12. In an ideal world, what would your dream supermarket look like?

Appendix 3: Shopping Log

Date and time of grocery shopping trip:

Estimated time spent at grocery store:

Store(s) purchases took place at:

Who accompanied you?

How would you describe the purpose of this shopping trip? (Highlight one)

Spontaneous trip, was walking by

Quick trip to buy things I was missing

Planned trip buying food for several days

Other, please describe:

Did you use a shopping list?

Did you interact with others? (Such as asking for help finding something, talking to other customers or store employees, bumping into someone you knew)

Did you purchase the items you were looking for, if not, which items were you not able to buy and for what reason? (Please mention if it was a result of price, quality, could not find the item or sold out, for example: **Organic spinach: sold out**)

Did you buy items on sale, that were promoted or had a coupon? Describe the items, the promotion, and where you saw the promotion: (For example: **chocolate, 3 for 2 deal, marketed at store**)

Appendix 4: Photovoice



PHOTO A: Participant 1 “Items purchased at Coop Extra”



PHOTO B: Participant 3 “Vegetarian liverpostei displayed next to meat liverpostei”



PHOTO C: Participant 4 “Plant-based milk separate from dairy milk”



PHOTO D: Participant 4 “Organic section”



PHOTO D: Participant 6 “Kolonihagen brand”

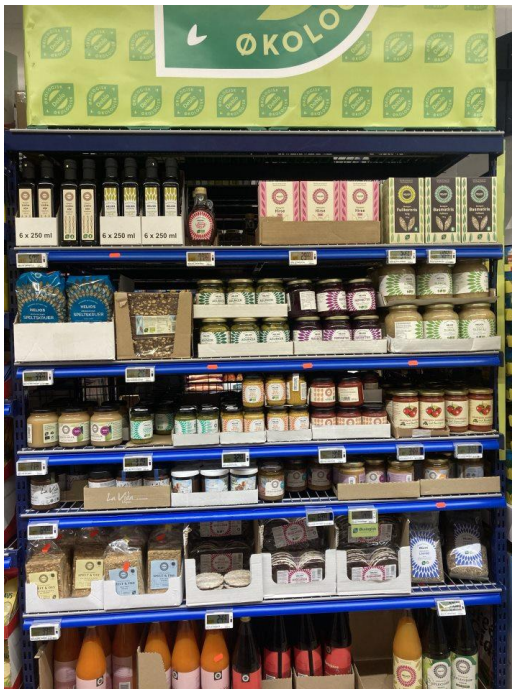


PHOTO E: Participant 7 “Helios section”



PHOTO F: Participant 7 “Plastic wrapped organic bananas or package-free conventional”

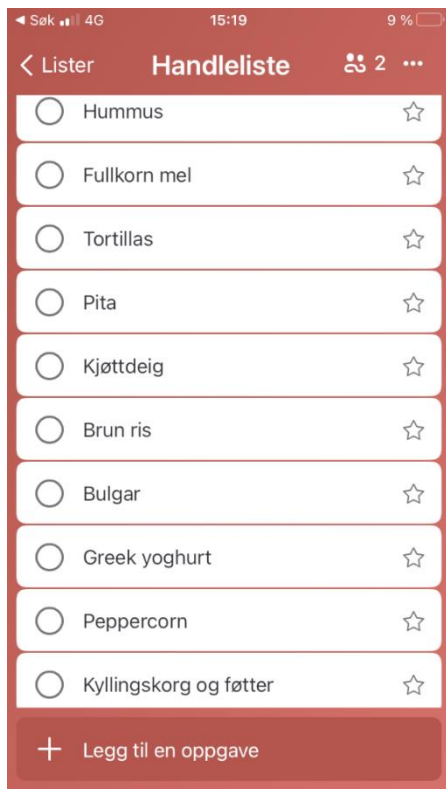


PHOTO G: Participant 9 "Shopping list"



PHOTO H: Participant 9 "Marketed discounted organic milk"



PHOTO I: Participant 8 "Shopping at Grønlandtorg"

Appendix 5: Research Quality Metrics

Trustworthiness in research quality (Bryman, 2012, p.390)

Qualitative measures	Quantitative measures	Objective
<i>Credibility</i>	Validity	Ensuring good practice and that the findings are correctly understood
<i>Transferability</i>	Validity	Produce “thick descriptions” that can be applied to other contexts
<i>Dependability</i>	Reliability	Ensuring that complete records are kept at all phases of the research process
<i>Confirmability</i>	Objectivity	Limiting the investigators’ personal values from intruding the research

Appendix 6: Sample Coding Interview 1

Line	Meaning unit	Condensed meaning unit Description close to the text	Condensed meaning unit Interpretation of the underlying meaning	Categories	Theme
6	for the last 12-13 years I've been working in restaurants, bars and now I work for a coffee roaster	I've been working in restaurants, bars and now coffee roaster	has first-hand experience in food sector	socialization	Acquired knowledge
15	That has always coloured my life, environmentally friendly products, and growing up in Northern America there is good quality produce	environmentally friendly products and good quality produce has coloured my life	upbringing exposed him to environmentally friendly values	socialization	Acquired knowledge
29	I generally eat vegetarian but leaning towards vegan	mostly vegetarian but leaning towards veganism	flexible diet but working towards veganism	values	Food ideology
29	I do consume meat occasionally, but I prefer organic, local and sustainably raised meat and if I can kill it myself the better	I occasionally consume organic, local and sustainably raised meat	eats only sustainable meat	values	Food ideology
32	I do eat fish, sadly not as much as I used to because there is not a lot to choose from in Norway. I prefer wild caught but there are not a lot of stores that sell that.	I eat wild caught fish but not so much in Norway because of limited selection	wants to eat wild caught fish but does not have access to it in Norway	attitudes	Expressing ideology
33	In the summertime I get a fair amount of free vegetables	I get some free vegetables in the summer	the way he gets food changes with the seasons	skills	Food ideology
34	I volunteer for Linda Jolly, she has a farm garden out by the Kings farm and is from California and I volunteer down at Losaeter and run events there	I volunteer for Linda Jolly and at Losaeter	engaged in Oslo urban-ag community	experience	Acquired knowledge

Appendix 7: Sample Coding Interview 2

Line	Meaning unit	Condensed meaning unit Description close to the text	Condensed meaning unit Interpretation of the underlying meaning	Categories	Theme
153	My boyfriend sometimes complains because I use a lot of time, I check things, I check ingredients. Most of the time I know what I like and what I want to buy.	my boyfriend sometimes complains I use a lot of time, I check things and ingredients	is attentive when shopping	attitude	Expressing ideology in store
162	I would say I don't know what's changed and when, but I definitely spend the majority of the time in the vegetable section and the rest kind of goes from there, so I base it around the vegetables more than anything else.	I spend the majority of the time in the vegetable section, I base it around vegetables more than anything else	bases what she buys around what vegetables inspire her	products	Material systems
198	My son is just impossible to take into a shop without ending up having to buy a bunch of stuff we didn't actually need. Like last time we went shopping just him and me, he would take the broccoli out of the cart and just say that we are not having anything green. Its hard to keep the concentration with family members there.	my son is impossible to take into a shop without ending up having to buy a bunch of stuff we don't need	shopping with her son influenced what they buy	experience	Acquired knowledge
212	I try to plan more because I am home a lot more and can plan the dinners. I think in the long run that definitely saves us money	I try to plan more because I am home a lot more, that helps us save money	planning influences how much they spend	skills	Competence
230	I know that certain things are not Keyhole but they still have them marked, its definitely misinformation.	I know some things are not Keyhole but still have the label	sense of mistrust in labels which have been criticized or bad press	belief	Shopping ideology



Norges miljø- og biovitenskapelige universitet
Noregs miljø- og biovitenskapelige universitet
Norwegian University of Life Sciences

Postboks 5003
NO-1432 Ås
Norway