

Minna Kanerva

# THE NEW MEATWAYS AND SUSTAINABILITY

Discourses and Social Practices



Strong  
flexitarian

Vegetarian

Vegan

[transcript] PoliticalScience

Minna Kanerva  
The New Meatways and Sustainability

This open access publication has been enabled by the support of POLLUX (Fachinformationsdienst Politikwissenschaft)



and a collaborative network of academic libraries for the promotion of the Open Access transformation in the Social Sciences and Humanities (transcript Open Library Politikwissenschaft 2020)

This publication is compliant with the “Recommendations on quality standards for the open access provision of books”, Nationaler Open Access Kontaktpunkt 2018 (<https://pub.uni-bielefeld.de/record/2932189>)

Universitätsbibliothek **Bayreuth** |  
Universitätsbibliothek der Humboldt-  
Universität zu **Berlin** | Staatsbibliothek  
zu **Berlin** | Universitätsbibliothek FU  
**Berlin** | Universitätsbibliothek **Bielefeld**  
(University of Bielefeld) | Universitäts-  
bibliothek der Ruhr-Universität **Bochum**  
| Universitäts- und Landesbibliothek |  
Sächsische Landesbibliothek - Staats- und  
Universitätsbibliothek **Dresden** | Universi-  
tätsbibliothek **Duisburg-Essen** | Univer-  
sitäts- u. Landesbibliothek **Düsseldorf** |  
Universitätsbibliothek **Erlangen-Nürnberg**  
| Universitätsbibliothek Johann Christian  
Senckenberg | Universitätsbibliothek  
**Gießen** | Niedersächsische Staats- und Uni-  
versitätsbibliothek **Göttingen** | Universitäts-  
bibliothek **Graz** | Universitätsbibliothek der  
FernUniversität in **Hagen** | Martin-Luther-  
Universität **Halle-Wittenberg** | Staats- und  
Universitätsbibliothek Carl von Ossietzky,  
**Hamburg** | Technische Informations-  
bibliothek **Hannover** | Gottfried Wilhelm  
Leibniz Bibliothek - Niedersächsische

Landesbibliothek | Universitätsbibliothek  
**Kassel** | Universitäts- und Stadtbibliothek  
**Köln** | Universität **Konstanz**, Kommuni-  
kations-, Informations-, Medienzentrum  
| Universitätsbibliothek **Koblenz-Landau** |  
Universitätsbibliothek **Leipzig** | Zentral- u.  
Hochschulbibliothek **Luzern** | Universitäts-  
bibliothek **Mainz** | Universitätsbibliothek  
**Marburg** | Ludwig-Maximilians-Universität  
**München** Universitätsbibliothek | Max  
Planck Digital Library | Universitäts- und  
Landesbibliothek **Münster** | Universitäts-  
bibliothek **Oldenburg** | Universitätsbiblio-  
thek **Osnabrück** | Universitätsbibliothek  
**Passau** | Universitätsbibliothek **Potsdam** |  
Universitätsbibliothek **Siegen** | Universitäts-  
bibliothek Vechta | Universitätsbibliothek  
der Bauhaus-Universität **Weimar** | Universi-  
tätsbibliothek **Wien** | Universitätsbibliothek  
**Wuppertal** | Universitätsbibliothek **Würz-  
burg** | Zentralbibliothek **Zürich** | Bundes-  
ministerium der Verteidigung - Bibliothek |  
Landesbibliothek **Oldenburg**

**Minna Kanerva** (PhD) is a senior researcher at the Sustainability Research Center (artec) at the University of Bremen in Germany. Her research focuses on sustainability transformation, linking social practices with discourses, and the sociology of meat.

Minna Kanerva

# **The New Meatways and Sustainability**

Discourses and Social Practices

**[transcript]**

Doctoral Dissertation, 2019. The publication of this book has been supported by the Sustainability Research Center (artec), University of Bremen.

### **Bibliographic information published by the Deutsche Nationalbibliothek**

The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available in the Internet at <http://dnb.d-nb.de>



This work is licensed under the Creative Commons Attribution 4.0 (BY) license, which means that the text may be remixed, transformed and built upon and be copied and redistributed in any medium or format even commercially, provided credit is given to the author. For details go to <http://creativecommons.org/licenses/by/4.0/>

Creative Commons license terms for re-use do not apply to any content (such as graphs, figures, photos, excerpts, etc.) not original to the Open Access publication and further permission may be required from the rights holder. The obligation to research and clear permission lies solely with the party re-using the material.

### **First published in 2021 by transcript Verlag, Bielefeld**

© **Minna Kanerva**

Alle Rechte vorbehalten. Die Verwertung der Texte und Bilder ist ohne Zustimmung des Verlages urheberrechtswidrig und strafbar. Das gilt auch für Vervielfältigungen, Übersetzungen, Mikroverfilmungen und für die Verarbeitung mit elektronischen Systemen.

All rights reserved. No part of this book may be reprinted or reproduced or utilized in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publisher.

Cover layout: Maria Arndt, Bielefeld

Printed by Majuskel Medienproduktion GmbH, Wetzlar

Print-ISBN 978-3-8376-5433-2

PDF-ISBN 978-3-8394-5433-6

EPUB-ISBN 978-3-7328-5433-2

<https://doi.org/10.14361/9783839454336>

Printed on permanent acid-free text paper.

# Contents

---

<b>List of tables</b> .....	7
<b>List of figures</b> .....	9
<b>List of boxes</b> .....	11
<b>Acknowledgements</b> .....	15
<b>Abstract</b> .....	17
<b>1. Introduction</b> .....	19
1.1 Framing and objectives for the work .....	19
1.2 Research approach .....	22
1.3 Outline of the book .....	23
1.4 General note on style .....	24
<b>2. Old and new meatways</b> .....	27
2.1 Background .....	27
2.2 Meat related discourses .....	61
2.3 The sustainable future of protein? .....	76
2.4 Conclusion and discussion .....	101
<b>3. Conceptual structure</b> .....	103
3.1 Social practice theories as the basis .....	104
3.2 Modifications to the elements of social practices .....	115
3.3 Concepts linking to general understandings .....	123
3.4 Linking practices to discourses .....	158
3.5 Further to the side of discourses .....	164
3.6 Power and agency .....	177
3.7 Conclusion and discussion .....	185

<b>4</b>	<b>Data and methods</b> .....	189
4.1	Introduction .....	189
4.2	Data choice, processing and preliminary analysis .....	192
4.3	Methods of further analysis .....	205
4.4	Quality criteria vs. methodological criticisms .....	212
4.5	Conclusion .....	217
<b>5</b>	<b>Exploring discourses on the new meatways</b> .....	219
5.1	Descriptions, themes and dimensions of the data .....	220
5.2	Framing .....	232
5.3	Meat-eating related challenges .....	256
5.4	Additional tools for change .....	272
5.5	Conclusion .....	281
<b>6.</b>	<b>Conclusions and discussion</b> .....	283
6.1	Conclusions from the analyses .....	284
6.2	Final words on transforming meat-eating related practices .....	297
6.3	Discussion .....	301
<b>7.</b>	<b>References</b> .....	309
<b>8.</b>	<b>Annex 1 – Coding system used in MAXQDA</b> .....	341

## List of tables

---

Table 2.1 Some of the main actors, developments and issues related to new meats

Table 3.1 Linking discourses, frames and framing devices

Table 4.1 Overview of the data from the Guardian

Table 4.2 Codes used for analysis

Table 4.3 Code memos from MAXQDA — Example

Table 5.1 Themes and dimensions in the CM document

Table 5.2 Themes and dimensions in the PBM document

Table 5.3 Themes and dimensions in the INS document

Table 5.4 Themes and dimensions in the FLEX document

Table 5.5 Themes and dimensions regarding vegetarianism and veganism in the data

Table 5.6 Titles and leads of the articles — Framing devices

Table 5.7 Typical framing devices in the data

Table 5.8 Further coping strategies in the data in addition to the four Ns



## List of figures

---

- Figure 2.1 Total global meat supply from 1961
- Figure 2.2 Impacts from systems of intensive meat production and consumption
- Figure 2.3 Global biomass of humans, wild terrestrial mammals and domesticated animals, 1900 and 2000
- Figure 2.4 Vegetarians over time in the United Kingdom
- Figure 2.5 Per capita meat supply in various locations from 1961
- Figure 2.6 Protein transition — Meat consumption vs. GDP
- Figure 2.7 Vegetarianism and GDP per capita in different countries
- Figure 2.8 Influences on meat-eating practices at the level of the individual
- Figure 2.9 Number of mentions in the online Guardian of different alternatives to eating conventional animal-based meat from 2000 to 2017
- Figure 2.10 The cycle of inertia
- Figure 2.11 Energy use, greenhouse gas potential and land use of different protein sources
- Figure 2.12 Life-cycle analyses — Comparing chicken with alternative protein sources
- Figure 2.13 Greenhouse gases embodied in different foods, including the Impossible Burger
- Figure 2.14 Per capita pulse supply in various locations from 1961
- Figure 3.1 The emphases in different practice theories and in behaviour change approaches
- Figure 3.2 Social practice as an iceberg
- Figure 3.3 Social practices and their connections to discourses
- Figure 3.4 Mapping old and new meats
- Figure 3.5 The structure of basic human values shared across cultures
- Figure 3.6 Cultural value dimensions
- Figure 3.7 Sketching a process of value and emotion conflict
- Figure 3.8 The continuum and journey of different meatways
- Figure 5.1 Meat reduction process, and flexitarian journey
- Figure 6.1 How social practices can transform
- Figure 6.2 The continuum and journey of different meatways revisited



## List of boxes

---

- Box 2.1 Contribution of the global meat system to greenhouse gases
- Box 2.2 Between production, supply and consumption of meat
- Box 2.3 Ideas for a transformation towards sustainable meat production and consumption
- Box 3.1 On the value-action gap
- Box 3.2 Social practices as habits
- Box 3.3 Societal master frames and dominant paradigms
- Box 4.1 Sociological discourse analysis according to Ruiz Ruiz (2009)
- Box 4.2 Metaphors and criticism of metaphor analysis



*“Directly recognizing and engaging people as agents of change can drastically speed up [...] transformation processes because everyone is part of a system, and everyone has a sphere of influence. Activating conscious human agency that is critically reflective of individual and shared assumptions, beliefs and paradigms is a powerful way to shift norms and institutions”*

*Karen O'Brien, a professor of Human Geography*

*“Not everything that is faced can be changed, but nothing can be changed until it is faced”*

*James Baldwin, a novelist*

*”Hope is an embrace of the unknown and the unknowable, an alternative to the certainty of both optimists and pessimists”*

*Rebecca Solnit, a writer*

*“After the final no, there comes a yes, and on that yes the future world depends”*

*Wallace Stevens, a poet*



## Acknowledgements

---

This book is based on my PhD. I am grateful to my two mentors, to Ines Weller for important conceptual and practical support throughout the process, and to Cor van der Weele, for many constructive, valuable and patient comments during the final year of writing.

I appreciate greatly the support from my colleagues at my research center. Further at the University of Bremen, I thank Professor Martin Nonhoff for giving me advice for an initial entrance to discourse-analytical work.

As regards other experts, I am grateful in particular to Daniel Welch for valuable comments on the conceptual basis. I also owe thanks my Finnish colleagues Anu Raijas, Mari Niva, Johanna Mäkelä and Piia Jallinoja who were instrumental at a critical point of my building the conceptual structure.

I am grateful to my friends far and near for asking me how I am and for giving me so much encouragement, and especially to Jill for her tireless support at different points of the process, and to Nadine for being a great sounding board for conceptual ideas.

All of my extended family — you know who you are — thank you so much for your support and patience. Also, I will always be grateful to my parents for giving me important values. I wish you were still here so that I could thank you in person!

Finally, my son Alekski had to put up with a stressed-out Mom for quite a while, and despite that, he managed to support me in his many wonderful ways, including humour. I am so lucky to have had you on my team.



## Abstract

---

Societies will have to go through an extremely challenging transformation towards sustainability in the near future. To do this by design, rather than by disaster, calls for a paradigm shift, and for science to support policymakers. Social practice theories help challenge the often hidden paradigms, worldviews, and values at the basis of many unsustainable practices. However, practice theoretical research can struggle to provide effective means for policymaking. Connected to social practices, discourses and their boundaries define what is seen as possible, what the range of issues and their solutions are. By exploring the connections between practices and discourses, this book develops, firstly, a conceptual approach to help enable purposive change in unsustainable social practices. This is done in an interdisciplinary manner integrating different literatures. Secondly, the book takes meat and the current meat system as a central theme. Radical transformation towards new meatways is arguably necessary, with the climate crisis and massive biodiversity and ecosystem loss being closely connected to the current meat system. Additionally, pandemics originating in wild or domesticated animals we eat is yet another example of how vastly unsustainable our food-related practices are. This book explores the necessity of transformation, as well as the complex psychological, ideological, and power-related mechanisms slowing down and inhibiting change.

Notable for the practice-discourse framework is that it allows a focus, on the one hand, on existing *strategic ignorance* of conflicting values, emotions and knowledge, and on the other hand, on the potential for *discursive consciousness* of practices, and their related (conflicting) values, emotions, and knowledge. The wider, the more varied and in-depth discourses there are, the more difficult strategic ignorance is to maintain. Discursive consciousness can create *discursively open practices* which may be well established and discursively dominant in a society, nonetheless, increasingly questioned, creating tensions and potential openings to different ways of going about the practices. Especially significant in such discursively open practices can be different and new meanings replacing, or co-occurring alongside old meanings. Discourses disseminate new meanings and potential new ways of doing things to a wider social group or society. Discursive consciousness can be seen as a key concept for purposive change. Further, it may better enable change in the

context of *distributed agentive power* residing within the practice-discourse arrangement. A positive feedback loop may emerge between collective individual action creating political change, political change changing both individual and societal values, and changing values increasing willingness for collective action.

Taking the widened, and interdisciplinary version of a social practice theory approach to meat-eating related practices, this book examines discourses related to the *new meatways*, firstly flexitarianism, and secondly, eating cultivated or plant-based meats, or insects. Cognitive frames can work as a focus of practice theoretical analysis especially due to their connections to values, emotions, and knowledge on the side of practices. Discourse data can be used to investigate some of the underlying issues to do with controversial practices, or practices that are established, but being questioned. Discourses can reveal much about the values, emotions, knowledge, paradigms, and worldviews linked to social practices, as well as potential coping mechanisms, such as strategic ignorance of related conflicts. The book also discusses potential ways in which the new meatways and discourses around them could enable a purposive transformation.

The analysed online discourse data suggests that meat-eating related practices can be seen as discursively open, especially due to the new meatways offering new solutions, as compared to vegetarianism and veganism. Discourses regarding cultivated or plant-based meat or insects push the boundaries of what meat is, and seeing strong flexitarianism as a realistic meatway helps imagine a solution to finding sufficient future protein for the world. Further, discourses around the new meatways can reveal somewhat hidden frames that have supported existing practices in the last decades. Two conceptual metaphors present in the data nail down well two issues regarding transforming the meat system towards radically less, or no intensive industrial production, with the goal of radically lower negative impacts. The first metaphor, the *hungry beast*, addresses the still very present meat demand paradigm or frame in need of critical reassessment. The new meats (cultivated meat, plant-based meat and insects) are partially functioning in this frame with the underlining assumption that they are necessary to satisfy the starkly increasing global demand for meat. The second metaphor of a *journey* illustrates how sustainable ways of eating protein, including some more conventional meat, can be realised. When framing meat eating and its transformation using this metaphor, different meatways are seen as points on a continuum, where many possible journeys along that continuum can be made. In this way, even more radical changes can be facilitated. Finally, compared to the old meatways, the new meatways can better align values related to sustainability with values often being prioritized in daily food-related practices, such as providing for family, convenience, tradition, freedom, politeness, and pleasure. The new meatways, therefore, offer a way to expand the discourse, away from the conventional animal-based meat vs. no meat dichotomy.

# 1. Introduction

---

This book is concerned with the issue of change as regards unsustainable social practices, taking meat and the current meat system as central examples and a theme. In this chapter, I will first introduce my focus and my motivation for doing this research. Subsequently, I will explain my research approach and goals for this work, and finally, briefly present the overall structure of the book.

## 1.1 Framing and objectives for the work

The enormous global system created to produce human food from non-human animals is argued to be the number one single cause of climate change and biodiversity loss, the two most urgent interlinked crises humanity is facing in the 21st century. Additionally, it causes many other serious problems. Whether such a fundamental practice to humans as eating other animals (Zaraska, 2016a) can be ended remains to be seen, but it is certainly possible to radically change this practice. Even if extremely challenging, it is arguably necessary to radically alter the current system of meat production and consumption — in short, the *meat system* — and go back to eating conventional animal-based meat only occasionally on more or less a global basis, supplementing, or replacing this with either meat-like or non-meat-like plant proteins. Without such changes, the dual crises cannot be sufficiently tackled, as is increasingly argued (Benton et al., 2021; Davis et al., 2016; Garnett, 2011; GRAIN-IATP, 2018; Johns Hopkins Center for a Livable Future, 2018; Springmann et al., 2018). The next chapter will discuss the many reasons to transform the meat system, but one of the most compelling ones is the amount of greenhouse gases (GHGs) produced by the meat and dairy system. In a business-as-usual growth scenario — regarding global population, and per capita meat and dairy consumption — the GHG emissions from this system would take up four-fifths (81%) of the global carbon budget for the 1.5-degree scenario for 2050 (GRAIN-IATP, 2018).<sup>1</sup>

---

1 This proportion takes the current contribution to global GHG emissions of the meat system to be 14.5% (FAO, 2013). The next chapter will discuss this contribution issue some more.

The question of meat is related to the more general question of sustainability, especially environmental sustainability.<sup>2</sup> Taking a social practice approach, whereby practices are the focus of inquiry, rather than consumers and their supposedly malleable behaviour, Shove and Spurling (2013) argue that achieving sustainability requires a radical redefinition of what counts as *normal* within social practices, involving not just the consumers, but all other parts of the societal system as well. In their view, changing social practices forms the foundation for a transformation towards sustainability. Therefore, understanding contemporary social practices — how they have changed, are currently changing, and how they might, especially purposively, change in the future — is essential. O'Brien (2012:588) sees indeed that to bring about sustainability, more focus has to be placed on change itself, "how humans individually and collectively approach change, why change is so often resisted or impeded, and, most important, how systems-scale changes towards sustainability come about".

Traditionally, social practice theories have not focused on purposive change. However, such a focus is critical, if social practice theories are to be employed to make effective public policy for more sustainable societies (Lorek & Vergragt, 2015).

Following from the above, a more thorough understanding of certain aspects of social practices can help enable transformative change, both for social practices more generally, and for meat-eating related practices in particular. Social practice theories are my point of departure in the conceptual structure of this book. However, I explore conceptually the better incorporation of especially four aspects relevant to change. Firstly, in the so-called second wave of social practice theory literature (Postill, 2010) from the last two decades, lately often focusing on (more sustainable) consumption, there has been little exploration of *how social practices and discourses combine*.<sup>3,4</sup> Seeing discourses as particularly relevant for change towards sustainability, I explore the conceptual connections between discourses and social practices within the framework in Chapter 3.<sup>5</sup> Secondly, the *role of values and emo-*

2 The concept of sustainability is usually considered to include economic, social and environmental components. This book focuses on the environmental component. It can be considered a prerequisite for the other two components.

3 With Daniel Welch as one recent exception.

4 Social practices will be discussed in detail in Chapter 3, but as regards the concept of discourse, there are many, rather different definitions for it. The one that perhaps most closely relates to my understanding and use of the word in this book is from Keller (2013:2), whereby discourses are "more or less successful attempts to stabilize, at least temporarily, attributions of meaning and orders of interpretation, and thereby to institutionalize a collectively binding order of knowledge in a social ensemble" around particular themes or issues.

5 I am aware that especially the works of Michel Foucault, and his broad view of discourses, are relevant to the study of both discourses and practices (see e.g. Jäger, 2001, for a discussion). However, his work is conceptually different from the contemporary social practice theory literature that focuses on a more specific definition of social practices, and especially on

tions is rarely discussed in social practice theory literature, even if their existence may be acknowledged. However, I see values and emotions, and conflicts between them, as having an essential intertwined role in both practices and discourses, in various ways often hindering change. This is, therefore, another aspect I explore in the conceptual structure. A third aspect linked to the practice-discourse connection is the *role of discursive consciousness*, of practices, and their related values, emotions, and knowledges, as well as any related conflicts. Although seen as a rare state of mind in social practices (Warde, 2014), discursive consciousness can also be seen as a key concept for purposive change, as discussed later. Finally, discursive consciousness of social practices can better enable change at both individual and societal levels in the *context of distributed agentive power* residing within different components related to social practices, including discourses, and including collective, and sometimes even individual, human agency.<sup>6</sup>

Taking the somewhat widened and interdisciplinary version of a social practice theory approach from the conceptual chapter (Chapter 3) to meat-eating related practices in the empirical chapter (Chapter 5), I examine discourses related to what I call the *new meatways*. The new meatways are comprised of eating alternative meat-like foods, such as cultivated meat, plant-based meat, or insects (called together the new meats), and flexitarianism, i.e. eating conventional, animal-based meat only occasionally, in the strong version, and less than daily in the weak version of flexitarianism.

Due to the under-exploration of the connections between discourses and social practices mentioned above, using discourse data to study social practices is rare (but see Fairclough, 2001a). However, I find it a useful way to investigate some of the underlying issues to do with especially controversial practices, such as those related to meat eating. Discourses are useful for examining cognitive frames, essential for the values, emotions, and knowledge linked to social practices. In particular, discourses may touch upon issues such as coping strategies, related to the value or emotion conflicts often hidden in meat eating, and the ideologies or values embedded, and often taken for granted, in such practices.

My overall goal with this work has been to explore ways in which societies can transform towards more sustainable practices in general, and more sustainable

---

(un)sustainable social practices. In this literature, practices and discourses are largely considered to be separate entities, and I take this view as well, even though I explore the important connections between them.

- 6 The more general issue of (dominative) power is of course relevant too. In social practice theories, the issue of power is often an underlying assumption, whereby the “hidden” part of individual practices containing cultural values, ideologies, materialities, infrastructures, etc. on the one hand, and the interconnectedness of many if not all social practices, on the other hand, are hindering change. This book will include discussion of such power as well.

meatways in particular. In Chapter 6, I will return to the issue of the potential relevance of this research.

## 1.2 Research approach

My research approach in this book is two-fold. Somewhat unconventionally for a doctoral dissertation which this book is based on, I include specific research related goals for both building the conceptual structure and doing the empirical analysis. This approach came about from my desire to work on the issue of meat, but in the contexts of both social practice theories and discourses, as I consider discourses essential for purposive change. As mentioned above, more recent social practice theory literature in general, and the social practice theory literature focusing on sustainability transformation in particular, has not (yet) engaged much in the connections between social practices and discourses, and therefore, I decided to explore this issue in this book, in addition to focusing on the case of meat. The conceptual structure will therefore not only accompany and support the empirical part, but also extend beyond it, and independent of it.

I call the first of my research related goals a *research task*, and it is the following:

- Exploring social practice theories and the connections between discourses and social practices, in order to create a framework that could help enable purposive change in unsustainable social practices both at individual and at societal levels.

In the conceptual chapter (Chapter 3), I will approach this task by looking into not just social practice theory literature, but further literatures, such as social psychology, cognitive linguistics, philosophy, critical discourse analysis and sustainability science itself. Spotswood and Marsh (2016) assume that the future of behaviour change is transdisciplinary. In such a manner, I will combine aspects of these literatures in my conceptual work.

The second research related goal is to answer a more specific *research question*, namely the following:

- How could the new meatways and discourses around them enable a purposive transformation in meat-eating related practices?

In the empirical chapter (Chapter 5), I will attempt to answer my research question by examining the collected discourse data from various angles, engaging in detailed analysis with a critical approach. The data itself is collected from the online Guardian, a broadsheet newspaper based in the United Kingdom, from four

separate articles and their reader comments<sup>7</sup> from between 2015 and 2017. The articles all discuss one or more of the new meatways.

As conclusions, I will include several suggestions on how specific elements of meat-eating related discourses can connect to change in practices, as answers to the research question, while reflecting on the research task, i.e. the more theoretical connections between discourses and social practices.

### 1.3 Outline of the book

Following this first chapter, Chapter 2 is a detailed overview of the topic of meat. It will first discuss the issues involved in the meat system, discuss the history of meat eating, and review trends in the past half a century in several countries, as well as discuss what might have been influencing the trends.<sup>8</sup> Subsequently, the chapter will review discourses around meat from the past and present, before moving on to real and potential future action to reduce meat eating. The new meatways and the new meats will also be discussed in the second chapter.

In Chapter 3, I will move into building the conceptual structure for social practices in connection with a sustainability transformation, and this is done in an interdisciplinary manner. The methodology of critical discourse analysis for the empirical analysis is introduced in Chapter 3, as it relates to the conceptual structure as well.

Further, Chapter 4 will give an overview of the actual methods of the data analysis, and discuss other issues related to the empirical analysis, such as data choice and quality criteria for the analysis. Subsequently, Chapter 5 will contain the actual empirical analysis of the chosen discourse data. I consider the results of this analysis to be an exploration of some of the elements in the conceptual structure, and indicative of the potential dynamics of transformative change.

Finally, in Chapter 6, I will present conclusions from the conceptual work, as well as from the empirical analysis, and include some suggestions on how to potentially further the transformation of meat-eating related practices. I will also reflect on the work as a whole.

To note, the theme of discourses — the red line of discourse, so to speak — carries through the whole rest of the book.

---

7 The total number of included reader comments is 607.

8 In general for this book, references to trends, influences and discourses in both the Global North and the Global South are included when available and appropriate. The empirical data, however, reflects discourses more in the Global North. The Global South and North division is a socio-economic and political division of countries. The countries in the Global South largely consist of industrializing or newly industrialized countries.

## 1.4 General note on style

There are a few issues to mention as regards the style of writing in this book.

First of all, I tend to use somewhat less complex language and fewer disciplinary-specific terms as might be the case for some comparable work based on dissertations. This is partly so because English is not my native language, but other than that, it is a deliberate choice. My personal preference is to avoid potentially fuzzy concepts or complex ways of presenting ideas that may not always be completely clear to readers, or sometimes not even to writers. As Billig (2009) argues, simple language is often better than technical or specialist language, as technical terms can sometimes be used more imprecisely, and their use may appear to solve a problem, when in fact, the writer is only avoiding solving the problem by using them.

Secondly, interdisciplinarity requires one to be as clear as possible and to use less jargon as well. Readers may not be familiar with the vocabulary of all the related disciplines, and therefore using too many specialist terms can make interdisciplinary texts unclear. Further, sometimes several specialist words could be applied from different disciplinary viewpoints to a principally similar idea, or, on the other hand, certain concepts may be viewed quite differently in different disciplines. Avoiding specialist words when possible often takes care of the first kind of ambiguity, and defining concepts specifically enough — but sometimes necessarily broadly — hopefully takes care of the second form of ambiguity.

Thirdly, my writing style in this book is less neutral in tone than the language in most doctoral dissertations might be. This is a style that is more common in sustainability research. Peattie (2011) notes that sustainability researchers are often criticized for doing research that is based on values and driven by a desire to do something good, as *real* research should be value-free, objective and dispassionate. However, all research is in fact laden with certain values, beliefs and worldviews. When these are consistent with the *dominant social paradigm* (whatever that may be in the particular research context), they are largely invisible, and so researchers, together with people in general, may not often be fully aware of the paradigm, and even when aware, they may not see the related values and beliefs as potentially or necessarily challengeable.<sup>9</sup> Sustainability, on the other hand, is *ideally* also a paradigmatic lens through which to view the world (Peattie, 2011). In the context of this book, this lens occasionally leads to — perhaps more visible — ideological arguments.<sup>10</sup> An example of such arguments for me personally, is that, without a sense and frame of *co-responsibility*, current societies may not be able to find a way out of the urgent ecological crises, to be tackled for our survival as organised

9 See Chapter 3 for more discussion on ideologies and paradigms.

10 Ideologies can be seen here as general, socially shared beliefs (van Dijk, 1998).

societies. In terms of both the research lens, and the research results, it is of course important to try to remain critical and self-reflective.

Finally, on the term “meat eating”, as discussed in Chapter 3 in connection with discussing *meat-eating related practices*, I generally prefer using the term “meat eating” to “meat consumption”, as a more concrete term that is less associated with general consumption related arguments. In specific contexts in this book, I do still use “meat consumption”, while occasionally referring to “eating animals”.



## 2. Old and new meatways<sup>1</sup>

---

In this chapter, I will give background to the issues within the meat crisis, explore how humans have been eating non-human animals over time, including in the last half a century, and consider potential reasons for changes in these practices. Subsequently, I will explore the different discourses related to eating animals — with the underlining notion, related to both my research task and research question, that discourses are deeply tied in with practices. Finally, I will look at some future visions for a transformation of the meat system.

### 2.1 Background

From scientific literature, it is evident by now that the impacts of the production and consumption of animals for human food on the natural world, and consequently on humans, are catastrophic, especially in terms of climate change and biodiversity loss. The meat system is said to be broken, something acknowledged by many members of the research community, and echoed by some media outlets. The topic is very gradually starting to appear in some policy domains. At the same time, most people in the world appear either unaware of the scale and extent of the damage done by the *global meat complex*,<sup>2</sup> or even if aware at some level, unwilling, or seemingly unable to change or critically assess their own food-related practices (see e.g. Hartmann & Siegrist, 2017).

- 
- 1 The old meatways refer here to traditional (mostly industrial) and abundant meat eating by the current vast majority, and vegetarianism or veganism by a current small minority.
  - 2 The Institute for Agriculture and Trade Policy (IATP) defines the global meat complex as a highly horizontally and vertically integrated “web of transnational corporations [...] that controls the inputs, production and processing of mass quantities of food animals”, see e.g. <http://www.iatp.org/blog/leaders-global-meat-complex>. I use occasionally the term Big Meat for this complex, and often just refer to the “meat industry” more generally. The meat system, on the other hand, refers in this book to the general systems of production and consumption of meat.

In addition to being the most important single contributor to both climate change and biodiversity loss, the global meat complex contributes to several other crucial issues. All this will be covered in Section 2.1.1, after which I will explore the history and present of eating animals in Section 2.1.2. In Section 2.1.3, I will reflect on some of the issues often considered to influence the practices of humans eating animals.

## 2.1.1 The issue with meat

Figure 2.1 shows the growth of total global meat consumption in the last half a century (measured as “supply”, see Box 2.2).<sup>3</sup> While the world has doubled its human population in this time, it has quadrupled its meat consumption, thereby the per capita consumption has doubled (for per capita growth, see Figure 2.5). This much-increased consumption of meat has largely been facilitated by industrial meat production methods developed since World War II, constituting one of the biggest changes in the entire food and agriculture industry (van Otterloo, 2012). Increasingly, the meat produced in the Global South is, however, also industrial, and so for example, at least three-quarters of the world’s chickens and more than half of pigs were produced industrially in the 2000s (FAO, 2009), and now, ten years later, these proportions are likely to have risen further.<sup>4</sup> A recent investigation concluded that, for the United Kingdom, the so-called megafarms (large CAFOs, confined animal feeding operations) are already widespread (with 800 of them in total in the country) and most of the rest of the UK meat production is likewise intensive.<sup>5</sup>

The impacts of the global meat complex have been covered in literature in quite some detail, especially in the last decade. A recent comprehensive report on the issue is the Meat Atlas produced by the Heinrich Böll Foundation (2014), and a recent peer-reviewed overview is provided, for example, by Godfray et al. (2018). Below is a review of some of the most pressing issues, related mainly to intensive

---

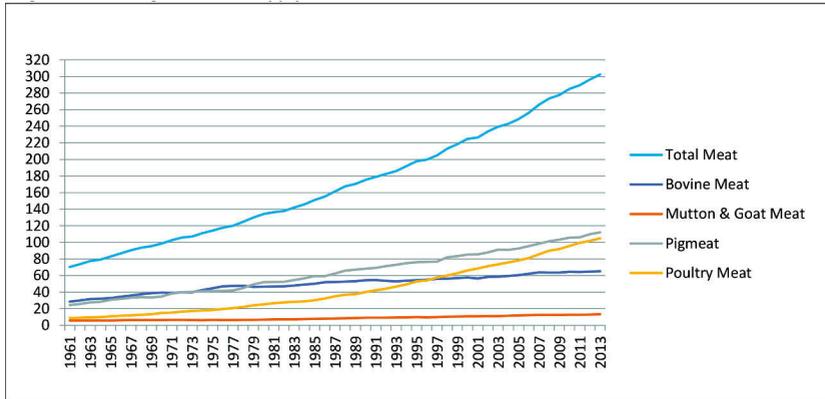
3 As of September 2020, FAOSTAT provides the historical food supply data series only until 2013. However, it can be observed, for example, from the OECD-FAO database that the trend-lines since 2013 are not essentially different from what is seen in Figures 2.1, 2.5 and 2.14 in this book.

4 A 2012 report on India concluded that around 90% of meat chickens in India were factory farmed at that point (MacDonald & Iyer, 2012).

5 A study by the Guardian newspaper and the Bureau of Investigative Journalism, see <https://www.theguardian.com/environment/2017/jul/17/uk-has-nearly-800-livestock-meg-a-farms-investigation-reveals>. The definition for an intensive UK farm is that there are more than 40,000 chickens, 2,000 pigs or 750 beef cows. The US definition for a large CAFO (also so called megafarm in the UK) is that there are at least 125,000 chickens, 2,500 pigs, or 1,000 beef cows.

non-organic animal agriculture, rather than organic, or extensive animal farming.<sup>6</sup> Figure 2.2 divides the impacts to four main categories: issues linked to a range of environmental impacts, issues linked more directly to human and animal welfare, and lastly, ethical impacts.

Figure 2.1: Total global meat supply from 1961



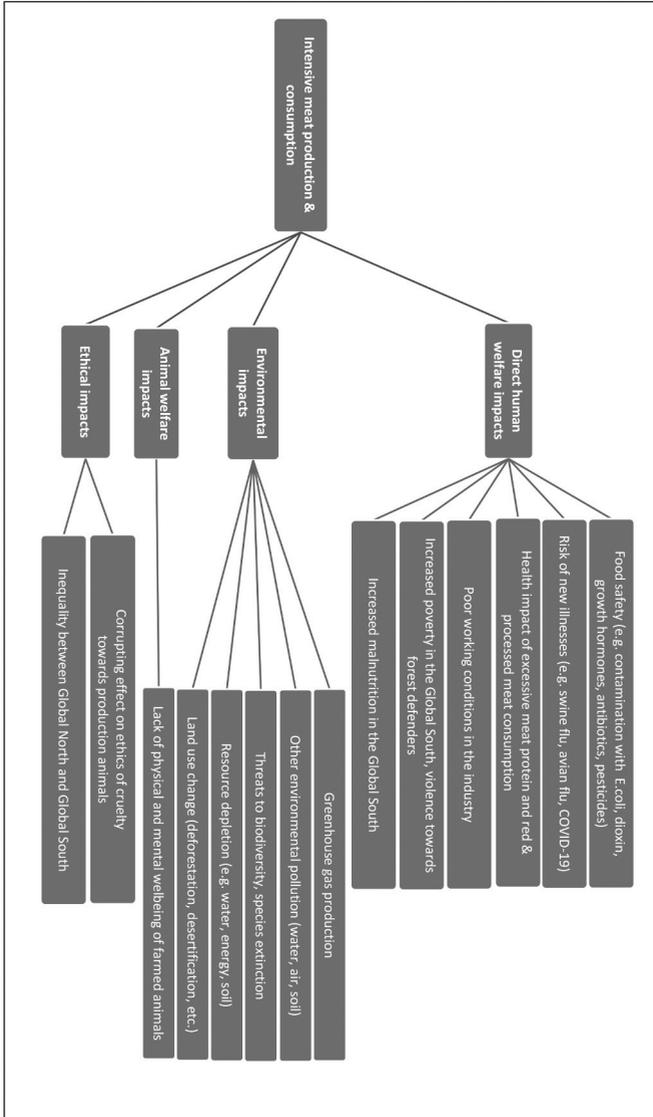
Source: FAOSTAT.

Notes: Data in in millions of tonnes; bovine meat consists of cows and buffaloes, but overwhelmingly cows; poultry meat covers chickens, turkeys, ducks, geese and guinea fowl, although mostly chickens; for the difference between supply and consumption, see Box 2.2; all food and agriculture-related data from FAOSTAT is available from 1961.

Firstly, *direct impacts on human welfare* include those generated from the production methods, affecting either food safety or the risk of new illnesses, or both. The domestication of farm animals has most likely brought about most of the common human viral diseases over the last 10,000 years with viruses jumping from animals to humans in close contact. However, the ever-increasing expansion and intensification of meat production — especially in poorer and less regulated conditions in the Global South, but in the Global North as well — has led to the dramatic increase in the emergence and spread of infectious diseases originating in animals, such as avian influenza (e.g. Greger, 2017) or the COVID-19 pandemic. Reducing

6 Organic or extensively produced meat shares many problems with intensively produced meat, especially with its climate impact (see e.g. Steinfeld et al., 2006; Foodwatch, 2009), and cannot offer an all-encompassing alternative to intensively produced meat, also in terms of scale. However, since it is often discussed as a real alternative, some discussion of organic/extensively produced meat will be included (e.g. in Section 2.2.1). Further, switching from conventional to organic meat can have positive or negative spillover effects (discussed in Section 2.3.1).

Figure 2.2: Impacts from systems of intensive meat production and consumption



Source: Figure by author.

global consumption of meat would be a way to reduce zoonotic disease spread (White & Razgour, 2020). The contamination of meat intended for consumption by therapeutic or growth-promoting antibiotics, growth hormones, pesticides animal faeces containing bacteria, such as *E. coli*, or toxins, such as dioxin, is a related and serious risk to human welfare. Similarly, bovine spongiform encephalopathy (BSE) is a disease caused by prion contaminated meat. The current global crisis with antibiotic-resistant bacteria has also to a large extent resulted from the same antibiotics being given to farm animals, often as a growth promotion agent (e.g. WHO, 2015).

Likewise, direct human welfare impacts are generated from poor working conditions in the meatpacking industry, most importantly from high rates of injury, often extremely low pay, lack of benefits, and enormous stress due to the rapid pace of work, foul working environment and the generally expected ruthless handling of live animals. According to Foer (2009), the annual personnel turnover rates in the United States typically exceed 100%, and are possibly up to around 150%. Often farm level workers, for example, in American intensive animal farming, are immigrants paid under minimum wage levels (e.g. Donaldson, 2016a).

Further, there is conclusive evidence by now that the excessive consumption of meat, and especially red meat and processed meats, contributes significantly to obesity and most serious human illnesses, such as cancer, cardiovascular disease, or diabetes (e.g. Deckers, 2013; Kmietowicz, 2017; Rouhani et al., 2014; Sinha et al., 2009; Wellesley et al., 2015; Willett & Stampfer, 2013). That societies could be consuming too much meat as regards human health has, however, been a controversial issue for decades, at least partly due to pressure from the global meat complex (Nestle, 2018; The Pew Commission, 2008), and has resulted, for example, in governments being reluctant to include limits on meat in official nutritional guidelines. Even when such limits are included, these involve only very modest recommended reductions (Gonzalez Fischer & Garnett, 2016), as discussed later in this chapter.

Finally, for human welfare impacts, and importantly from a global perspective, intensive meat production has an impact on poverty and malnutrition. Tudge (2017), among others, argues that poverty in the Global South is being amplified by the gradual but steady industrialization of meat production there. The human labour input that has helped employ large masses of people on subsistence farms in the South is being cut in the name of efficiency, simultaneously, however, increasing unemployment and decreasing access to food production (Fiddes, 1991; Tudge, 2017). Further, the expansion of CAFOs and supermarkets in the Global South — often favoured by governments (e.g. Heinrich Böll Foundation, 2017) — is cutting down the beneficial smallholder production, and increasing grain prices, as a larger proportion of the grain goes to the CAFOs, with the higher prices being particularly a problem for the poor animal farmers (MacLachlan, 2015). Additionally, growing

feed for meat-producing animals worsens food shortages through deforestation and the displacement of local populations from their traditional lands, and violence towards forest and wildlife defenders.<sup>7</sup>

Although most people would likely prefer not to think about it, producing billions of individual animals globally only to be killed for human food<sup>8</sup> may be considered by some to be one of the worst consequences of industrialized animal agriculture. It can be argued that the question is less about *animal welfare* within the production systems as such, and more about sentient animals' right to be respected, a discussion philosopher Peter Singer set off over 40 years ago, and their right to not necessarily be our food, let alone in such excessive amounts. Animal welfare issues are most closely linked to the treatment of animals in intensive agricultural production systems (see e.g. McLeod-Kilmurray, 2012). The problems are rooted in lack of both physical and mental wellbeing of farmed animals, which also lead to serious human welfare risks, on the one hand, through the use of large amounts of therapeutic antibiotics to contain diseases, and on the other hand, through stressed animals being exposed to diseases that end up infecting humans, as mentioned above. Foer (2009) argues, however, that the meat industry discovered early on that an overall good health of farm animals is not a required condition for making a profit.<sup>9</sup>

The lack of wellbeing of the production animals is also an issue for the third category of impacts from intensive meat production and consumption, relating to the *ethics of meat production*, i.e. questions of morality. Firstly, it can be said that cruelty towards animals is morally wrong. Rawles (2017), among others, has argued that animal welfare should be included in the concept of sustainable development, alongside economy, environment and society, since sustainable development in itself is "ethically aspirational". Further, she suggests that regarding animal welfare as a luxury that societies cannot afford, because of more dire economic or environmental pressures, reflects the instrumental thinking (regarding nature) that is at the root of the problems societies are currently facing.

There has been a strong but ultimately failed effort to include animal welfare in the 2015 Sustainable Development Goals for 2030.<sup>10</sup> However, in October 2016,

7 This phenomenon is increasingly reported in the news. See e.g. <https://www.dw.com/en/5-d-easily-countries-for-environmental-defenders/a-54298499>, published 28 July 2020.

8 Around 65 billion farm animals were slaughtered globally in 2011 (Heinrich Böll Foundation, 2014), around 120 thousand farm animals per minute.

9 The lack of mental wellbeing of the production animals was discussed as an issue for the quality of meat already in the late 1970s (see e.g. Lawrie, 1977, discussing the effect of animal stress).

10 See e.g. <https://www.worldanimalprotection.org/news/un-incorporate-animal-protection-2030-agenda-sustainable-development>.

the FAO<sup>11</sup> Committee on World Food Security significantly included in their final recommendation, (in line with 2030 Agenda for Sustainable Development) considerations for animal welfare to be aligned with World Organization for Animal Health (OIE) standards and principles. It remains to be seen whether governments take note of these recommendations, and what that might mean in practice for the industry.<sup>12</sup>

Further on the ethical aspects of industrial meat production, as discussed above, the increasing industrialization of meat production in the Global South can be expected to significantly increase unemployment and poverty there (e.g. Tudge, 2017). This creates an ethical problem whereby the technology transfer (i.e. industrialization of meat production) transferred from the Global North to the South increases the welfare divide between the North and the South.

Last, but probably most importantly for the survival of humanity, the enormous *environmental impacts* of industrial meat production stem from the scale of production and lack of consideration for the secondary effects of using the inputs (e.g. land, oil, energy, fertilizers, water, feed, uniform agricultural plant and animal species) and the effects of secondary outputs (e.g. manure, wastewater), which cause air, water and ground pollution, in addition to increasing greenhouse gases, detrimental land-use change (through deforestation, soil degradation, erosion and desertification), and the associated depletion of natural resources and threats to biodiversity.

For example, the water footprint of industrial animal farming is considerable. Hoekstra (2017) gives one estimate of the water footprint of average diets in the Global North. An average meat eater's diet for one single day in the Global North costs 3600 litres of water, while an average vegetarian diet there consumes 2300 litres, still a considerable amount, but much less.<sup>13</sup> The pollution of waterways by fertilizers and manure is a problem not accounted for in these figures. In fact, more than 80% of the nitrogen inputs into animal agriculture are lost (Westhoek et al., 2011), impacting on terrestrial biodiversity in addition to increasing water pollution and disrupting the natural nitrogen cycle. Leach et al. (2012) conclude from their study on the effect of different diets on nitrogen losses to the environment that only a complete change to plant-based protein would result in a significant reduction of the nitrogen footprint.

Agriculture's contribution to greenhouse gas (GHG) emissions is often estimated to be up to a third of all emissions when fossil fuel inputs are included

---

11 The Food and Agriculture Organization of the United Nations

12 The FAO committee also made recommendations regarding several other negative impacts from the meat system.

13 The numbers for the Global South are lower, 2050 and 1750 litres, respectively (Hoekstra, 2017).

(e.g. Garnett, 2017). Importantly, this figure, however, does not include emissions related to the processing, transport, retail, and consumption of food, or the resulting waste. Industrial meat (and dairy) production has been estimated to contribute at least half of the total food impact on GHG emissions (e.g. Eder & Delgado, 2006), with the largest impact made at the farm stage. In 2006, the FAO (Steinfeld et al.) estimated livestock's contribution to all GHGs from agriculture to be as high as 80%. How much animal agriculture exactly contributes to the total of global greenhouse gases from all sources is still, however, controversial (see Box 2.1 for discussion).

### Box 2.1. Contribution of the global meat system to greenhouse gases

The amount of GHG emissions related to animal agriculture has been a controversial topic especially after the FAO (Steinfeld et al., 2006) made their estimate of 18% of all global GHG emissions, including the impact of land-use changes.

The range of estimates made after 2006 is large, with Goodland and Anhang (2009) calculating a contribution as high as 51%, and the FAO recalculating their own estimate at 14.5% (Gerber et al., 2013), this latter number likely being the most often currently quoted. The Meat Atlas (Heinrich Böll Foundation, 2014:34) refers to a range from 6 to 32%, where the correct proportion depends on whether only direct (6%) or total (32%), so also indirect emissions, are considered.

The difficulties in making accurate estimations originate partly in the complexity of the issue, disagreements over which processes, inputs, outputs and impacts should be included, as well as methodological issues, and sometimes even political disagreements over e.g. the relevant time reference point for GHGs, especially methane, in the atmosphere. As Hayek (2019) notes, the errors present in the standard model estimations may not only be compounding, but also often go underreported. He notes that, “although emissions from the models are uncertain, [this] does not mean that they are wrong. It means that how wrong or right they are is unknown” (Hayek, 2019:4).

On a national level, the estimates vary a great deal, depending on the agricultural systems involved, the contributions from other sources of GHGs, whether emissions accounting is production- or consumption-based (for the last, see Wellesley et al., 2015:4), and the methods used. Similar disagreements as for the global level add to the uncertainties of the national estimates. National level comparisons may indeed be rather meaningless (Garnett, 2011). To give but two examples, for Australia, where especially beef production is highly emissions intensive, short-term (20-year) GHG emissions from all agriculture are estimated by some to be as high as 54% of all Australian anthropogenic GHGs, with animal agriculture contributing most of this (Beyond Zero Emissions, 2014). Further, Hayek (2019) estimates GHG emissions from

meat production with a so-called top-down method (measuring directly from the air) and concludes that for countries such as the United States, standard (bottom-up) model estimates seriously underestimate the emissions, due to the high level of industrialization of meat production there. As intensive animal agriculture continues its expansion, this same underestimation affects an increasing number of countries and regions Hayek argues.

These uncertainties (although rarely discussed as such) may have contributed to the uncertainty among the general public as regards the significance of the impact from meat production on climate change (see e.g. Austgulen, 2014; Wellesley et al., 2015), and it may have helped the global meat complex in creating a “safe space” for continuing its business as usual (cf. tobacco industry, Proctor, 2008). Further, using the highest global figure of 51% uncritically may undermine the credibility of some work by animal activists, or even critical animal studies as an academic field (Twine, 2014). In general, the wide range of estimates is likely to be partly due to certain lack of scientific rigour in the assessments that do exist, and partly due to politics being involved.<sup>14</sup> Although very relevant, the controversy about the numbers is, however, largely ignored in discourses (Twine, 2014).

Paradoxically, if the contribution of the meat system to GHGs is more moderate (e.g. 14.5%), reductions need to be radical to make an impact. Whereas, if the contribution is much larger, even a more moderate change could make a significant contribution to climate change mitigation, as also noted by Goodland (2014).

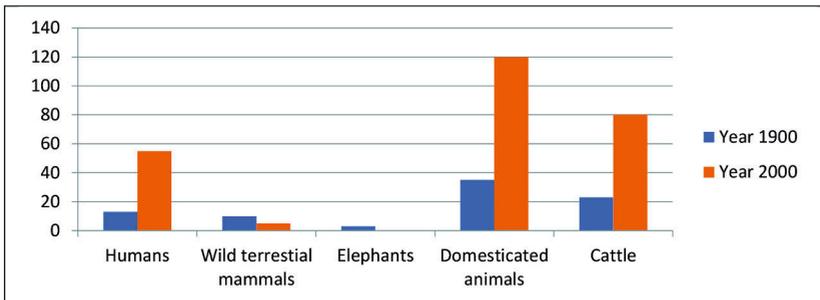
According to the oft-quoted estimate from the FAO (Steinfeld et al., 2006), 70% of all agricultural land and 30% of all land surface is used in livestock production, directly or indirectly. An updated estimate from Poore and Nemecek (2018) is that around 83% of all farmland is used for animal agriculture when including that used for dairy farming and aquaculture. With the associated continuing destruction of rainforests and grasslands, intensive meat production destroys the diversity of species and ecosystems. The third form of biodiversity, within a species (as opposed to between species or between ecosystems), is also threatened by the uniformity of livestock breeds used in intensive farming. Industrial livestock production, in the hands of a small number of multinationals and using only a small number of animal breeds, has, in the recent past, been growing seven times faster than small-scale farming in the Global South, according to the FAO (2007).<sup>15</sup> As a

14 See e.g. a 2012 column in the New York Times: <https://bittman.blogs.nytimes.com/2012/07/11/fao-yields-to-meat-industry-pressure-on-climate-change/>.

15 Gene banks are often seen as a solution for keeping the genetic variety of livestock and therefore providing resistance to diseases or challenging climate conditions. However, Gura (2010) notes that this may be creating only an illusion of safety. Frozen tissue in gene banks collected from disease-resistant animals cannot keep up with the adaptations that diseases

result, small-scale animal farming with diverse species is gradually being pushed out by intensive farming with uniform species (FAO, 2009).<sup>16</sup> All in all, meat production is the number one threat to global biodiversity and species loss (Machovina et al., 2015). Figure 2.3 illustrates the enormity of the global extent of animal agriculture. According to the estimate provided by Smil (2011), out of all the mammal biomass on land in the year 2000, only a tiny fraction consisted of wild animals, with around a third of total biomass being humans and nearly two-thirds domesticated animals.<sup>17</sup>

Figure 2.3: Global biomass of humans, wild terrestrial mammals and domesticated animals, 1900 and 2000



Source: Based on Smil (2011).

Notes: Data in million tonnes of carbon; estimates for humans, domesticated animals and cattle in 2000 are relatively the most accurate.

Relevant to the issues above, the *efficiency* with which the energy contained in the inputs in typical intensive animal agriculture is converted into energy in the outputs is exceedingly low. According to Smil (2002), for example, 97% of gross energy in the feed for cows in the United States is *not* converted into beef.<sup>18</sup> The European Union imports four-fifths of the protein-rich feed (Westhoek et al., 2011), therefore exporting the problems created by the high demand for energy and other inputs for the feed, as well as the problem of land-use change. Comparing the production and transport of 84 food items in a thorough review, Gonzalez (2011)

themselves make in the real world, and climate change poses a threat to gene banks. New breeding technologies, such as cloning, further reduce the livestock gene pool.

- 16 Climate change further threatens small-scale animal farming, as severe draughts make pastoralists abandon livestock production (e.g. FAO, 2009).
- 17 Another recent estimate from 2018 (Bar-On et al.) confirms these proportions, with 4% of terrestrial mammal biomass being wild animals, 60% domesticated animals, and 36% humans.
- 18 For pork, the number is 91%, and for chicken meat, 89% (Smil, 2002).

concluded that animal-based foods are overall much less efficient than plant-based foods in terms of protein delivery when measured in energy use or emitted GHGs. A third of all calories and a half of all the plant proteins produced globally is fed to animals (Cassidy et al., 2013), instead of humans.

The vast increases in the production and consumption of meat observed in the last half a century, and the widely expected further increases for the future decades carry massive impacts. The future increases are generally argued to be related to the expected rise in world population to nearly 10 billion by 2050,<sup>19</sup> and expected increase in living standards and more intensive meat production, especially in certain countries in the Global South bringing about higher per capita meat consumption. Such increases in a business-as-usual system would greatly worsen the current negative impacts from intensive meat production and consumption, making, for example, addressing catastrophic climate change impossible (see e.g. Kim et al., 2015). The FAO estimate of 455 Mt for the level of meat production in 2050 is a 75% increase from the level in 2005 (Alexandratos & Bruinsma, 2012). If this production level would be realised without tackling the GHG emissions from meat and dairy, while simultaneously following the path to lower emissions from other sources so that the target warming level of 1.5 degrees of centigrade would not be exceeded, 81% of all global GHG emissions would come from the meat and dairy production (GRAIN-IATP, 2018).<sup>20</sup>

Considering the above, the FAO growth estimate does not, in fact, seem feasible within the current frame of science, technology and society. Transforming the meat production methods to adequately respond to the issues most likely has to be coupled with a radical reduction in meat production and consumption itself, if not an actual elimination of the current intensive meat production methods entirely. A recent estimate contained in Springmann et al. (2018) indicates that the planetary boundaries<sup>21</sup> would be far exceeded in the next decades without changes towards more plant-based diets. As Garnett (2017) argues, however, the issues described in this section need to be addressed in an integrated way, rather than by dealing with one problem, such as GHGs, at a time. In any case, alternative protein sources will likely have to be developed further, as well as incorporated into our everyday lives, on a large scale for a transformation towards a feasible future.

---

19 A 2017 median estimate from the UN is 9.8 billion (from <https://esa.un.org/unpd/wpp/Graphs/Probabilistic/POP/TOT/>). To compare, in 1960, around the early stages of intensive animal agriculture, the world population was at 3 billion.

20 This scenario is relying on the potentially low 14.5% estimate of the current contribution to total emissions.

21 Planetary boundaries related to GHG emissions, cropland, blue water, nitrogen and phosphorus.

On the one hand, addressing this complex issue adequately seems a huge challenge, especially viewed from the production side; on the other hand, it would seem rather possible, and even “easy”,<sup>22</sup> for people in the industrialized, or newly industrialized countries to experiment with, or adapt to new foodways for themselves, considering the motivating evidence against continuing with the current path. People could, in principle, gradually, if not abruptly, just eat less or no conventional animal-based meat, whenever they have alternative plant-based proteins to eat. However, food, or meat eating in particular, cannot usually be dealt with purely at a rational level, as firstly, eating any food involves many more non-rational factors such as social rules, cultural meanings, emotions, and values, secondly, it is largely one of the automated habits and path-dependent practices embedded in the everyday environment people live in, and thirdly, the related industries do their best to give us sub-conscious cues to get us to eat more meat. Further, most people do not want to stop eating meat (e.g. Wellesley et al., 2015; Zaraska, 2016a). Importantly, the topic of eating less meat is rather controversial, still a taboo subject in politics very recently (Lang et al., 2010), and even today “few governments talk even privately of ‘hard measures’” (Lang, 2017:330) in meat policy in relation to issues such as climate change and biodiversity.<sup>23</sup>

In addition to formulating a conceptual outline of social practices more generally, this book will consider the role of discourses in connection with the above-mentioned obstacles, and I will explore how discourses around the new meatways, in particular, could enable conscious and radical meat reduction, both at individual and at societal levels. However, first, the next sections will look at some available data on the past and current meat-eating practices, and what may have influenced the practices. I consider these issues relevant to this book, as they have an impact on discourses around meat.

---

22 See Goodland (2014) using the word “easy”, or <https://theconversation.com/reducing-meat-and-dairy-consumption-easier-said-than-done-or-easier-done-than-said-4317> by Richard Twine (in *The Conversation*, 24 November 2011) encouraging experimentation of different diets regarding meat.

23 One recent exception is the Dutch government which has started steps into reducing livestock in the country due to major issues with nitrogen pollution (see e.g. <https://www.sciencemag.org/news/2019/12/nitrogen-crisis-jam-packed-livestock-operations-has-paralyzed-dutch-economy>). What governments can do more generally is discussed further in Section 2.3.

## 2.1.2 About meat eating over time

### 2.1.2.1 A short history of (not) eating animals<sup>24</sup>

From prehistory of the human species, through the beginnings of livestock farming around 9000 BC (Nam et al., 2010), until around 1950 AD (Aiking, 2011), eating meat used to be considered a luxury for most people at a global level, rather than everyday practice. However, there has been a lot of variation in how much meat has been eaten. Firstly, cultural, geographical, and economic differences have had a role in eating, or not eating, meat for millennia, so that for example in Europe, the northern (Germanic and Celtic) cultures were consuming more meat than the southern (Roman and Greek) cultures, more dominated by agriculture (de Boer et al., 2006). Further, in medieval Germany, for example, the level of meat eating was very high for a considerable period of time, especially since people often got their pay in meat instead of money (Bork, 2006). More generally in medieval Europe, people ate meat whenever they got hold of some, and abstaining was seen as a sign of religious heretics, possibly leading to being killed (Zaraska, 2016a). In the United States, eating large amounts of meat on an annual basis was commonplace already in the early 19th century (Smil, 2013), due to the large amounts of wild animals and land for grazing cows, although meat was still more available for the wealthy than to the poor. In Argentina, the historically high consumption of meat in the last centuries has been largely a consequence of the Spanish invasion in the 16th century (Boyer, 2016).

York and Gossard (2004) emphasize the impact of the ecological contexts — factors such as climate and resource availability — and their link to cultures that have developed over time within each context. For example, in Asia, those living in coastal areas would be traditionally eating a lot of fish, those living in hot and humid climates would develop eating cultures around largely vegetarian foods. Medieval Japan, on the other hand, was largely vegetarian due to a shortage of land on which to grow food for domestic animals, although religion played a role too. Similarly, much of the Chinese diet was traditionally vegetarian due to lack of land, but culturally, China was more oriented towards eating meat (Zaraska, 2016a).

The advance of science in the Western world from the 17th century onwards strengthened the belief that humans must dominate nature, and around the same time, the average amount of meat eaten started gradually to rise. Associated with this were frequent claims from the scientific community saying that meat was a source of “strength and vigour”, more so than any other foods. With the advances in refrigeration and transport technology in the mid to late 19th century, meat

---

24 This section will also cover some history of vegetarianism, as it is important for the discourses around both eating meat and not eating meat. Discourses as such will be the topic for Section 2.2.

consumption levels rose further (Fiddes, 1991). The 20th-century world wars ended up promoting meat as a prized food, preceding the meat industry's rise after World War II.

In human history, those who have not eaten meat have usually done so because they have not had any choice. For example, due to their poverty, many have not had access to meat, but when given the chance, they have happily engaged in meat eating. Moreover, there have long been those who have not eaten meat because of cultural, philosophical or religious reasons, such as the Pythagoreans in ancient Greek, or many Hindus in India. In present-day India, around 30% of the population report being vegetarians, according to an Indian government survey from 2014.<sup>25</sup> As Leahy et al. (2010) argue, those not eating meat out of religious reasons, for example, have generally not *chosen* to be vegetarians, but they have been born into vegetarianism. For example, in India, the principle of *ahimsa*, nonviolence, prohibits eating meat within much of Hinduism, Jainism and Buddhism, as harming animals makes a person spiritually impure (Zaraska, 2016a).

The estimate in Leahy et al. (2010) is that 22%, or around 1.5 billion people worldwide, are vegetarians, mostly out of necessity. In contrast, they estimate that out-of-choice vegetarians would number globally only 75 million, or around 1% of the current global population. While the proportion of out-of-necessity vegetarians may have decreased in the last years since these estimates, (see Section 2.1.3 and the discussion on the protein transition), the proportion of out-of-choice vegetarians is likely to have increased somewhat, trends recognized by Leahy et al. (2010) as well. Interestingly, the Faunalytics study (Asher et al., 2014) indicates that there are five times as many *former* vegetarians and vegans in the United States as there are current ones. If the same phenomenon is true at a more international level, there could be a couple of hundred million former out-of-choice vegetarians or vegans in the world.<sup>26</sup>

In modern times, abstaining from meat as a choice existed in some form in different countries, but as a larger movement it has roots in the United Kingdom going back to the late 18th century (Shprintzen, 2011), originally as part of Christian mysticism, but also as a means for curing medical illnesses. It spread from there to the United States in the early 19th century, by which time it had transformed itself to more a movement for social reform. Around the middle of the 19th

---

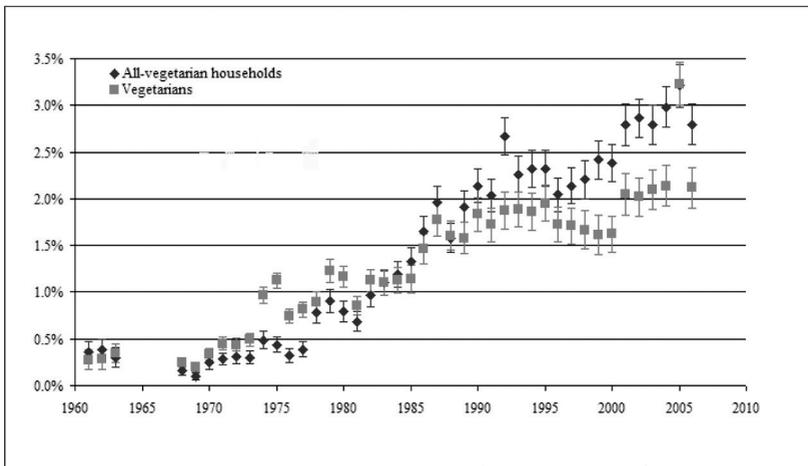
25 This data is from Office of Registrar General & Census Commissioner of India, sample registration system (SRS) baseline survey 2014, and covers all those above 15 years of age. The proportions vary between different Indian states from just over 1% to well over 70% of the population being vegetarian. Note that, in India, a person is *not* counted as vegetarian if s/he eats eggs.

26 According to the Faunalytics study, these former vegetarians and vegans currently eat mostly a flexitarian diet.

century, there was a period where resistance to the radical vegetarian movement created (in the popular media of the time) an image of vegetarians as "frail, weak and sexually impotent" (Shprintzen, 2011:9).<sup>27</sup> By the end of the 19th century in the US, however, vegetarianism "emerged as a way to build individual character and personal health in order to succeed in a society driven by personal gain and monetary advancement" (ibid.), and the lifestyle was connected to physical strength, fitness, athletics, individualism and masculinity. Although numbers of vegetarians remained small, there was a growing commercial interest, and food products (meat imitations) and vegetarian restaurants were marketed to consumers. During American involvement in World War I, meatless meals were encouraged by the United States government as patriotic, in practice saving more meat to be sent to soldiers in Europe.

Regarding ethical vegetarians, an early example includes Leonardo da Vinci (McCurdy, 1932, in Fiddes, 1991), and later on, in the 19th-century Europe, there was an anti-cruelty movement focusing on the immoral treatment of animals. The modern ethical movement is different from this, however, as it tends to put humans more at the same level as non-human animals, instead of assuming that cruelty is wrong only after absolute human needs have been satisfied, as was the case for the 19th-century movement.

Figure 2.4: Vegetarians over time in the United Kingdom



Source: Leahy et al. (2010).

27 Throughout this time, for the mainstream, meat was associated with strength (Fiddes, 1991).

The first vegetarian society (and the term *vegetarian*) was established in the United Kingdom in 1847, and the UK has the most longitudinal data to-date on estimates of numbers of vegetarians, dating back to the early 1960s (Leahy et al., 2010, see Figure 2.4). A 2016 estimate of the number of vegetarians in the UK is 3.25%.<sup>28</sup>

It is usual to categorize modern out-of-choice vegetarians into either mainly ethical vegetarians or mainly health vegetarians (Ruby, 2012), although the motivations people express for their vegetarianism often depends on the social situation in which they express them (Wilson et al., 2004).<sup>29</sup> People may be increasingly likely to make their actual dietary choices considering the entire variety of problems related to food production and consumption, therefore including the environmental issues (Spaargaren, Oosterveer, et al., 2012a). These problems are increasingly part of the current discourses around meat, explored later in this chapter.

Of late, there is an increased presence of vegetarianism and veganism in the public discourses (as discussed in Section 2.2.2). The meat consumption numbers still do not reflect this in actual eating practices, however.<sup>30</sup> The countries reportedly having the largest proportion of people identifying as vegetarians or vegans at the moment, apart from India, include Germany, Switzerland, Israel, Australia and Taiwan, all around or above 10%. However, the results vary from survey to survey and are unlikely to be comparable.

It is noteworthy that vegetarianism as a practice and discourse around vegetarianism are quite apart from each other. This may be partly due to this particular discourse being shaped more by those not actually engaging in vegetarian practices themselves, so for example, by criticism. As I see vegetarianism as an important counterpart to the meat system, I have covered it in this section and will cover it also in Section 2.2 about discourses. Moreover, as regards my empirical analysis in Chapter 5, I will briefly focus on vegetarianism there as an important theme in the discourse.

---

28 See <https://www.vegansociety.com/whats-new/news/find-out-how-many-vegans-are-great-britain>.

29 A related issue, *motive alliances*, appealing to combined benefits of reduced meat eating to health, animals, and environment is considered to be useful (e.g. by Hartmann & Siegrist, 2017; Belz and Peattie, 2009; de Boer, Schösler et al., 2013).

30 FAOSTAT, the frequently used source of fairly comparable global data on meat eating, generally lags several years behind in its publicly available data. As of June 2020, meat consumption data is generally only available until 2013, and does, therefore, not show trends that might have taken place since then. Whether there is actually a decreasing trend taking place, globally or regionally, still remains to be seen. But an indication that the numbers for meat consumption may not have gone down much is that in countries such as Germany and Finland, the national level data shows that meat consumption stayed more or less stable until 2018, despite the vegetarian or vegan “trends”.

### 2.1.2.2 The rise of industrial meat

The rise of industrialized animal agriculture after World War II, the associated increased availability and decreased prices for meat, the (especially US) government policies, as well as industry marketing and advertising, all encouraging meat eating, and the psychological distancing of animals from their flesh through the separation of industrial meat production far away from most people, all resulted in meat eventually becoming an everyday food item for nearly all those living in the Global North, and increasingly for many in the Global South. Regardless of the new everyday character of meat as a food item, it retained its central celebrated role at the centre of the plate. Apart from the enormous increases in overall consumption of meat, in what is lately called the *protein transition* (see Section 2.1.3), the most obvious change has been in chicken meat replacing beef to a significant extent. In other words, levels of per capita chicken consumption started rising faster from around 1990, near the time when per capita beef consumption started decreasing.

De Boer et al. (2006) argue that factors mainly related to globalization, such as increases in the equality of national incomes, global food trade, and internationalization of both industrial animal agriculture and eating habits, have evened out differences in meat consumption between countries, although many differences remain. Figure 2.5 shows trend lines for meat consumption for 12 different countries, representing a variety of societies and cultures from industrialized, or newly industrialized countries.<sup>31</sup>

Excluding India where per capita meat eating has not essentially changed (but see later in this section), Figure 2.5 shows that most industrialized or newly industrialized countries have not only increased their meat consumption over the last half a century, but to some extent, approached each other's levels of consumption. Consequently, some of these 12 countries have stabilized their per capita meat consumption, and some are, in fact, consuming slightly less meat per person now than they were 5-10 years ago, while others have been consuming increasing amounts nearly throughout the 50 or so years.

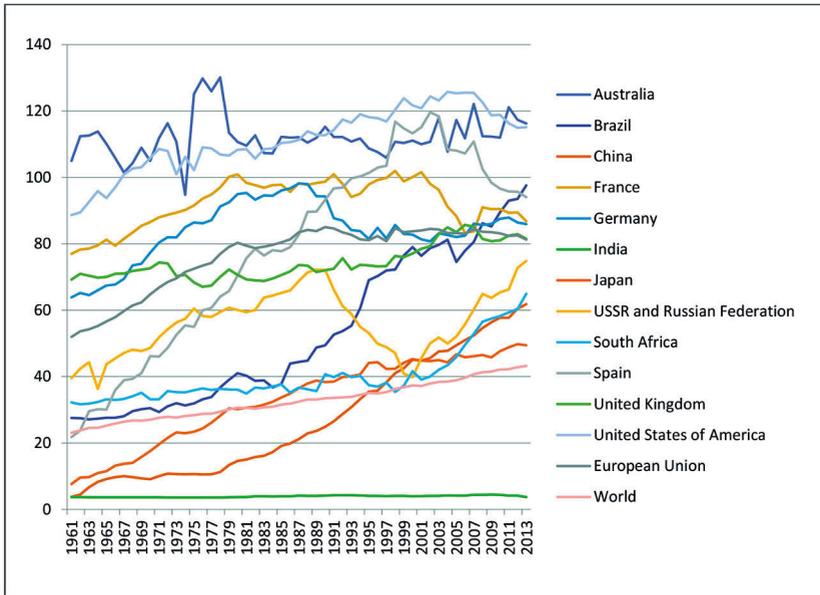
In Europe in 2013, every EU citizen was “supplied” with 81 kg of meat on average, of which she/he actually ate about two thirds.<sup>32</sup> After a longer period of growth, the total per capita meat consumption in Europe has not changed much in the last 25 years, but there is still much variation between countries. For example, by the late 1990's the average Spaniard ate more than five times as much meat as he/she

---

31 These same countries are also those chosen for the first ever large cross-country survey on public attitudes on meat contained in the Chatham House Report (Wellesley et al., 2015), except that Italy and Poland have been replaced by Spain and Australia, adding more variety to the data.

32 See Box 2.2 for how supply and consumption figures are related.

Figure 2.5: Per capita meat supply in various locations from 1961



Source: FAOSTAT.

Note: Data in kg/person/year; data for USSR ends in 1991, and data for the Russian Federation starts from 1992; for the difference between supply and consumption, see Box 2.2; all food and agriculture-related data from FAOSTAT is available from 1961.

did in 1961 (at that time more along the lines of the Mediterranean diet<sup>33</sup>), but since around 2000, the consumption has come down somewhat. The average French or German eats slightly less meat now than they did 20-30 years ago. On the other hand, the average British person has eaten fairly stable and large amounts of meat throughout the half a century, although the average amount increased somewhat 10-15 year ago.<sup>34</sup>

33 The Mediterranean diet refers to food consumption patterns typical of some Mediterranean regions in the early 1960s, such as Crete, other parts of Greece, Spain, southern France, and southern Italy. The diet emphasizes relatively low consumption of red meat, among other things (Tyrovolas & Polychronopoulos, 2010).

34 The discourse data for the empirical analysis in Chapter 5 comes for the most part from the UK. The notable changes over the last half a century in the UK include a sharp increase in eating chicken, a slow decrease with sheep and goat meat — although the UK still remains one of the countries with most per capita consumption of sheep and goat meat — and a temporary dip in the 1990's (during the time of the BSE crisis) in the otherwise slower decline with beef. The pig meat consumption has remained rather stable throughout the time period.

Outside Europe, the average American and Australian have eaten the most meat compared to those living in the other 10 industrialized, or newly industrialized countries in Figure 2.5. Japan started from very low levels of meat consumption in the early 1960s, and currently, the average Japanese eats an amount just above the world average.<sup>35</sup> Lastly, China started from very low meat consumption levels in the early 1960s, well below the Japanese and at the same level as India, but has climbed steadily upwards, especially since the late 1970s, and the trend line seems to point to the average Chinese reaching the level of most Europeans in the next decade, unless the trends change direction in the near future.

Due to its still very modest level of meat consumption, India is seen by the global industry mainly as a potential future market for meat consumers, although a very large one at that. The per capita consumption of meat in India is projected by the FAO to grow six-fold, from an extremely low current base of 3 kg/year to around 18 kg/year by 2050, most of which would be chicken (Alexandratos & Bruinsma, 2012). Eating meat in India (or "non-veg", as meat is traditionally called there) is increasingly seen as part of a modern and successful lifestyle, with the appreciation for the meat-eating West replacing the previously highly valued Indian vegetarian elites (see e.g. Zaraska, 2016a). Further increases in industrialization, urbanization, growth of supermarket chains, mobility, and secularism are likely to drive growth. It is therefore currently more popular in India to change from veg to non-veg, rather than the other way around, although out-of-choice vegetarianism is an existing phenomenon in India as well. In fact, Bajzelj and Bothra (2016) refer to a "tug of war" between the veg and non-veg groups in society, tangled with the special status of cows, and going up all the way to the top political circles, illustrated by the 2017 attempt by the government to ban beef exports.<sup>36</sup> At the same time, the Indian governments have generally welcomed investments from foreign meat industry companies (Bajzelj & Bothra, 2016), and it is likely that, unless strong and swift political action is taken to prevent the formation of networks of global industrial actors (similar to developments in China), and an alternate path for future protein in India is chosen, the projections for growth may be realised. India's rapid

---

35 The Japanese differ from other industrialized countries in the world in their consumption of fish and other seafood. The average world citizen has been eating about twice as much meat as fish over the last decades, but the average Japanese has until lately eaten much more fish than meat, up to six times as much in the early 1960's. However, Japan is at a point in time right now when meat and fish consumption are at the same level, or in fact, for the first time in 2013, meat consumption was slightly higher than seafood consumption.

36 See e.g. <https://timesofindia.indiatimes.com/topic/beef-ban>.

recent rise to be one of the world's top beef exporters<sup>37</sup> is already a big challenge from a sustainability point of view.

An important point for the discussion about increasing global meat consumption is that the recent increases have not been evenly distributed among the *new middle classes* in the Global South.<sup>38</sup> For example, Lange (2016) notes that such increases are rather unevenly distributed, firstly, in the sense that many of the countries in the South are increasing their average meat consumption only marginally, whereas others are increasing it substantially, and secondly, within the higher meat consumption countries (such as China), there is a vast amount of variability, due to various cultural, geographical, political or other factors. However, in addition to the current individual meat eaters eating more meat, there is a large group of people, 1.45 billion, according to Leahy et al. (2010), who are not current, but potential future meat eaters. In other words, these people have been eating a vegetarian diet until now, mostly only out of necessity. This very large group of people could have a significant impact on future trends. In China, some of the substantial recent increases in meat consumption may have been due to the rise of the new middle classes there, benefiting from government policies opening markets to foreign investment in industrial animal agriculture since the late 1970s (MacLachlan, 2015).

### Box 2.2. Between production, supply and consumption of meat

There are certain differences in how data related to meat production, supply and consumption is presented in various sources and publications, and what the numbers entail.

One relevant issue is how losses during the *food supply chain* are dealt with and reflected in the data. There are still large data gaps regarding how much food exactly is lost or wasted in the various food supply chains. According to the FAO (2011), about one-third of all food produced, and more than a fifth of meat, is lost or wasted globally, more or less equally in the Global North and the Global South. However, in the North, the main losses take place mostly at the end of the food supply chain, within distribution and consumption. These are defined as *waste*. On the other hand, in the South, the main losses take place at the beginning and middle of the food supply chain, in

37 FAOSTAT data indicates that over five years from 2008 to 2013, India's total meat exports tripled. These exports are almost exclusively of buffalo meat (categorized as beef), and India is now on par with Brazil as the two largest bovine meat (beef) exporters in the world.

38 The new middle classes in the Global South are not "rich" if measured against a Global North standard. Their average absolute income level borders the income of the low-income groups in the North. However, they generally have enough money to buy household appliances (TVs, computers, etc.), and meat.

production, handling and storage, and processing and packaging, together defined as *losses*. For the meat supply chain in the North, waste at the consumption level makes up about half of total meat losses and waste. According to the FAO (2011), as a total, about 24% of edible meat and meat products are lost in the European food supply chain for meat and meat products, between the farm, the dinner plate and the waste bin.

How losses and waste are considered in statistical data on food varies. The FAO *meat supply data*, used for the figures in this section, takes estimates of at least some of the food losses between production and household into account. However, losses during the consumption stage are not included, due to the lack of accurate data up to now. The FAO defines “food supply” data as estimates of food supplies available for human consumption, and remark that “it is important to note [...] that the amount of food actually consumed may be lower than the quantity shown”, depending on the degree of losses and waste, e.g. during storage, in preparation and cooking etc. (<http://www.fao.org>). Presumably, also institutional waste occurring at the consumption stage (in restaurants, schools, hospitals etc.) is not accounted for, and it is unclear whether retail waste is included or not. The losses and waste not accounted for by the FAO can be estimated to be roughly 10–20%.

Finally, it is important to note that the FAO includes much of the bone in the animals in the meat supply data. The FAO data is expressed in *carcass weight* at slaughterhouse exit level (Westhoek et al., 2011). However, different animal species, different types of the same farmed species, and different cuts of the same animal all have different quantities of bone in them. Westhoek and colleagues give a rough estimation of a live cow consisting of about 45%, a pig 55%, and a chicken 60% of *retail meat*. Moreover, comparing retail meat to the FAO carcass weight data, the proportions for different species are 70% for cows, 75% for pigs, and 80% for chickens. Finally, the actual meat consumed after processing and cooking, and taking further losses into account, is around 80% of the retail meat.

In much of the literature using FAO data, “supply” has been taken to represent “consumption”, and the latter word is used mostly in this book as well. To get the actual average human consumption based on the FAO supply figures, roughly a third should be deducted, so that the eaten meat is about 60–67% of the FAO supply data, depending on the species in question, according to Westhoek et al. (2011). To note, Hallström and Börjesson (2013) provide a critical discussion on meat consumption statistics and discrepancies within it.

After this review of the actual consumption trends, the next section will look further into potential past influences, along with potential future influences on how and whether people will use animals for food, mostly through a brief review of literature. Understanding influences on meat eating in the past, present or future are

relevant to the sustainability of human life on Earth. How could the global society respond to the meat crisis, radically reduce or change the way meat is produced or eaten, or perhaps eliminate eating animals altogether?

As the Chatham House Report (Wellesley et al., 2015) and others have argued, the necessary and radical future change in responding to the meat crisis cannot apply in just the Global North, where large quantities of meat animals have been used for food for quite some time already, but it has to also take place in the newly industrialized, or industrializing countries in the Global South, where plentiful meat is a much more recent, but often equally problematic phenomenon. The change must be global in its reach.<sup>39</sup>

Finally to note, the industrial production and largely unsustainable consumption of dairy foods, eggs, and seafood, in addition to the overuse of wild seafood, share many of the related environmental, human or animal welfare or ethical issues with those related to meat eating. A shift away from the overconsumption of also other animal-based foods to a more plant-based diet is therefore important (see e.g. Verain et al., 2015). However, these topics cannot be covered in this book, as the scale and scope of the work would be too large.

### 2.1.3 Potential influences on meat consumption

To some extent, it is possible to evaluate or measure what might have contributed to different levels or trends in meat eating, for example, the often, but not always upward trends in the last half a century, as shown by the graphs in the previous section. In the following, I will consider the discussion in literature.

The *level of regions and nations*, or the *global level*, is where changes up or down in meat production and consumption have their main impacts, and at this level, only larger and more persistent trends are significant. The discussion is largely based on connections (e.g. correlations) between different factors that could influence meat consumption. Critical literature on meat production and consumption has also grown in recent years around the growing awareness among the research, media and sometimes even policy communities of the enormous problems related to the global meat complex, as discussed earlier.<sup>40</sup>

---

39 Important to note is that the low levels of meat consumption in the least economically developed countries in the process of industrializing often still reflect lack of adequate amounts of protein. Moreover, domesticated animals are used in these countries (as well as in some newly industrialized countries) for purposes other than meat or dairy (or leather, wool etc.), as labour or as economic security, for example, and discussion on changing this system would involve issues beyond the reach of this book.

40 Wellesley et al. (2015) provides an often-referenced report and discussion on the larger trends.

The most dominant factors regarding meat production at this level are often identified as linked to *demand*. There is an obvious demand effect from increasing population, and consequently more people needing food of any kind. However, apart from as a consequence of population growth, demand for meat is generally expected to increase (and these correlations are found) with an increasing *standard of living* linked to *urbanization* and a decreasing *price of meat*, with globalization regarded as the general engine behind much of the other factors, for example, through increased international trade and investment. These three factors are discussed in the sub-sections that follow.

The critical voices regarding this demand focus, on the other hand, are calling more attention to the influence from *industry*, either in terms of the industrialization process itself, in terms of lobbying pressure on governmental policies, in terms of influencing academic research (Nestle, 2018), or in terms of direct marketing and advertisement to consumers. These criticisms are partly incorporated into the following three sub-sections and partly follow as a separate sub-section on the demand vs. supply issue.

There are also *demographic factors* that are linked to the **level of the individual** and do not necessarily reflect differences at the level of nations or regions. These include education, age and gender. For example, older age and female gender have both been linked to lower consumption of meat (e.g. Lea & Worsley, 2001), and higher education has also been linked to lower consumption of meat (Regmi & Gehlhar, 2001). The level of the individual is crucial for change, and I will discuss it after the sections focusing on macro-level influences.

Further, *cultural factors* play a significant role in influencing larger trends in meat eating. At least within Europe, cultural and national differences in meat eating may be larger than the demographic or socioeconomic differences within cultures or geographical areas (Evans & Miele, 2012). Culture will be referred to in the following sections when appropriate.

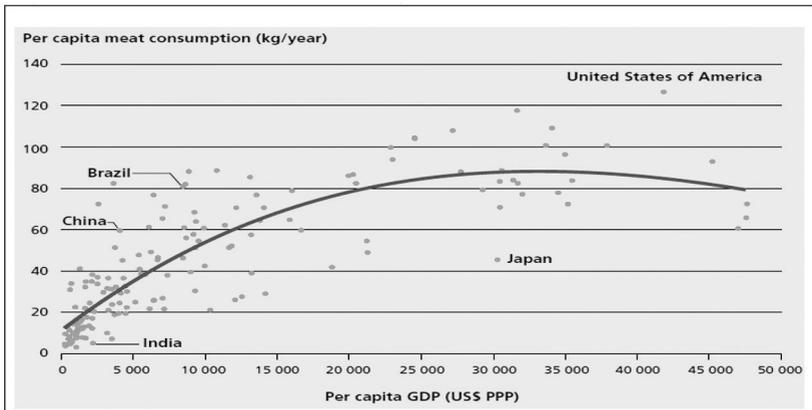
Finally, and partially linked to culture, further large-scale changes to the levels of meat consumption come from factors which can be seen at the **level of discourse**. Here influential may be food scares, such as the BSE crisis in the United Kingdom in the 1990s, the more general unhealthy image of red meat, and concerns regarding factory farming or climate change. Importantly, discourses can be seen to integrate the individual level with the society, i.e. the regional, national or global level. Section 2.2 will explore discourses around meat.

### 2.1.3.1 Standard of living – The protein transition

Globally speaking, the biggest phenomenon to do with income and nutrition in the last decades is argued to be the *protein transition*, whereby meat consumption is said to rise together with the rise of economic development and rising incomes.

Although a rising GDP (gross domestic product) per capita — as an indicator of standard of living — may not be claimed to directly cause rising meat consumption levels, a positive association between GDP and meat consumption can be found (see e.g. FAO, 2009; Smil, 2002; York & Gossard, 2004), as the mostly rising curve in Figure 2.6 illustrates.

Figure 2.6: Protein transition — Meat consumption vs. GDP



Source: FAO (2009).

Note: GDP per capita is measured at purchasing power parity (PPP) in constant 2005 international US dollars. Based on FAO data for per capita meat consumption and the World Bank for per capita GDP.

However, such a positive link (as in Figure 2.6) is more valid at the global level, and not nearly always seen at national levels (see e.g. Wellesley et al., 2015). The relationship between income and meat is, therefore, more complex, even when considering the protein transition an inherent development in human societies.

For example, it is acknowledged that sociocultural factors can have more influence than income growth, as can be seen from countries such as India and Japan (see Figure 2.5), where for India, the level of meat consumption has remained extremely low despite rapid income growth in significant parts of the population in recent decades,<sup>41</sup> and for Japan, where a moderate meat diet has prevailed to some extent, despite Japan being an overall high-income country already for decades. Further, the Chatham House Report (Wellesley et al., 2015) found out in their survey of 12 countries that affluent respondents in China and India (where historically meat has *not* been widely eaten) were more likely than lower earners to want to eat more meat, but in Brazil and South Africa (where meat *has* traditionally been

41 But see Section 2.3.1 for the future of India.

central), higher earners were less likely to want to eat more meat than low earners, similarly to many Global North countries, such as France, Germany, the United Kingdom or the United States.

Correspondingly, York and Gossard (2004) note that on average, people in the Global North and the Middle East have tended to eat more meat the wealthier the nations have become, whereas at least in some parts of Asia, people tend to shift towards eating more fish, rather than meat, when they become wealthier.

As argued by many by now, GDP does not measure human well-being adequately. To explore an alternative, Pradhan et al. (2013) analysed food consumption data in detail for the last half a century for all the countries in the world, using the Human Development Index (HDI) instead of GDP. Interestingly, they found that, similar to GDP, also HDI correlates strongly and positively with the consumption of animal products *at a global level*.

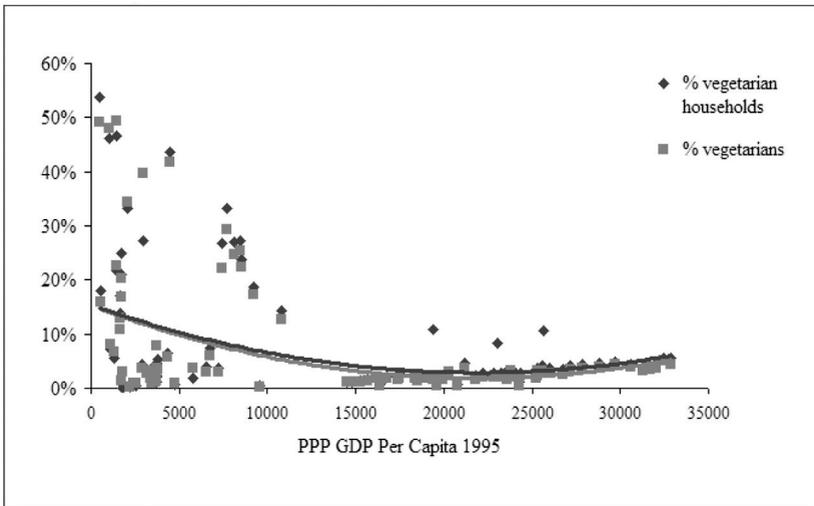
It has also been presented — and the curve in Figure 2.6 would also seem to support this — that meat consumption increases with income according to a Kuznets curve, an inverted U-curve (see e.g. Cole & McCoskey, 2013) or an S-curve (Keyzer et al., 2005; Westhoek et al., 2011), and this curve may already be in the downward or levelling off part in certain countries, especially in the Global North. At some point, so the theory goes, people with higher income cease to regard meat as a sign of wealth, or they start to view eating more meat in a negative light (for various reasons), and therefore, they reduce their meat consumption. According to Popkin (1999), the final stage of a five-stage nutrition transition (where different stages can also co-exist) in effect takes diets back to eating less meat, more unprocessed and simpler foods in general. This would also seem to be in line with the recent fairly stable, or slightly decreasing meat-eating trends, for example, in some European countries. However, for most countries, according to these analyses, the time to reach the income level where consumption would turn down would still be long, and much too long to help with the current global meat crisis (Cole & McCoskey, 2013).

Finally, Figure 2.7 shows results from a study estimating the number of vegetarians and comparing this to income levels at a global level. As can be seen, the inverted U-curve in Figure 2.6 above matches rather well with the U-curve in Figure 2.7, so that the rising part of the curve in Figure 2.7 could reflect the fifth stage of the nutrition transition (Popkin, 1999).

Leahy et al. (2010) distinguish between out-of-necessity vegetarians as those on the downward part of the curve in Figure 2.7 (eating meat when given the chance), and out-of-choice vegetarians as those on the upward part of the curve (increasingly not eating meat).

I would conclude that, while increased income may often lead to more meat being eaten (when it is available), the relationship is more complex, and so, this is by no means an absolute rule. The Kuznets curve, even if reflecting a real phe-

Figure 2.7: Vegetarianism and GDP per capita in different countries



Source: Leahy et al. (2010).  
Note: In international dollars.

nomenon, is not, however, practicable as most people, or nations, have not reached the level of income at which meat consumption might start decreasing, as also noted by Cole and McCoskey (2013).

### 2.1.3.2 Meat prices

According to economic theory, and simply put, the lower the price of a desired item is, the more people will buy and consume it. Many (e.g. Rivera-Ferre, 2009; Westhoek et al., 2011) argue this to be the case with meat as well, in particular with lower-income population segments, and currently more generally in the Global South.

Similarly, when asked what people consider when buying food in a supermarket, price is often one of the top considerations, in addition to taste, health and food safety (see e.g. Wellesley et al., 2015). However, as discussed later in Chapter 3, most behaviour, including routine shopping, is automatic, driven by path dependency and subconscious decisions (based on intended or unintended cues in the environment at home or in shops). It may, therefore, be more that people *think* — or even that they prefer to answer a survey<sup>42</sup> saying that they think — they consider

42 See e.g. Hartmann and Siegrist (2017) for criticism about asking people's preferences about meat eating in surveys.

certain attributes, such as price or healthiness, rather than that they *actually* buy food items based on these attributes, and not some other attributes (such as the aesthetics of the packaging), while engaged in automatic behaviour.<sup>43</sup> In the Global North, prices are also considered to have less relevance for meat purchases than for some other commodities (e.g. PBL, 2008). On the other hand, there is some recent evidence that a tax on meat could be an efficient way to limit or reduce meat eating (Bailey & Harper, 2015; Springmann et al., 2016; Wellesley et al., 2015).

The falling trend in meat prices in the last half a century is most clear for chicken (see e.g. Rivera-Ferre, 2009) which used to be considered particularly luxurious meat still in the early part of the 20th century. At the same time, the last half a century has seen a steeper rise in chicken consumption over other meats in many countries, both in the Global North and South.

The sharp fall in chicken meat prices is, to a significant extent, due to the industrialization of poultry production since the 1950s in the United States and Europe (see e.g. Westhoek et al., 2011), and later also in the Global South, with the speed and scale of industrialization, and also the concentration and globalization (in terms of international trade) unparalleled by any other foods or food products (Marí & Buntzel, 2008). However, there are other, more controversial factors contributing to low meat prices, such as government subsidies, and intentional price dumping by the industry (e.g. Heinrich Böll Foundation, 2014). Also, the externalization of social, environmental or ethical issues arising from meat production in general keeps meat prices much lower than they would be, if these factors were calculated in (e.g. Gjerris et al., 2011). Fuchs et al. (2016) analyse in detail the power mechanisms at different stages of the meat supply chain artificially maintaining low meat prices.

The situation regarding artificially low meat prices is particularly extreme in the United States, as US agricultural policy, in terms of government subsidies to feed crops, makes feed grain and therefore meat cheaper than most other US foods. According to Donaldson (2016a), US meat is, in fact, cheaper than Chinese meat because of the subsidies. McMullen (2016) argues that Big Meat in the US has been supported by the government generally in three ways: with subsidies, advertising,<sup>44</sup> and nutrition advice.<sup>45</sup>

43 However, most likely price nearly always has some influence on food purchases.

44 For example, the long running and still influential advertising campaign "Beef, it's what's for dinner" originated from a government supported advertising programme (McMullen, 2016:41).

45 Due to industry pressure, e.g. from the National Cattlemen's Beef Association (Simon, 2013), the 2015-2020 US dietary guidelines mainly failed to recommend eating less meat, although the advisory committee supported including a clear message regarding that (see e.g. <http://www.npr.org/sections/thesalt/2016/01/07/462160303/new-dietary-gu-id-el-in-es-c-r-ac-k--do-wn-on-sugar-but-red-meat-gets-a-pass>). The advisory committee for the 2020-

In Europe, apart from chicken, meat prices have not decreased significantly in the last half a century when adjusted with a food consumer price index, i.e. when comparing changes in the price of meat to the changes in the average price of all food items. Kanerva (2013) correlates meat price and meat consumption data for several European countries and finds indications for some relationships between certain meats and certain countries. However, in the United Kingdom, for example, pork and sheep meat consumption have come down together with the prices, indicating that there may have been other, stronger influences on pork and sheep meat consumption. Rivera-Ferre (2009) has made similar observations for the United States from 1955 to 1995, where the consumption of chicken was correlated with price, but the consumption of beef and pork was not.

The policy of the Chinese government since the late 1970s of opening the Chinese market to foreign industrial meat producers (MacLachlan, 2015) has seen not only meat prices drop, but indeed consumption rise (in line with a governmental goal) to the extent that the government turned around in 2016, and issued new nutrition guidelines recommending only modest amounts of meat to be consumed, together with a campaign to curb the current excessive meat consumption, and its negative impacts on the population.<sup>46</sup> In China, lifting the population from poverty has coincided with a rise in meat production and fall in meat prices.<sup>47</sup>

Culture can, however, trump price, similarly to the case of the protein transition discussed above. Westhoek et al. (2011) explore the link between household expenditure and food culture. Southern European countries have traditionally spent considerably more money on food as compared to northern European countries, so, culture may have outplayed prices in southern Europe. Food in general has also occupied a more central place in people's lives in southern Europe, as opposed to northern Europe, where only in the last half a century food's cultural position has gradually gained importance (see also van Otterloo, 2012). De Boer et al. (2006) link this to the contribution of religion to food culture, as their study indicates that traditionally catholic countries in Europe have spent more money on meat than traditionally protestant countries, with the catholic culture appreciating meat specifically as a culinary pleasure.

A conclusion for this section is that meat prices are in many cases intentionally lowered to increase consumption, and while this approach often works (although

---

2025 guidelines received criticism for ties to the food industry, see e.g. <https://www.nytimes.com/2020/06/17/health/diet-nutrition-guidelines.html>.

46 See <http://www.fcrn.org.uk/fcrn-blogs/lucy-luo/new-chinese-dietary-guidelines-%E2%80%93-93-what-do-they-really-say-meat-consumption-and>.

47 Recently, China has invested in cultivated meat, possibly seeing it as a partial solution for Chinese meat consumption (<http://www.independent.co.uk/news/world/asia/china-israel-trade-deal-lab-grown-meat-veganism-vegetarianism-a7950901.html>).

not always), the low prices are a significant problem in and of itself, as exemplified by the Chinese case.

Finally, I would note that price can, in fact, be seen as a supply factor. To explain, arguing that low prices push meat consumption up implies that the process does *not* start from increased demand pushing the industry to produce more (an argument often made), but from the lower prices produced by the industry creating the demand.

### 2.1.3.3 Urbanization

The degree of urbanization is generally considered to be strongly related to increased meat eating, through changes in lifestyles and diets overall, both in the Global North and increasingly also in the South (e.g. Rivera-Ferre, 2009). For example, double-income families, supermarkets and convenience meat products are linked to urbanization, and indeed, the enormous increases in the consumption of poultry over the last half a century are probably partly due to the convenience factor (Westhoek et al., 2011). Anderson and Shugan (1991) observed a while ago that the perceived high convenience was the main contributor for the shift from beef to chicken at that point in the United States, rather than perceived healthiness of chicken which is often argued to be the main cause for the switch. Likewise, Schroeter and Foster (2004) find that the higher the share of women in the workforce, the higher the consumption of chicken (and fish, which can also be quick to prepare) in the US.

With data for 132 countries, the regression results of York and Gossard (2004) indicate that urbanization generally does seem to increase together with not just chicken, but also total meat consumption. They, however, also emphasize that different geographical regions have had different impacts from the processes of urbanization. Rivera-Ferre (2009) remarks that the relationship between urbanization and increasing meat consumption is not as simple as it might seem, and urbanization is only one aspect in the expansion of industrial meat production. She argues strongly that the complex process is driven more by political and economic interests, than simpler forces such as urbanization.

In conclusion, although the standard of living, urbanization and meat consumption often rise together, and meat prices may have an inverted relationship with consumption, these trends may also be related to other simultaneous factors. Importantly, the industrialization of meat production through related factors, such as marketing and government subsidies for feed crops, may have both increased consumption and decreased prices. The following section explores further the basic chicken and egg question of whether demand for meat drives supply (as often claimed), or the other way around, as also discussed in literature.

### 2.1.3.4 Supply vs. demand

As an example, the report by OECD and FAO (2014:180) says that “it is mostly consumer preferences, together with income and population growth, that lead and drive the meat sector over time”. This is still often an accepted paradigm, but some critical literature argues that consumer preferences are, in fact, largely created by industry marketing and advertising, and the availability of (convenience) products in supermarkets. Early criticism was provided by Galbraith (Galbraith, 1971, in MacLachlan, 2015).

Similar to Rivera-Ferre (2009) above, MacLachlan (2015) argues that the rising meat consumption especially in the Global South — often named the Livestock Revolution — is less a question of demand (from higher-income earners) and more a question of supply. In other words, the spread of both industrialized animal agriculture and supermarkets in cities in the Global South, combined with industry promotion, are driving meat prices down (while also driving grain prices up) and meat “demand” up. A similar process has taken place earlier in previously industrialized countries. He compares this supposedly “demand-driven revolution” to the Green Revolution which was “supply-driven” since it came about from the development of new forms of high-yielding cereal grains and technology transfer to the Global South. I would even argue that, unlike the Livestock Revolution, the Green Revolution could be seen as more demand-driven, since it was largely a response from the Global North to the food insecurity in the Global South.

Also Marí and Buntzel (2008) question the demand/supply relationship in meat. Rather than the increased demand creating markets for industrial meat production in the Global South, the intensification of meat production by large multinationals has created the markets that consumers have adjusted to. They argue further that the vastly increased international trade in chicken meat over the last half a century has also brought about an increase in chicken consumption, rather than the other way around. Rivera-Ferre (2009) also maintains that many development agencies have seen specifically industrial meat as a solution to both malnutrition and increased economic development in the Global South. Further, Zhou (2015) describes in detail how actions by the global meat complex together with government policies in the United States, China and Brazil (together called the Triangle) have shaped production and consumption in different, but equally demand increasing ways. The US has exported its successful model and related technology for industrial animal agriculture first to Brazil, and more recently to China, while also exporting large amounts of meat and feed (for Chinese meat animals) to China.<sup>48</sup> Brazil is the other major supplier of meat and feed to China. In both Brazil and China, the

---

48 In the early 2010s, the US domestic consumption of meat decreased due to increased exports, according to the USDA (Zhou, 2015). In other words, US consumption was driven by industry decisions to export to the new lucrative markets in China.

governments have seen the entry of the foreign (mostly US) meat industry as a very positive turn for their economies (see also Tian et al., 2016 for China).

One way to examine quantitatively the relationship between the growth of the global meat complex and consumption trends would be to look at developments in industry advertisement and marketing. Detailed data on industry advertisement or marketing expenses is, however, generally difficult or impossible to obtain from public sources, as companies are usually not obliged to disclose such data. Nonetheless, some research on the effect of advertising and marketing does exist. For example, Zimmerman (2011) concludes from his thorough review that both marketing and advertising have had a major, and perhaps the largest, impact on the obesity epidemic in the United States since the early 1980s, while excessive meat eating is related to obesity. Linking advertisement to meat eating directly, Brester and Shroeder (1995) performed a study whereby branded meat advertising had a clear increasing effect on meat eating.<sup>49</sup>

More generally, I would argue that it is not only the marketing and advertisement for specific meat products that increase meat eating, but these advertisements can be seen as a sign of the prevailing meat-eating culture (or carnism, see Section 2.2). Their mere existence is enough to have an impact on meat eating; if there were no advertisements, no marketing for any kind of meat or meat products, not in the media, and not in supermarkets or elsewhere, this could have a significant lowering impact on consumption, as it would likely play down the importance and visibility of meat. The acceptability and desirability of high meat consumption could also be lower in such a scenario, similar to the case of tobacco or alcohol advertising and marketing.

Finally, although often discouraging and challenging for sustainability, the demand paradigm — the default explanation by industries and also policymakers to the supply vs. demand question — could have an upside as well. Industries generally justify many of their actions by saying that the actions are a response to what their customers want. In some cases at least, this claim may be a way to justify either continuing with business-as-usual or doing something new. It can also be a form of “face saving”, i.e. not having to admit that the industry needs some reorientation because of environmental reasons, for example. In the case of industries such as the global meat complex, it would indeed be quite possible in theory at least for the food industry as a whole to use such a face-saving justification for an orientation away from intensive animal-based food production, towards either

---

49 Nestle (2007) notes that the expenses on marketing and advertisement for any single nationally distributed food product in the US far exceed (often by 10-50 fold) the expenditure of the US government on the food pyramid, which supposedly promotes a healthy diet, as opposed to what the industry advertisements usually promote. See discussion on nutrition guidelines in Section 2.3.

(lower yield, but more pricey) extensive meat production, or towards some of the meat alternatives discussed later in this chapter. The scale of change necessary for the industry will be an enormous challenge, and all sustainable alternatives entail radical cuts to meat produced by slaughtering animals, as the Earth system cannot support current levels of meat consumption from organic or extensive meat production (see e.g. Stănescu, 2016).

### 2.1.3.5 The level of the individual

Factors, such as industrialization of meat production, lower prices, and pervasive industry influence, urbanization, increased income, globalization of Western food culture,<sup>50</sup> all indeed have had the potential to increase meat eating, at least to a point. Further, political factors, such as agricultural and food policies, often influenced by industry, and demographic factors, such as age, gender or education may play a role in influencing the level of meat consumption. Finally, food scares or concerns regarding factory farming, health or climate change can run counter to the increasing trends, with some potential to reduce meat eating, or to reduce some environmental or health impacts from eating meat, such as with a switch from eating beef to eating chicken.

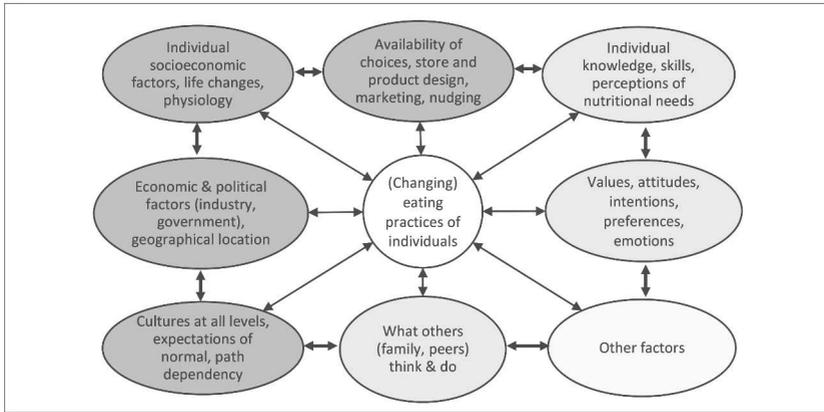
Focusing on the level of the individual, all the different factors — and many others not discussed above and beyond the scope of this chapter — combine. Figure 2.8 illustrates different possible influences on meat eating at the level of an individual person.

Figure 2.8 demonstrates how complex the situation is. As regards quantifying the influencing factors, some of them, such as economic factors, can be fairly easily quantified. However, others, such as cultural factors, are difficult to measure, although they can be described. Some tacit factors may not even be describable, let alone measurable. Importantly, the factors also influence each other. For example, one's gender or life situation, or availability of money, will have some effect on how much importance the availability of different options in the shops has, and individual values regarding animal ethics will have some impact on how much the national food culture influences one's meat-eating practices. Balancing between different needs or values, for example, between family and animal ethics, or between cost and taste, also plays a very relevant role (see e.g. Evans & Miele, 2012; Sobal et al., 2006). Many factors often do not directly affect how people eat meat, even though they play their often very relevant part in the bigger picture. However, Shephard and Raats state that:

---

50 A Western diet is defined e.g. by Popkin et al. (2012:6) as “high intake of refined carbohydrates, added sugars, fats, and animal-source foods”.

Figure 2.8: Influences on meat-eating practices at the level of the individual



Source: Figure by author.

Notes: The arrows are only illustrative, and mostly very little of the interconnecting relationships is actually known; the factors marked darker are discussed more in this section, and most of the factors marked in lighter grey are discussed more in Chapter 3.

...because human food choice is influenced by so many potential factors, there is often a tendency to look at the impact of these factors in isolation rather than trying to arrive at some overall understanding of the interplay between different types of influences.

Shephard and Raats (2006:ix)

The sheer number of factors, their qualities, and their complicated relationships with each other, make it, therefore, impossible to quantify such a model. It is largely a question of “drowning out by numbers” (Kasper, 2015:29).

To view the issue through a social practice lens, as in Chapter 3, the web of overall factors, as in Figure 2.8, is what makes how people act or behave relatively stable, but it is also what makes practices change on their own over time when different factors change. As Shove et al. (2012) argue, this coinciding stability and change is typical for social practices, of which meat eating is one. However, the crucial question for the near future is how the patterns of many unsustainable practices, including meat-eating related practices, could be purposively and radically changed.

Intentionality can originate top-down or bottom-up, or both. Firstly, it can come from policymakers, advocacy groups, or other macro-level actors, through thinking in terms of the above factor model, whereby individuals could be influenced with or without their explicit awareness. For example, attempts to motivate people towards different behaviour as regards climate change mostly take place

through information sharing and appeals to fear (Hunter & Röö, 2016). Choice architecture also belongs to a top-down approach to behaviour change. However, there are large scale phenomena that prevent such methods from creating the desired change. For example, society is often blind to the countering effect of the most dominant values present, such as the importance still based on (increased) consumption. Generally, decades of research on values (see e.g. Maio, 2011; 2017) has shown that values — or more specifically, value priorities and value dispositions — do matter and they are important for behaviour.

Secondly, change can also originate from the bottom up, from ordinary people. With nearly all practices, however, such bottom-up change can be — and has to be for real and more extensive social change — enabled by, or combined with support from other societal actors, such as policymakers, the industry or various advocacy groups.

An example regarding bottom-up change in eating practices is related to the debate regarding whether those eating only a little meat (flexitarians) or no meat (vegetarians or vegans) have any agency to influence larger trends towards eating less meat. Is the (future) supply of the new meats offered by the industry the only way for ordinary eaters to have an impact within a capitalist system? Some maintain (e.g. Spiller & Nitzko, 2015) indeed that flexitarians or vegans have little market power, as compared to intensive meat eaters. The “humane meat” producers<sup>51</sup> even argue that such people are worsening the situation, by not eating meat and thereby not being able to “vote” as effectively via their purchase behaviour (Stănescu, 2016). However, an individual decision for eating less or no meat, and therefore, for example, pulses, is not a passive act, but an active choice for a different vision of future (idem). These eaters have citizen power, or agency through their choices (Spiller & Nitzko, 2015).

This citizen power may be realised, however, only to the extent that such actions are in some ways public. Therefore, essential elements for intentional and lasting change — i.e. not dependent on situational factors such as choice architecture — include *discourses*, as I will argue further in Chapter 3. Discourses connect the macro level of society to the micro level of the individual, or put in another way, as van Dijk (2015:469) says, “language users as social actors mentally represent and connect [society and discourse]”. Discourses can be seen as a prerequisite to an awareness of problematic practices and their solutions — whether at the level of individuals or at the level of societies — especially since discourses can also lead to an increased awareness of potentially conflicting values, emotions, and knowledge.

---

51 Meat producers, mainly in the US, who call themselves “humane meat” producers, produce mainly organic meat. However, the US market has not been well regulated in this respect, and these producers have received a good deal of criticism for being manipulative towards consumers (Stănescu, 2016).

Without acknowledged awareness, purposive and lasting change at the individual or societal levels is unlikely. Section 2.2 will, therefore, explore recent and current discourses on meat.

## 2.2 Meat related discourses

In Section 2.1, I touched on discourses around eating, and not eating meat, as, due to the values and emotions attached to eating, it is not really possible to discuss the history of meat without mentioning what eating, or not eating animals has meant to humans over time. In this section, however, I will briefly cover the discourses over the last half a century and then focus on the present day. Chapters 3 and 4 will discuss further the role of discourse in society.

### 2.2.1 Rise of discourses

Nearly 30 years ago, Fiddes (1991) noted that meat eating could be considered just as ideological or political an issue as vegetarianism, as it involved an abundance of social rules and meaning. He went on to say that, consequently, the habit of meat eating required justification just like vegetarianism, and it could not therefore just be passed as something obvious. It should rather be a conscious choice.

When questioned, meat eaters have generally justified their diet as something natural, traditional or necessary for humans. In prehistory, meat eating is argued to have been an integral part of the development of our species (e.g. Zaraska, 2016a). Meat was also considered necessary for religious reasons (e.g. Swatland, 2010), and nowadays people often justify their practice simply because meat tastes good, and it is an important part of social eating. These lines of thought go back a very long time. However, before the rise of industrial animal farming, there was a certain “eat with care” attitude to eating meat (Foer, 2009).

For our age of industrial meat, Joy (2010) talks about the three Ns of justification regarding eating meat: Normal, Natural and Necessary. People have internalised these so well that the four Ns have usually been considered truths rather than opinions, and therefore, any moral considerations regarding eating animals have not even entered the picture for most people. Joy introduced the term *carnism* to indicate the culture, or the invisible belief system of meat eating, and the discursive hegemony that the culture of meat enjoys. Piazza et al. (2015), add a fourth N for Nice to the three Ns from Joy.<sup>52</sup> Further, Monteiro et al. (2017) develop

---

52 Some of the literature discussing the three or four Ns use capital initials. I decided to use these as well, in particular since I see these concepts as frames, and frames are often capitalised in frame analysis (see later in Chapter 4).

a distinction between *carnistic defence* (justifying meat eating) and *carnistic domination* (justifying killing animals for meat), with the first relating more to Normal, Necessary and Nice, and the second more to Natural. Before the term carnism, other authors, in addition to Fiddes above, have linked meat eating to an ideology. Adams (e.g. 1991) claims that meat eating has become an ideology whereby the ideology itself makes meat eating appear natural and predestined. Indeed, she argues that killing animals for food has changed from something we do to them into something that is “part of animals’ nature” (idem:135). Palmer (1997) includes an early discussion of human domination over domesticated animals potentially being legitimized through a *social contract*.

Meat eating has traditionally symbolized masculinity, strength, higher socio-economic status, and human dominion over nature (e.g. Allen & Baines, 2002; Ruby & Heine, 2011). There are some signs, however, that the image of meat may be changing (e.g. de Bakker & Dagevos, 2012; Ruby, 2012), or that the symbolic meaning of meat could even be successfully manipulated (Allen & Baines, 2002). The ideas of what is “normal” tend to shift considerably over time (Shove, 2003; see also Chapter 3), so has also the meaning of meat changed and will continue to change.

As mentioned earlier, meat, and especially red meat, has been discussed negatively, not only in academic literature but also in many media stories, especially concerning its healthiness. However, conflicting dietary advice for health, and especially weight loss, can be found in many places, especially in popular media, with governmental dietary guidelines being only a minor source of information for many people who tend to be persuaded simultaneously to two, often opposite directions. On the one hand, people have become more conscious about the links between eating habits and health, encouraging them to follow a diet less heavy on meat, among other things. On the other hand, certain popular diets have pulled some health-conscious people towards eating more meat. In particular, the “low carb” diet has often been understood as a high-meat diet. Coinciding with the rise of such diets, also the so-called lipid hypothesis (i.e. that saturated fats and blood cholesterol are major factors in cardiovascular disease) has been questioned, even in some scientific literature (e.g. by Siri-Tarino et al., 2010).

Clear cultural differences have been seen in the discourse. Halkier et al. (2007) make a comparison between four European countries in terms of the discursive framings of food consumers and conclude that there are fairly large national or cultural differences within Europe. Further, they argue that conflicts in northern European countries may be more between different food-related issues, such as food safety, quality, nutrition and ethics, while in southern European countries they may be between different types of actors, such as public authorities, the food industry and the retail sector. Likewise, Kjærnes and Torjusen (2012) find some regional differences in that, people from southern and eastern Europe tend to be lately more pessimistic about food than especially Scandinavian consumers. More-

over, a comparative study by Bauer et al. (2006) in Germany, Finland, Italy and the United Kingdom on the impacts of the BSE crisis illuminates, how national media influences the perception of risk.

Priorities and framings also change over time as a result of changing practices, scientific research, and public debates. Framings of food (and often, meat) related concerns in general have varied a lot just in the last half a century. In the 1950s and 1960s, they were mostly about safety, convenience and prices, in the 1970s and 1980s, about fertilizers and pesticides, in the 1980s and 1990s, about risks and taste, and in the 2000s, about animal welfare and fair trade (Spaargaren, Loeber, et al., 2012).

Often in the last decades, public and media discussions around meat eating have largely arisen from issues related to intensive animal agriculture. Larger health scares, such as the European BSE crisis in the 1990s, the avian influenza epidemic taking place mostly in Asia from the early 2000s onwards, or more local crises of meat contamination with dioxin or other toxins, have generated much discussion which has often led to a wider debate on the issues related to a diet relying heavily on eating meat. The COVID-19 pandemic has largely been blamed on both live animal markets widespread in certain countries, and on the global destruction of the natural world, often for industrial animal farming.<sup>53</sup>

Several narratives have existed for significant time already as to how problems related to the global meat complex could be solved while continuing to consume meat from slaughtered animals. Organic meat has been a popular answer to those concerned with industrially produced meat. However, as mentioned earlier, large scale organic meat production shares many of the same problems as conventional production, especially in term of climate change or deforestation (e.g. Foodwatch, 2009; Steinfeld et al., 2006), and organic meat producers can also deceive consumers by marketing “humane” meat from “compassionate” farmers with few regulatory constraints (see Stănescu, 2016). Further, grass-fed cows have been suggested even as a solution to the contribution of meat to climate change (by the grazing locking away soil carbon), and such discourse has been popular online as well. This account has, however, also been firmly disputed (see a thorough review of the issue by Garnett et al., 2018), although there remain arguments that a *small* number of *well-placed* grazing cows may be relatively harmless as regards climate change (see Garnett et al., 2018; Rööös et al., 2016). There is another popular “less, but better” narrative which acknowledges the array of serious problems, and the urgent need to find solutions, but aligns with the paradigm of the necessity of meat eating. An example of this is the Eat well -campaign in the United Kingdom. The idea is that decreasing meat eating, and concentrating on better quality, i.e. less

---

53 See e.g. <https://www.theguardian.com/world/2020/mar/25/coronavirus-nature-is-sending-us-a-message-says-un-environment-chief>

intensively produced meat, can help solve the meat crisis. Although this is an appealing idea to many, and probably designed to cause less antagonism (Santini et al., 2015), the lack of radical absolute reductions in this model, however, casts doubt on its viability as a sustainable global solution. The question is about quantities: a truly small amount of grazing cattle could be beneficial, if it would replace the current mass production of beef. The focus of any such “less, but better” -campaigns would, therefore, better be more strongly on the “less”, rather than the “better”.<sup>54</sup>

The FAO prediction of 75% increase in the demand for meat by 2050 carries a message of “people will want meat”, and assumes that there cannot be a radical reduction in the meat that people eat globally, and more generally, that humans have to keep eating animals. Even though this business-as-usual approach requiring growth of production is also criticized by food production-related organisations (see Soil Association, 2010), the growth paradigm is also included in at least some of the alternative meat discourse.<sup>55</sup>

Less visible in the public discourses have been, on the one hand, the answer from the global meat complex and from some international organisations to the anticipated increased future demand for meat, and, on the other hand, their answer to the contribution of meat production to climate change. The suggested and researched solution to the issue of demand has been to make intensive animal farming even more intensive, widespread and efficient, and the answer to the issue of climate change has been to intensify science’s focus on developing animal breeds, or animal feeds that are less harmful in terms of the production of GHGs, so for example, reducing the methane emissions from cows (e.g. in many FAO reports on the issue). This discourse, especially related to the increased intensity, has largely stayed out of the media focus, and presumably might not always be well received by the publics. Neither would all stakeholders necessarily want to draw attention to the realities of intensive animal agriculture. However, as for example, Garnett (2011) or Springmann et al. (2018) conclude, it is not possible to make the meat system efficient enough to take account of climate change. Reductions in consumption must be an integral part of the picture. Further, the assumption that intensification significantly decreases GHG emissions from extensive animal farming has also been called into question (see Hayek, 2019).

Despite the narrative of especially red meat being bad not only for humans, but for the environment as well, no very large scale, or radical changes in the image of

---

54 Some, for example de Boer, de Witt et al. (2016) argue, however, that switching to eating organic meat can have positive spillover effects to other, more environmentally beneficial behaviours.

55 See for example Paul Shapiro, Vice President of Policy, the Humane Society of the United States, and a self-declared vegan, talking at a Stanford University panel discussion on cultivated meat at <http://www.gfi.org/stanford-on-meat-without-animals>.

meat have been widespread until now, as the Chatham House Report's (Wellesley et al., 2015) findings about (especially red) meat in the United States still being strongly associated with being American demonstrate. Similarly, all the different discourses on ethical and other problems related to eating animals have not, until now, led to a more permanent increase in the numbers of vegetarians, which in Europe, for example, have ranged in recent decades from around 1% to between 5-10%, or vegans which number generally under or around 1% of a population.<sup>56</sup> Temporarily, these numbers have changed, e.g. in France, the share of vegetarians rose reportedly to 6% around 2001, possibly as a consequence of the BSE crisis, but soon after, the figures fell towards what has been more typical for modern day France, i.e. only 1-2% of the population (Kjørstad, 2005).

Additionally, there have been narratives countering the superiority of a vegetarian or vegan diet, as regards environmental impacts from the food system. For example, the *vegetarian myth* (Keith, 2009) claims that vegetarians or vegans falsely believe that their diets can be a solution to the crisis of industrial animal agriculture. Further, there has been a debate on whether those eating grass-fed animals or those eating no meat end up killing more animals, with the arguments being between accidental killings during plant harvesting and intentional killings in animal agriculture, a discussion largely initiated by Davis (2003), and mostly revolving around ethics. While convincingly aiming to end the fight as regards numbers of animals killed, Lamey (2007) points to the new discourse over not *whether* animals deserve protection or not, but *which kind* of protections produce the best results. He points out that field animals do get killed even within the production of a vegan diet, in other words, his argument is for the importance of choice in farming methods. He further emphasizes that "not all meats are created equal" (idem:344), so that, while both produce the same amount of meat, killing 100 chickens is ethically worse than killing one cow.

The disconnection between meat production and consumption is largely due to the industrialization of meat production and the growth of supermarkets. Gouveia and Juska (2002:384-385) argue that the popular media has been falsely reconnecting production and consumption by "framing food and cooking as a lifestyle" by discussing, for example, seasonal and locally produced foods, or engaging celebrity cooks to visit rustic small farms, while in reality, most eaters are still faced with the same industrially produced supermarket meat. In this narrative, the reintegration of production and consumption is, therefore, made into a matter of individual

---

56 The numbers also depend on the definition of what counts as a vegetarian or vegan diet. Unfortunately, there is sparse longitudinal or geographically comparable data available on the share of vegetarians or vegans in different countries, and the estimates tend to be using different definitions, and carrying various methodological issues with them.

choice, while actually the two realms are perhaps even further distanced from each other with this framing.

As the following section will discuss, the (conscious) awareness of the enormously challenging and critical issues related to the current meat system is still low among most people, but has increased in the last years in the scientific community, some media outlets, and even within policymakers and the industries involved. New solutions have been considered, and new discourses have been born, taking some of the focus away from more modest or incremental changes to the system, or the narratives that are based on disputed science, to more radical alternatives. As a result, the older discourses mostly keep on existing while new discourses are born, and so, the numbers of different, and often contradicting, narratives around meat are increasing in the public sphere.

### 2.2.2 The new discourses

There seems to currently exist new and diverging narratives, or discourses, around the various solutions to the meat crisis, at least in the Global North. Two of the most obvious strands include, on the one hand, the necessity of overhauling the current meat system, and on the other hand, apparent denial of the need for large-scale changes. The *new meats*, such as cultivated meat, plant-based meat, or insects, as well as flexitarianism — as an additional *new meatway* — are an important theme in the first strand of discourses.

Firstly, there is a great deal of excitement among start-up businesses developing cultivated or plant-based meat,<sup>57</sup> major investors,<sup>58</sup> and organisations<sup>59</sup> involved with the start-ups in building the new industry (see the next section and Table 2.1 for more on some of these developments). There is a degree of hype

---

57 The developers of meat analogues have developed the term *plant-based meat* to emphasize the fact that these products aspire to resemble meat in every way, the only exception being that their origin is from plants, rather than animals. Recent terms used by the companies developing meat cultivated from animal cells are *cellular agriculture* (from 2015), *cultured meat* (around in wider discourses from around 2016), *clean meat* (from 2016), and *cell-based meat* (from 2018). *Cultivated meat* is the latest term, entering the wider discourses only in 2019, judged to be the most appealing term, based on consumer research performed by the Good Food Institute (see <https://www.gfi.org/cultivatedmeat>). I mostly refer to cultivated, plant-based and animal-based (conventional) meat in this book. See Chapter 3 for some more discussion on the names.

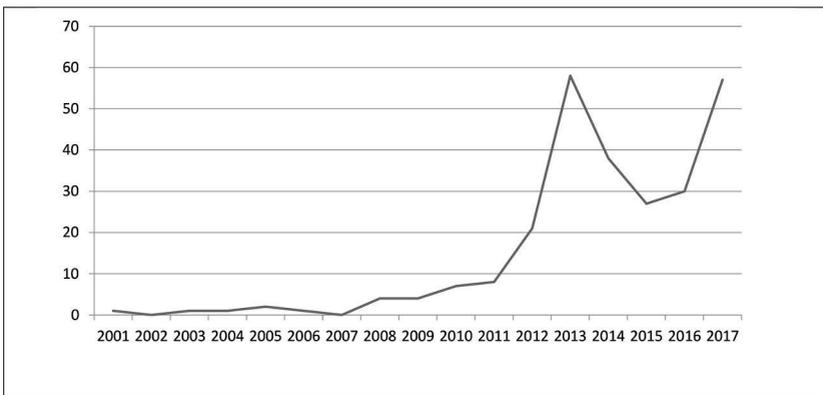
58 See e.g. FAIRR (2016), or <https://www.cbinsights.com/research/future-of-meat-industrial-farming/>.

59 Such as the Good Food Institute ([www.gfi.org](http://www.gfi.org)) and New Harvest ([www.new-harvest.org](http://www.new-harvest.org)), promoting the alternatives, and financing research in cell- and plant-based meats.

attached to these alternatives. Some policy circles are supporting these developments,<sup>60</sup> and through increasing media reporting in recent years, many citizens have had a chance to learn about the new potential directions.

Figure 2.9 shows the number of articles in the Guardian newspaper on different alternatives to eating conventional meat (including insects and flexitarianism, discussed later). The media event in 2013 where the first-ever cultured beef burger was prepared and eaten in London caused the peak around that year. However, the overall trend is clear. The number of articles was rising between around 2007 and 2017.

Figure 2.9: Number of mentions in the online Guardian of different alternatives to eating conventional animal-based meat from 2000 to 2017



Source: Based on the Guardian archives.

Notes: The keywords used in the search for articles include the following: "cultured meat", "artificial meat", "lab-grown meat", "synthetic meat", "in-vitro meat", "clean meat", "eating insects", "plant-based protein", "impossible burger", "beyond meat", "flexitarian", "reducetarian", "semi-vegetarian", "meat alternative"; many articles mention several such keywords, therefore the numbers do not refer to the number of articles, but to the mentions of these keywords; the term "cell-based meat" was only invented in 2018, and "cultivated meat" entered discourses outside academic literature mainly only in late 2019, therefore, these terms are not included in the search.

In these discourses, conventionally produced meat from slaughtered animals can actually be seen as the "wrong technology" to produce meat, "convenient, but incredibly inefficient", and the future Earth citizens may look back at people eating animals (for their flesh) as something weird and archaic.<sup>61</sup> However, more of-

60 For example, at the EU level, a research project called LikeMeat (Likemeat.eu) was EU-funded. Further, the Dutch government has funded research on cultivated meat (see [http://www.nw-harvest.org/mark\\_post\\_cultured\\_beef](http://www.nw-harvest.org/mark_post_cultured_beef)).

61 From Pat Brown, the founder of Impossible Foods, on BBC programme *The Inquiry* in January 2017.

ten cultivated meat creates controversy, with the discussion often moving from stronger initial reactions of disgust, or “wow”, to concerns for health or social consequences on the one hand, and environmental and ethical benefits on the other hand (see e.g. Laestadius & Caldwell, 2015; Onwezen & van der Weele, 2016; Verbeke et al., 2015). The perceived unnaturalness and high-tech character of cultivated meat, and the perceived naturalness and low-tech character of (intensively produced) conventional animal-based meat, are also apparent in the discourses. On naturalness, Ethan Brown, the founder of one of the new plant-based meat companies has argued that intensively produced conventional animal-based meat has already become “artificial”, as it is, in fact, so unnatural (Stănescu, 2016).

Special about the discourses around the new plant-based meats is that these products are not aimed so much at vegetarians or vegans, but at those who until now have been conventional meat eaters, i.e. the majority of people.<sup>62</sup> Similarly, cultivated meat is not presented as another product for vegetarians or vegans, but for non-vegetarians, although Hopkins (2015) argues that the media may sometimes do a disservice by assuming otherwise.

Another narrative is built around eating farmed *insects*, as something exotic and good for us. Since the technological input is much smaller, and since insects represent something either formerly, or currently, rejected (mostly in the Global North), something mundane, or something very traditional (in some parts of the rest of the world), the excitement, or the hype — related to other promising, but more technological solutions (such as cultured or new plant-based meat) — is less obvious, although still existing. Largely, the initial reception by the publics in the Global North has been disgust (e.g. Looy et al., 2014). Insect start-ups tend to be dwindling businesses in many cases (Ana C. Day, personal communication, 9 April 2016),<sup>63</sup> although policymakers in the Global North are gradually making an effort to accommodate them.<sup>64</sup> Insect eating eventually gaining ground in the Global North has been compared to sushi’s rise in popularity in the North outside Japan. However, the two differ from each other to a significant extent, even if the initial yuck-factor or the exotic nature of these foods are common features. Sushi in the Western world has been an additional, by now normalised food choice without any

---

62 Indeed, Beyond Meat estimates that 70% of its customers eating Beyond Burgers are meat eaters (<https://www.foodnavigator-usa.com/Article/2018/01/12/An-estimated-70-of-Beyond-Burger-fans-are-meat-eaters-not-vegans-vegetarians-says-Beyond-Meat>).

63 Ana C. Day is the founder of 4Ento.com, an organisation promoting insects as primary future protein alternative for human consumption.

64 For example, EU food regulations changed from 2018 to accommodate insects as food. Further at the EU level, a research project called PROteINSECT (Proteinsect.eu) was EU-funded. Moreover, the Dutch government supported the 2012-2013 Edible Insects -project carried out by Wageningen University and the FAO (see Paul Vantomme interview at <https://www.youtube.com/watch?v=Tylfq4Azhr4>).

meaning of transformation attached to it, whereas insects are attached to the narrative of challenging the conventional animal-based meat-eating related practices, and potentially transforming the conventional meat system.<sup>65</sup>

Contrasting the above *solution narratives*, the narrative around eating traditional and minimally processed plant-based proteins, *pulses*<sup>66</sup> (various beans, and lentils, chickpeas and dry peas) — nutritionally rich (see e.g. Mudryj et al., 2014), beneficial from an agricultural point of view (e.g. FAO-FNS Forum, 2016), and inexpensive replacements for meat — has been attracting much less attention. Such discourses do exist among some mostly development-oriented researchers, some similarly directed international organisations (e.g. parts of the FAO), and perhaps some of the people who are actually eating pulses regularly, i.e. (part- or full-time) vegetarians and vegans. Eating pulses is already normalised for the latter group of people who have often been doing it for years, or even all their lives, either in the Global North, or in the South, out of choice or, more often, necessity. Generally, pulse consumption is however low, especially in the Global North.<sup>67</sup> An indication of the weak or

- 
- 65 Considering the Global South and discourses on the new meats, the number of articles from the last few years seems to be fairly modest, and there have been usually few if any reader comments. Here are, however, examples of such articles: A couple of Mexican English-speaking newspaper articles (in Mexico News Daily and The News) about insects are very enthusiastic about Mexico's culinary history in the sense that insects have been part of the Mexican diet for centuries, and still are very much so (for example, <https://mexiconewsdaily.com/news/insects-the-answer-to-global-food-shortage/>). A Hong Kong article in South China Morning Post about insects is positive as well (<https://www.scmp.com/lifestyle/health/article/1309183/lead-de-bugging-nutrition>), as is their article about cultivated meat (<https://www.scmp.com/comment/insight-opinion/article/1295106/why-stem-cell-hamburger-tastes-future>), and their article on plant-based meat (<https://www.scmp.com/lifestyle/food-drink/article/1995239/bleeding-plant-based-burger-coming-trendy-restaurant-new-york>). An article from the Indian newspaper The Hindu is also relatively optimistic about cultivated meat (<https://www.thehindu.com/todays-paper/tp-in-school/qa-on-the-science-of-growing-hamburger-in-the-lab/article4996660.ece>). A South African article in the Mail & Guardian about insects is also fairly positive, although some personal disgust is expressed by the journalist (<https://mg.co.za/article/2013-07-05-waiter-op-en-up-a-can-of-worms/>). Finally, an Argentinian article in the Clarin newspaper is optimistic about plant-based meat ([https://www.clarin.com/espectaculos/si/animal-salio-lastimado-hamburguesa\\_o\\_4100G2MEb.html](https://www.clarin.com/espectaculos/si/animal-salio-lastimado-hamburguesa_o_4100G2MEb.html)).
- 66 In the FAO definition, pulses are also called grain legumes; they are plant species from the Fabaceae family, harvested annually and only for dry grain, so not for oil or as vegetables. Soy is not considered to be part of pulses in this definition.
- 67 FAO/STAT data shows that world per capita pulse consumption decreased between 1961 (start of FAO statistics) and the early 2000's, after which there has been a slight increase. However, in most countries there has been a decrease in per capita consumption, or the consumption has been rather marginal to begin with.

non-existing new narrative around pulses is the lack of media attention to pulses,<sup>68</sup> lack of research on pulse varieties until recently (see e.g. FAO-FNS Forum, 2016), or the fact that the 2016 UN International Year of Pulses passed mostly unnoticed in the Global North at least.<sup>69</sup> Pulses seem to create modest enthusiasm, they are mainly covered in the discourse as an obligatory mention of an existing option (see e.g. FAIRR, 2016), albeit with less potential for big profit margins, unless processed into further products, such as ingredients into plant-based meat products.

Additionally, pulses receive a good deal of criticism, sometimes accompanied by humour, of being difficult to digest, difficult to cook, or plain boring. In their article discussing the necessary large-scale meat reduction and replacement, Schösler et al. (2012) themselves present lentils as “cumbersome” and “out of fashion”. This negative narrative about pulses may work as an excuse to not to have to see them as real alternatives, or to move away from meat. There seems to currently exist a narrative whereby people would cook vegetarian food more often, if only they knew how. Schösler et al. (2012:39) argue that “in particular, a lack of familiarity and skill hampered the preparation of real vegetarian meals” among the Dutch. This is noteworthy, seen in the context of the Global North where cooking, including exploring new recipes, is considered a common hobby, and there is an abundance of cookbooks, including those with only vegetarian recipes.<sup>70</sup>

However, there may indeed be a point about a need to update the *image* of pulses (Jallinoja et al., 2016; Schyver & Smith, 2005), when researchers involved with sustainable food themselves (such as Schösler et al., 2012) call pulses in effect “boring”. There is current research going on, for example, on developing new more productive and resistant varieties of pulses, easier or quicker to prepare, and more integrated into current food systems (see e.g. Global Pulse Confederation, 2016 for a 10-year research plan). Much of the research is directed on solving food insecurities in the Global South. Section 2.3.4 will focus some more on pulses.

Independent of the low status of pulses, of late, a new rise of vegetarianism or veganism in public discourses in the Global North is visible. This rise is likely to originate partly from the (still low but) seemingly rising conscious awareness of

---

68 For example, the two UK based newspapers the Guardian and the Daily Mail have hardly any articles regarding pulses, apart from some cooking recipes. However, both Guardian India and Daily Mail India do have several articles (usually without reader comments) from the last years, with pulses being culturally and nutritionally important in India.

69 For example, in the online Guardian, there have been almost no articles referring on the 2016 Year of Pulses.

70 A search in the online New York Public Library catalogue with the word “cookbook” produces a list with many more titles included in the collection in the last 20 years (331 titles for the period 1998-2017) than in the century that preceded (140 titles for the period 1898-1997). The proportion of entirely “vegetarian cookbooks” in these English language titles is over 10% for the last 20 years (38 titles). The trend in cookbooks in Europe has been similar.

issues around the global meat complex, and partly from the availability of more vegetarian or vegan products in Western supermarkets and restaurants, and recipes in cookbooks. However, meat consumption figures are still not reflecting such a trend. Looking at collections of surveys on the numbers of people identifying as vegetarians, or vegans, e.g. in Wikipedia<sup>71</sup> — a source of information many turn to — it would certainly seem that the numbers are up from the 1-5% of people in most countries that have seen themselves as (out-of-choice) vegetarians in the last decades, or the no more than 1% that have identified as vegans. Several surveys from the last couple of years quoted in Wikipedia indicate that around 10% or more of people identify as vegetarians or vegans in several countries. Although the data as such may not be reliable, there does seem to be a rise in numbers of vegetarians and vegans in these surveys.<sup>72</sup>

This rise in survey figures can be explained in several ways. Firstly, it may actually reflect more people not eating meat. Secondly, it could indicate that more people allow themselves to say publicly that they identify as vegetarians or vegans. Thirdly, it may be that people consider being vegetarian or vegan more morally correct now than before, and since survey often tend to capture the ideal person rather than the real person (e.g. Lalwani, 2009), the rise in numbers may be a reflection of this. Fourthly, it could be that the definition of vegetarian or vegans diets is becoming looser,<sup>73</sup> and so, a considerable number of those identifying as vegetarians might still eat meat (see e.g. Haddad & Tanzman, 2003). The concept of *flexitarianism*, or part-time vegetarianism, also plays a role here, discussed below and in Section 2.3. The last three alternatives could explain the “veggie trend paradox” of why meat consumption levels have not (yet) come down in the Global North despite the recent vegetarian or vegan trend at the level of discourses. The first option — actually increased numbers of people not eating meat — could be accurate, but not show up in statistics, if those identifying as meat eaters are correspondingly eat-

---

71 See [https://en.wikipedia.org/wiki/Vegetarianism\\_by\\_country](https://en.wikipedia.org/wiki/Vegetarianism_by_country).

72 However, for the same country, and around the same time, different surveys may give fairly different results. See also Hartmann and Siegrist (2017) for criticism on surveys asking people about their meat-eating practices.

73 The survey definitions of vegetarianism or veganism may also have changed over time.

ing more meat,<sup>74</sup> or if the meat industry is able to channel more meat into other consumption.<sup>75</sup>

Further on discourses around vegetarianism or veganism, Rothgerber (2014:34) refers to Adams (2001) in arguing that “the mere presence of vegetarians reminds omnivores of their [own] behaviour, causing guilt, anger, and a host of other negative emotions”. His empirical results support Adams’ theory. These negative emotions can be seen expressed in the discourses of the last decades, for example in the references to a “veggie lobby” — particularly popular in online discussions<sup>76</sup> — that supposedly tries to influence governmental policy to reduce or ban meat eating. In reality, however, governments have been very reluctant to discuss or implement any actual meat-reduction related policies (e.g. Laestadius et al., 2014; Wellesley et al., 2015). Devaluing vegetarians or vegans has been part of this discourse as well, and as Rothgerber (2014) argues, it is another coping mechanism of meat eaters, aroused by the presence of vegetarians and vegans, and used to overcome the cognitive dissonance created from eating animals, while knowing what it means for the animals being eaten, or what some other impacts from this practice are. Loughnan et al. (2010) coined the term *meat paradox* to describe our love for meat (dead animals) and our love for (live) animals as pets, for example, and Loughnan et al. (2014) explore how different people use different coping mechanisms regarding meat paradox and the associated cognitive dissonance and strategic ignorance, topics discussed further in Chapter 3.

Next to the vegetarian and vegan related discourses, there is a new discourse whereby a more relaxed attitude is applied, as regards radical change in eating animals. Here belong the discourses around flexitarianism, a new name for an older idea of a low contribution of animal-based meat in the diet.<sup>77,78</sup> While the end-re-

---

74 There is also a new trend, seen by some as a backlash against veganism, the “carnivore diet”, whereby a person’s diet is mostly based on animal foods. Such a person ends up consuming considerably more meat than an average meat eater. See <https://www.theguardian.com/lifeandstyle/2018/may/11/the-carnivore-diet-all-meat-health-benefits-dangers> from the Guardian on 11 May 2018.

75 For example, the meat consumption by domestic cats and dogs is significant (about a quarter of total meat consumed in the US is eaten by cats and dogs), and does also include meat that could be eaten by humans (see Okin, 2017).

76 See, for example, reader comments to the Daily Mail article <https://www.dailymail.co.uk/health/article-2113986/Red-meat-early-death-study-Eating-regularly-increases-risk-death-heart-disease.html> published online 12 March 2012.

77 See e.g. <https://www.theguardian.com/lifeandstyle/2017/jun/25/vegans-vegetarians-and-now-reducetarians> published online 25 Jun 2017.

78 Globally speaking, flexitarianism has been, and still is, the most common and normal way of eating conventional, animal-based meat, even if it is not called by that name (e.g. Hicks et al., 2018). As regards Europe, Dagevos et al. (2012) found nearly 20% of the Dutch in 2011 to eat in a manner comparable to either strong flexitarianism or vegetarianism/veganism, and

sult from reducing the amount of animal-based foods in one's diet may be very similar to being a flexitarian, the term *reducetarian* refers to action or process of reducing meat eating, rather than already being a semi-vegetarian, or flexitarian. It seems that even some of the vegan discourse is positive about the idea of simply reducing, rather than eliminating animal-based foods. However, to some, it may be counterproductive to focus on small reductions, rather than radical change.<sup>79</sup> Finally, while “reducetarian” or “flexitarian” (or even “vegetarian” or “vegan”) do not directly distinguish between different motives on cutting back on meat eating, other new terms for diets do, such as *climatarian* or *sustainitarian*,<sup>80</sup> which focus on the environmental consequences of food, or more specifically the meat that is eaten.<sup>81</sup> Focusing on co-benefits to human health, animals and the environment (motive alliances, see Belz & Peattie, 2009; de Boer et al., 2013; Hartmann & Siegrist, 2017) may, however, be more beneficial than focusing on single benefits, as discussed further in Chapter 3.

There seems to be some division between optimism and pessimism about change in the meat-eating related discourse within academia. Certain optimism is contained in the writings about flexitarians, for example in the Netherlands (e.g. de Boer et al., 2013) or Germany (e.g. O’Riordan & Stoll-Kleemann, 2015), while there seems to be certain pessimism about the proportion of vegetarians or vegans being low and unchanging, for example in France<sup>82</sup> or the United States.<sup>83</sup> This might be a reflection of (un)willingness to tinker with food cultures (e.g. in Germany vs. in France), or, it could be reflecting higher tolerance and freedom contained in flexitarianism vs. stricter vegetarianism or veganism, or both.<sup>84</sup>

---

the majority of the Dutch (77%) to qualify as weak flexitarians. However, when asked, only 13% of the respondents identified with being a flexitarian.

- 79 See e.g. <http://veganstrategist.org/2015/11/06/compromise-isnt-complicity-four-reasons-vegan-activists-should-welcome-reducetarianism-and-one-big-reason-reducetarians-should-go-vegan/>
- 80 See <https://www.lessmeatlessheat.org> and <https://grist.org/food/climatarian-vegavore-reducetarian-why-we-have-so-many-words-for-cutting-back-on-meat/>.
- 81 In this book, the term *flexitarian* is used as a general, most common and rather neutral term for someone eating less (smaller amounts or more infrequently) meat than the average person in the Global North.
- 82 Around 10% of the French see themselves as vegetarians in the future, yet only 2-3% report being currently vegetarian (Opinionway survey, <http://www.20minutes.fr/societe/1808807-20160318-journee-viande-pourquoi-deviennent-tous-vegetariens>). Ouedraogo (personal communication, 21 February 2017) argues this to be a sign of food “malaise” in the French society. Arouna Ouedraogo works for the French National Institute for Agricultural Research (INRA).
- 83 See <https://www.psychologytoday.com/us/blog/animals-and-us/201109/why-are-there-so-few-vegetarians>. The author Harold Herzog is a Professor of Psychology in the US.
- 84 Additionally, researchers’ personal optimism or pessimism may colour their arguments.

At the same time as all these narratives exist, the vast majority of people, and seemingly a large proportion of policymakers, have still been either unaware of the critical issues to do with the broken meat system (see the meta-study by Hartmann & Siegrist, 2017), or even if aware, reluctant to change their own practices (see also e.g. Wellesley et al., 2015) or push for policies encouraging others to do so.<sup>85</sup> Similarly, even many NGOs have not pushed the issue, for example in their campaigning (Laestadius et al., 2014), and even those that do, tend to advocate for small reductions in the consumption of meat, rather than for radical reductions or an overhaul of the meat system together with larger adoption of plant-based diets (Linnea Laestadius, personal communication, 19 October 2017).

There are recent attempts within international organisations, such as the European Heart Network (2017), the International Panel of Experts on Sustainable Food Systems (IPES FOOD, 2017) and the World Bank (2017), to recommend reductions in meat consumption, combining benefits for human and planet health. A report from the International Food Policy Research Institute from 2011 was an early voice in this, suggesting around 20% reduction to the global baseline growth scenario for 2030, in effect bringing consumption of meat back by 2030 to the level it was in 2000 (Msangi & Rosegrant, 2011). At the same time, a 2018 opinion piece from the EU Observer (an independent online newspaper writing about EU matters) suspects that in terms of denial, meat is “the new climate change”.<sup>86</sup>

Looking back, the meat crisis reached awareness even in the wider scientific community mostly only after the publication of the 2006 Livestock’s long shadow report by the FAO (Steinfeld et al., 2006). Newspapers did eventually report on the issue.<sup>87</sup> During the period after the 2006 report, there were high-profile calls for change. In 2008, the then head of the IPCC, Dr. Rajendra Pachauri, called for people to significantly reduce their meat eating.<sup>88</sup> In 2009, the Meat-free Monday campaign was launched.<sup>89</sup> In the same year, Lord Nicholas Stern took a significant political step as a high-profile climate change expert when he said that “meat is a wasteful use of water and creates a lot of greenhouse gases. It puts enormous pressure on the world’s resources. A vegetarian diet is better” in an interview by the Times newspaper.<sup>90</sup> His comments created a lot of, often negative, media at-

---

85 See e.g. <https://euobserver.com/environment/127407> from 2015. Among other things, this EU Observer article discusses a European Commission report on sustainable food that the Commission planned to publish by 2013, but then subsequently “buried”.

86 See <https://euobserver.com/opinion/141344>.

87 See e.g. <https://www.theguardian.com/environment/2009/may/16/ghent-belgium-vegetarian-town-environment>.

88 See e.g. <https://www.theguardian.com/environment/2008/sep/07/food.foodanddrink>.

89 See <https://www.meatfreemondays.com/about/>.

90 See <https://www.thetimes.co.uk/article/climate-chief-lord-stern-give-up-meat-to-save-the-planet-2j9kv8btjsr> from 27 October 2009.

tion,<sup>91</sup> and since then, he has apparently not returned to publicly say that, for climate change mitigation, a vegetarian diet would be better than a diet with meat.<sup>92</sup> In an interview by an Indian newspaper the Indian Express in 2017, when questioned, he referred to his comments in 2009 and said that he “did not advocate vegetarianism”, and that “diet is an individual choice”.<sup>93</sup> Further, in his recent book on climate change mitigation, Stern (2015) does not discuss meat’s contribution to climate change at all, although the book does include one very short mention of cultivated meat (on p. 78) as an example of potentially helpful private-sector innovations.<sup>94</sup> In the decade since the FAO report and the high-profile calls for meat reduction, not much seems to have changed, other than that the new alternatives to meat are becoming a reality, and at least partly due to them, the spread of discourses has widened. Meat consumption as such has only increased at a global level and has not significantly decreased for any individual country.

There are multiple explanations for the low awareness — or denial — and the related lack of action until now. They include the discursive hegemony of carnism (discussed in this chapter and Chapter 3), strategic ignorance as a coping mechanism for the internal conflict rising from the meat paradox (see Chapter 3), the disconnection between the production and consumption of meat (this chapter), the seeming lack of certainty in terms of the proportional contribution of the global meat complex to climate change (see Box 2.1)<sup>95</sup> or to many of the other related problems, and the overall complexity of the issues related to the global meat complex (this chapter). Another psychological factor may be the underestimation of impacts from behaviour within which changes are perceived as (personally) difficult (de Boer et al., 2016; Tabi et al., 2013).<sup>96</sup>

Notably, there is relatively little research focusing on the pressure from the conventional animal-based meat industry to maintain the status quo, although this pressure is possibly a major contributor to the lack of action, similar to the impact of some other industry lobbies, e.g. in the fossil fuel industries. Fuchs et al. (2016) offer an analysis of the often hidden power, including discursive power, the

---

91 See <https://www.theguardian.com/commentisfree/cif-green/2009/oct/27/vegan-vegetarian-stern-climate-change> in the online Guardian on 27 October 2009.

92 An indication of this is that e.g. Google search results regarding Lord Stern talking about vegetarianism being good for the climate generally only refer to the interview in the Times in 2009, in other words, there are very few newer internet search results on this.

93 See <https://indianexpress.com/article/explained/costs-ignored-climate-change-a-function-of-market-failure-says-lord-nicholas-stern-world-bank-4593123/> from 31 March 2017.

94 He also says that discussing such innovations would be “beyond the scope of this book” (p. 78).

95 However, in current discourses, a certainty is usually asserted by using a number (usually 14.5% or 18%) without reference to any uncertainty of the science behind it.

96 However, this can also be seen as a coping mechanism, linked to strategic ignorance.

meat industry has. Joy (2010) blames the media for having framed the meat-related discourses in a way that has often supported the existing state of affairs, by for example framing cases of clear animal cruelty in intensive agriculture as exceptions, omitting the discourse, or even sometimes prohibiting it. Stibbe (2018) demonstrates how the global meat complex tries to manage the images of meat and of the industry itself, reinforce the positive stories around meat that benefit the industry, and create uncertainty about the science on the negative impacts from the meat system. Nestle (2018) points out how the meat industry produces its own biased research in order to keep meat's image positive, or at least neutral.<sup>97</sup> Austgulen (2014) suggests that lack of consensus on the issues around meat, and in particular around negative and positive aspects of meat production and consumption present in the public discourse, confuses the public debate, and may act against change. It may be argued that this not only benefits the global meat complex but could even be encouraged by them (see also Stibbe, 2018).<sup>98</sup> Complexity gives an advantage to those opposing reductions in meat eating (e.g. the industry), as it is easy to create uncertainty from complexity (Wellesley et al., 2015). Such tactics would then compare to the tactics used earlier, for example, by the tobacco industry “to fatally undermine public understanding and encourage ignorance in even the most clear-cut of public health issues” (Christensen, 2008:266).

The data I have analysed and will discuss in Chapter 5 reflects some of the narratives and discourses described above. In the rest of the current chapter, however, I will explore some issues related to the transformation of the meat system.

### 2.3 The sustainable future of protein?

Reducing or eliminating meat from our diets is considered “outstandingly” efficient as a way for people to have a positive impact on climate (e.g. de Boer et al., 2016). Further, for example Davis et al. (2016) agree in their study with many other researchers that societies simply cannot move into sustainable global food production and reduce our water, nitrogen, carbon and land footprints enough to account for the growing world population, unless the intake of animal-based proteins is radically reduced. The next sections will look at the possible pathways to changing the course. The options proposed as replacements for (at least some) conventionally

---

97 Nestle (2018) points to a new tactic by the industry in positioning meat as a health food.

98 An unexplored issue is whether the food industry has attempted to shape discourses by e.g. purposefully participating in online discussion, similarly to what has happened in (other) political online discussions (see e.g. <https://www.theguardian.com/us-news/2017/oct/14/russia-us-politics-social-media-facebook>).

produced industrial meat, such as plant-based or cultivated meat, and insects will be examined, and simply eating less meat will be discussed as well.

### 2.3.1 Peak meat

Similar to keeping much of the oil in the ground to move to a sustainable, fossil-free future (the *peak oil* discourse), there could be a peak meat moment.<sup>99</sup> In other words, industrial meat production and consumption could have reached its peak, at least in the Global North, and be eventually on its way down — unintentionally, or intentionally.

Scenario research indicates that reducing meat production and consumption can have a significant effect on GHG emissions. For example, Westhoek et al. (2014) calculate that a 50% reduction in all meat, dairy and egg (production and) consumption in the European Union could reduce agricultural GHG emissions in the EU up to 42%, in addition to leading to what is currently considered a healthy level of saturated fat and red meat consumption. Further, Rööös et al. (2016) build scenarios based on agroecological principles whereby meat (production and) consumption would be cut by 60-80%; such diets could be produced using globally fair land attribution, and the climate impacts would be within the 2-degree pathway.

There are basically two main approaches discussed in literature for intentional reduction in meat (production and) consumption, reviewed e.g. in Verain et al. (2015). The first can be called *weak* sustainable meat consumption, as it includes relatively minor adjustments to consumption patterns, choosing products that are less burdening to the environment, either by being more sustainably produced meat products or by having a lower meat content. More sustainably produced meat could consist of a switch between beef and chicken, or it could originate from overall more efficient production. The latter option would most likely result in further global expansion of intensive animal agriculture which could, however, produce lower GHG emissions per unit of production, although the extent of this benefit may have been overestimated (see Hayek, 2019). Advocating for minor reductions in meat eating would belong to this approach. While such “green” meat production or consumption might be preferable by most stakeholders, it has been argued that it would not result in large enough, and fast enough absolute reductions in the negative impacts from the meat system, especially concerning the dual crises

---

99 The term “peak meat” has been used e.g. by Spiller and Nitzko (2015), and also in the media, e.g. in a 2013 Guardian article <https://www.theguardian.com/sustainable-business/sustainable-meat-vegan-vegetarian-celebrities>. In these contexts, it refers to a reduction that is not collectively and purposively designed.

of climate and biodiversity.<sup>100</sup> Indeed, if it entailed a further expansion of intensive animal agriculture, it could even lead to an increase in negative impacts (see e.g. Henning, 2016, on FAO's recommendation to accelerate the intensification of animal agriculture in the Global South). Likewise, any rebound effects, such as increased meat exports as a response to falling domestic consumption would be likely to cancel any positive impacts at a global level. Weak sustainability as such could be an entirely separate trajectory, not leading to strong sustainability, as argued by Voget-Kleschin et al. (2015).

The second approach can be called *strong* sustainable meat consumption, and it involves radical changes to the system, substantial reductions in, or the elimination of, intensive meat production, and radical behavioural dietary change, at a global level wherever this is achievable. The far (and as of today, very unlikely) end of this path is a world where everyone is vegan. This approach relates to the *sufficiency* concept in sustainable consumption policy and research (see also Verain et al., 2015).<sup>101</sup> An option less explored in theory, this approach would likely lead to faster and more relevant changes, bringing about large absolute reductions in meat production and consumption and the related negative impacts. Subsequently, this pathway would result in large positive impacts, e.g. in terms of human health, significantly reduced GHGs and air and water pollution, and in terms of rewilding of landscapes.

The scale of transformation in the strong sustainability approach is daunting. However, meat consumption can be argued to differ somewhat from certain other areas of consumption. Firstly, the challenges are felt at two levels, very personal — most people are strongly attached to eating animals, even with the conflicts involved — and systemic (changing the protein production systems). To compare, transformation in transport may have some common features — e.g. with people arguing for a right to own private cars — but an energy transformation tends to be more about changing the system, and to some extent less about equally personal or identity related issues. Secondly, there can be considered to be an aspect of “people power” in meat eating. In other words, in principle, and to some extent at least in practice as well, many people *can* have some say in what they buy, cook and eat, and therefore they can be, to some extent, steering the change. Especially

100 See e.g. Garnett (2011); Davis et al. (2016); Johns Hopkins Center for a Livable Future (2018); GRAIN-IATP (2018); Springmann et al. (2018); and Benton et al. (2021).

101 In this book, sustainable consumption generally refers to “sustainable resource consumption, taking into account the complete product life cycle”, and involving the “consumption patterns of industries, governments, households, and individuals” (Lorek & Fuchs, 2011:36). More specifically, the Oslo Roundtable (1994) has defined sustainable consumption as “the use of goods and services that respond to basic needs and bring a better quality of life, while minimising the use of natural resources, toxic materials and emissions of waste and pollutants over the life cycle, so as not to jeopardise the needs of future generations”.

due to the disruption the new meats bring, this can be so *despite* the power structures in societies.<sup>102</sup> Again, to compare, bringing change from the bottom up in transport or energy is likely to be even more challenging for individuals. Chapter 3 will further discuss such potential agency, while the next section of this chapter will look at existing attempts by societal actors at changing things around meat. Subsequently, Sections 2.3.3 and 2.3.4 will still review the main current or future options for replacing meat.

### 2.3.2 Potential and real action for change in the present

At the level of the discourse, there are changes taking place (see Section 2.2.2), spurred by increased scientific knowledge of the various crises related to the meat system, and with the media playing a large role in the new discourses, and with some NGOs raising awareness. As mentioned earlier, at the level of actual meat consumption, data up to date shows no real change from business as usual, although there does *appear* to be an increasing number of people in the Global North experimenting with a vegetarian or vegan diet in the last few years. While the global meat complex is generally likely to prefer, or even try to maintain ignorance (see e.g. Stibbe, 2018), a small but increasing number of industry-related actors have responded with new technologies, products and investments (such as cultivated or plant-based meat).<sup>103</sup> The internet is inevitably assisting the spread of doubt about the relevance of the issue, but campaigns for change can likewise spread through the internet.<sup>104</sup> Finally, and perhaps most importantly, governments have been largely inactive in terms of policy measures until now (see e.g. Spiller & Nitzko, 2015; Wellesley et al., 2015). Wellesley and colleagues refer to a *cycle of inertia* to describe the negative feedback loop between low awareness, policy priorities and overall inaction (see Figure 2.10).

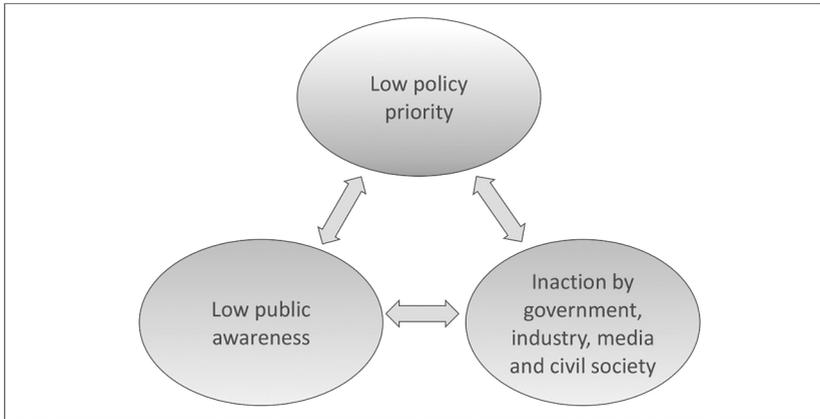
Breaking this cycle must be a policy priority, according to Wellesley et al. (2015). They argue that the governmental inaction regarding meat comes from fear of public backlash (seeing meat as taboo), fear of industry resistance, lack of (evidence-based) research, lack of issue visibility in discourses (until very recently), and possibly lack of awareness among policymakers until recently. Governments have perceived the issue as too controversial and too challenging. However, Wellesley and

102 See Fuchs et al. (2016) for a critical discussion of the power structures that tend to inhibit change towards sustainability.

103 Some major investment funds have also encouraged food companies to shift more to plant-based foods, see <https://www.reuters.com/article/us-investors-food/investors-urge-food-companies-to-shift-from-meat-to-plants-idUSKCN11WoKH> from Reuters on 26 September 2016.

104 See e.g. <https://www.lessmeatlessheat.org> which "aims to devote all of its effort to addressing the most powerful driver of climate change (livestock agriculture) through the cheapest and fastest way possible (behavioural change)".

Figure 2.10: *The cycle of inertia*



Source: Modified from Wellesley et al. (2015).

Note: The essential difference to the original figure is that its unidirectional arrows (clockwise) have been replaced by bidirectional arrows.

colleagues maintain that “public outrage and tacit acceptance should not be considered mutually exclusive” (idem:16), and their own research indicates that initial public resistance to changes can be overcome. This matches with the understanding that value dispositions can change during the process, rather than them having to change first (as I will discuss in Chapter 3).

Further, Wellesley et al. (2015) assume that governmental intervention at national and international levels would be necessary for larger-scale action among populations themselves to reduce meat eating, and similarly, businesses lack incentives to reduce production on their own and therefore need governmental support. Indeed, the focus group research done by Wellesley and colleagues suggests that populations (in otherwise diverse societies)<sup>105</sup> feel that governments must take the lead, and when they do not, this is a signal of the unimportance of the issue.

In general, governments tend to assume individual behaviour change as the solution to many areas within sustainability (e.g. energy use), but seemingly not so within meat.<sup>106</sup> I see this as a kind of (governmental meat) paradox, as opposed to the other meat paradox, mentioned earlier and discussed further in Chapter 3, as

105 The focus group research was done in the US, the UK, China and Brazil, and similar results in this issue were found in all four countries.

106 And meat is treated differently to other foods, where governments do encourage people to eat differently. Arguably in an obesogenic environment, eating fewer fattening foods as such

effective individual change is in principle *more* feasible within meat consumption than within many other areas of consumption, and yet, it has not been supported by governments. This is so in particular at the present moment with an increasing amount of seemingly good alternatives available. Individual action, especially in something where it is more feasible, can be a prerequisite for political change. As discussed in Chapter 3, political change can also change individual attitudes and values. These two combined could enable a *positive* feedback loop, a cycle of action for change.

Lastly, Wellesley et al. (2015) discuss industry power. Food businesses hold enormous sway over influencing the publics in terms of advertising,<sup>107</sup> and therefore, “in the absence of industry buy-in or regulation of private-sector marketing, government-led nudges would be unlikely to trump those of food retailers” (idem: 13).<sup>108</sup> Although they do not go into details regarding what the industry buy-in could entail, it is considered essential by Wellesley and colleagues and should cover a variety of industries with a stake in meat production, such as feed, livestock, meatpacking, pharmaceutical and food retail industries.<sup>109</sup>

As regards further recommendations on how to make real change, Box 2.3 highlights two in-depth discussions on how to transform meat-eating related practices towards radically lower meat consumption. The first is from the book by Marta Zaraska (Zaraska, 2016a) on the long-term human species’ dependency on meat, and the second is from the Chatham House Report (Wellesley et al., 2015) looking at different pathways to lower meat consumption. The recommendations as regards these two documents are similar, with Wellesley and colleagues being more detailed, however. Both sources focus more on shrinking the consumption side, albeit comprehensibly, and on changing production mainly by indirect financial means. While they do not include more radical methods of transformation, they do both include discourses, changing meanings, the new meats and the idea of co-responsibility (at least between governments and civil society, including individual citizens), topics for Chapter 3. The results of adopting the suggestions could in principle fundamentally change the system, and radically reduce consumption, which already implies following the principle of strong sustainability.<sup>110</sup>

---

can be difficult. Of course, some of those foods, such as hamburgers, have had conventional animal-based meat as an essential element.

- 107 Six of the ten largest global advertisers in terms of spending in 2013 were food and beverage companies (Wellesley et al., 2015).
- 108 On the other hand, Wellesley et al. (2015) argue that governments could well use tactics similar to industry advertising and marketing in their anti-meat messaging.
- 109 Fuchs et al. (2014) offer another important contribution on meat industry power.
- 110 One more comprehensive list of measures, similar to the ones in Box 2.3, but in fact closely following the elements of social practices in Shove et al. (2012) are included in Jallinoja et al. (2016, see especially their Table 5 on p. 11). Further, Rothgerber (2013) includes several sug-

### Box 2.3. Ideas for a transformation towards sustainable meat production and consumption

Zaraska (2016a) discusses the main elements of a purposive stage five nutrition transition, mentioned earlier in this chapter as a more “natural” phenomenon of societies moving towards eating less meat after a certain level of income is reached. Zaraska’s main points about this transition include:

- Raising awareness about the “factors that drive our food choices, instead of blindly following our routines, our culture, and [industry] advertising” (p. 201) should be the first step in the change. Zaraska believes that cultivated and plant-based meat and insects will change our attitudes towards meat, and result in us radically cutting the consumption of animal-based meat: “once the idea catches on, it may quickly gain traction” (p. 198).
- Incorporating new meats (such as plant-based or cultivated meat) into diets gives people the taste of meat, while pulses satisfy the “protein hunger”.
- New governmental policies can divert subsidies, establish a meat tax, and change certain laws, such as the United States ag-gag law favouring the meat industry.<sup>111</sup>
- A certain amount of “propaganda” for vegetarian diets is necessary. Using imagery similar to what the meat industry uses, such diets should be presented as convenient, economical, positive, and as something that can make a person strong and beautiful. Some of this, Zaraska argues, can be done by people themselves, for example, creating positive associations of vegetarian meals by pairing them with a delicious dessert, or by grilling vegetables in the summer barbecue, instead of sausages.
- It would be important to be flexible with dietary purity, in the form of seeing part-time vegetarianism (flexitarianism) as positive, rather than as negative.
- It would be essential to try to work with the meat industry, rather than be against it.<sup>112</sup>
- The actual impact (e.g. in terms of the environment) of changes is crucial, and considering this, Zaraska points out that strong flexitarianism may be better than vegetarianism with a lot of cheese, milk and eggs.

Wellesley et al. (2015) argue that short-term change should focus on reducing meat consumption, i.e. eating in moderation, rather than entirely substituting meat, while

---

gestions for changing attitudes and perceptions of norms, raising awareness and redefining the link between masculinity and meat eating.

focusing on larger shifts in the status of plant-based and meat-based diets. Their further recommendations include the following:

- National debates should be initiated on meat consumption by considering different national contexts (political, social, cultural); focusing messaging on co-benefits of reducing meat (health, price, local environmental concerns, food safety, food security), and using simple messaging (“hard-hitting facts and visual linkages between meat, dairy products and climate change”, p. ix). Further, governments, academia and civil society groups should be connected to media around the issue, and responsible businesses and celebrities used in messaging about new social norms and reduced consumption.
- Comprehensive approaches should be pursued by making meat alternatives (plant-based or low-meat) better available to consumers in shops, cafeterias etc.; using public procurement to promote alternatives (e.g. in schools and hospitals, or agreeing targets with firms); focusing on pricing (meat more expensive, vegetables and meat alternatives less expensive) and taxes (carbon tax); removing subsidies for meat and subsidizing existing plant-based alternatives; being prepared to review and revise policies, as more knowledge is built up regarding what works; supporting innovation regarding the development of new plant-based (or low-meat) alternatives, along with cultivated meat; increasing education about what a well-balanced diet consists of (against the current *protein transition* to more meat and increasing use of industrial foods), as well as education regarding preserving food traditions and knowledge about food preparation.
- The case for governmental intervention should be built by figuring out economic costs of inaction, and gains from action (reduced consumption); aligning with sustainable development goals and Paris climate agreement; focusing on new sustainable food guidelines with recommendations to reducing meat; generating more research on encouraging individual behaviour change (comparing to other nutrition interventions, e.g. with sugar); developing *consumption-based* national GHG emission targets (current ones are production-based and not as effective); and making consistent policy, i.e. taking the issue into account across various governmental ministries.
- Finally, *change agents* should include, firstly, celebrities who can reach socio-economic groups that can otherwise be difficult to reach, and secondly, women who can be first movers in a transition to eating less meat (an indication from many of the surveyed countries in the Chatham House Report), due to their generally lower will to eat meat, and their often central role in food provision.

Box 2.3 focuses on medium- to high-level meat consuming populations everywhere. Regarding the low-meat consuming populations in the Global South, Garnett (2012) notes that there needs to be much more research on what a healthy and sustainable diet could look like in many, especially low-income developing country contexts. Also the InterAcademy Partnership's report (IAP, 2018) suggests further research in this area.

Some small signs of actual change are emerging in treating interventions in meat eating as less of a societal taboo. For example, there have been sessions within the UNFCCC (COP) meetings on meat consumption in both 2015 and in 2017, although only on a very limited and unofficial scale.<sup>113</sup> Further, the SR1.5 report (IPCC, 2018) includes reduced meat eating as an option for limiting global warming to 1.5 degrees centigrade, and the land-use report (IPCC, 2019) discusses the relevance of reduced meat production. There has been some research at the EU level into a "what if" scenario, i.e. investigating the impacts from a more substantial reduction in meat eating in high-income countries (see Santini et al., 2015), although this scenario considers only an 11% reduction between 2014 and 2024, involving a doubling of the number of both vegetarians and flexitarians in this time.<sup>114</sup>

Until recently, options for governmental interventions explored in practice include some attempts at obligatory vegetarian days (perhaps most famously in Ghent, Belgium, already since 2009), fat tax (in Denmark, however, abolished soon after its enactment), and new nutrition guidelines, based on both the most up-to-date science on human health and environmental sustainability aspects. This last option is perhaps the safest for governments, being a rather low profile, and a passive form of policy action, yet at the same time, such guidelines can send a powerful message to society. They are also the basis for nutritional education in schools. In the following, I will give a brief review of the current state of affairs as regards dietary guidelines.

The official dietary guidelines in European countries and elsewhere, generally adopted after World War II, have been going through several periods of adjustment, and the national dietary guidelines have been quite diverse. Some of the newest guidelines aim to bring more consistency with the current science and between different (European) countries, while taking local food cultures into account

111 The ag-gag laws make it illegal in the United States to record animal rights abuses (with video or photos) within industrial animal agriculture facilities.

112 Zaraska mentions the Dutch brand Vegetarian Butcher as an example of one type of working with the industry.

113 See <https://euobserver.com/environment/139869>, an article in EU Observer on 14 November 2017. Further, COP24 in Katowice, Poland, and the COP25 in Madrid, Spain, included some more discussion on meat.

114 The number of vegetarians was estimated at 3%, and the number of flexitarians at 15% (eating 50% of the average per capita meat consumption) in 2014.

(see EUFIC, 2009). The Mediterranean diet (already part of the national guidelines in Greece) which encourages the consumption of red meat only occasionally, is supposedly taken into consideration. However, until lately, recommending a limit to meat for health purposes has been rare, and considering sustainability rarer still. The guidelines are generally a compromise between the priorities of different interest groups, such as the food industry and scientific experts, and are often published by governmental departments or agencies dealing with the food industry as well (Korthals, 2016). Such is the case in the United States where the USDA is responsible for both nutrition guidelines and the promotion of the food industry. Consequently, the USDA has had an informal policy to avoid saying that the US population should be eating less meat, or any other food for that matter (Foer, 2009).<sup>115</sup>

Gonzalez Fischer and Garnett (2016) and Springmann et al. (2020) have reviewed official dietary guidelines from recent years. Currently, there are guidelines for over 100 countries.<sup>116</sup> Of these, only a handful of countries (such as Germany, Brazil, Canada, Sweden, Denmark, UK, and China) have published official dietary guidelines that include some (implicit or explicit) aspects of sustainability of foods and eating.<sup>117</sup> Some countries (such as the US and Australia) have attempted to include these, but (at least in some cases mainly due to industry pressure) the final guidelines have excluded sustainability aspects. Several other countries do include some sustainability in unofficial guidelines. Generally, however, even when environmental sustainability is included, the messages are not radical, as the limits on meat are often not very far from the average intake (Gonzalez Fischer & Garnett, 2016), and demand for meat-like alternatives to meat is not stimulated by these guidelines (Korthals, 2016). However, it is still significant that pulses are promoted as a healthy protein alternative, in at least some of these new guidelines.

The 2021 Danish guidelines remarkably take food related CO<sub>2</sub> emissions into account, and consequently recommend limiting the amount of meat, especially

---

115 The USDA dietary guidelines for 2015-2020 were the first US guidelines to include a message about some people (teenage boys and adult men) potentially eating too much meat. They implied that limiting red meat might be a good idea. However, 111 g of meat (red meat, chicken, eggs) a day was recommended for a 2000 kcal diet, and this is still a rather substantial amount nonetheless. The 2020-2025 US guidelines maintain the recommendation, and no longer imply that there could be population groups eating too much meat.

116 At the time of the publication of the report in 2016, there were 83. Since then the number has grown significantly, which is something to note in itself. See <http://www.fao.org/nutrition/education/food-dietary-guidelines/en/> for up-to-date details.

117 Sustainability is mostly focused on environmental sustainability in these guidelines (except for Brazil), not social or economic sustainability.

red meat. They also recommend high intake of pulses, as much as 100g a day.<sup>118</sup> Similarly, the new Canadian guidelines from 2019 seemingly encourage people to eat more plant-based proteins, e.g. pulses, than meat. They are also very comprehensive in offering food, nutrition, and eating-related advice.<sup>119</sup> One of the other somewhat stronger messages in terms of cutting down on meat eating comes from the newest 2016 UK guidelines where meat is far down the list of proteins to choose from: “Eat some beans, pulses, fish, eggs, meat and other proteins”.<sup>120</sup> Moreover, the new guidelines in France (a traditionally meat-heavy food culture) from 2017 include some limits to meat, while giving pulses a greater role.<sup>121</sup> Finally, the official Chinese dietary guidelines from 2016 include a recommendation to limit meat consumption to about 50% of current consumption among the Chinese. Tian et al. (2016) consider that the most important reasons for the policy shift would be, firstly, that the increased meat eating is negatively affecting the health of the Chinese population, and secondly, that meat production is consuming too much grain that could be eaten by people instead. The Chinese Nutrition Society launched a Less Meat Less Heat -campaign in China in 2016 seemingly aiming for cuts in meat eating to also reduce GHGs.<sup>122</sup> Different from the national guidelines dependent on national politics, a Planetary Health Diet was developed in 2019 (Willett et al., 2019). These universal diet guidelines take into account both planetary boundaries and human health, and could become a significant reference source.<sup>123</sup>

Further, how an intentional increase in meat prices, for example, through a meat tax, or through eliminating governmental subsidies for animal agriculture, would affect meat eating, is not only largely unexplored (but see Springmann et al., 2016), but still a controversial matter (see e.g. Dagevos & Voordouw, 2013; Laestadius et al., 2014). Likewise, Hunter and Rööös (2016:151) argue that “government policy [regarding food] rarely leverages such tools [as direct price intervention, taxation or limiting access] because they are deeply unpopular with consumers and not

118 See <https://altomkost.dk/raad-og-anbefalinger/de-officielle-kostraad-godt-for-sundhed-og-klima/spis-mindre-koed-vaelg-baelgfrugter-og-fisk/> (in Danish).

119 See <https://food-guide.canada.ca/en/>.

120 From <http://www.fao.org/nutrition/education/food-dietary-guidelines/regions/countries/united-kingdom/en/>.

121 See e.g. <https://www.foodnavigator.com/Article/2017/01/30/French-agency-ANSES-slashes-recommended-meat-intake-in-new-guidelines>.

122 See <http://www.fcrn.org.uk/fcrn-blogs/lucy-luo/new-chinese-dietary-guidelines-%E2%80%93-what-do-they-really-say-meat-consumption-and-for-the-interpretation-of-the-chinese-guidelines-from-2016>, and for the (originally Australian) Less Meat Less Heat campaign which aims to have a global impact.

123 According to the Planetary Health Diet, a healthy daily meat intake (healthy for the planet and for humans, considering a 2500 kcal diet) of meat and eggs is 56 g and the same for pulses is 100 g.

without political risk". Although research has indicated that meat pricing might not be very effective in directing people's consumption, especially in the Global North (e.g. PBL, 2008), other recent empirical evidence offers some support for the idea of a meat tax (Bailey & Harper, 2015; Wellesley et al., 2015). When asking focus groups in China, Brazil, the United States and the United Kingdom, Wellesley et al. (2015) found that meat tax was considered unpopular and unfair (towards the poor), but still possibly efficient.<sup>124</sup> Comparing to sustainable mobility, pricing measures are seen equally unfair, but restrictions and banning (car use in certain locations) can actually be considered both fair and effective by people, even if it restricts their freedom of choice (Gärling & Friman, 2015).

An issue less often considered when discussing reductions in meat production and consumption, is the rebound effect. In this context, it can take two forms. Firstly, at an individual level, reduced eating of intensively produced meat may be replaced by eating correspondingly more other unsustainable animal protein, such as fish, cheese or eggs (Hartmann & Siegrist, 2017), or organically produced meat which shares many problems with intensively produced meat (Foodwatch, 2009; Steinfeld et al., 2006).<sup>125</sup> Secondly, there can be a rebound effect at the global level whereby a decrease in meat eating in the Global North leads to increased consumption in the Global South, via production or exports moving more towards the South, and/or by lower world market prices for meat (resulting from lower demand in the North) enabling the creation of new, or higher level meat consumers in the South (Spiller & Nitzko, 2015). The more inclusive in terms of conventional animal-based products and more global the transformation, therefore, the better such negative impacts (for sustainability) can be avoided.<sup>126</sup>

In addition to such negative spillover effects, there can be positive spillover effects (de Boer et al., 2016) whereby a change in meat eating at a personal level can lead to positive changes in other areas of personal life, such as energy use, due to interconnected goals or shared underpinning values being engaged by such action (Sanderson, 2014). Even eating organic meat — although not better, and sometimes slightly worse, than intensively produced meat in terms of climate change or deforestation — can have such positive spillover effects (while potentially having negative spillover effects, as mentioned above). More generally, studies done by

---

124 See Springmann et al. (2016) for an evaluation of such a tax.

125 Also, people may engage in moral licensing whereby they compensate one moral behaviour with another immoral behaviour (see e.g. Nash et al., 2017).

126 Thirdly, if the production side is the primary focus, and not consumption, increased efficiencies in livestock production (e.g. through increased crop yields or livestock feeding efficiencies) can result in a rebound effect and actually increase consumption or provide incentives for increased production, e.g. farming more land (Smith et al., 2014).

Lacasse (2016) indicate that labelling someone (after them having behaved pro-environmentally) as an environmentalist can lead to stronger positive spillover effects than not labelling them.

Even when policymakers have difficulties engaging in the issue, there would be ample space for environmental and other civil society organisations to campaign for meat reduction more efficiently and on a broader scale than they have until now (see Laestadius et al., 2014), using methods such as those in Box 2.3.

As I will argue in Chapter 3, both the new meatways and the related new discourses can have their own agentive power. In the next section, I will, therefore, review the new meatways, as real current and near-future food choices.

## 2.3.3 Some comparisons of the new meatways

### 2.3.3.1 Radical vs. incremental change

Shove (2010:1278) argues that radical innovations “redefine the rules of the game; [...] render previously important forms of competence redundant; and [...] reconfigure interpretations of value and significance”. I suggest that the new meats — such as cultivated meat, insects (“new” in the Global North), or the new plant-based meats — can be considered radical innovations. I would consider even *strong flexitarianism*, whereby flexitarians eat conventional, animal-based meat occasionally (and various alternatives, including pulses, as their more typical diet), a radical innovation for the present, even if it is, at the same time, a very old way of eating, and globally, most people actually are flexitarians to some degree at least, even if they do not call themselves that (Hicks et al., 2018).<sup>127</sup>

If adopted widely as new practices of eating meat, these new meatways (eating new meats and flexitarianism) could have huge impacts on existing multi-billion industries, while creating new ones. They could redefine what meat, or meat eating, signifies for most people. They could also partly reconfigure the values people attach to different ways of eating. For example, the strictness inherent in vegetarianism and veganism loses ground to the flexibility in flexitarianism. Eating meat occasionally is considered normal in strong flexitarianism, whereas it is usually seen in a negative light in vegetarianism or veganism, by both vegetarians/vegans

---

127 Using the Shove (2010) definition for radical innovation, strong flexitarianism redefines the rules of the game with the idea of sufficiency, i.e. accepting much lower levels of production and consumption than would be “possible”. Further, strong flexitarianism can render previous forms of competence redundant, if it leads to a large scale, or global, transformation of massive intensive production to smaller scale extensive production of meat. Moreover, strong flexitarianism reconfigures interpretations of value and significance by, for example, redefining what eating meat signifies in a system and society where it is eaten only occasionally, as a special treat. Finally, incorporating the new meats into flexitarian diets would redefine the meaning of “meat” as such.

themselves and those around them. A potential breach of identity as a vegetarian or vegan may lead people to give up their vegetarianism or veganism and join the ranks of *former* vegetarians or vegans who, in fact, often end up being flexitarians, even if they would not identify as such (Asher et al., 2014).

*Weak flexitarianism*,<sup>128</sup> whereby change is only small-scale and incremental, is unlikely to lead to radical impacts on its own. It is, however, easily argued to be a possible stepping stone for more radical change. The potential downsides to this approach range from the case where such a process from incremental to radical takes too long to have a timely and large enough impact, to the case where the development from weak to strong flexitarianism truly never takes place, and the incremental “first” step remains the only step (for this, see a review by Nash et al., 2017). Similarly to weak and strong sustainability (see Voget-Kleschin et al., 2015), weak flexitarianism may well be an entirely separate trajectory from strong flexitarianism, where the first does not lead to the second. Taking only a small step into flexitarianism could also create a rebound effect or engagement in moral licensing (whereby people engage more in other unsustainable actions) negating any positive impacts from the incremental change. The behaviour-impact gap is a crucial, but frequently overlooked concept (see Csutora, 2012; Geiger et al., 2018; Gjerris et al., 2016).

In their discussion on various pathways towards sustainable meat eating, Ve-rain et al. (2015) distinguish between radical and incremental change. However, they look at the definition from the point of view of the eater, so that in radical change, fundamental changes are made in meat consumption patterns. I would argue that, although fundamental changes may be required in terms of consumption (or production), the principal difference between radical and incremental change might be better defined in terms of impacts, rather than in terms of how difficult such change may be to consumers or other parts of society. Defining the radical/incremental contrast in terms of impacts helps us focus on what really matters — a way out of the crises — rather than how difficult the change may, or may not be. Radical change is very often difficult as such, and although focusing on the difficulties may be important for achieving change, the radical reduction in impacts is the ultimate goal.<sup>129</sup>

---

128 Terms “heavy flexitarianism” and “light flexitarianism” exist as well (see e.g. Dagevos and Voordouw, 2013). However, there are two reasons why “strong” and “weak” may be better terms. Firstly, they align with strong sustainability and weak sustainability, and the radical vs. incremental nature of change in these. Secondly, “heavy” can be seen as negative (e.g. referring to weight of a person), whereas “strong” is normally seen as positive, and vice versa, “light” is more likely to be seen as positive, and “weak” as negative. The signals are therefore pointing to the wrong direction with “heavy” and “light”.

129 Radical change in terms of impacts might mean, for example, that less land is needed for agriculture in the future than currently, even with the expected global population increases,

### 2.3.3.2 The new meats

The new meats — cultivated meat, the new plant-based meats<sup>130</sup> and insects — have created high *expectations*, even hype. Donaldson (2016b) refers to “redefining the game” with the new meats.<sup>131</sup> Cultivated meat is promoted by its advocates as a wonder solution to the meat crisis,<sup>132</sup> similar to those promoting the new plant-based meats.<sup>133</sup> Apart from the obvious difference in origin and production methods, one of the main differences between these two new meats is that cultivated meat is only gradually becoming a real available product,<sup>134</sup> whereas the new plant-based meats have already been that for some time. However, even the high-tech plant-based meat is still rather new, and only available in somewhat limited locations, which on its own may increase the hype. Further, even insects have created some degree of hype, although considerably less so.<sup>135</sup> Insects are of course an ex-

---

or that the species extinction rate decreases rather than increases. Or, it might mean that GHGs produced by agriculture are made as low as possible, not in the current system, but in a transformed agricultural system. Or, that waterways recover and become less polluted by agriculture, even with population increases.

- 130 Plant-based meat substitutes as such are of course not a new phenomenon, with tofu being the oldest and going back two thousand years in Asia. Tofu and other somewhat older meat analogues, developed in the last few decades, are not covered in this book, as they have mostly been considered and marketed for vegetarians or vegans until now, rather than for meat eaters. While tofu never even intended to resemble meat, also the older meat analogues have actually not resembled meat very much, except perhaps in appearance. In comparison, the new plant-based meat is intended to be much more meat-like, and the more they develop, the more meat-like they are expected to become, in texture, appearance, mouthfeel, smell and taste, up to the point of being identical to meat in these respects. In this book, I usually refer to new (or new generation/high-tech) plant-based meats when referring to these meat substitutes. For an overview of both cultivated and plant-based meat, see Dance (2017).
- 131 Some of the related popular book titles from the last couple of years include: “The future of meat without animals” and “Clean meat: How growing meat without animals will revolutionize dinner and the world”.
- 132 This was clear, for example, in a panel discussion at Stanford University <https://ethicsinsociety.stanford.edu/events/meat-without-animals-considering-cellular-agriculture>, from 12 January 2017. See also <https://gizmodo.com/behind-the-hype-of-lab-grown-meat-1797383294>.
- 133 See e.g. <https://www.theguardian.com/commentisfree/2017/apr/18/veggie-burger-clean-meat-revolution-plant-foods-animals> from 18 April 2017.
- 134 A significant step was taken in late 2020 when food authorities in Singapore approved cultivated chicken for sale. See <https://www.theguardian.com/environment/2020/dec/02/no-kill-lab-grown-meat-to-go-on-sale-for-first-time>. It is currently possible to taste (but not buy) cultivated chicken at a restaurant in Israel. See <https://www.theguardian.com/food/2020/dec/04/no-kill-lab-grown-chicken-burger-restaurant-israel>.
- 135 See e.g. <https://www.theguardian.com/lifeandstyle/2013/aug/05/can-eating-insects-feed-world> from 5 August 2013, or [https://www.ted.com/talks/marcel\\_dicke\\_why\\_not\\_eat\\_insects](https://www.ted.com/talks/marcel_dicke_why_not_eat_insects), a TED talk from 2010.

isting food, but not on the scale (and not with the price) that would be required, if they were to replace a significant part of currently produced animal-based meat.

It is only relatively recently that meat analogues have been marketed and regarded as food for those eating conventional animal-based meat, i.e. non-vegetarians,<sup>136</sup> and the new plant-based meat, such as the products from Impossible Foods or Beyond Meat have non-vegetarians as their main target market. This is a significant change and can have an impact on redefining meat. Chapter 3 will discuss further the question of what meat is.

As such, new technologies tend to create hype, which is argued to be a necessary part of their development (see e.g. Magnuson Chiles, 2013). A central idea in the *sociology of expectations* is that “speculation upon what might happen tomorrow makes things happen in the present day”, i.e. expectations are performative (idem:514). Usually, there is a contrast between positive and negative expectations, and the media plays a central role in creating and maintaining these expectations, and therefore, it also plays an important role in creating the future.

To help avoid a significant behaviour-impact gap (Csutora & Zsóka, 2016), the real-world impacts of the various alternatives need to be thoroughly estimated. However, there is still little precise information on the impacts of especially large-scale replacement of conventional animal-based meat by any of the new meats, such as cultivated meat, new plant-based meats or insects. Figure 2.11 shows some comparisons of impacts as life cycle analyses, including pulses, and comparing the alternatives to the production of beef and other conventional animal-based meats and other protein sources. These graphs indicate that, although the range of estimates is rather large and quite high for energy use, especially for cultivated meat, the included new meats do come out well for GHGs and land use.<sup>137</sup>

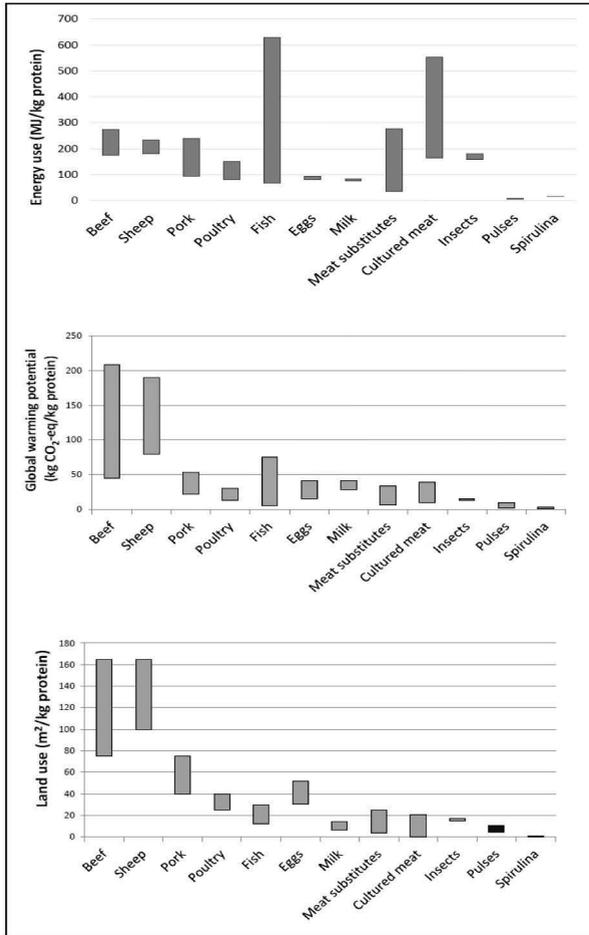
Further, in some situations, different studies can produce rather different results. With cultivated meat, the estimates are based on a handful of life-cycle analyses (mainly Mattick et al., 2015; Tuomisto et al., 2014; Tuomisto et al., 2017; Tuomisto & Teixeira de Mattos, 2011), and these results vary a great deal. Importantly of course, as cultivated meat is only in the process of becoming a real product, it is reasonable that estimates of impacts have a large degree of uncertainty, as different production methods related, for example, to bioreactor design and growth medium, are considered in different studies (see Tuomisto et al., 2017), and the future technology to produce cultivated meat most efficiently

---

136 An indication of this can be seen already in this 2012 news article <https://vegnews.com/2012/3/market-for-fake-meat-booming>.

137 Water use was not estimated in this study. Moreover, the meat substitutes do not include the new generation plant-based meat, but tofu, tempeh etc. (original data for these is from Blonk et al., 2008).

Figure 2.11: Energy use, greenhouse gas potential and land use of different protein sources



Source: Tuomisto et al. (2014) and Tuomisto et al. (2017).

Notes: The height of the pillars indicates the range of different results; cultured meat refers to cultivated meat; water use was not estimated in this study; moreover, the meat substitutes do not include the new generation plant-based meat, but tofu, tempeh etc. (original data for these is from Blonk et al., 2008).

may not even be known yet.<sup>138</sup> The eventual scale of production can make a large

138 One near future option for both cultivated meat (for the growth medium) and plant-based meats (directly) could be to use fermented protein produced directly from CO<sub>2</sub>, water and

difference as well. In particular, the large energy footprint of cultivated meat could come considerably down in the future (e.g. Smetana et al., 2015).

Moreover, Figure 2.12 shows a detailed comparison of different impacts from chicken, the most environmentally friendly from conventional animal-based meats, and various other protein sources, such as cultivated meat and insects, along with substitutes based on soy, mycoprotein (Quorn) and gluten. However, the newest meat analogues are not included.<sup>139</sup> In conclusion, cultivated meat does badly in this comparison, mainly due to the amount of energy currently required to produce it. Soy-based meats seem to have low impacts, and chicken and insects do not perform badly either in these estimates. On the other hand, Figure 2.11 indicates clearly that pulses<sup>140</sup> have the lowest environmental impacts of all the discussed alternatives, with a very narrow range of estimates.

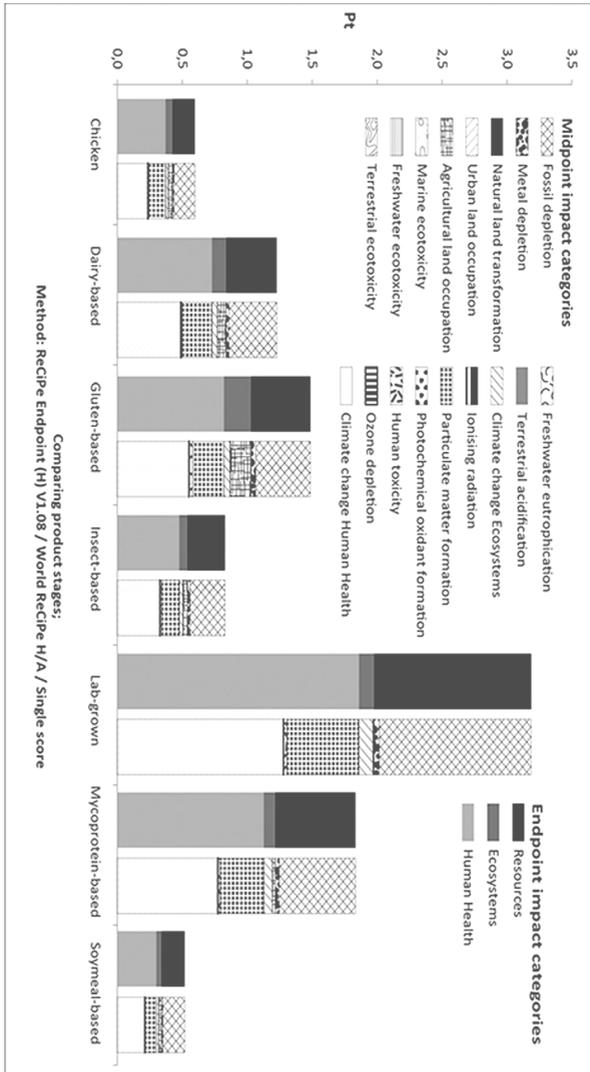
---

electricity. Pioneering start-up company Solar Foods has called their protein product Solein. Such “farm-free” food innovations could affect the footprints and prices of the new meats significantly. See e.g. <https://www.theguardian.com/commentisfree/2020/jan/08/lab-grown-food-destroy-farming-save-planet>.

139 Such as the products made by Impossible Foods, or Beyond Meat, i.e. products that are a focus in this book.

140 Together with spirulina, an algae.

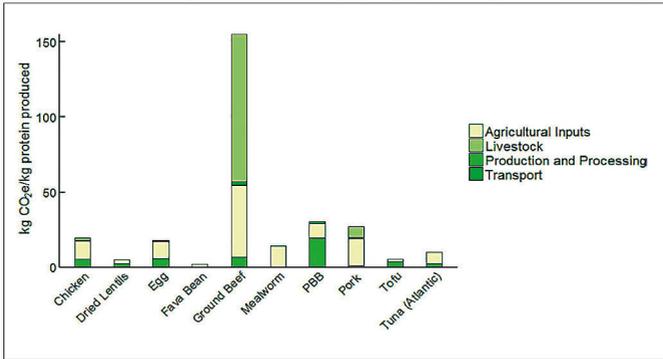
Figure 2.12: Life-cycle analyses — Comparing chicken with alternative protein sources



Source: Smetana et al. (2015).

Notes: Data unit is 0.3 kg of digestible protein; dairy-based alternatives refer mainly to milk and cheese; LCA methodology does not measure all impacts, such as animal welfare impacts; further, land-use change impacts are not included in the methodology of Smetana et al. (2015), although they argue that these are not substantial for soy meant for direct human consumption; Pt refers to points given for the scale of impacts.

Figure 2.13: Greenhouse gases embodied in different foods, including the Impossible Burger



Source: Goldstein et al. (2017).

Note: GHG emissions are measured in kg CO<sub>2</sub>e/kg protein produced. PBB stands for a plant-based burger, and the Impossible Burger, made by Impossible Foods, has been used for the calculations.

As regards the newest plant-based meats, such as the products made by Impossible Foods or Beyond Meat, there are, as of yet, few comparable life-cycle analyses done. The companies have done some of their own estimates, at least partly in cooperation with outside researchers, and in these, plant-based meat performs well, at least when compared to beef. One such study has been done by Goldstein et al. (2017) and contains a life-cycle analysis of the Impossible Burger. Figure 2.13 shows a comparison between the Impossible Burger (PBB) and other protein sources in terms of GHGs embodied in these foods.<sup>141</sup>

141 For water and land use, the company itself estimates that “one Impossible Burger uses about one quarter of the water [and] 5% of the land” as compared to a burger made from typical US-produced cows. (IF Sustainability Report 2017, available at <https://impossiblefoods.app.box.com/s/edwcfyvojzsvzn5d633dxt4c4ehyzqq3>. The energy requirements for Impossible Burger, on the other hand, are currently comparable to the low end of beef production (Rebekah Moses, Sustainability and Agriculture Manager of Impossible Foods, personal communication, 27 August 2018).

Table 2.1 gives a brief overview of the three new meats, cultivated meat, insects and plant-based meat, in terms of some of the main actors, issues and developments.<sup>142</sup> The most important aims with all such alternatives are, on one hand, to make something radically better from an environmental point of view as compared to conventional animal-based meat production, and on the other hand, to achieve wide acceptance of these foods as meat, as long as “meat” is considered a necessary element of food cultures.

Strong flexitarianism, which could be defined — in light of the new meats — as including any kind of meat, also plant-based or animal-based meat, or insects, only occasionally, and relying more on pulses for protein, seems overwhelmingly the best option for environmental impacts, while being a healthy option, and arguably healthier than processed foods in general, while fairly likely being ethically more just. Although the question remains, how to mainstream strong flexitarianism (occasionally eating meat), as opposed to weak flexitarianism (occasionally avoiding meat),<sup>143</sup> flexitarianism as a phenomenon is seen as a significant step towards sustainable meat future (see e.g. Verain et al., 2015).

However, it could be that the mere availability of the new meats can function as a way to open up, not only what meat is, but the daily practices of meat eating as well, and change the values attached to eating meat.<sup>144</sup> Because of the new meats, it could be possible for people to experiment with, not only the new meats themselves, but also with flexitarianism. The oppositional positioning between meat eaters and meat avoiders (vegetarians/vegans), which have until now determined each other (Arouna Ouedraogo, personal communication, 15 February 2017), might be eroding with the new meats and with the newly discovered option of flexitarianism which is less dogmatic and, therefore, creates less resentment (de Boer et al., 2014). Chapter 3 will discuss these issues further. But first, the next section will still have a look at pulses, as they are inevitably an important part of a sustainable future of protein.

---

142 The developments and the expansion of the number of actors within especially cultivated meat are rapid, and therefore, Table 2.1 only captures some of the main ones. The Good Food Institute is a good source for up-to-date information ([www.gfi.org](http://www.gfi.org)).

143 The term “flexitarian” originally referred to flexible (occasionally meat-eating) vegetarians, or semi-vegetarians, but now includes meat eaters who do not eat meat every day (de Boer et al., 2014). Strong flexitarianism can be seen to refer to the original meaning and weak flexitarianism to the newer meaning. In fact, many vegetarians are strong flexitarians, as they do occasionally eat meat, even if they identify as vegetarians.

144 Similar to what de Bakker and Dagevos (2012) argue could happen with extra focus on promoting organic meat.

Table 2.1: Some of the main actors, developments and issues related to new meats

<p><b>References (for technical details etc.)</b></p> <p><b>Examples of production and sale</b></p>	<p><b>Cultivated meat</b> (Bhat et al., 2014; Dance, 2017; Ferrari, 2016; Post, 2012; Stephens et al., 2018; Verbeke et al., 2015)</p> <p>Start-ups: Mosa Meats (NL), Memphis Meats (US), Modern Meadow (US), SuperMeat (LU) etc.; no consumer sales yet</p>	<p><b>Insects</b> (Defoliart, 1999; EFSA, 2015; Lundy &amp; Parrella, 2015; Tan et al., 2015; van Huis et al., 2013; Yen, 2015)</p> <p>Wild harvesting, semi-domestication, and some farming in the South, for domestic use and exports, e.g. Thailand; small, often online start-ups in the North, e.g. Snack Insects (DE), Tasty Bugs (NL), Dimini Cricket (FR), Tiny Farms (US); some North small to medium-scale farming, and restaurants with insect dishes</p> <p>FAO produced a landmark report in 2013 (van Huis et al., 2013); relatively large amount of academic interest in research; some EU funded projects, e.g. ProteinINSECT; policy interest in China (to note, 2<sup>nd</sup> global conference Insects to Feed the World was held in China in 2018)</p>	<p><b>Plant-based meat, the new generation</b> (Dance, 2017; Sexton, 2016)</p> <p>Start-ups: Impossible Foods (US), Beyond Meat (US) etc.; possibly included in this generation: Vegetarian Butcher (NL); restaurants and supermarkets especially in the US selling the new generation products; but expanding to other parts of the world</p> <p>New Harvest (US), Good Food Institute (US); Indleblo (US, start-up accelerator); Leonardo DiCaprio, Bill Gates; venture capital firms</p>	<p><b>Other orgs supporting with research &amp; PR; other investors</b></p> <p>New Harvest (US), Good Food Institute (US); ShojinMeat (JP); conventional meat companies, e.g. Tyson, Cargill investing; Bill Gates, Richard Branson; Indleblo (US, start-up accelerator); China (trade agreement with Israel)</p>	<p><b>History and state of play, what makes it special</b></p> <p>Over ten-year scientific development until now; many prototypes exist; tasting is currently possible in Israel (with SuperMeat) and Singapore will allow commercial sale in 2021 (chicken from US company Eat Just); animal-based without killing animals (in principle); several production techniques exist; a lot of media attention; part of a new discourse on clean meat (products) and cellular agriculture (field of science); promises to open up meat production (currently done behind closed doors)</p>	<p><b>Main issues for the future</b></p> <p>Finding inexpensive animal-free growth medium; scaling the production up, bringing the price down; making it safe (e.g. from pathogens) and efficient enough especially in terms of energy use; image building, overcoming disgust; legislative issues; critical issue: what would be the environmental impacts of large scale production of cultivated meat: if it were to replace conventional animal-based meat?</p>	<p><b>Legislative issues in terms of producers being able to call their products some form of "meat"</b> (e.g. France banned the use of words referring to meat, e.g. "sausage" in 2018 for plant-based products; other courts have considered similar bans); making the product enough meat-like to attract large numbers of meat eaters; image building; market building; environmental impacts of large scale production, if intended to replace meat?</p>
---	--	---	---	---	---	---	---

### 2.3.4 Pulses – The future new meat?

Since beans, lentils and other pulses are an important option for global future protein, they are included here, although pulses cannot yet perhaps be considered a new meat as such.<sup>145</sup> While being an important part of the diet in many countries, especially in the Global South, and traditionally in some European countries, especially in Spain,<sup>146</sup> pulses have not until now generated much interest as part of the solution narrative to the meat crisis, as mentioned earlier in Section 2.2.2. This is despite them being excellent from a nutritional point of view (see e.g. Asif et al., 2013; Mudryj et al., 2014), and from an agricultural point of view, especially in terms of soil health (see e.g. FAO-FNS Forum, 2016). There are some recent research developments, such as efforts to breed short-cooking beans (see e.g. Meadows, 2016) or to collect better data for assessing the production possibilities (Cernay et al., 2016), and the United Nations International Year of Pulses in 2016 has inspired new research in the area, especially within the new ten-year research strategy on pulses (Broom, 2016) coinciding with the UN Decade of Action on Nutrition 2016-2025. Further, a Global Pulse Brand<sup>147</sup> has been launched to help the food industry promote pulses, e.g. by incorporating them in other foods. There is therefore also some image improvement going on. However, for wider discourses, media visibility of the Year of Pulses was fairly non-existent, at least in the Global North.<sup>148</sup> Moreover, at least in some contexts where the International Year of Pulses was seen as successful (e.g. in Australia), its success was claimed to originate from pulses being promoted as an additional food to meat, not as a replacement for meat.<sup>149</sup> This obviously goes against seeing increased pulse consumption as a way to help solve the meat crisis.

Already in 2002, Schneider called for a strategy for lifting the image of pulses in the Global North, calling for communication campaigns, development of more modern, convenient and varied pulse products, more research and the coordination of integrated chains from domestic producers to industry to consumers. Further, she noted that in Australia, there was a remarkably rapid and steep rise in domestic pulse consumption in the 1980s (reaching above the levels in Spain), and argued

---

145 But see e.g. Jallinoja et al. (2016) where pulses are treated as an outstanding meat alternative for meat eaters.

146 However, many traditional meals in Spain include both pulses and meat, although considering from a nutritional point of view only one of these would be desirable.

147 See <http://pulses.org/pulse-brand>.

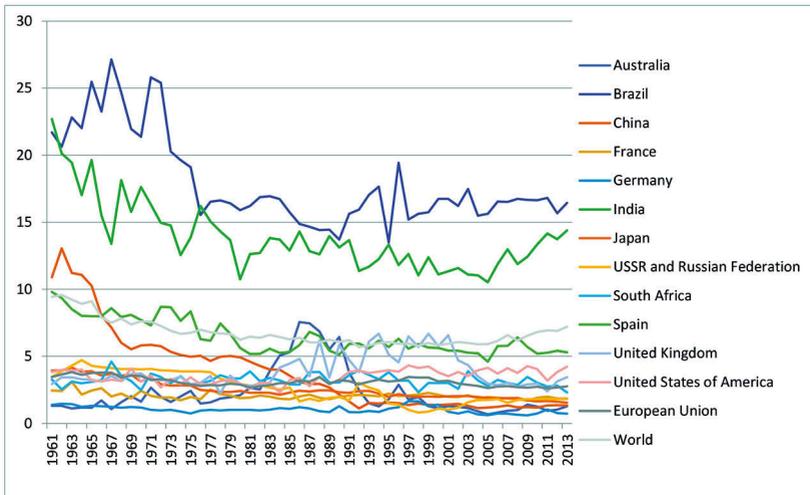
148 For example, there were no news articles in the UK Guardian in 2016 regarding the International Year of Pulses, although alternatives to meat as such are a common topic in the Guardian.

149 See <http://www.farmweekly.com.au/news/agriculture/agribusiness/general-news/campaign-promotes-pulses-globally/2753776.aspx>.

that this was due to the image of pulses being changed in Australia. However, the FAOSTAT data shows that the rapid increase was followed by a rapid decline about a decade later, which may have been due to increased exports, especially to India where markets were opened to other countries from the mid-1980s (Siddique & Sykes, 1997). It, therefore, remains an open question why the domestic Australian pulse consumption rose so rapidly. If this was due mostly to industry strategy and marketing, it was very efficient indeed.

Figure 2.14 shows the trends in pulse consumption over the last half a century for 12 countries. Although world consumption has risen slightly in recent years, the longer trend has been towards lesser use of pulses. Of the top ten pulse consuming countries, seven are in Sub-Saharan Africa, with Rwanda and Niger currently at the top<sup>150</sup> and with both countries' per capita consumption, surprisingly, more than twice as much as India's.

Figure 2.14: Per capita pulse supply in various locations from 1961



Source: FAOSTAT.

Notes: Data in kg/person/year; data for USSR until 1991, for the Russian Federation from 1992; the 12 countries are the same as those in Fig. 2.5 for meat; the data is supply, not consumption; there is no exact information on how much various losses account for with pulses; all food and agriculture-related data from FAOSTAT is available from 1961.

Pulses can hardly compete with the excitement related to the high-tech start-ups working on cultivated meat and new plant-based meats. As they are, how-

<sup>150</sup> These countries are not shown in Figure 2.14.

ever, the original and arguably the best meat alternative, for human, animal and environmental health, it may be unfortunate that pulses even have to compete. Although pulses as basic products without much further processing do not create big profits for the food industry, people can, however, already incorporate them into their diets. Pulses do not necessarily need further development, although the research investigating breed varieties of beans that cook faster, or are more weather resistant can certainly make acceptance easier in the Global North, and contribute to food security in the Global South. In terms of the giving pulses a “makeover” to make them more appealing, Jallinoja et al. (2016:12) argue that new associations are necessary to see pulses as “festive, fulfilling, energizing and pleasurable food”, similar to how meat has been seen until now.<sup>151</sup> Associations can change through practices, and a new food can be accepted through frequent exposure. So, could pulses also change from being associated with only vegetarians or vegans to being a relevant meat alternative — a new meat — for everyone? For a new “bean-eating practice” to develop in Europe, elements of “positive meanings, appropriate materials, and skills and competences” (idem:6) need to be in place. Jallinoja and colleagues call for the promotion of flexitarianism and seeing meat eating and vegetarianism (or veganism) not as opposites, but as points on the same continuum. This could make moving along that continuum easier, and replacing (some) meat with plant-proteins a more relaxed affair, and therefore more easily a routinized and embodied practice.

Although, for example, Verain et al. (2015) note that flexitarianism can just be a food style among many others, rather than a step towards eventual vegetarianism, it could still be that the different clusters of eaters — such as those identified by Verain and colleagues — are on the same continuum or journey from avid meat lovers to vegetarians and vegans, but just at different points on that journey. While some might never move much forward, others walk all the way.

---

151 Schyver and Smith (2005) also call for work on changing the image of soy.

## 2.4 Conclusion and discussion

Considering the new meats on a practical level, even if cultivated meat would be a significantly more environment and climate-friendly option than animal-based meat, and even if it could compete in price and quality with animal-based meat soon, I suspect that the production of it could not replace the massive production system for animal-based meat in a short enough time, nor would it seem sensible to perform such full-scale replacement, at least from the environmental impact point of view. Further, even if farming insects would be more climate or environment-friendly than farming conventional animals (per kg of protein), farming insects at a scale even remotely similar to current animal farming in the near future, and without causing damage at the same scale, would seem rather challenging. As an illustration, the meat from one single modern meat cow would correspond close to 2 million mealworms.<sup>152</sup> The new plant-based meat replacing processed animal-based meat would likely be a feasible option. Combining different alternatives in individual strong flexitarian diets — such as some plant-based meat, some cultivated meat,<sup>153</sup> some insects, with a small amount of extensively raised more conventional meat animals (at least in the Global South) — might work. However, this would still amount to a radical change in how “meat” is produced, and in what people eat when they eat “meat”, and how much “meat” they eat.

Increasingly the necessity of changing practices related to producing and eating meat is being recognized, although still often in minor ways.<sup>154</sup> Survey results indicate that many people might be willing to cut down on their meat eating or even change to the new meats.<sup>155</sup> It could be argued, however, that these surveys reflect the ideal self more than any realised action at the level of daily practices (Lalwani, 2009).

---

152 This estimate is based on the following: one average meat cow from conventional production has approximately 200 kg of meat and one (currently) average size mealworm weighs just over 0.1 grams.

153 Or cultivated fish — another product under development — to counter the depleting fish stocks.

154 For example, the new scientific IPCC SR1.5 report (IPCC, 2018) recognizes a need to look into meat consumption, but this has not yet been recognized officially at the policy (COP) meetings.

155 For example, survey results in Lee and Simpson (2016) suggest that 29% of the UK population had cut their meat eating in 2013-2014. Other survey results claim that the Generation Z (those born from around the turn of the millennium, although definitions vary) is leading the change from meat to plant-based meat (<http://uk.businessinsider.com/generation-z-is-eating-fake-meat-2017-10?r=US&IR=T>). Similarly, a 2017 YouGov poll in the UK found that 56% of the respondents agreed that meat is not necessary in order to have a good meal. See <http://yougov.co.uk/news/2017/04/06/over-half-happy-have-meat-free-meals/>.

At the same time, in other surveys, awareness of the particular issues related to the broken meat system, especially regarding its connection to climate change, still seems to be low (e.g. Wellesley et al., 2015). In line with this, the meat consumption data still does not show any significant declines for most countries, the global per capita consumption is still going up, and the FAO still predicts enormous future rises in the “demand” for meat.

I would suggest that the willingness of survey respondents to cut down *in the future*, but not today, may be linked to a phenomenon called *ethical mirage* (Tenbrunsel et al., 2010), whereby we expect to behave in line with our ideal self (or our should-self) in the future. Further, it may be that the low awareness (when asked in a survey question) is, in fact, partly strategic ignorance, a coping mechanism for the difficulty in accommodating both the ideal self, and the values related to it, and the daily practices of eating animals. Even those who claim to have already reduced their meat eating in the past may be influenced by ethical mirage, whereby we use our ideal self to explain our past behaviour, and thereby give more inaccurate assessments. Chapter 3 will explore these issues further.

In conclusion, the world needs to question the meat demand paradigm (Garnett et al., 2018), and the broken meat system needs to be fixed, if not entirely unmade, redone or replaced. Currently, however, there is no societal action plan for any of that. Rather, there is still large-scale denial and doubt among much of the public, and even policymakers, about the problem in the first place. The new meatways, however, offer an alternative (Zaraska, 2016a), even if this is not yet given much emphasis. Purposive change may often start from the level of discourse — in terms of some agreement about a problem, and a search for solutions — and I suggest that perhaps the most important role of the new meatways in the very near future is and will be at the level of discourses. Fortunately, discourses as regards both the necessity of change and the new meatways already exist. These discourses are by no means universal and are still limited to certain media, of which the UK Guardian newspaper is an example.

In Chapter 5, I explore, through the data from the Guardian, answers to my research question related to how the new meatways and discourses around them could enable radical changes in meat-eating related practices, importantly bringing the related values closer to the ideal self, and thereby hopefully reducing the need for coping mechanisms regarding meat.

First, however, Chapter 3 will focus on explaining the above concepts in more detail. It will combine and expand on different concepts within social practice theories. It will also argue for the relevance of discourses as regards changing practices purposively. Bridging social practices and discourses has still not been explored much in detail in literature, and as mentioned in Chapter 1, I hope to offer some insights into the connections in the next chapter.

### 3. Conceptual structure

---

The purpose of this chapter is, firstly, to engage in the research task from Chapter 1, namely, exploring social practice theories and the connections between discourses and social practices, in order to create a framework that could help enable purposive change in unsustainable social practices both at individual and at societal levels. Secondly, this chapter provides the conceptual structure for the empirical analysis in Chapter 5 which aims to answer the more specific research question from Chapter 1.

In this chapter, I will attempt to adapt social practice theories in the context of purposive change towards sustainability. I will build a framework that is based on combining aspects of different versions of social practice theories with concepts from social psychology, philosophy, cognitive linguistics and critical discourse analysis. I aim to build a structure that connects practices and discourses closely and emphasizes the connections to values and emotions, often given less attention in social practice theories. Further, I will explore the role of *discursive consciousness* that can help combat two large obstacles standing in the way of purposive change towards sustainability, namely *strategic ignorance* (of knowledge, and of value and emotion conflicts) and often invisible, but dominant ideologies, paradigms, and frames.<sup>1</sup>

First, however, it is necessary for this chapter to briefly present some background to social practice theories, especially in connection with sustainability, and so, in Section 3.1, I will discuss social practice theories in comparison to other theories of change, from the point of view of sustainability transformations, and explain the notion of *meat-eating related practices* I use in this book. Following this,

---

1 I attempt to build a structure that makes sense, so to speak, and seeks to explain to a satisfactory level. In interdisciplinary work, some fences may be necessarily crossed (e.g. here, using social psychology in connection with social practice theories), and this may not always seem appropriate at first sight. However, I hope to be able to justify adequately the arguments I make. Many of the mechanisms and related phenomena to do with social practices, and human behaviour in general, are still far from being fully explained. This book is one attempt to suggest some combinations of links that may not have yet been explored fully.

in Section 3.2, I will first present the, by now fairly dominant, take on social practices by Shove et al. (2012), before moving on to some potential modifications to their model later in Section 3.2 and in Section 3.3. These modifications include adding *the body* as the fourth element of practices, replacing the element of *meanings* with *general understandings*, a broader concept, and incorporating *values* and *emotions* more tightly as vital connections to the main practice elements. Last but not least, as regards the modifications, in Section 3.4 and Section 3.5, I will link practices to discourses, through the counterparts of general understandings (on the side of practices) and cognitive frames (on the side of discourses). Discursive consciousness and the concept of *discursively open practices* will be discussed in these sections, as well as ideologies and critical discourse analysis, with the latter being not only related to the conceptual structure, but also the methodological approach I will take to my data in Chapter 5.<sup>2</sup> Finally, before the conclusion to this chapter, in Section 3.6, I will briefly align my thoughts on the issue of agency for change, being that change is the critical overarching issue I want to tackle in this book.

### 3.1 Social practice theories as the basis

This section will first give a brief overview of why social practice theories might work better than more individual-based theories or even theories that tend to only focus on the system level. Further, I will illustrate how there is still no agreement on what social practice theory, in the singular form, should look like. As a consequence, interdisciplinarity may fit with the current social practice theories more easily than with some other more established theories.

#### 3.1.1 Transformations to sustainability – Between approaches

##### 3.1.1.1 Onwards from individual-based behaviour change models

Behaviour change policy methods by governments or other organisations have relied on, and still often rely, on models of human behaviour whereby individuals are driven to behave in a certain way by factors residing inside (e.g. attitudes, preferences) and/or outside (e.g. social norms, environmental cues, financial circumstances) of those individuals, while still being relatively free to choose which way to behave or do things. In Chapter 2, I referred to the factor model, but other names for a similar way of centralizing the individual include the rational choice

---

2 Chapter 4 will explain in more detail how I conducted the data analysis in practice.

model,<sup>3</sup> criticized, for example, as the *portfolio model*,<sup>4</sup> or the *ABC model*.<sup>5</sup> Such a model seems to be a functional way of explaining the world in which humans move about, doing things while being affected by various factors. In some circumstances, the individual-based behaviour change methods may be beneficial, and the economic theory, sociology and social psychology behind many of them offer relevant insights. However, as Welch and Warde (2015) argue (see also Southerton et al., 2004), this way of looking at behaviour:

...structurally overestimates the role of deliberation in routine purposive tasks, and fundamentally underestimates the extent to which individuals' autonomous action is constrained by infrastructures and socio-technical systems [...by norms and...] resource constraints: social, cultural and economic.

(Welch & Warde, 2015:88)

Especially when the question is about complex issues — with more long-term and global, rather than short-term and local benefits — and about necessary large-scale changes — whether large-scale to the individual or large-scale to society — relying on individual-based models or methods without changing the bigger picture is both inefficient and not transformative enough. Moreover, whatever the issue, small or large, when values or emotions are in conflict, a human response (including at the level of governments) is to attempt to deal with the situation by ignoring the conflict and thereby attempting to ignore the whole issue.

### 3.1.1.2 System-wide approaches

In contrast, system-wide theories seeking large-scale and systemic social change have often minimized the role of the individual. Hölscher et al. (2018) usefully analyse the differences between a focus on *transition* and *transformation*. The former, mainly in the form of theory on sustainable transitions or transitions management (see e.g. Markard et al., 2012 for an overview), focuses more on changing subsystems, such as energy or mobility, and examines the related social, technological and institutional interactions.

- 
- 3 What is meant by the rational choice model here includes many recent theories about behaviour. One overview of them can be found at <https://www.apsc.gov.au/changing-behaviour-r-public-policy-perspective>.
  - 4 In the portfolio model (originally from Hindess, 1988), people choose their behaviour based on a portfolio consisting of more or less stable values, attitudes, norms, interests and desires (Welch, 2017).
  - 5 The "ABC" (in the way Elizabeth Shove uses it) comes from attitude, behaviour, and choice. Shove (2010) argues that governments hide behind this framework instead of acknowledging their role in sustaining unsustainable institutions and ways of life, and their ability to change structures.

On the other hand, global change research referring to transformations tends to focus more on “large-scale changes in whole societies, which can be global, national or local, and involve interacting human and biophysical system components” (Hölscher et al., 2018:2). In transformational systems thinking, interventions at the paradigm level — such as at the level of societal values and ideologies — is considered most efficient (Meadows, 2008). O’Brien (2018:157) contends that the dimensions of transformation are indeed best tackled collectively “to engage individuals and groups [...] such that they shift from being seen as ‘objects to be changed’ and reduced to their carbon footprints, to viewing themselves as subjects or agents of change who are capable of contributing to systemic transformations”.

In transitions research, concepts such as values, emotions, or individual agency have been largely left with little or no role. Although transitions management sees policymaking as building networks in which different actors can participate and interact (Shove et al., 2012), transitions research has been criticized for mainly being concerned with technocratic transitions. Approaches to systems-scale transformation, on the other hand, seek more radical, large-scale and long-term societal changes (Hölscher et al., 2018). Further, in systems thinking, the notion of *transformative agency* emphasizes the role of “intrinsic motivation, cognition, emotions and values as key dimensions of human agency for change” (Hölscher et al., 2018:2, also O’Brien, 2012).

### 3.1.1.3 Social practice theories

A strong recent focus in social practice theories is related to policy-relevant research on changes towards sustainable societies (see for example, a much quoted book by Shove et al., 2012). While some social practice theory approaches to sustainability use transitions theory to a larger extent (see e.g. Spaargaren, Oosterveer, et al., 2012b), others do not. Social practice theories, in general, could be seen as approaching the systems level, while at the same time focusing on everyday practices performed by individuals. Yet, the one idea connecting the range of practice theories is that the unit of analysis is not the individual, but practices as such, and especially the repeated performances of practices.<sup>6</sup> However, even when the individual is seemingly reduced to a *carrier of practices*, as is the case in some approaches, but by no means all, the individual is nonetheless in the picture, and arguably, therefore, has a role.<sup>7</sup>

---

6 Nicolini (2017) specifically advises against shifting the focus to large-scale abstract things, such as “institutions” or “the state”, which to him are largely incompatible with a practice-based approach.

7 Others emphasize that even as carriers of practices, individuals are not passive, but that change is constant and natural to practices, and takes place through individual performances of practices (e.g. Shove et al., 2012).

As regards the definition for a social practice, several authors have given their versions over time. The version that seems to work best in the context of this book is the following from Welch and Warde (2015:85): a social practice is “an organised, and recognizable, socially shared bundle of activities that involves the integration of a complex array of components: material, embodied, ideational and affective”. A relevant contribution of more recent practice theoretical literature has been to see practices, or “the organization of human activity as nexuses of generic types of components” (Warde et al., 2017:29) which different authors have then treated with different emphasis.

Although practice theories usually emphasize habits, routines, and *practical consciousness*, rather than discrete actions and reflection, or discursive consciousness,<sup>8</sup> the extent to which different aspects are highlighted, and even more fundamental ideas about what human behaviour consists of, can be large. Scholars preferring the stronger approaches may see the weaker approaches as closer to the individual behaviour change approaches.

Figure 3.1 illustrates both some of the emphases in different social practice theories, as well as the emphases between social practice theories and individual-based behaviour change approaches. While stronger social practice theories are often in opposition to individual-based behaviour change approaches, the somewhat weaker approaches in social practice theories can indeed be placed somewhere in the middle. They, for example, may consider individuals to have more agency or grant discursive consciousness some role to play.

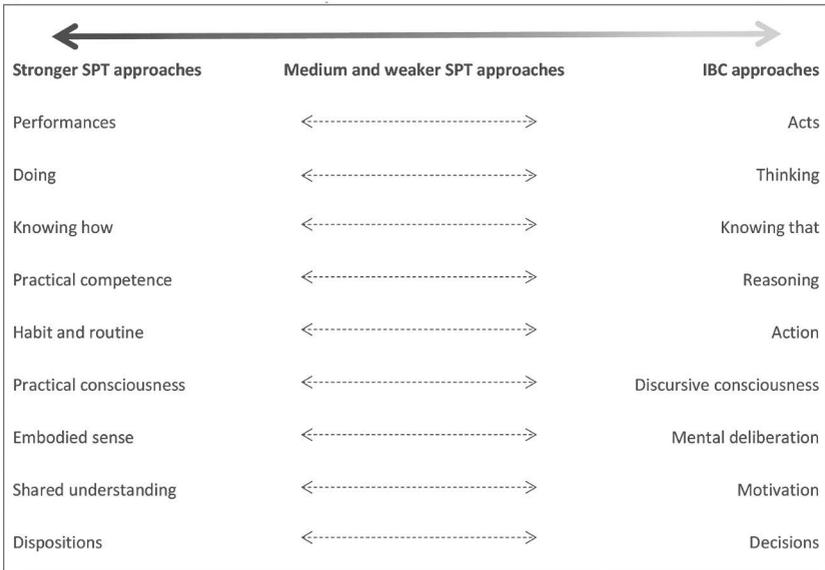
Warde (2014) argues that the stronger versions of practice theories tend to not only emphasize the items on the left of Figure 3.1, but suggest further that some of the items on the left *precede* items on the right, so that, for example, doing comes before, and also directs, thinking, and habit, routine and practical consciousness are not only the “default mode of engagement in the world” (idem:292), as medium strong versions might see things, but “all consciousness is effectively practical consciousness” (idem:285). Medium-strong versions would see the left-hand items as more important than those on the right (but not argue for their time-wise precedence), while the weaker versions of practice theories would merely note that the left-hand items should get enough attention. Some authors purposefully claim to use weak practice theory, in particular, by not decentring the human actor with agency (see e.g. Goulden et al., 2014). Others seek to maintain a somewhat stronger position and state that agency exists but mainly transpires through practices (e.g. Welch, 2017a).

Social practice theories evolved from the 1970s onwards, partly to solve the long-term issue in social sciences of agency vs. structure, moving beyond it, without pri-

---

8 The terms practical and discursive consciousness come from Giddens' structuration theory (1984).

Figure 3.1: The emphases in different practice theories and in behaviour change approaches



Source: Substantially modified from Warde (2014).

Notes: The original comparison by Warde is between practice theories and the “sovereign individual”, and there is no middle position; SPT refers to social practice theories, IBC refers to individual behaviour change.

oritizing either structure or agency, and yet being able to describe and analyse both change and stability (Shove et al., 2012; Welch & Warde, 2015). Practices, practice elements and their relationships both ensure that practices are relatively stable, but at the same time perpetually changing. In a way, practices are always open to potential change within their elements, and at the same time closed due to their apparent stability. However, the stability of practices is only the “outcome of successfully faithful reproductions of a practice” (Shove et al., 2012:13).

Although today social practice theories are seen as cutting across the field of sustainable consumption (Lorek & Vergragt, 2015), applying social practice theories to consumption-related issues mainly came, soon after the turn of the new millennium, as a reaction to social sciences seeing consumption increasingly as something done by an “empowered individual, exercising freedom of choice through voluntary decisions” (Welch & Warde, 2015:86).

The question of agency is, therefore, an essential unifying, yet dividing concept in social practice theories, especially when they are applied to the issue of change. Welch and Warde (2015) argue that the question of agency indeed has

roughly divided those adhering to practice theories into two “programmes” as regards sustainable consumption, change and the potential that individuals have to change things. The first programme, in their view, represented by Elizabeth Shove, and rooted in stronger practice theories, has been sceptical, while the second programme, rooted in ecological modernization, and represented by Gert Spaargaren, has been optimistic. The first programme has focused more on the dynamics of practices, why they form the way they do, and how they change, giving materialities (including infrastructures and technologies) a central role. The second programme has focused more on citizen-consumers as change agents at “consumption-junctions” where production and consumption meet. Lately, however, there has been convergence (Welch & Warde, 2015) whereby the first programme has focused more specifically on transforming practices (e.g. in Shove et al., 2012), and the second programme has acknowledged that social practices define, or “produce” individuals (Spaargaren, 2013), while at the same time, individuals as citizen-consumers retain agency for change.<sup>9</sup>

Related to the question of social practice theories and agency, there are differences in terms of the emphasis given to other human-related qualities or experiences potentially relevant to practices, such as emotions and values. Decentring the human tends to decentre such concepts as well. However, the relevance of both emotions and values to social practices is increasingly emphasized by some authors. Reckwitz (2017) and Welch (2017a) both consider emotions being intrinsic to all practices. Similarly, Weenink and Spaargaren (2016) tie collective agency to practices via emotions. And Welch (2017a) considers values to also be strongly connected to practices. The further development of the concept of *general understandings* by Welch and Warde (2017, concept originally from Schatzki, 2002), as an important component of social practices, helps to see both values and emotions linked to practices via such general understandings, as discussed further in Section 3.3.

The embeddedness of emotions and values in social practices makes insights from social psychology relevant to social practice theories, even if the policy priority is not to change the behaviour of individuals through psychological methods. For example, Nash et al. (2017) argue that social psychology and social practice theories can complement and enrich each other in attempts to create broader change towards sustainability. However, similar to Hargreaves (2011), Nash and colleagues point out that rather than attempt to change behaviour through changing value dispositions of individuals, “attempts to change practices seek broader, societal shifts

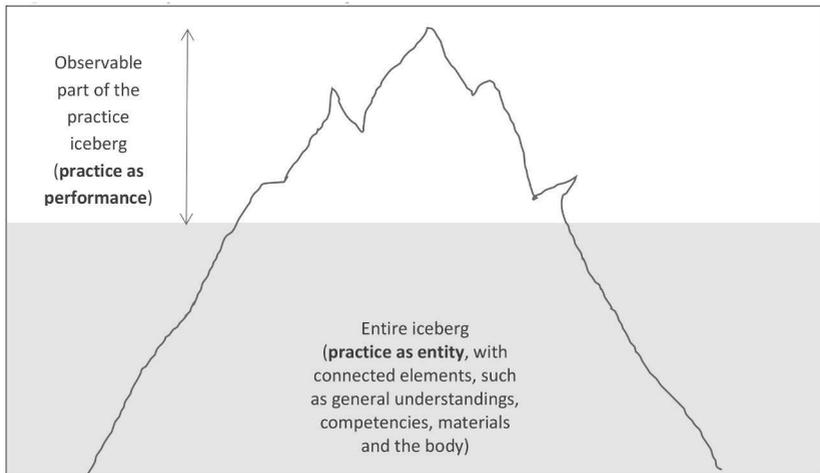
---

9 Citizens in this context can be seen as prioritizing more sustainability-facilitating values (see Section 3.3.2), including a sense of responsibility, while consumers would tend to prioritize more sustainability-hindering values (e.g. Gjerris et al., 2016). Citizen-consumers are a combination of the two, supposedly able to balance different value priorities.

in the organization, understandings, and/or performances” of practices, including changes in social norms (Nash et al., 2017:11).

Regardless of the disagreements around agency, Welch (2017a) maintains that a social practice approach innovatively reframes the policy question “How do we change individuals’ behaviour?” into “How do we change practices and their performance?”. The latter question clearly must pay some attention to the system as well, whether “system” refers to the mesh of practices or to societal structures more traditionally. An iceberg is a useful metaphor illustrating the difference between *practices as entities* and *practices as performances* (with the latter understood commonly as “behaviour”), as provided by Spurling et al. (2013), and shown in Figure 3.2. If policymaking only focuses on the visible tip of the iceberg, i.e. the behaviour, it is no wonder that not enough sustained change can be made.

Figure 3.2: Social practice as an iceberg



Source: Modified from Spurling et al. (2013)

Mainly, according to Welch (2017a), practice theories offer new insights for understanding processes of social change and the framing of problems, while offering new opportunities for intervention, and challenging the common assumptions feeding into policymaking.

Although until now, practice-theoretical research has mostly analysed individual performances of practices,<sup>10</sup> instead of focusing on the larger system (Warde,

10 So, the focus has still been on the tip of the iceberg, but taking the whole iceberg into account. Social practice theoretical analysis has traditionally not centred on change.

2014), the possibilities are there. Social practice theoretical research for policy insights on practice-related norms, values, discourses, knowledge, standards and societal structures could, and perhaps should, become the central focus of investigation and intervention.<sup>11</sup> Social practice theories move away from framing problems in term of “false oppositions or alternatives: the individual *or* the social context; behaviour *or* technology” (Welch, 2016:238). Indeed, sufficiently broad interventions that have addressed several components of practices (rather than just one) have been more successful (Southerton et al., 2011).<sup>12</sup> Using social practice theory to the fullest in policymaking would, however, mean that policymakers should be capable of critical self-reflection.

Among the policymakers that do see the benefits of incorporating social practice theories, there is a tendency to use practice theories to formulate the policy issues themselves, but when it comes to motivating behaviour change, policymakers often go back to social psychology to address individual consumers (Welch, 2017a). It appears that using practice theories for actual social change is still a challenge. This may partly be because changing system-wide elements such as worldviews, meanings, or paradigms is not only challenging but often not something policymakers would even wish to do.

Sometimes reformatting policy issues and looking at them anew from a practice point of view can be beneficial. For example, Hargreaves (2011) analyses more traditional behaviour-change campaigns in a workplace through a social practice theory lens and concludes that such campaigns can be seen as interventions in the organisation of multiple connected practices, rather than attempts to change the motives and values of individual people. Although the campaign may stay the same, the focus of assessing its impact shifts more towards practices (both as entities and as performances) and away from individuals, while also better revealing the challenges in behaviour change campaigns.

Welch and Warde (2015) see essentially three outstanding issues calling for further development of practice theories, especially in terms of making them into more useful policy tools. Firstly, the relationship between production and consumption is problematic, as production is mostly neglected in practice theories. However, Welch and Warde argue that the recent attempts for a synthesis with socio-technical transition approaches might help in this respect.<sup>13</sup> Secondly, the

---

11 This would be close to the system change approach described above, in terms of most efficient interventions being at the paradigm level (Meadows, 2008).

12 An example of a successful campaign is the Cool Biz initiative in Japan (see Shove et al., 2012).

13 See Geels et al. (2015) for another attempt to synthesize. Geels and colleagues also look for synergies between the capitalism and efficiency-based approaches and full sustainability transformation approaches.

relationship between collective agency and everyday routines has largely been neglected in practice theories. Welch and Warde suggest that one way to get away from this theoretically tricky relationship is to see sustainable consumption as an “organized field of strategic interventions”<sup>14</sup> (original quote from Barnett et al., 2011:13), whereby unsustainable consumption is “taken up as the object of problematizing discourse” (Welch & Warde, 2015:97). Thirdly, the relationship between the micro-level of everyday performances and the macro-level of institutional context is an issue for sociology as a whole, but it is especially so for the stronger practice theoretical programme discussed above. Indeed, usually adhering to *flat ontology*,<sup>15</sup> stronger practice theories tend to see no division between individual practices and the system level, yet they often stay at the level of practice performances for empirical (and even theoretical) research.<sup>16</sup> Welch and Warde conclude by saying that practice theories still lack fully persuasive conceptual answers to how to make change, especially due to the third point above.

Spotswood and Marsh (2016) assume that the future of behaviour change is transdisciplinary. Although incompatibility may not necessarily be an issue in transdisciplinary or interdisciplinary research, I would argue that even when it is, compatibility need not always be a first priority (Colyvan, 2008), if certain concepts around a phenomenon nonetheless represent ideas that may achieve results. This is somewhat in the spirit of *bricolage*. I would add that compatibility between issues may also be found later on. Colyvan (2008:119) argues that ontological consistency is “just one virtue among many”, and in natural sciences in particular, inconsistency is sometimes unavoidable. In any event, my purpose is to contribute to new insights into complex and urgent problems through working in an interdisciplinary manner.

---

14 This is in the sense of political consumption whereby everyday consumption is seen “as a surface of mobilization for wider, explicitly political aims and agendas” (Barnett et al., 2011:13).

15 I do not follow flat ontology (rejecting a hierarchy of societal entities) in this work as such, even though I agree with the view of the world consisting of a near infinite number of interlinked social practices. I would rather see that many of those practices form what can be called “the system” (such as in the “meat system”).

16 Regarding applying social practice theories to large-scale phenomena, Nicolini (2017) notes that it is not always clear what is large and what is small: for example, there can be large-scale phenomena that are not “big” as such. He gives the example of greetings as apparently small scale, but at the same time “ubiquitous, pervasive and critical to sustain the fabric of social relationships and its orderliness” (idem:100).

### 3.1.2 Meat-eating related practices

Although the focus of this chapter is more general, it still seems necessary to define here what the meat-eating related practices are that I examine in this book before embarking on building the fuller conceptual structure.

The components mentioned in the above definition for social practices (Welch & Warde, 2015) include material, embodied, ideational and affective components. In meat-eating related practices, the material components would include the food that is eaten, cooking equipment, supermarkets, farms, processing facilities, and so on. The embodied components would include, for example, skills and practical knowledge for all the related activities. The ideational components would include meanings, understandings, knowledge and values, and these would be connected to the affective components which would mainly relate to different emotions related to food and eating.

Most if not all practices are more or less closely linked to, and overlapping with other practices (e.g. Weenink & Spaargaren, 2016) to the extent that any particular practice is usually part of a complex, interconnected mesh of practices. So it is with meat: meat-eating related practices are part of a mesh of practices, most closely related to shopping, socializing, family raising, cooking, disposal and digestion related practices, but they are equally part of the larger meat system of breeding, feeding and killing domestic animals; production, processing, distribution, trading, wholesale, retail, marketing and advertising of meat, further connected to the larger agricultural systems, subsidies, governmental policies, and so on. I am therefore greatly simplifying the picture by focusing on meat *eating* as a practice, but by “meat eating” I do not only refer to the bodily consumption of animal flesh (or the new plant-based meats), but also the relatively closely related practices — described above and generally taking place after the *consumption junction*, while being connected to what comes before the consumption junction. Since according to the dominant “demand hypothesis”, meat production in intensive systems is driven by the demand for meat to be eaten, the “eating side” of the consumption junction should certainly be relevant to examine for radical change. The eating side reflects the dominant values and worldviews related to the production side, including ideologies such as *carnism* (discussed in Section 3.5.3).

Eating as a practice is both similar and dissimilar to other practices, especially those seen as consumption practices. It is dissimilar in the sense that (together with other bodily consumption of substances) it is the only form of consumption where the human body literally does the consuming. But much of other consumption is also related to (perceived and often real) bodily needs, such as domestic heating or water consumption related to cleaning our bodies. The bodily consumption of food for sustenance is of course not the only reason people engage in eating practices. Other reasons include many of the same reasons people engage in other

consumption practices: to satisfy emotional needs or to form and maintain social connections. Further, eating involves similar linked practices as other consumption practices such as shopping, and knowledge related to what to purchase. Generally, it is performed as a means to an end, similar to most other consumption practices. Finally, similar negative emotions can be related to eating as compared to some other forms of consumption, feelings of guilt, for example.

Warde (2013) defines eating as a particularly complex social practice, a *compound practice*, i.e. a combination of four component integrative practices: supplying of food (nutrition), cooking, organisation of meal occasions (etiquette) and aesthetic judgements of taste (gastronomy). Warde points out how eating is a generally disorganised and weakly regulated practice (no clear standards exist). As exceptions, he mentions traditional eating in France, the Slow Food movement, and eating out as a treat. When viewed as a product of history, eating is a practice that has changed enormously over time, and even currently differs significantly between cultures and geographical areas. From a long-term historical point of view, eating practices — similar to many other social practices — are in a constant process of change.

As regards the practices of eating meat, the reason I more frequently use the term “meat eating” rather than “meat consumption” is primarily threefold. Firstly, “consumption” in general can be a more ideological term than “eating”, on the positive side seen as supporting the functioning of economies, and on the negative side seen as contributing to the destroying of nature. Secondly, “consumption”, similar to “consumer”,<sup>17</sup> infers materialistic values that are potentially not beneficial as regards sustainability-related communication (Crompton, 2016, see also Section 3.3.2). Thirdly, Wilk (2018) warns against using abstractions — and “consumption” is an abstraction — in connection with attempts for radical societal change towards sustainability.<sup>18</sup> However, I do refer to “consumption” at times, especially when referring to the quantifiable amounts of meat being produced and eaten.<sup>19</sup> Additionally, I refer to “eating animals”. In general in this book, I reserve this last expression to contexts where the (often hidden) animal origin is the main point, for example, in connection with strategic ignorance.

To note, most of the concepts or topics discussed in this chapter will be relevant to meat-eating related practices. Therefore, at certain points, there will either be

---

17 In opposition to “consumer”, “citizen” implies more sustainability-facilitating values, such as co-responsibility. See more on values in Section 3.3.2.

18 According to Wilk, abstraction — making abstract concepts into personified reality, e.g. “the market” — can make arguments less convincing to the lay person. Using more concrete and real terms, such as “weather”, are closer to the everyday than more abstract and virtual terms, such as “climate”. Weather is experienced, climate is not.

19 This is especially so in Chapter 2.

an unnumbered subsection entitled *Meat-eating related practices and...* in which the links from the concepts to meat will be explored, or the meat-eating related issues will be discussed directly in the main discussion.<sup>20</sup>

## 3.2 Modifications to the elements of social practices

In this section, I will explain how I have adapted the model of social practices contained in Shove et al. (2012). Detailed explanations will follow, but Figure 3.3 provides first an illustration.

Compared to the simplified model of practices shown in Figure 3.3b, and originating from Shove et al. (2012), Figure 3.3a still maintains the one-to-one connections between elements, as it moves from two dimensions to three dimensions. However, as modifications, it includes a fourth element, *the body*, and additionally, *meanings* has been replaced by *general understandings*, a term representing a component of practices, originally from Schatzki (2002), and developed further by Welch and Warde (2017). Moreover, Figure 3.3c illustrates the coupling between general understandings<sup>21</sup> and *cognitive frames*, importantly connecting practices to discourses. As Figure 3.3c illustrates, values, emotions, and knowledge connect to both general understandings (on the side of practices) and cognitive frames (on the side of discourses), as discussed later.

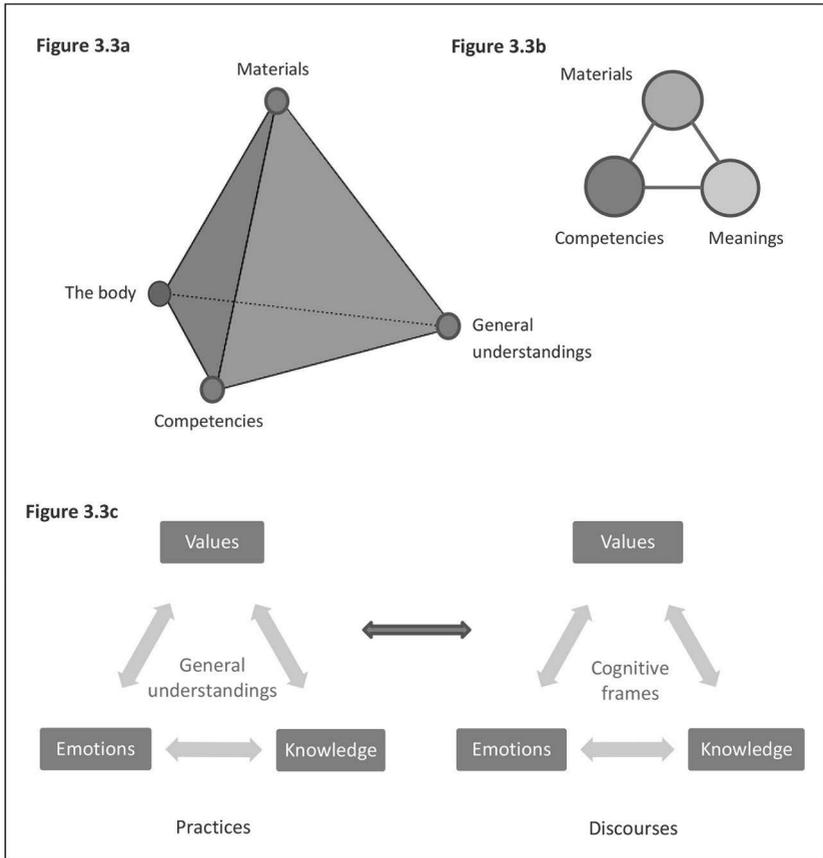
### 3.2.1 A brief overview of Shove et al. (2012)

The 2012 book by Elizabeth Shove, Mika Pantzar and Matt Watson has become a classic in social practice theory literature in a short time, even though it has also received some criticism (see e.g. Weenink & Spaargaren, 2016; Welch & Warde, 2015). Apart from its approach in addressing the crucially important policy side, its emphasis on certain old and new aspects of social practice theories themselves have in part helped to solidify some parts of the rather diverse field. The main new theoretical contribution of Shove and colleagues lies in the dynamics of practices and in emphasizing materialities as an element of social practices. The main points that Shove and colleagues highlight include the following:

20 This is, in particular, the case in Section 3.3.3.2.

21 Schatzki (2002) distinguishes between “practical understandings”, more specific to certain individual practices, and “general understandings”, shared between practices.

Figure 3.3: Social practices and their connections to discourses



Source: Figure 3.3a is inspired by Shove et al. (2012), Figure 3.3b is based on Shove et al. (2012), and Figure 3.3c is by author.

- Practices are composed of elements, which in the simplified model<sup>22</sup> are comprised of meanings, materials and competences
- Materiality is key to social practices
- People are carriers of practices, although not passively so
- The distinction between practice-as-entity and practice-as-performance is central

22 The model contained in Shove et al. (2012) is simplified in order to focus on the dynamics of practices, on stability and change. See Figure 3.3b.

- Practices emerge, persist, change and disappear, and this largely happens through the links between different practice elements being made, remade or broken
- Stability of practices only comes from faithful repetitive performances of practices and is therefore always provisional
- The unit of enquiry for research and/or policymaking are practices, not individuals.<sup>23</sup>

As regards issues I focus on in this conceptual structure, Shove and colleagues do recognize both agency and emotions as residing in social practices. They talk about the relevance to many sustainability-related policy issues such as climate change of profound changes in social practices, *including* dominant worldviews and discourses. Further, they argue that the ABC model is a political position downplaying the role that governments often have in maintaining unsustainability. However, they do not focus specifically on values, more obviously not at an individual level, but also not specifically at a societal level.<sup>24</sup> This is likely to be partially a result of their aim of overturning the dominant behaviour change policy framework for which the *value-action gap*, for example, would be a key question. In recognizing discourses as relevant to changing practices, for example, when “dominant discourses crumble” (Shove et al., 2012:58), they touch upon my concern with connecting practices and discourses more tightly.

To speak more specifically of the process of change: as stated above, the way Shove and colleagues see practices changing is mainly through reconnecting elements. In fact, while practices are in a constant state of change, elements may be more stable. Shove and colleagues make a distinction between a proto-practice and a disintegrated practice, in both of which relevant elements exist without being linked. In the former, they are not yet connected, and in the latter, they are no longer connected. The point is that elements may be replaced, and links remade one by one, and during this process, the practice may not go through any sudden and radical change as such, but still in the end, it may be radically different from what

---

23 Many of these points come from earlier practice theory literature, such as Reckwitz (2002), e.g. the carrier concept and seeing practices as consisting of elements. The main unit of enquiry was seen already earlier as practices. And the original idea for the formulation of practice-as-entity and practice-as-performance goes back to Schatzki (1996). However, Shove et al. (2012) have further enforced these positions, and brought them together in a digestible whole.

24 However, in other writing, e.g. in Shove (2003), the meanings of value concepts such as comfort, cleanliness and convenience are a central focus, with the message being that the meanings have been, and can be redefined, and that diversity in meanings would be better for sustainability than sticking to the current resource-intensive Western meanings of these value concepts.

existed before. The example Shove and colleagues use is the change from horse-driven carriages to automobiles, while arguing that the only truly new element *during this change* was the petrol engine itself, and the skills for its maintenance and repair.<sup>25</sup>

In the following sections, and later in this chapter, my focus is necessarily selective. I discuss materialities mainly from the point of view of power and agency, relating to stability and change. Similarly, as regards competencies, I focus on their connection to practical consciousness, as the counterpart to discursive consciousness (relevant to discourses, as well as change). Finally, I discuss the suggested additional fourth element to the simplified model of social practices in Shove et al. (2012), i.e. the body, largely concerning the ways the body connects to emotions and values, which are a key focus for me, together with the element related to meanings (which I expand to “general understandings”).

To recap what Shove and colleagues see as constituting the streamlined elements (as shown in Figure 3.3b): *materials* to them consist of objects, infrastructures, tools, hardware and the human body itself; *competencies* include background knowledge and understanding, know-how, skills, and practical consciousness; and *meanings* consist of meanings of practices as such, but also emotions and motivational knowledge, ideas and aspirations.<sup>26</sup>

Finally, it is noteworthy that I refer to “behaviour” sometimes seemingly in the same way as I refer to “practices”. Shove (2010), however, warns against such usage, as practice theories are specifically *not* behavioural theories. She sees the two concepts theoretically in opposition to each other. However, I see “behaviour” in most cases as the observable performances of practices, the tip of the iceberg in Figure 3.2 (and in Spurling et al., 2013; Welch, 2016), whereas normally when referring to “practices”, I refer to the whole body of the iceberg, the practice as an entity. With this distinction in mind, it seems justifiable to speak of both “behaviour” and “practices” in certain contexts.

---

25 Later on, of course many more elements changed in the new practice of car driving.

26 These lists may not be exhaustive.

### 3.2.2 Adding emphasis – Distributed agentive power

Section 3.6 will return to *agentive power*,<sup>27</sup> but in this subsection, I want to clarify how I see agentive power in relation to the elements of social practices as depicted in Figure 3.3a.

Even though Shove et al. (2012), in line with practice theoretical arguments, seek to decentre individual humans and bring out practices as the defining unit of social life, they see agentive power as part of practices in several ways, although the reader needs to search fairly attentively for the instances where the topic is discussed. Further, and notably, change is not specifically attributed to agentive power.

Firstly, Shove and colleagues see agentive power distributed within practices. They acknowledge that human agency exists, and it is:

...loosely but unavoidably contained with a universe of possibilities defined by [...] complexes of practice. It is in this sense that practices make agency possible, a conclusion that is not at all incompatible with the related point that practices do not exist unless recurrently enacted by real life human beings.

Shove et al. (2012:126)

Humans as carriers of practices are therefore not passive, and in fact, practices themselves are “active” in a way, and form “inherently dynamic” integrations of elements. Practices do not exist without human action, and humans could not act effectively without practices.

Secondly, Shove and colleagues emphasize the material element of practices, and go some way towards Actor Network Theory (e.g. Latour, 2000), in assigning things and materials an important role. Therefore, Shove and colleagues are “broadly sympathetic to the view that agencies and competencies are distributed between things and people” (Shove et al., 2012:10). However, instead of giving materiality a larger agentive role in the way Actor Network Theory does, Shove and colleagues integrate materiality tightly as part of social practices.

Discussing social practice theories in connection with sustainability, Sahakian and Wilhite (2014) refer to agentive power distributed across different *pillars of practices*, comprised of the body (including embodied physical and mental knowledge), the material world, and the social world (social context, including social norms and

---

27 A useful definition of agentive power for this book: “the capability or power to be the source and originator of acts” (Sahakian and Wilhite, 2014: 28, with reference to Ortnor, 1989). I see *agency* as agentive power of human actors, implying some form of (potential) intention and planning, whereas non-human actors (including “things”) can have agentive power, rather than agency, as they do not intend and plan to use such power (artificial intelligence excluded).

values, institutions and legal frameworks). On the one hand, the deeper a practice (or a habit) is fixed on these pillars, the harder it is to change, and on the other hand, when change (intentional or not) takes place in more than one pillar, it is more likely that a change in practices will be persistent and successful. Importantly, Sahakian and Wilhite do not take issue with practices being in a constant state of change (as Shove and colleagues do), their focus is mostly on *purposive* change. Crucially for them, all the pillars have *distributed agentic power*. This type of agentic power is what makes purposive change in practices possible, as changes in just one pillar are usually not enough.

Shove et al. (2012) perceive practice elements somewhat differently from Sahakian and Wilhite (2014), and the foci of these two approaches to change are different as well. Nonetheless, the idea of distributed agentic power remains relevant in both, and this is the idea I wish to build on, emphasizing, along with Sahakian and Wilhite, the importance of such power for purposive change.

### Meat-eating related practices and material agency<sup>28</sup>

In line with the idea of material things having agentic power, there can be little doubt that Mark Post's cultivated meat patty from 2013, or the cultivated meat products from Memphis Meats since then, or the plant-based Impossible Burger,<sup>29</sup> can all be seen as having agentic power: "the mere idea [of cultivated meat] is enough to stimulate thought on our present and future meat consumption" (van der Weele & Driessen, 2013:653) when normally such thoughts tend to be kept hidden through strategic ignorance (see later in Section 3.3.3). Expectations are performative (Magneson Chiles, 2013), and so, expectations of the new meats have agentic power. In addition to affecting our minds already before their physical existence — as mere ideas of materialities — these new meats have now started to reorganise the food industry. Conventional meat companies are now taking alternatives to meat seriously, as competitors, and as something to invest in. Moreover, plant-based meats, such as the Impossible Burger, already existing materialities, are currently being eaten more or less consciously as something actually called "plant-based meat" by thousands of Americans. Due to the marketing and media attention, most customers in the restaurants serving the Impossible Burger would likely be aware of what they are eating. Further, these material things have indeed entered various discourses, not only in the Western public discourses but

28 As mentioned earlier, these Chapter 3 sections exploring meat-eating related practices are unnumbered.

29 The Impossible Burger is a product from Impossible Foods, see <https://impossiblefoods.com>. For Memphis Meats, see <http://www.memphismeat.com>.

also beyond that, even though on a smaller scale, as mentioned in Chapter 2.<sup>30</sup> Most importantly perhaps, these new meats have already significantly contributed to questioning the future of intensive animal farming (van der Weele, 2017). Although material things lack “intelligibility, intentionality and affectivity”, they can have performative power to influence the ways practices unfold (Weenink & Spaargaren, 2016:66)<sup>31</sup> — in the form of both expectations and actual materialities.

### 3.2.3 Adding a fourth element – The body

Shove et al. (2012) include the human body as part of the material elements of practices, so in fact, the body is included. However, it is given very little weight, possibly on purpose, to keep to the principle of decentring the individual. Similarly, Shove and colleagues seem wary of incorporating Bourdieu’s concept of *habitus*<sup>32</sup> (idem:5). It is hard to see habitus residing in any particular element of practices conceptualised by Shove and colleagues, but rather partly in all of them: in materials (which include the body), in competencies (which include skills and practical consciousness), and meanings (which include other aspects often seen as part of the habitus, such as aspirations and values). In contrast, Sahakian and Wilhite (2014) explicitly bring out the significance of habitus. To them, it resides in the body pillar of practices and plays a crucial role in the habitual and routine performances of practices.

Moving back to Shove et al. (2012), when combining “body” with other “materials”, Shove and colleagues, not only decentre individual humans but appear to nearly exclude them entirely from the world of practices. However, all of the three practice elements in Shove et al. (2012) have bodily connections. I, therefore, argue that, *without* having to involve the concept of habitus as such, the “body” works well as a fourth element of practices together with the conceptualisation of practice elements by Shove and colleagues. Since in a tetrahedron all corner points are connected, in Figure 3.3a, the body is also connected to the other three practice elements, as it is in actual practices. The body connects to competencies via skills, embodied knowledge and practical consciousness, to general understandings via values, emotions, and discursive knowledge (including meanings), and to materials via the close connections between human bodies and materials (technologies, infrastructures, things, including food) that are made for and used by human bodies.<sup>33</sup> The body is involved in some way in the performances of all practices. No

30 See Section 2.2.2.

31 I would equate performative power with agentive power in this context.

32 Habitus is understood here as various dispositions mediating thought and action, and acquired through past experiences (Sahakian and Wilhite, 2014).

33 Importantly, I would include nature or non-human animals in materials only to the (unfortunate) extent that they are objects to be used by humans, such as “meat animals”. This brings the conflict between humans and the natural world in view. On the other hand, perhaps non-

social practices exist without human action and experience. Including our physical and mental capabilities, our bodies enable us and restrict us in our practice performances; the body is an essential part of them. The body cannot, therefore, be sensibly omitted as a relevant component of practices, even if it may draw unhelpful attention to individuals in a practice theoretical scheme that tries to focus away from the individual.

However, reflexivity, discursive consciousness or conscious decisions (bodily processes as well) are not involved in the performances of all practices. In fact, they are not involved in *most* routine performances of practices. I will return to the theme of reflexivity and discursive consciousness in more detail in Section 3.4.1.

### 3.2.4 Replacing an element – General understandings

When streamlining the elements of practices, Shove et al. (2012) give “meanings” a large role. One of the practice elements, meanings relate to the “significance of participation” (idem:23) in practices, and as said, they also connect to motivational knowledge and emotions: “states of emotion have been folded into ‘meaning’” (idem:121). It is clear from the discussion by Shove and colleagues that competencies do not include conscious mental activities, but meanings might do so, on occasion at least. Further, Shove and colleagues do not discuss values, but to the extent that they are properties of practices (see later in this chapter), they would be likely to connect to meanings as well.

Welch and Warde (2017) elaborate on the concept of *general understandings*.<sup>34</sup> To Welch and Warde, general understandings account for “how very general ideas are incorporated into practice”, thereby accounting for meanings. They are “experienced, articulated and negotiated in [...] embodied activity”, thereby connecting to the body. Moreover, they “inform and shape practices, and in turn [...] are themselves conditioned by practices” (idem:195), thereby able to be conceptualised as an actual element of practices. Finally, they include values, and they are connected to emotions: “values — a particular kind of general understanding — combine conceptual, pre-reflexive and affective components” (idem:189).

In most of the above, the role of general understandings is similar to how Shove et al. (2012) conceptualise meanings. However, general understandings are conceived as a broader and therefore arguably more advantageous concept by Welch and Warde (2017). Importantly for the connection between practices and discourses (discussed further in Section 3.4), general understandings also connect different

---

human animals could be thought of as engaging in social practices, and in such cases, the “body” would include the bodies of non-human animals.

34 As mentioned earlier, the concept comes originally from Schatzki (2002) who distinguishes between practical and general understandings.

practices to each other as they can “inform multiple practices”, and help us, therefore, understand how both closely and distantly related practices “borrow from and change one another” (idem:195). In fact, Shove et al. (2012) see meanings connecting practices as well.<sup>35</sup> This similar function further supports incorporating general understandings into Figure 3.3a and replacing meanings with them.

### 3.3 Concepts linking to general understandings

In this section, I will first continue on the topic of meanings, as it remains important for social practices and change towards sustainability. Meanings carry particular relevance to the issue of new meats, discussed below. In the two sections thereafter, I will focus on values and emotions, and to some extent on knowledge.<sup>36</sup> These are all concepts that link to general understandings as an element of social practices and are therefore necessarily part of the discussion in this conceptual structure.

#### 3.3.1 Changing meanings and sustainability

Shove et al. (2012) argue that while changing competencies often takes time, meanings as forms of association can emerge, change and travel far and fast. Therefore, while Shove and colleagues emphasize the stability of practice *elements* in general — as opposed to practices themselves which have a natural tendency to change — they see meanings as often delicate, and not necessarily stable. As Lehtonen (2000:117) states, meanings are “always temporary, bound to a certain time, place and context”.

Examples given by Shove and colleagues on natural change — natural, in the sense that it has taken place through other changes in practices or societies, and has not been purposive — but still rather radical change in meanings over time include car driving (from luxurious to the everyday), home baking (from a necessity to a hobby), and writing with ink (from normal to special).

---

35 As an example, they discuss how the meaning of being overweight connects practices such as shopping, exercising and eating (Shove et al., 2012:113).

36 Knowledge is connected to general understandings in Figure 3.3c, in the same way as values and emotions. Theories of embodied knowledge also connect knowledge directly to emotions and the body (see Ignatov, 2007). Knowledge will be discussed in this section implicitly or explicitly when relevant. For example, knowledge is connected to meanings, and ignoring knowledge is relevant to strategic ignorance. My focus is on purposive change, and while knowledge is important for practices as such, it is most challenging for change to the extent that its existence might or might not produce seemingly beneficial or necessary change; hence the connection of knowledge to strategic ignorance, for example, is relevant.

A further example on meaning changing naturally, and, in fact, rather rapidly is how the meaning of misplaced plastic has in the last few years shifted from simple, but perhaps ugly “litter” to something “pervasive and sinister” and a “source of contagion”. This is argued to have taken place due to the realisation — first among scientists and then among the publics — of the ubiquitousness of plastic microbeads, initially, in various cosmetic and cleaning products, and subsequently, in nature: “the realisation that microbeads were pouring down millions of shower drains was a key moment in the public turn against plastic”.<sup>37</sup> As a consequence, in less than five years, a global revolt against plastic, in discourses, in action, and at governmental levels, has developed.

However, Shove and colleagues emphasize that meanings can also have their persistent lives. Meanings can even swap practices — such as the meaning of being chauffeured in horse carriages to being chauffeured in automobiles in the early days of the car. Meanings can reappear as well — such as cycling in certain locations, for example in the Netherlands, where it was reborn in around the 1980s, after decades of a minor role, as the normal method of moving around.

Further, meanings can be changed on purpose. On this, Shove and colleagues give two examples: Nordic Walking and Cool Biz, as explained below.

Nordic Walking was popularised in Finland in the 1990s. For it to become popular, “walking with ‘sticks’ had to be disassociated from meanings of frailty and somehow connected to concepts of vitality and wellbeing” (Shove et al., 2012:53). The manufacturers succeeded in this by using two established narratives, one of personal health, and the other of fresh air, nature and outdoor life. Although the transformation of Nordic Walking into an internationally popular form of exercise was a success, Shove and colleagues maintain that such a process tends to be uncertain and local, constrained and enabled by existing contexts. It can also take time, as cultural meanings are often slow to change.

Nordic Walking was originally only partly about public health, and partly about selling new equipment. As an example of policymakers taking action to reduce CO<sub>2</sub> emissions, Shove and colleagues discuss the Japanese Cool Biz and Warm Biz campaigns in the 2000s. Although not purposefully applying practice theories, these campaigns were precisely about changing elements of practices, most importantly, by changing meanings — and, thereby changing behaviour as well. Efforts were made to change the meaning of normal office clothing in order to affect the material technologies (how much air conditioning and heating was needed in offices, and increasing the acceptable range of temperatures) and competencies (how people dressed for the office, and how facilities management handled the temperature

---

37 See <https://www.theguardian.com/environment/2018/nov/13/the-plastic-backlash-whats-behind-our-sudden-rage-and-will-it-make-a-difference>, an in-depth article by Stephen Buranyi in the online Guardian, 13 November 2018.

control). In less than five years, for example, “running air-conditioning ‘cold’ and wearing a tie and jacket in the summer turned from being a normal to an exceptional thing to do” for many (Shove et al., 2012:158).<sup>38</sup>

For achieving sustainability, Shove and colleagues argue that the focus of policymakers might usefully shift towards facilitating the breaking down of old unsustainable practices, including redefining meanings of certain “bad” elements of practices, such as the meaning of “comfort”. They contend that this may seem radical, but maintain that policy methods focusing on practice elements such as meanings have long been used in public health policies.

### Meat-eating related practices and changing meanings

There are many ways to understand the meaning of meat, including the more literal, the more symbolic, and the meaning regarding what is normal or not normal.<sup>39</sup>

As regards the literal meaning, etymologically the English word “meat” (from Old English “mete”) is related to the word “meal”, referring generally to food. Other old languages (Old High German, Old Saxon, Old Icelandic and Gothic) have similar histories with the word. At some point, however, a “meal” (by then, ground grain) became perceived as incomplete without animal flesh (Marder, 2016). In some other languages, the corresponding word for meat may have originally referred to “flesh as food”, such as in ancient Greek or Latin. Only from around 1300, however, has the English word “meat” referred to “flesh as food”. In light of history then, the literal meaning of “meat” has changed over time, and is likely to change again, even if not intentionally, as meanings do change.<sup>40</sup>

In fact, and as mentioned in Chapter 2, due to the meat crisis, there are current efforts to change the meaning of “meat”. Promoters of the new meats (companies, organisations, individuals) are keen on expanding “meat” to cover cultivated meat and plant-based meat,<sup>41</sup> whereas the conventional meat industry is keen on restricting “meat” to conventional animal-based meat. There is, therefore, a fight

38 For more details and discussion of Cool Biz and Warm Biz, see Shove et al. (2012).

39 I introduced the 4 Ns — Normal, Natural, Necessary and Nice — often associated with eating meat, already in Chapter 2. I will discuss them again in connection with strategic ignorance later in Section 3.3.3, as the 4 Ns are usually seen as rationalizations for a practice that causes cognitive dissonance (see Piazza et al., 2015). I will discuss them again in Section 3.5.3 in connection with the ideology of carnism.

40 Considering sustainability and purposive change, a future meaning for “meat” could even be something like “protein food resembling animal flesh”.

41 This expansion of course covers the very name “plant-based meat”, used, for example, extensively in the book *The future of meat without animals*, edited by Donaldson and Carter (2016).

going on about what meat is — together with other, up-to-now animal-derived products such as milk — and the fight has extended to the courts in several countries.<sup>42</sup> The fight can be seen as being over profits, but it can also be seen as a fight over power in discourse — for example, who gets to decide what meat, or milk, is and is not? It is, in this sense, also a fight over power in society.<sup>43</sup>

Figure 3.4 illustrates the new meats and the older options on a two-dimensional scale, measuring conventional meat character — various sensual experiences of “meatiness” that has until now defined whether something is considered meat or not — and the amount of animal protein in the food in question. The latter has until now been seen as important for what meat is. Looking at the issue as in Figure 3.4, it becomes easier to appreciate that, firstly, the definitions for the literal meaning of meat are not necessarily clear-cut, and secondly, that variety and change in the meaning is quite possible, perhaps even including the possibility that pulses could eventually be considered enough meat-like to be enjoyed as “meat”. Further, I have included “hybrids” as a potential cross-over between cultivated and plant-based meat, or any other combination, for that matter.<sup>44</sup>

One popular name for cultivated meat has been “clean meat”. This term was created in 2016 by the Good Food Institute, an organisation involved in advancing the development of cultivated and new plant-based meats. “Clean meat” has been seen as a term that is catching on: “clean meat, clean conscience”.<sup>45</sup> Some instances have extended “clean meat” to cover also the new plant-based meats.<sup>46</sup> Adopting “clean meat” as a larger category consisting of cultivated and plant-based meats could further erase the strict definition of meat, and facilitate a transformation away from conventional meat eating. Another recent term for cultivated meat, “cell-based” meat, when compared to “plant-based” and “animal-based” meat, might also have some agentive power to make different meats more equal and to narrow the psychological distance between the production and consumption of any kind of meat.<sup>47</sup> Ferrari (2016) notes that cultivated meat promises to bring the meat pro-

42 One significant court case has been with plant-based milk product manufacturer Oatly and the EU, see e.g. <https://theconversation.com/vegan-dairy-products-face-eu-ban-from-using-milk-cartons-and-yoghurt-pots-and-uk-could-be-next-153564>

43 See e.g. Wilson (2015) for a discussion on political discourse.

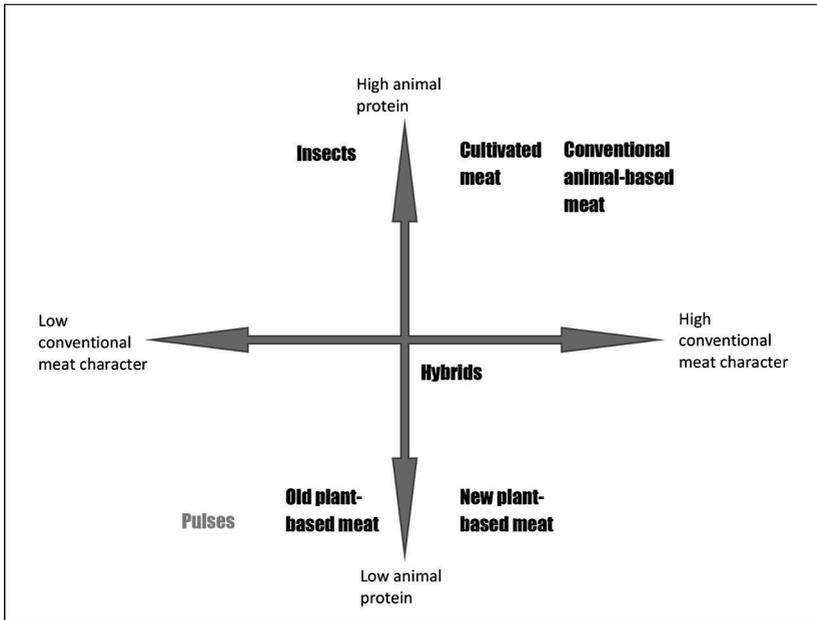
44 Hybrid products with cultivated meat have been discussed. In fact, hybrids already exist as a combination of animal-based meat (conventional meat or insects) and plant-based protein in certain processed products.

45 See <https://www.theguardian.com/lifeandstyle/2017/sep/20/lab-grown-meat-fish-feed-the-world-frankenmeat-startups> in the online Guardian on 20 September 2017.

46 See e.g. <https://a16z.com/2016/11/23/meatless-meats-clean-meats/>, a podcast from 2016, or <https://www.cbinsights.com/research/future-of-meat-industrial-farming/> from 16 January 2019.

47 The term “cultivated meat” is one that the Good Food Institute decided to try to advance in 2019 as the best term so far. See <https://www.gfi.org/cultivatedmeat>.

Figure 3.4: Mapping old and new meats



Source: Figure by author.

duction process (this time in shiny copper bioreactors) again to the midst of people, as it used to be, especially in rural settings. Animals, on the other hand, would no longer be present at all, at least if such production took place on an industrial scale.<sup>48,49</sup>

The idea (a conceptual metaphor) of a *continuum* (see Jallinoja et al., 2016) of different ways to eat meat is related to the literal meaning of meat as well. I see the meat continuum covering every meatway from a strict vegan (eating only pulses and/or plant-based meat) to someone who restricts their “meat” to large amounts of conventional animal-based meat. The bulk of the continuum consists of different

48 The envisioned “pig in the backyard” production of cultivated meat would be different, however: small-scale, local, even at-home production. The animals would be very present (see van der Weele & Driessen, 2013).

49 A pioneering company Solar Foods promises to make even plants unnecessary for food production, with their “farm-free” fermented protein called Solein, produced directly from CO<sub>2</sub>, water and electricity. See e.g. <https://www.theguardian.com/commentisfree/2020/jan/08/lab-grown-food-destroy-farming-save-planet>.

versions of flexitarians, eating conventional meat only occasionally (strong flexitarians), or more often than not (weak flexitarians).<sup>50</sup> The important point Jallinoja et al. (2016) see in such a way of conceptualising different ways of eating meat is that it can decrease the polarization between conventional meat eaters and those that prefer to eat less or no conventional meat. Further, it can help flexitarianism be an acceptable and positive way to eat much less conventional meat. With a continuum kind of thinking, all ways to eat meat become only points on the continuum. I would add that moving along the continuum — as a *journey* — into whichever direction, is easier to see as normal. So for example, some months one may eat almost no conventional meat, and some other months a bit more. When such processes become normalised, and less moralized, they become easier. In the end, it can become simpler to eat less conventional animal-based meat, even radically less.

Applying the practice element thinking from Shove et al. (2012) to the above, normalising the new meats as material elements, and normalising flexitarianism as a new competence element of meat-eating practices, can be important for change. Thereby Jallinoja et al. (2016) call for a new “bean-eating practice” to develop in Europe, with elements of “positive meanings, appropriate materials, and skills and competences” (idem:6) being facilitated by change agents such as NGOs, politicians, celebrity chefs and teachers of home economics. This can be seen as reanimating an old bean-eating practice, but importantly, with new skills, and new positive symbolic meanings. Jallinoja and colleagues emphasize that new associations are necessary between plant-based proteins (including pulses) and “festive, fulfilling, energizing and pleasurable food”, instead of the old associations between plant-based proteins as a choice for vegetarians and vegans only.<sup>51</sup> Moreover, the old meaning of animal-based meat as the only “festive, fulfilling and satisfying” protein food needs to be challenged.<sup>52</sup>

Further on the links between literal and symbolic meanings of meat, Donaldson (2016a) argues that calling the new plant-based protein products “meat” (or “milk” or “eggs”) may on its own help change the more symbolic meanings as well.

On the other hand, the conventional meat industry may indeed wish to keep the more literal meaning of meat as stable as possible, also because that may help keep the (arguably rather outdated) symbolic meanings intact. The image of happy cows helps to keep the origin of conventional meat in the dark, and fuels the distance

50 This continuum is discussed again in Section 3.5.3 in relation to ideologies.

51 On the same issue, Schyver and Smith (2005) argue that significant improvements in the image of soy could increase the human consumption of soy.

52 There would seem to be an inherent problem, however, with using the word “festive” for something to be eaten regularly (pulses with a new image). However, meat has retained the meaning of “festive”, although in many societies, it is currently eaten on a daily basis. In strong flexitarianism, of course, “festive” for meat is entirely appropriate, as meat is something eaten only rarely in this meatway.

between production and consumption, which is beneficial to the industry. Similarly, promoting meat as healthy and symbolizing power is favourable to industry growth.

Lastly, and as already discussed in Chapter 2, the symbolic meaning of *not* eating meat has changed remarkably even in more recent history. For example, some years after vegetarianism spread from the United Kingdom to the United States in the early 19th century, an image of vegetarians as “frail, weak and sexually impotent” (Shprintzen, 2011:9) was popularised in the US media, supposedly as an attack for vegetarianism’s role in social reform. By the end of the 19th century, however, partly due to larger changes in society, and partly to the movement itself, vegetarianism had become connected to physical strength, fitness, athletics, individualism, and masculinity. Similar strong and relatively fast changes in symbolic meanings may be possible in today’s societies as well. The pace of change in technologies is much faster today than it has ever been. Perhaps, meanings can change faster too. In any case, one pathway to change may be through the important value and emotion connections discussed further in the following sections.

### 3.3.2 The relevance of values, value priorities and value dispositions

In the following, I will outline several value-related concepts, using arguments especially from social psychology, but also from social practice theories. Interdisciplinarity is necessary in this context, as practice theories alone do not offer enough material for the discussion, especially as regards purposive change towards sustainable practices. I will first consider the emphasis given to values relating to sustainability. After that, I will discuss values more specifically in connection with social practices. The attention given to values in this chapter is fairly extensive. I see it, however, rather necessarily so, considering the relevance of values to several key concepts in the framework built in this chapter (general understandings and cognitive frames, along with strategic ignorance), and their argued importance regarding a transformation towards sustainability. Crompton (2016:219) notes that, despite there being a substantial body of research “establishing the importance of values in motivating public expressions of concern about social and environmental causes”, this particular literature is often overlooked.

Connecting values to the above section on meanings, symbolic meanings are about values as well, as a symbolic meaning refers to something valued or not valued. Values are complex and, similar to some other issues related to cognition, their role and functioning are not yet fully understood.<sup>53</sup> Schwartz and Bardi

---

53 The complexity of values and value systems is evident, for example, when referring to a 2017 social psychology monograph *The psychology of human values* by professor Gregory Maio.

(2001:269) define values as “desirable, trans-situational goals, varying in importance, that serve as guiding principles in people’s lives”. In more abstract contexts, such as regarding the overall importance of protecting nature, attitudes — evaluating something positively or negatively — are, in fact, very similar to values (Maio, 2011).<sup>54</sup>

Finally, I want to emphasize that the societal level as regards values is likely to be more important for a transformation towards sustainability than the individual level would be. However, the individual level is significant as well and is likely to be greatly influenced by the societal level, in terms of discourses, institutions, laws and ideologies. Most value related studies in social psychology refer to the level of the individual.

### 3.3.2.1 Values and sustainability

According to the Schwartz basic value theory (see e.g. Schwartz, 2012), *basic human values* (see the value map in Figure 3.5) are shared across all people and cultures. Further, among these, *self-transcending values* — showing in Figure 3.5 as *universalism* and *benevolence* — are hierarchically higher across cultures than *self-enhancing values*, such as *achievement*, *power* and (partly) *hedonism*.<sup>55</sup> According to Schwartz (2012), in the cross-cultural value systems, “hierarchically higher” values are considered more important to the functioning of society.<sup>56</sup> Schwartz notes further that the social function of values is to “motivate and control the behaviour of group members” (idem:14, original reference to Parsons, 1951). More specifically:

The high importance of benevolence values (ranked 1st) derives from the centrality of positive, cooperative social relations in the family, the main setting for initial and continuing value acquisition. Benevolence values provide the internalized motivational base for such relations. They are reinforced and modeled early and repeatedly. Universalism values (2nd) also contribute to positive social relations. They are functionally important primarily when group members must relate to those with whom they do not readily identify, in schools, work-places, etc. [...] Behavior based on these values is intrinsically motivated. It satisfies individual needs without harming others. Hence, it rarely threatens positive social relations.<sup>57</sup>

Schwartz (2012:15)

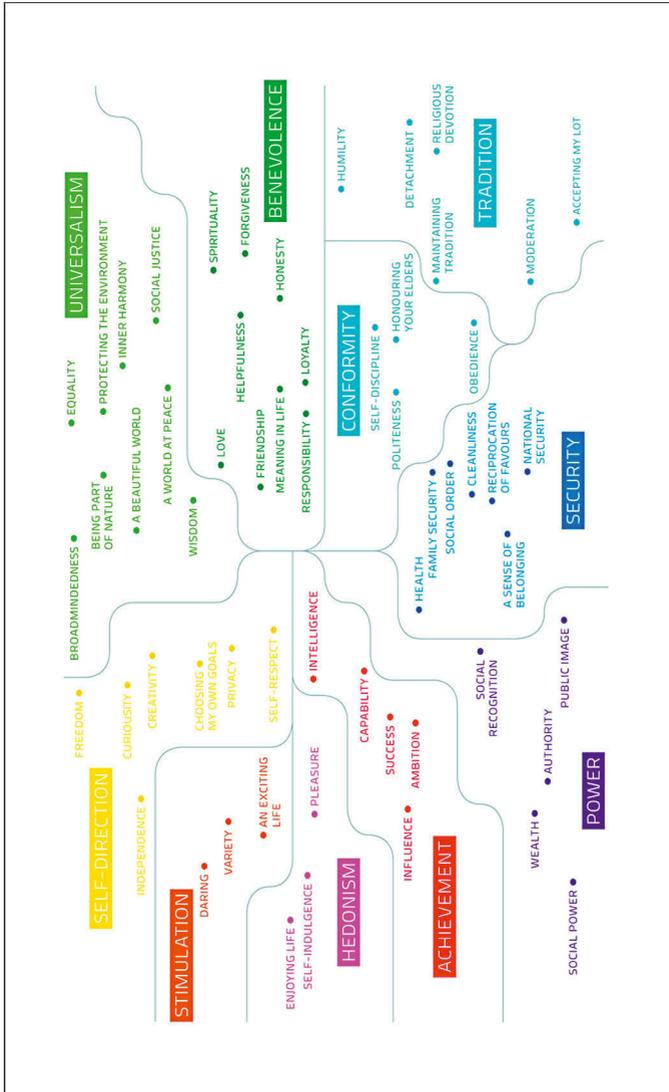
54 In addition to attitudes, *norms* are another practical application of values.

55 In the Schwartz value circle (see e.g. Schwartz, 2012:9), hedonism falls partly on self-enhancing values and partly on values grouped as *openness to change*.

56 Irrespective of the social desirability of survey answers, see Schwartz et al. (1997).

57 A third group of values sometimes seen together with benevolence and universalism is *self-direction values* which “foster creativity, motivate innovation, and promote coping with challenges” (Schwartz, 2012:15), and which are also intrinsically motivated and socially beneficial.

Figure 3.5: The structure of basic human values shared across cultures



Source: Holmes et al. (2011), based on the Schwartz basic value theory (Schwartz, 1992).

Note: The structure is based on data from over 80 countries and 65,000 people.

Maio (2017:32) describes these two groups of basic values as follows: universalism involves “understanding, appreciation, tolerance and protection for the welfare of all”, and benevolence involves “preservation and enhancement of the welfare of people with whom one is in frequent personal contact”.<sup>58</sup>

To explain the structure of values in Figure 3.5, the further apart two values are on the map, the less likely they are to be prioritized at the same time. And vice versa, if two values are close to each other on the map, they are more likely to be prioritized at the same time. This is not to say that values placed far away from each other on the map *could not* be prioritized at the same time. It is, however, less likely that they are. Further, it may be that such somewhat opposing values cause conflict within an individual, or a society if they *cannot* be prioritized at the same time (e.g. in connection with eating meat, see later in this chapter), or they cause a conflict in a larger context if prioritizing them simultaneously does not work in reality (e.g. prioritizing material overconsumption at the same time as nature protection).

What is also relevant to note about the value map in Figure 3.5 is that, although at the individual level there is much variation between prioritized values, the *structure* of the map, i.e. how close or far two values are in relation to each other, is consistent across cultures. Moreover, the values in the map are all given at least some importance across cultures, hence the name “basic human values”.

At the level of individuals, how values are expressed, and how important each of them is, varies, both between individuals, and between situations or contexts, and over time, even though certain value priorities tend to transcend specific situations (Schwartz, 2012). People have therefore more permanent *value dispositions* that may or may not correspond to the more stable priorities in the surrounding society (but often correspond to family environments), and people have *value priorities* which can change on a moment to moment (or day to day) basis, but still have some correlation to the more permanent value dispositions.<sup>59,60</sup>

Those values that behaviour change policies might want to prioritize among the public are often crowded out by other situational cues, such as advertising, limiting infrastructure, personal situations (e.g. limited cognitive, financial or time

---

58 Originally adopted from Schwartz (1992).

59 As an example, a person who values self-discipline, would still be likely to want to let go and relax every now and then, but would be unlikely to want to do that on a continuous basis. Living in a society or family valuing self-discipline, a person in general would be more likely to have that value in his/her more permanent value disposition than in another societal/family setting valuing self-indulgence, for example. In the value map in Figure 3.5, self-discipline and self-indulgence are placed fairly far from each other, and are less likely to coincide at the same time.

60 Many of the literature references I have used do not separate between value priorities and dispositions. However, I have made this distinction in my writing.

resources), or social situations (expectations, demands, emotional needs). As the Schwartz basic value theory states:

The *relative* importance of multiple values guides action. Any attitude or behavior typically has implications for more than one value. For example, attending church might express and promote tradition, conformity, and security values at the expense of hedonism and stimulation values. The tradeoff among relevant, competing values is what guides attitudes and behaviors [...] Values contribute to action to the extent that they are relevant in the context (hence likely to be activated) and important to the actor.

Schwartz (2006a:4)

As the concept of the value-action gap indicates (see also Box 3.1), it seems that people often do not act according to values they would consider important. This is, however, not entirely a fair assessment, and Maio (2011) argues that the debate of recent years regarding the value-action gap has somewhat missed the point. Values do have much to do with how we act (together with emotions, see Section 3.3.3), but at any particular moment, several different values are competing for our attention, and only some of those values are expressed in what we do. The society we live in promotes and prioritizes certain values, and these are often those that ultimately end up influencing our actions. Maio maintains that individual value dispositions do have the power to explain our actions when looking at a *broad* range of behaviour, whereas one single value has much less power to explain any specific action. The question, therefore, is less to do with trying to solve the value-action gap, and more to do with how to engage or prioritize certain values in daily practices, and in society at large.

### Box 3.1. On the value-action gap

The value-action gap (concept from Blake, 1999) has been frequently claimed as the basis for individuals or even societies not making better choices. The often seemingly unbridgeable gap has become a defining discourse frame among many policymakers and some academics, and Maio (2011:1) suggests that it is a "potentially paralysing cultural truism" preventing human progress. In the last 15 years or so, it has turned policymakers from having to bring about more regulation into trying to make people cross the gap with persuasion (e.g. with nudging, choice architecture).

However, there are a variety of approaches to this phenomenon arguing that the value-action gap is the wrong focus as such, as explained below.

As mentioned elsewhere in this section, Maio (2011) argues that the match between values (or attitudes) and action is fairly good when looking at a broad range

of behaviour, rather than a particular concrete action. A practical example with liking fruit: Someone who likes fruit will generally eat lots of them, but predicting, based on that attitude, whether he/she will eat oranges on Thursdays is impossible. Too many other variables, some of which are conflicting values, come into play. Similarly, someone who values protecting nature very highly might still drive to work at least a part of any month, as it may be much more convenient than other options for achieving the particular objective of getting to work those days. Moreover, the problem may be related to mentally translating particular values into very specific actions. People are not always motivated or able to do the translation. Additionally, particular values may not be salient enough in the context of a particular action, and people may not even recall their more permanent value dispositions at the right moment. Generally speaking, there are often several competing values, making the application of any particular value more challenging (see also Burford et al., 2015; Kollmuss & Agyeman, 2002). Besides, the phenomenon of cognitive dissonance and strategic ignorance can affect value priorities on their own, when a conflict between values is seemingly solved by ignoring the conflict.

Social practice theories approach the value-action gap from a different angle, arguing that it is not a relevant concept, due to the dynamics of practices, and due to their focus on practices instead of individuals. Behaviour is not seen as an expression of individual values or attitudes, but the observable performance of a practice, the tip of the iceberg (Figure 3.2), whereby the body of the iceberg includes worldviews and societal value priorities, among other things. Practice theories have until recently (but see e.g. Welch, 2017a for an exception) tended to not focus on values, due to much of recent practice theoretical literature in the area of sustainability being a reaction against the focus on individual behaviour change policies, and due to the relationship between these policies and attitudes (the abstract form of which are values). However, practice theories have, at the same time, maintained that societal worldviews and values are important for how practices thrive or change (see e.g. Shove et al., 2012). Viewing social practices through the pillar concept (Sahakian & Wilhite, 2014) likewise helps one to appreciate why changing values are not enough to change practices without larger-scale changes in more than one pillar. This is especially so in the case of stronger individual or societal “habits” which often include unsustainable practices, such as consuming large amounts of meat. Further, as discussed in this chapter elsewhere, social practice theories argue that action can affect values, rather than the other way around, and some empirical studies in social psychology point to this important mechanism as well.

Yet another way to explain the value-action gap (relating to the issue of competing values mentioned above) is to focus on value priorities and decision-making processes taking place in individuals. The concepts of the want- and should-selves (Bazerman et al., 1998), along with ethical mirage (Tenbrunsel et al., 2010) help in this. In

short, the should-self (similar to the ideal self, and holding certain value priorities) dominates both before and after an, often unconscious, decision to do something is made, but the want-self (often holding different value priorities) dominates during the actual decision. The concept of ethical mirage refers to how we view our action both beforehand and afterwards. Beforehand, we may think we will act with different value priorities (according to the should-self) than we, in fact, do when the action moment comes (and the want-self decides). Similarly afterwards, it is the should-self that reflects back on the action, and therefore, we may think we have made a choice with different value priorities than we did in actuality. This separation of want- and should-selves implies that there is a gap, but it is a gap between our different “value selves”, rather than between values and action. The value priorities of the want-self tend to be more impulsive, and involve more self-enhancing values, whereas the value priorities of the should-self are often more self-transcending, and determine what we consider the appropriate thing to do in a particular situation, also relating to social norms.<sup>61</sup> The want-self tends to involve more emotions and the should-self more thoughtfulness.<sup>62</sup> This distinction can partly help explain related phenomena, such as why surveys can fail to capture actual behaviour. Moreover, the common concepts of citizen and consumer identities can be aligned with the should- and want-selves.

Tenbrunsel and colleagues have some recommendations about how to better realign the want- and should-selves so that the should-self values can have more influence on action. For example, they suggest that asking why the want-self is not aligned with the should-self can be beneficial, as becoming conscious of the issues (engaging in discursive consciousness) can help to realign the value priorities. Additionally, combining being more aware (of the value conflict and the should-self values) with the planning of action can be useful.

Importantly for issues involving societal value conflicts, uncertainty and doubt let the want-self dominate more easily (Tenbrunsel et al., 2010). So, when there is uncertainty about facts (e.g. to do with climate change), the should-self may play a smaller role in decision making. While the approach of Tenbrunsel and colleagues does not consider contextual constraints (or the main part of the practice iceberg), it does help explain some of the variety in the ways people engage in practices, as well as what the core dilemma may be in situations where there indeed is some choice.

Combining these approaches then, I would argue that the value-action gap is almost always about a conflict between values, between different individual values, between different societal values, or between individual and societal values. The distinction between individual value dispositions and priorities and societal value priorities is important, with societal value priorities being more stable, yet still changeable. Further, reflecting on how values compete for attention could help align not only the want- and should-selves of individuals, but also societal value priorities and more

sustainable practices.<sup>63</sup> The phenomenon of strategic ignorance of value conflicts is, however, a crucial further complication to be addressed in connection with climate change, or other complex issues where values are in stark conflict.

Lamenting the gap between values and action is counterproductive. It is misplaced, and therefore, takes away the focus on the real issues. Further, it legitimizes lack of progress towards sustainability as something that cannot be helped due to human nature.

The division between self-transcending and self-enhancing values mentioned above is not only relevant socially for group functioning, but self-transcending values are related to affinity to sustainability-related issues as well (Crompton, 2016; Sanderson, 2014).<sup>64</sup> Engaging with and prioritizing particular values, such as *unity with nature*, and a desire to *protect the environment* (both in Figure 3.5) can, in particular, help build public acceptance of ambitious change towards sustainability, and create public demand for such change. A review of literature on the association between self-transcending values and the environment is provided in Crompton (Crompton, 2010:84-86; see also Kasser, 2004, 2011; Crompton, 2016). The centrality of self-enhancing, and especially *materialistic values* (focusing on image, status, wealth, possession) among those, on the other hand, tends to be associated with little concern for the environment (e.g. Hurst et al., 2013; Kasser et al., 2004), in addition to decreasing individual and societal well-being, as Kasser et al. (2004:22) suggest: “materialistic values not only heighten our vulnerability to

- 
- 61 Other research (e.g. Shiv & Fedorikhin, 1999; Zimmerman & Shimoga, 2014), has explained the want-self phenomenon so that when cognitive processing resources are limited (e.g. when we are tired), emotions get to have a bigger impact on our choices, and when our cognitive resources are not limited, the reflexive side gets a bigger share of the decision-making. However, research reviewed in Tenbrunsel et al. (2010) indicates that it is not simply a question of availability of cognitive resources, but indeed, the want-self can have bigger role in certain situations than in others.
- 62 However, it would likely be wrong to say that the want-self is all about emotions and the should-self is all about reason. Science still has not yet fully explained emotions as such, but they are heavily involved in many things we do, including decision making. There are cognitive theories of emotions, and emotion-based theories of cognition (e.g. Edwards, 1999). These two selves match, roughly speaking, and with fewer moral undertones, with the concepts of *fast* and *slow thinking* of Kahneman (e.g. 2011).
- 63 Reflecting on values has indeed been found effective for affecting value dispositions (Lekes et al., 2012).
- 64 Some related literature uses terms such as *we-centred* values and *ego-centred* values for a similar, but not exactly the same grouping (see e.g. Power & Mont, 2013).

serious social and environmental problems but also undermine our ability to work cooperatively in finding solutions to these problems”<sup>65,66,67</sup>.

Drawing further from social psychology literature, pro-environmental or pro-social *actions* as such are argued to reinforce our self-transcending values, therefore making it more likely that we involve in new similar actions. In fact, only thinking about values can make them stronger. Based on a study by Lekes et al. (2012), people reflecting on their particular self-transcending values for a few weeks led them to prioritize these over self-enhancing values, and to feel that their well-being had increased. So, it would appear from this that value dispositions can be changed consciously.

Although drawing attention to self-enhancing values (e.g. concerning saving money) may lead to pro-environmental behaviour, this is argued by some to only yield short-term benefits (e.g. Bolderdijk & Steg, 2015; Power, 2011). Further, it may not be as likely to lead to positive spillovers to other pro-environmental or pro-social behaviours (Nash et al., 2017), and it may be more likely to cause the rebound effect<sup>68</sup> than a focus on self-transcending values (e.g. Mont & Power, 2013).

Significantly, in social psychology, drawing attention to self-enhancing values is claimed to diminish the impact of self-transcending values, and vice versa, in a *see-saw effect* (Kasser, 2016; Maio et al., 2009). Moreover, engaging with certain

---

65 Kasser and colleagues demonstrate in their work that “when materialistic values become relatively central to a person’s system of values, personal well-being declines because the likelihood of having experiences that satisfy important psychological needs decreases” (Kasser et al., 2004: 13). Likewise, at societal or community levels, a strong materialistic value orientation is associated with less civil, pro-social, or pro-environmental behaviour.

66 I am not making any moral claims about an absolute inferiority of certain values, such as self-enhancing values. However, from the point of view of sustainability in the current global context, a strong and exclusive focus on self-enhancing values is likely to be problematic. It seems an open question whether self-transcending and self-enhancing values can work in combination. In any case, in order for such combinations to work within the context of sustainability, self-transcending values need to have a more permanent priority. For example, protecting nature in order to obtain wealth from it (e.g. responsible forest management) can fit within the sustainability frame. However, unless protection of nature is prioritized (e.g. in laws), another more attractive way of obtaining wealth from the same piece of nature (e.g. turning it into a mine, grazing area for cows, or holiday lodges) may lead to the destruction of it.

67 It is of course important to remember that association is not causation. However, this book assumes that value dispositions at the individual level, and value priorities at the societal level, do have an impact on the range of social practices engaged in, and therefore, associations found in empirical studies are important. Further, literature (e.g. Kasser et al., 2004) points to pathways whereby particular value systems have influence.

68 Rebound effect refers to, for example, savings (more fuel-efficient car) leading to more spending (driving more, buying a second car) whereby the total amount of (natural) resources spent is the same or more than to begin with.

values — regardless of which type — repeatedly seems to make them stronger, i.e. they are prioritized more often as a result (Sandel, 2012). This is particularly important in connection with the discussion in Box 3.3 on the concept of *dominant social paradigms*. Values such as a focus on financial wealth, competition and power (self-enhancing values), are repeatedly engaged with in most current societies. As culturally dominant values, they are more readily incorporated in the more permanent value dispositions at the individual level (original claim for this connection from Rogers, 1964), while also impacting social practices engaged in.

Further, communications framed with emphasis on self-transcending values seem to be effective in strengthening these values (i.e. increasing their priority) *regardless* of the more permanent value dispositions of people. Research indicates that while drawing attention to self-enhancing values has the result of strengthening them, engaging with both self-enhancing *and* self-transcending values is not found to be helpful in this respect (Crompton, 2016). This could be because self-transcending values are generally focused on less within, for example, Western societies, and therefore, an equal emphasis between the two value groups in a certain narrow context, in the end, still keeps self-enhancing values more prioritized, due to the larger context where they are much more present, in discourses, for example.

There are at least two important situations in which it may be beneficial to combine matters, however. The first has to do with combined motivations, *motive alliances*, between different issues. Underpinning values can connect issues such as poverty, inequality and climate change. The *bleed-over effect* helps to strengthen values between different issues (Chilton et al., 2012; Kasser, 2016; Maio et al., 2009). Therefore, it makes sense to address issues together, rather than in isolation, at least when they are linked by similar values (Sanderson, 2014). Additionally, action towards sustainability need not always involve altruistic motives; it can also, for example, be about responsibility towards one's own health and wellbeing along with benefits to others.

Secondly, and importantly, *social labelling*<sup>69</sup> may be able to extend across the divide between self-transcending and self-enhancing values, so that some of the potentially negative effects of self-enhancing values on pro-environmental or pro-social behaviour could be overcome. Engaging self-transcending values by labelling people as pro-environmental or pro-social — even though originally the behaviour was motivated by other reasons — can change their view of themselves, and with this, change their more permanent value dispositions. The phenomenon of social labelling can make people justify their previous behaviour according to the new

---

69 Social labelling is different from “ecolabelling”, a field that is about labelling products, and considered controversial by some in terms of its usefulness for change towards sustainability (see e.g. Gjerris et al., 2016). Social labelling is about labelling behaviour (not products), and it is argued to have power because of our social connection to other people.

label (Cornelissen et al., 2007), possibly leading to stronger positive spillover effects to other pro-environmental or pro-social behaviours (Lacasse, 2016). Social labelling can, therefore, lead to an environmentally or socially beneficial practice, originally associated with other values, but being associated with self-transcending values later on.

Additionally, this phenomenon of *value change following behaviour change* has been observed in other empirical contexts. Hoff-Elimari et al. (2014) concluded from their study on European countries that pro-social government policies can drive public value prioritizing, making the public potentially more accepting of future harsh policy measures. Similarly, the study by Hargreaves (2011), applying practice theories to organisational behaviour, indicates that value change need not always precede pro-environmental behaviour change. In his study, people specifically rejected environmental values as motivators, but nonetheless, were favourable to certain pro-environmental practices for their organisation.

As shown in several contexts above, changing behaviour can, therefore, change attitudes and value dispositions, so the arrow from values to behaviour is reversed, and doing affects thinking. Indeed, social practice theories (e.g. Warde, 2014) argue that doing *can* precede thinking, in other words, that value dispositions can change after certain related practices are already enacted. Shove (2010) contends that both new attitudes (and values) and related new behaviours may be the results of changed practices and their performances. Social psychology and social practice theories at least partially agree on this.

To conclude the above, the discussion on the relationship between value change and behaviour change is by no means settled, and one should take a rather critical approach to the view that individual value change must precede individual behaviour change. Instead, the view — aligned with social practice theories — that value dispositions can change during and after behaviour change, or after a change in practices, is worth considering more widely. As Berzonsky and Moser say when discussing the importance of values for transformation towards sustainability:

Emphatically, we do not propose a sequential process, wherein values must change first before other changes in practice and policy can be initiated. One is always implicated in and intertwined with the other. Values change in some and then inspire others; behaviors change values and values change behaviors; those passionate to spread certain values use bully pulpits, policies and markets. Inner change is in these ways linked to outer change. Ignoring the psycho-cultural component [involving values] of the transformation, however, risks missing what may well be the most obstinate obstacle to the change so many call for as humanity enters the Anthropocene.

Berzonsky and Moser (2017:21)

As Berzonsky and Moser imply above, the precise modes of influence are less relevant than the overall focus on values. It can be argued that, when taking a wider view of different literatures, there may be more pathways to achieving a transformation of values that are important for solving the ecological crisis and transforming societies towards sustainability. However, more relevant than concentrating on day-to-day value priorities might be to concentrate on the more permanent value dispositions people hold. These then are likely to be greatly affected by societal value priorities, and therefore, changing societal discourses as well as “norms, standards and institutions” (Warde, 2014:295), up to the level of social paradigms or master frames (see Box 3.3) is increasingly believed to be necessary (see e.g. O’Brien, 2018).<sup>70</sup> As Berzonsky and Moser (2017:15) put it, many calls are made for “society to move away from values that drive environmentally unsustainable and economically and socially unjust trends to a new set of values supporting the emergence of true ecological, economic, and social sustainability”.

I would add that at the societal level, consistency in values is a key issue in terms of policies and discourses. One reason (among many) why behaviour change policies often do not produce long-term results may be that the promoted actions (and the related values), at the level of individuals, tend to be misaligned with the values that the same policymakers — and societies at large — embrace and promote otherwise (see e.g. Crompton, 2016).

Schwartz has worked on societal level values in his cultural value theory (see e.g. Schwartz, 2006b).<sup>71,72</sup> In this theory (see Figure 3.6), the self-transcending and self-enhancing value groups correspond to *egalitarianism* and *harmony*, on the one hand, and *mastery* and *hierarchy*, on the other. Cultures that prioritize egalitarianism prioritize values such as equality, social justice, responsibility, helpfulness, and honesty; and cultures that prioritize harmony, consider values such as world at peace, unity with nature, and protecting the environment important.<sup>73,74</sup> Compar-

70 In the language of social practice theories, these would involve the practices-as-entities, the larger part of the iceberg in Figure 3.2.

71 Hsu (2013:150) offers a comparison of different cultural value theories (of Hofstede, Inglehart, Schwartz and Steenkamp) and concludes that, at least in the consumption behaviour context examined in the study, in general, the Schwartz cultural value theory is “more theoretically and empirically useful” than the other three.

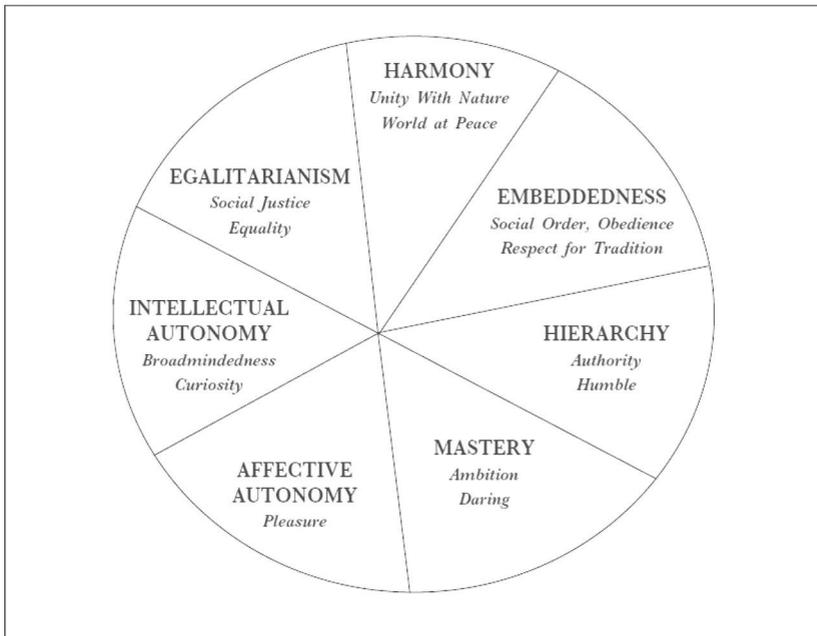
72 Schwartz (2006:138) defines a culture as “the rich complex of meanings, beliefs, practices, symbols, norms, and values prevalent among people in a society”. Further, he notes that “in addition to a dominant culture, subgroups within societies espouse conflicting value emphases” (idem:139).

73 On the other side, cultures prioritizing mastery, consider values such as ambition, success and competence important, and cultures prioritizing hierarchy prioritize values such as social power, authority and wealth (Schwartz, 2006).

74 An example from the grouping of cultures according to the Schwartz cultural value theory (Schwartz, 2006): there are clear differences between the English-speaking countries and

ing these cultural, or societal level values to the individual level values (as shown in Figure 3.5), the similarities are obvious. The structure of the circle in Figure 3.6 is built the same way as the structure of the map in Figure 3.5 (often also presented as a circle), in other words, distance matters for the co-occurrence of values. One distinction between the two models is worth mentioning, however. At the individual level, benevolence values include *dependability* (called “responsible” in Figure 3.5). This refers to one’s immediate social group, and not to wider society. However, at the cultural/societal level, the same value shows up as *responsibility*, and in particular, as *collective responsibility* within the egalitarianism value group (see Schwartz, 2006b). Further, the hierarchy value group includes responsibility, but there it is in the form of *conformity*.

Figure 3.6: Cultural value dimensions



Source: Schwartz (2006b)

In the rest of this book, I will generally refer to values either *facilitating* or *hindering* sustainability. By these terms, I refer to the individual, but especially the

---

western Europe as regards harmony — it is high in western Europe, but lower than average in English-speaking countries, especially the United States.

societal (cultural) level, and to the value groups discussed above. The values facilitating sustainability include values such as unity with nature, protecting the environment, and collective responsibility (co-responsibility), as well as social justice and equality.

### 3.3.2.2 Values and social practices

While human actors have individual value priorities and dispositions, values themselves reside more within social practices (Welch, 2017a), and these often reflect (more stable, yet changeable) societal value priorities, rather than necessarily individual priorities. Practices can, in fact, be seen to have a range of *potential* values. When performing practices in a certain way in a certain context, human actors (usually unconsciously) match their own value priorities with at least some of the values residing in practices. For example, the practice of showering in a Western everyday context holds certain values. Comfort, cleanliness and convenience (from the title of Shove, 2003) are certainly among those. All performances of showering are likely to prioritize cleanliness, but some performances by the same person might prioritize convenience (short and efficient shower) over comfort (long and enjoyable shower). What is important for (un)sustainability, however, is that all of those values belong to everyday showering as a practice (and can lead to excessive resource use).

On a daily level, value priorities (and emotions, see more in Section 3.3.3) are significant determinants on the ways we do things and perform practices. This also holds within the same practice, at least when it is not a very strong habit (see Box 3.2).

#### Box 3.2. Social practices as habits

Sahakian and Wilhite (2014:28) contend that “all habits are practices, but not all practices demand habitual reproduction”. The habitual nature of practices can, therefore, be either weak or strong. With weaker habits, there is more variation in the performance of practices, we make more choices, using some discursive consciousness and fewer automated strategies than with strong habits. In general, many practices — at least those practices that are not entirely dependent of other people, and where there is at least some choice — boil down to processes similar to the food choice processes discussed below in the chapter text. Many of the choices are automated, as they are part of habits and routines, but there is variation, especially with weaker habits, and in these situations, we make more conscious choices. We may consciously choose a longer shower over a shorter one, or oatmeal over bacon, even though we are unaware of the majority of actual choices made,<sup>75</sup> as we employ various strategies to help us

through our daily lives. In such weaker habits, value dispositions are argued to have more influence on what we do (see e.g. Dahlstrand & Biel, 1997; Matthies et al., 2002).

Sayer (2013) sees practices existing on a continuum, where at one end are the most habitual practices (i.e. strong habits), and at the other end, practices to which a certain amount of deliberation and variation is typical (weaker habits).

Stronger unsustainable habits are a particular problem for sustainability (e.g. Sahakian & Wilhite, 2014; Verplanken & Roy, 2015). Stronger habits are performed with much less variation and much less discursive consciousness. Only bigger changes (such as life changes involving new employment, marriage, birth of children, moving house, retirement) are often believed to disrupt the stronger habits enough on their own. Sahakian and Wilhite (2014) would see stronger habits potentially shifting when one of the three pillars of practices—the body, the social world and the material world—goes through change, but dissolving only when larger changes take place in more than one pillar.

Stronger practice theories would be likely to maintain that consciously trying to change, especially a strong habit, would be the wrong approach, and focusing on the structure of the practice, and what changeable societal elements support that structure, would bring more results.

While social practice theorists tend to downplay the importance of individual values (being principally against the ABC model), societal values are nonetheless critically important for social practices, as argued above. What is also noteworthy is that until recently, practice-theoretical research has mostly analysed individual performances of practices, instead of focusing more on “the norms, standards and institutions which produce shared understandings and common procedures” (Warde, 2014:295), while at the same time arguing for the importance of worldviews and discourses (as e.g. in Shove et al., 2012). Societal value priorities reflect worldviews and are reflected in discourses, while impacting on the value dispositions of individuals, societal structures, and practices as entities and as performances.

Going back to the elements of practices (see Figure 3.3), values “inform the cognitive and affective dispositions through which individuals respond to their environment [... and] values illustrate how general understandings may combine the tacit and the discursive” (Welch & Warde, 2017:6). Values, therefore, link to general understandings, as well as to practical (tacit) and discursive consciousness, and to emotions (see Section 3.4).

---

75 For example, regarding food-related decisions, we tend to be aware of only a very small proportion of them (see Wansink & Sobal, 2007).

## Meat-eating related practices and values

In the case of choosing which food to eat, or whether to eat meat or not, values turn into *food choice values* (see Sobal et al., 2006). Food choice values are about what makes us want to eat or not eat certain foods. If something tastes very nice, we are likely to want to eat it, so taste is a food choice value. Similarly, price, convenience, variation and healthiness are food choice values. Many people prioritize price, even if they could afford something more expensive.<sup>76</sup> However, in other cases, people do not value taste, price or convenience more than quality, safety, ethics, or how a particular food fits with the social eating situation (related to the basic value *conformity*). So, in those cases, the relevant food choice values may make a person choose not to eat a particular food, meat, for example, no matter how tasty it is. Or vice versa, a person who would normally prioritize animal welfare (and not eat meat) eats meat on occasions in which avoiding social conflict is considered more important. In many cases indeed, food choice values are in conflict, in which case it depends on the situation (and whether the want- or the should-self is dominating, see Box 3.1), which values win. However, in many cases, certain situations repeat. For example, every weekday morning a person may be faced with the same situation between healthier, but perhaps less tasty, and potentially tastier, but arguably less healthy foods (e.g. oatmeal or bacon). In such situations, people tend to develop strategies for themselves, so that they do not have to consciously deliberate about the choices every time. These strategies<sup>77</sup> make the choices automatic and routinized, and when using such strategies, only a more or less new situation makes people rethink their food choices and food choice values.

At the societal level, the issues discussed in Chapter 2 relating to different factors potentially increasing or decreasing meat eating are, in fact, ultimately about food choice values. For example, urbanization tends to make people prioritize convenience, and therefore pre-packaged convenient cuts of meat.

At the individual level, more permanently prioritizing universalism values may be directly related to reduced meat eating (de Boer et al., 2007). Eating organic meat may not necessarily have an impact on reducing meat consumption, but it can emphasize the related food values, such as sustainability, fairness and animal welfare (de Bakker & Dagevos, 2012). The new meats (cultivated or plant-based meats and insects) could have a similar effect.

---

76 In such a situation, price is considered more in a symbolic way, and in this situation, we may buy either cheap or expensive items, depending on the situation. When price is only about true ability or inability to buy something, it is not a similar kind of value.

77 Such strategies include only focusing on one value every time, or using heuristics where certain foods are always excluded from the choices, or conversely, are always added as an extra item. See Sobal et al. (2006) for more examples.

On motive alliances regarding meat eating, if expressed motivation to not eat meat depends on the context (see Wilson et al., 2004), then trying to motivate people with multiple motivations (environmental, human health, animal welfare) could make it more difficult for people to continue ignoring or denying the issues related to eating animals; and vice versa, it could make it easier for people to be motivated to change their meat-eating related practices and support wider changes. Indeed, Hartmann and Siegrist (2017) conclude from their systematic review of 38 different research articles that it seems that focusing on several reasons to eat less meat can produce better results than focusing only on the environment.

As regards social labelling, calling occasional meat eating flexitarianism — rather than not calling it anything in particular, or calling it “failed vegetarianism” — can help people view themselves more positively, and continue to engage in this behaviour, as long as “flexitarianism” is seen as a positive label. The effects can spill over to other practices.

It may also be that social norms (and therefore societal value priorities) change due to societal discourse. In the United Kingdom, for example, it seems that an increasing number of people feel that they *should* eat less or no meat (irrespective of whether they do). This is evident in survey answers which report increasing numbers of vegetarians, flexitarians and vegans.<sup>78,79</sup> And significantly, there are currently no real government policy actions supporting such changes.

### 3.3.3 Linking values and emotions

In this section, I will focus on the links between values, emotions, and social practices. I will cover emotions in this particular setting, rather than in a broader context.<sup>80</sup> Suffice it to say that emotions are another critical area where, despite recent advances, for example, in measuring emotions in brain activity, there is still much to discover on their role and functioning. On the connection between emotions and thought, Ignatov (2007) claims — along the lines of theories of embodied knowledge — that people are first and foremost feeling and only sometimes also re-

---

78 At least until now, meat consumption statistics do not show a significant enough decrease that would be in line with such survey results.

79 See e.g. <https://www.theguardian.com/business/2018/nov/01/third-of-britons-have-stopped-or-reduced-meat-eating-vegan-vegetarian-report>—report in the online Guardian on 1 November 2018.

80 Some specifically prefer to use the term “emotion” (e.g. Scheer, 2012) in connection with social practices, while others prefer to use “affect” (e.g. Reckwitz, 2017). There are somewhat conflicting definitions of affect, but e.g. Stangor (2010) sees that there are two components of affect: emotion and motivation, while Chatterton (2016) defines affect as the experiencing of emotion. I prefer to use the term “emotion”, instead of “affect”.

flexively thinking.<sup>81</sup> Emotions have been defined as embodied thoughts (Rosaldo, 1984), among many other things, but generally, they are defined as including a bodily component and a thought component, and psychology sees them mostly as directing attention and guiding action (e.g. Stangor, 2010). They can, therefore, be seen to have an important role in performances of practices.

Weenink and Spaargaren (2016) argue that emotions link to not only general understandings (in the form of *emotionally charged general understandings*), but to competencies and material elements as well.<sup>82</sup> Further, emotions literally move people into action, including thought; they are what we care about, and human agency resides in emotions. Bodily action systems and emotion processing systems in the brain are closely connected, and emotional reactions are always bodily reactions, however, differing in intensity, duration and awareness. Our “relentless emotional processing [...] directs our acting, thinking and feeling”, to the extent that humans can “only ‘be’ through the emotional experience of practices” (idem:71). However, we are mostly unaware of our emotions.

To Weenink and Spaargaren (2016), practices, in fact, produce *emotional energy*, and the more emotional energy a particular *emotionally-charged* practice produces, the more likely we are to want to engage in it, and vice versa. Humans, on the other hand, have emotional agency, and Weenink and Spaargaren see that *collective emotional agency* can help change practices. These two concepts can be seen to link so that the emotional energy — a form of agentive power — produced by practices turns into emotional agency in people. Change can originate in high-intensity emotions that generate new ideas, and through changing general understandings shared by different practices.

### Meat-eating related practices and emotional energy

Meat-eating practices have traditionally produced a lot of emotional energy (for most people), and following Weenink and Spaargaren (2016), this has made people more likely to want to continue engaging in them, regardless of the downsides. Further, strategic ignorance of emotion conflicts related to meat eating is likely to prevent any sense of emotional agency for changing these practices. On the other hand, movements such as the vegan movement could be seen as having a significant amount of the collective emotional agency for change that Weenink and Spaargaren discuss.

81 This can in fact fit well with stronger social practice theories.

82 Figure 3.3 provides for connections between emotions and other elements of practices, including via the fourth element of body.

### 3.3.3.1 Some concrete ways that values and emotions link

Similarly to values, practice theories have tended to side-line emotions. Reckwitz (2017) suggests this to be related to social theory long relegating emotions to psychology, and to the overall preference of reason over emotion in modernity. I would add that, in practice theories, emotions may have been seen even more to do with individuals than values, and therefore, not the main focus. However, in the last few years, more practice theory literature has paid attention to emotions. Welch (2017a), for example, calls for better incorporation of emotions to practice theories. Like values, emotions are inherent to practices (Reckwitz, 2017; Weenink & Spaargaren, 2016; Welch, 2017a).<sup>83</sup>

Values and emotions are often intimately connected to both each other and to our goals. We may express our prioritized values in our action seemingly for the sake of those values (values as motivators), but we may also have other, perhaps more basic goals, and the values are expressed in the process of reaching those other goals. Such more basic goals are often related to emotions (emotions as motivators). As the etymology of the two words would suggest, motivation has a strong link to emotion (Welch, 2017a). Further, “motivation without a process of being [emotionally] affected by something is not thinkable” (Reckwitz, 2017:120). Sayer (2013:171) argues that values “merge into emotional dispositions” to inform our valuations of various things, including people, ideas, behaviours and practices. Schwartz notes that the basic human values (see Figure 3.5) in particular link to emotions, as “when values are activated, they become infused with feeling” (Schwartz, 2006a:3).<sup>84</sup>

In many cases, when making a usually unconscious choice for practice A rather than practice B, we prioritize certain values, and often (unconsciously) *want* certain emotions (in a way then, we have emotion priorities as well). Once performing the practice, we experience these emotions as bodily sensations, whether conscious or mindful about them or not. Emotions are therefore obviously part of us, in both the wanting and the experiencing of them. Many practices may be performed because they have to be. For example, we have to eat. However, value priorities and emotional wants have a role in *how* we perform the practices we have to perform. Emotional wants can be linked to the emotional energy that Weenink and Spaargaren (2016) see in practices. We *want* the emotional energy of certain practices.

---

83 Weenink and Spaargaren (2016) talk about practices having “emotional mood”, and Reckwitz (2017) refers to practices having “affects”.

84 For example, even when we attempt to tell the truth in a certain situation for the sake of being honest (i.e. honesty as a prioritized value), we may, in fact, aim for our action to be in line with our prioritized value mainly for the sake of feeling content with ourselves and our behaviour, or of not feeling guilty. If we, on the other hand, do not feel guilty about lying, we may be less likely to aim for honesty.

## Meat-eating related practices and moral emotions

Some concepts blend in both values and emotions. *Moral emotions* are linked to *moral values* (in some way referring to right and wrong). Moral values tend to be on the right-hand side of Figure 3.5. Moral emotions include anger, contempt, disgust, guilt, shame and embarrassment, but also positive emotions such as elevation, gratitude, and pride (Rozin et al., 1997; Tangney et al., 2007). On the negative side of moral emotions, especially guilt and moral disgust are linked to eating animals, as well as to the alternatives to meat, such as cultivated meat.

There are several ways that guilt relates to eating animals. The phenomenon of strategic ignorance (see later in this section) often arises as a result of guilty feelings about eating animals. Further, Stanescu (2016) argues that eating meat from organically farmed animals, may, have more to do with assuaging guilt, and less to do with prioritizing self-transcending values to do with nature (i.e. animal welfare in this case). Moreover, people who are not full vegetarians, but occasionally eat meat, seem to feel/express more guilt about their food practices than those eating meat on a daily basis (Verain et al., 2015). This is possibly so because such people are more consciously aware (engaging in discursive consciousness) of their eating practices and the consequences of those than regular meat eaters are. The occasionally meat-eating vegetarians are likely not engaging in as much strategic ignorance about meat, and therefore, feelings of guilt may be more acute.<sup>85</sup> Finally, the presence of vegetarians often causes guilt, and other negative emotions, such as anger and resentment, in regular meat eaters, as it reminds them of their morally problematic behaviour of eating animals (Adams, 2001; Rothgerber, 2014).

Guilt has been linked to pro-environmental action as well, in the way that this negative moral emotion could be used as a motivating tool for persuading people to change their behaviour towards sustainability (see Rees et al., 2015).

One could theorize that being in the presence of people who eat such new meats might cause even more guilt (and anger) in those eating conventional meat. This would be so as there would now be even less reason for the meat eaters to *not* join those who eat the meat-like alternatives than before when the options were either eating a completely vegetarian or vegan diet or eating animal-based meat regularly. It was easier, then, to justify not choosing a full vegetarian or vegan diet.

Moral disgust is linked, among other things, to eating animals being wrong, expressed by some vegetarians and vegans (e.g. Loughnan et al., 2014). It likely has its roots in another more basic form of disgust which has probably originally functioned as a survival tool, warning humans of dangerous items (see e.g. Rozin & Haidt, 2013). Further, moral disgust can be felt towards new meats such as insects

---

85 Such people might feel less guilt, however, if they saw themselves as flexitarians, rather than failed vegetarians.

(see e.g. Tan et al., 2015)<sup>86</sup> and cultivated meat (see e.g. Verbeke et al., 2015). However, exposure, curiosity and knowledge, and changing meanings of normality may lessen feelings of moral disgust (see also van der Weele & Driessen, 2013).

Lastly, the concept of *moralization* is relevant in connection with meat. Moralization is a process which converts preferences into values, and in which a previously value-neutral issue can become morally disgusting (Rozin et al., 1997). Rozin and colleagues use cigarette smoking in the United States as an example of this process. Applied to the case of intensive animal agriculture, a process of moralization could, with time, turn this way of meat production into being immoral, and disgusting. At the same time, the alternatives to industrial meat production, such as cultivated meat, could become the morally acceptable choices, and disgust could, therefore, be redirected from cultivated meat to conventional animal-based meat (Driessen & Korthals, 2012).<sup>87</sup>

### 3.3.3.2 Further conflicts between values and emotions

This subsection will focus more heavily on meat-eating related practices — rather than have them as specific examples, as is mostly the case in this chapter — since meat eating illustrates extremely well issues to do with value and emotion conflicts, and the resulting tension and cognitive dissonance, and ambivalence regarding how to resolve the conflicts, as well as strategic ignorance and other coping mechanisms, as ways to deal with the conflicts. Moreover, I will discuss the related challenges to do with changing practices. For example, strategic ignorance often leads people to ignore the problem of meat, rather than just their internal conflicts. Other coping mechanisms can further close practices, keeping them from changing, and lead to unhelpful conflicts between people, for example, between meat eaters and vegetarians or vegans. When examining meat eating as a “moral practice”, it is possible to shed light on how emotions, cognitions, values, beliefs, and identities intimately combine (Loughnan et al., 2014). Other topics in this context, similar to meat, include climate change and (un)sustainable practices more generally.

### Ambivalence and strategic ignorance

*Ambivalence* is another concept bringing values and emotions together, however, as a result of a conflict. Maio (2017) identifies ambivalence as arising in situations when we feel conflicted about an issue; we feel both positively and negatively about

---

86 In some cases at least, disgust related to insects may be more basic disgust than moral disgust.

87 However, some argue (see e.g. Ferrari, 2016 or Miller, 2012) that cultivated meat would support the immorality of eating animals, rather than offer a moral alternative.

something. He notes that ambivalence is evoked towards issues which put values into conflict.<sup>88</sup> In everyday contexts, ambivalence is often seen either as a conflict between values or as a conflict between emotions. But as emotions and values are closely connected, it's more a question what kind of a frame is used, i.e. a value frame or an emotion frame. To give an example from the online Merriam-Webster English dictionary (for the term "ambivalence"): "I'm ambivalent about going to the show. On the one hand, it would be fun. On the other hand, I really should stay home and get some work done". Merriam-Webster refers to this as a conflict between feelings, but, in fact, it is also about values (and about want- and should-selves): valuing a positive social experience, a pleasant evening (perhaps related to hedonism or benevolence values, see Figure 3.5) more than the feeling of accomplishment from work completed (perhaps related to self-discipline, a conformity value; or ambition, an achievement value) at that particular time, will make a person select the first option. Vice versa, valuing the work accomplishment more on that particular day will make the person select the second option.

We are often aware — at some level — of a feeling of ambivalence, but not necessarily of the reasons for it, especially not regarding the value conflict. Ambivalence does not need to (and often does not) lead to any action that would correct the value conflict; the conflict can stay, and we may eventually suppress the related conflicting emotions and the feeling of ambivalence itself, and it changes into strategic ignorance. But the more aware of it we become, the more likely we are to do something about it, in terms of more consciously choosing action in line with one value over another. Figure 3.7 illustrates a simplified process that often arises from conflicting values.

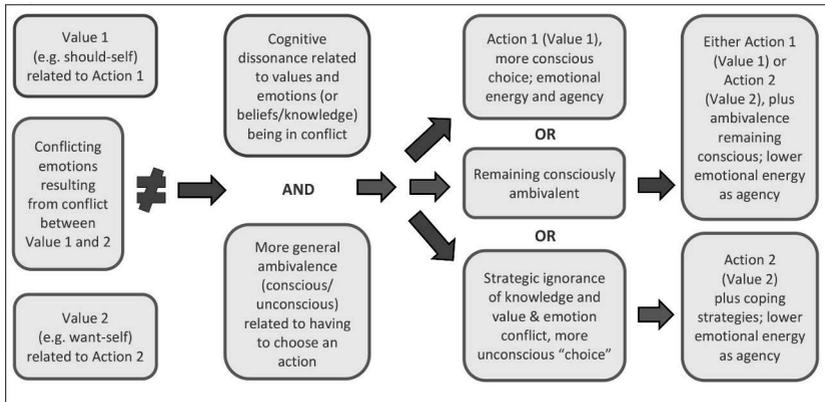
To describe the process in Figure 3.7,<sup>89</sup> the two values that are in conflict may both be prioritized by us, but one of them is more likely to be linked to our ideal selves, our more permanent value preferences (the should-self), and the other one is more likely to be linked to our (perhaps more immediate) wants and needs (the want-self). For example, "I know I should not eat meat, but I want it anyway", or "my partner wants us to eat meat" are examples of this. The value conflict may also arise from differences between individual and societal value priorities (e.g. Sanderson, 2014). The *cognitive dissonance* (psychologically uncomfortable conflict) and more general ambivalence that result especially from longer-term inconsistent behaviour, are addressed by either changing behaviour (Action 1), so that there is

---

88 Maio (2017) argues that ambivalence can, however, also arise when two values pull to the same direction, if they are in principle far from each other (e.g. in terms of the value map).

89 Chatterton (2016: 42) criticizes flow charts explaining behaviour, as well as "the language of barriers", as it reflects the ABC-model kind of approach. However, Figure 3.7 is only meant to illustrate the phenomena of strategic ignorance and ambivalence. More generally, I do not discuss "barriers to desirable behaviour" in this book.

Figure 3.7: Sketching a process of value and emotion conflict



Source: Figure by author.

no conflict, or by ignoring the conflict to the extent that it can be coped with in connection with the behaviour that may have been originally more desirable (Action 2). A further, although perhaps less common option (included in Figure 3.7) is that one remains consciously ambivalent, but still chooses one of the actions. In this situation, consciousness about the conflict situation regarding choices made might stay. Both of the situations where either ambivalence or strategic ignorance are present in the “end state” in Figure 3.7 have some emotional costs, and therefore the action that resolves the conflict (Action 1 in Figure 3.7) results in more experienced emotional energy than the other two options.

Eating animals is an excellent example of value conflicts. Loughnan et al. (2010) coined the term *meat paradox* to describe our love for meat (dead animals) and our love for (live) animals as pets, for example.

According to the theory of cognitive dissonance (concept originally from Festinger, 1957; see also e.g. Onwezen and van der Weele, 2016), people attempt to solve conflicts between value priorities concerning action, by changing the actions, changing the value priorities, or changing thoughts or beliefs related to the action. In a way, the last option relates to changing accepted “knowledge”. In connection with meat, this could involve believing, for example, that animals are not worthy of moral concern (e.g. Bratanova et al., 2011), often regardless of whether the person would overall prioritize moral concerns. Or, it can relate to justifying meat eating by arguing that it is necessary. It may sometimes be easier to change what you think than what you do, and so, in this context, addressing cognitive dissonance by changing otherwise desired behaviours tends to be more difficult than the other

ways to address the dissonance (e.g. Nash et al., 2017), so Action 2 in Figure 3.7 is often more likely than Action 1.<sup>90</sup> Both resulting actions — behaviours or practice performances — have emotional energy, as all practices do (Weenink & Spaargaren, 2016), but this energy may be experienced differently in different situations. Critically, strategic ignorance itself costs emotional energy which makes Action 2 more resource intensive than Action 1 (van der Weele, 2013). Additionally, strategic ignorance of the original emotion conflict is likely to prevent a sense of emotional *agency*.

The simplest form of strategic ignorance is avoiding thinking about the related issues in the first place. In connection with eating animals, avoiding thinking about anything to do with meat production is such strategic ignorance (see e.g. Rothgerber, 2014). This is likely to relate to avoiding information about any negative consequences from eating animals (see the next subsection). Many coping strategies can be regarded as forms of strategic ignorance (van der Weele, 2013). Regarding eating animals, a variety of strategies have been identified over the last years (discussed e.g. in Loughnan et al., 2014; Rothgerber, 2014; van der Weele, 2013).<sup>91</sup> They mainly fall into the three basic approaches described above. First, radically reducing (in the form of strong flexitarianism) or stopping eating animals altogether (vegetarianism or veganism) is the approach in line with Action 1 in Figure 3.7. Second, in addition to what was mentioned above, changing value priorities can be realised by *rejecting* certain moral behaviour (such as not harming animals) on the basis that it cannot be absolute, or consistent. For example, there is no way to eat so that no living creature would ever be harmed; therefore, eating animals regularly is all right. Paying attention to any real or imagined inconsistencies among vegetarians or vegans, or, devaluing them to the extent that their behaviour is supposedly less moral than our own behaviour (e.g. by calling them hypocrites or fanatics), are part of the same strategy.<sup>92</sup> Moreover, giving a lower moral status to certain animals (meat animals) as compared to others (e.g. pets) is also related to values. Third, changing thoughts and beliefs (or accepted knowledge) is often related to the dissociation of the food product from the animal it originates from, including calling them by different names (e.g. beef vs. cow). Further, denying that meat animals (including fish) experience pain, or that they can have feelings such as fear, or have similar intelligence to pets, for example, is about changing beliefs.

90 Even when changing behaviour (e.g. stopping eating meat), strategic ignorance, together with *confirmation bias* may continue in other forms. For example, vegetarians may deny ever liking the taste of meat, or believe that no amount of meat is healthy to eat (van der Weele, 2013).

91 In a way, this research was started by Rozin (1996) when he appealed for psychologists to “take meat eating seriously” (Loughnan et al., 2014: 107).

92 Minson and Monin (2012) call the putting down of vegetarians and vegans by meat eaters *dogooder derogation*.

Beliefs about our behaviour can function as coping strategies. For example, eating “humane” meat (often not produced essentially differently from other meat, see Stănescu, 2016) may only be about *perceived* behaviour change. Similarly, believing in, and proclaiming our intentions to reduce meat eating in the future, or belittling the extent of the amounts of meat we have eaten in the past (related to the concept of ethical mirage, and therefore values) can operate as coping strategies. Additionally, some negative emotions could function as further coping strategies. Feeling disgust towards insects or cultivated meat may work as a justification to continue with our current meatways, as the new ways are not conceivable. Likewise, *environmental melancholia* (Lertzman, 2015) is related to feeling disempowered (and unable to act) regarding overwhelming issues, such as the miserable lives of meat animals, environmental destruction, or climate change.

Rationalizations or justifications of behaviour can also function as coping strategies, whereby the value conflict is ignored, as the behaviour or practice performance is too central to not pursue. In connection with eating animals, Joy (2010) identified three such justifications, to which Piazza et al. (2015) added a fourth. Together these are the four Ns: meat being Normal, Natural, Necessary and Nice.<sup>93</sup> These justifications are very common, and used alongside other coping strategies (Piazza et al., 2015). Interestingly, men tend to use more direct justifications, such as the four Ns, and claim to not generally mind as much to think about animals dying for their food — correlating with how masculine men perceive themselves — whereas women tend to prefer more indirect justifications, such as dissociation and avoidance (Rothgerber, 2013).

At times, cognitive dissonance can resurface. A rather common and interesting context in which this happens is when meat eaters and vegetarians and vegans confront each other. In such situations, vegetarians activate the meat eaters’ inner conflict surrounding meat consumption, causing guilt, anger, and other negative emotions, and thereby reinforcing the coping strategies in meat eaters. Rothgerber’s empirical study (2014) supports these arguments originally made by Adams (2001).

Even though strategic ignorance and the related coping strategies help keep a practice more solid, or closed to changes, things are not set in stone, and the process in Figure 3.7 can indeed start all over again when something changes. In addition to confrontations between crucially different practices (meat eaters vs. vegetarians), new information, or a particular life event, can sometimes challenge a particular coping strategy, and return the process to addressing the conflicting values and emotions again (e.g. de Boer et al., 2016). In connection with meat eating, the new meats may also have this impact. Further, linking several issues together, for example, related to eating less meat being good for animal welfare, one’s own

---

93 Nice comes from Piazza et al. (2015).

health, and the health of the planet (see e.g. de Boer et al., 2013) can make persisting with strategic ignorance more difficult, as values and emotions can link together in new ways in such  *motive alliances*. It may be important, however, that whatever is “new” is not forced upon anyone in large quantities, but can be taken in little by little, to avoid strengthening the coping strategies further. Doubt about our own practices can in some circumstances make resistance stronger (e.g. Zaraska, 2016a).

The concepts of cognitive dissonance and ambivalence are not often addressed in the same literature. Meat eating is, however, one such instance where somewhat more attention has been paid to ambivalence. Together with strategic ignorance, ambivalence is believed to be particularly wide-spread in connection with eating animals, and possibly increasing in society in general (van der Weele, 2013; van Harreveld et al., 2009), and Moreover, true ignorance about the impacts from eating animals is likely to be rarer than it appears (see also Holm & Møhl, 2000).<sup>94</sup>

Confronting the meat paradox by acknowledging and embracing the ambivalence may help us to be conscious about, and potentially change, our eating practices (Zaraska, 2016b). It may decrease polarization, often present in connection with controversial issues, and increase our willingness to look for solutions. Van der Weele (2013) argues that cultivated meat (together with other new meats) can help in this process by making us acknowledge our ambivalence about meat, question current practices, and bring meat eaters and vegetarians closer to each other. It can also give energy to look for new solutions. Flexitarianism as a recognized practice can work in the same way.

Finally and importantly, not everyone experiences cognitive dissonance about eating animals (Monteiro et al., 2017; Onwezen & van der Weele, 2016). Those people that do not, tend to be *indifferent* to the conflicts other people have in this context, as their own prioritized values are not in conflict. Sometimes the 4N justifications may, in fact, have little to do with strategic ignorance regarding eating animals, and more to do with a need to justify socially something that other people disapprove of (Piazza et al., 2015). In the first study of strategic ignorance in a real-life context, Onwezen and van der Weele (2016) emphasize that to support changes in practices, it is important to try to tell apart those who are truly indifferent from those strategically ignoring the issues. One way they suggest to do this is to focus on the feeling of responsibility which they argue is present in the strategically ignorant.

---

94 Holm and Møhl (2000) found already more than 25 years ago in their interviews of the Danish public that meat eaters voiced concern about factory farming.

## Strategic ignorance of knowledge

Strategic ignorance is multifaceted in the sense that it is, first and foremost, ignorance of the value and emotion conflicts, or difficult emotions as such, and as a consequence, it translates into ignorance of information and knowledge, as a coping strategy. Strategic ignorance, therefore, combines all three aspects of values, emotions, and knowledge linked to general understandings as an element of social practices (Figure 3.3).

Strategic ignorance is usually related to very ordinary daily situations, not only more extreme ones, such as ignorance of atrocities or disasters (van der Weele, 2013). Nonetheless, it is by no means a minor phenomenon. Among all the ways to deal with cognitive dissonance, to “deny, obscure or deform threatening forms of knowledge in more or less automatic and subconscious ways [... strategic ignorance is] a paradoxical phenomenon, for in order not to want to know, one has to know enough to know that knowing more would be undesirable or dangerous” (van der Weele, 2013:292; see also Bankier, 1996).

Another name for strategic ignorance is *wilful ignorance*, and from this term, it becomes obvious that “will” or “want” is a relevant component of this form of ignorance, as it is really about wanting (or not wanting) something (Wieland, 2017). For example, a meat eater does not want to consider the negative effects of his/her meat eating, because he/she *wants to go on eating meat*. Considering all the negative impacts would question the practice, and endanger it. In a way, this could be seen as a kind of a permanent want-self situation, whereby the should-self never gets a say. Wieland emphasizes the strength of wilful/strategic ignorance by arguing that “the claim that it is implausible that people could [stay] wilfully ignorant for so long underestimates the force of wilful ignorance” (idem:118). Wieland argues that wilful/strategic ignorance is motivated by *backward-looking* and *forward-looking self-interest*, which again can be seen relating to a more permanent reign of the want-self values while the should-self values (and the resulting emotional conflict) get strategically ignored:

We do not want to consider whether our practices are wrong, first because we have engaged in them for too long, and realizing this will seriously affect the image we have of ourselves. Second, we do not want to consider it, because it's in our interests if we stay ignorant: slaveholders want to keep their cheap workers, and consumers want to keep on buying cheap clothes.

Wieland (2017:118)

As I argued in Chapter 2, the low awareness of issues to do with meat is very likely linked to strategic ignorance and denial of the related knowledge and information. Similarly to people not wanting to know how meat animals are treated, people do not want to know — even though they actually do, in some ways at least — the en-

vironmental impacts of intensive animal agriculture. Such a theory is supported by some empirical data. A study using data from the 2014 British Social Attitudes Survey<sup>95</sup> found that *more than a third* of those who continued to eat meat as before and had no intentions to change their practices, did not have an opinion on a question regarding whether eating no meat or less meat is better for the animals themselves, the environment, or human health (Lee & Simpson, 2016). Usually such a large proportion of “neither agree nor disagree” answers would be a sign of a poorly phrased question, but in this case, the authors suspect it relates to either lack of awareness, or “perhaps a feeling of not wanting to engage with [the issues]” (idem:11). I believe that indeed, rather than a case of true low awareness, this is a case of strategic ignorance of knowledge. Further, in this group of respondents (continuing to eat meat as before), only 25% thought that eating less or no meat would be better for animals, whereas 45% of all respondents thought so.<sup>96</sup> Moreover, de Boer et al. (2016) found in their study that meat eaters were less likely than those eating less or no meat to think that meat has a big impact on climate change.<sup>97</sup>

Steg (2015) argues that one situation where values facilitating sustainability may be strengthened is when scientific evidence indicates that unsustainability seriously threatens the current way of life. This, however, requires that such evidence is not ignored. Related to the value-action gap, the concept of a *knowledge-action gap* revolves around the dilemma of why knowledge — long the building block behind *public understanding of science* and a supposed cure for the *knowledge deficit* — does often not create the desired action. This is of course partly related to the same reasons why the value-action gap is an issue (but see Box 3.1). However, the difference is that no matter how much new knowledge is poured into society, this may have little or no impact when it is ignored to begin with: “it’s always possible to wake someone from sleep, but no amount of noise will wake someone who is pretending to be asleep” (Foer, 2009:102). Strategic ignorance can, therefore, be seen as an enemy of sustainability.

When *uncertainty* of knowledge exists, it is easier to remain strategically ignorant (e.g. van der Weele, 2013). Tenbrunsel et al. (2010) argue that uncertainty and doubt let the want-self dominate more easily, and so, engaging with behaviour

---

95 Performed annually since 1983.

96 Even so, 45% is a low proportion thinking that not eating meat, or eating less meat, would be better for the animals, at least if “animals” refer to “animal welfare”. Out of all the respondents, 31% thought that eating less or no meat would be better for the environment, while 21% out of the regular meat eaters thought so.

97 It may of course be that those believing in the impacts from meat had reduced their meat eating, while those not believing in it had not reduced their meat eating. But this would imply straightforward rational behaviour in a matter (eating meat) not usually thought of as rational.

more in line with the should-self, and the knowledge it may hold, is not necessary. In the case of industries wanting to sustain themselves, maintaining, creating or *manufacturing uncertainty* (Michaels, 2008) about the negative effects of their business-as-usual is therefore greatly beneficial, as already mentioned in Chapter 2. Similar to climate change as a whole, the meat crisis is complex (even regarding the contribution the meat system makes to climate change), and therefore, the easily created uncertainty gives an advantage to those opposing reductions in meat production and consumption, such as the related industries (Wellesley et al., 2015).

Strategic ignorance does not only exist at the level of the individual. It is collective as well (van der Weele, 2013). Norgaard (2011) argues that the denial of climate change has been socially and culturally organised. It has been supported by the current *dominant social paradigm* (e.g. Peattie, 2011, see also Box 3.3) and by the strategic nature of the denial. It connects to societal value priorities that, as more stable, can be difficult to influence, but easy to ignore (in terms of value conflicts), and emotions that are difficult to confront, yet *not* easy to ignore altogether.<sup>98</sup> Mont and Power (2013) note that cognitive dissonance itself has been largely ignored in policymaking.<sup>99</sup>

Huddard-Kennedy et al. (2015) refer to the potential of discursive consciousness to question and potentially change unsustainable practices. This relates to discourses (the topic of the next section), but discursive consciousness is likely to drive change only when the related values and emotions are addressed. Without this, strategic ignorance can block the awareness that reflexivity requires.

On addressing values, value priorities and dispositions, and conflicts, Macdiarmid et al. (2016) conclude from their study in Scotland on the awareness of impacts on the environment and climate from the meat system that a certain *moral disengagement*<sup>100</sup> around meat is obvious. Regardless of evidence against meat eating, people want to keep on eating it. Macdiarmid and colleagues emphasize the importance of considering the many strong “meat values” related to eating meat, such as pleasure, identity, status, masculinity, tradition and sociality.<sup>101</sup> For any change to take place, these values must be addressed first, they argue.

On addressing emotions, van der Weele (e.g. 2013) believes in the potential of more awareness of feelings of ambivalence in lessening strategic ignorance. Further, unless we allow ourselves to feel negative emotions, for example, climate-change related fears, and the emotional conflicts, for example, regarding the practice of eating animals, or other unsustainable practices, and unless we allow our-

---

98 Hence the lower emotional energy in connection with strategic ignorance in Figure 3.7.

99 Is this a case of strategic ignorance of strategic ignorance?

100 The concept of moral disengagement is originally from Albert Bandura (1986). See also a discussion on moral engagement and meat eating in Graça et al. (2014).

101 Meat values, as opposed to more general food values discussed earlier in this chapter.

selves to be motivated by these emotions rather than demotivated by ignoring them, the inertia that has impeded adequate global responses to big sustainability challenges so far will not be overcome (Andrews, 2017b; Andrews & Hoggett, 2019).

### 3.4 Linking practices to discourses

Drawing on from insights in the above section on values, emotions, and knowledge, all in connection with general understandings and social practices, this section will make the link from practices to discourses, via correspondence between general understandings (on the side of practices) and cognitive frames (on the side of discourses). This section, however, starts with discussing the concept of discursive consciousness, critical for purposively changing practices. Later the concept of discursively open practices will be introduced, before making the final jump between practices and discourses.

#### 3.4.1 Discursive consciousness

In Giddens' duality of consciousness, practical consciousness is comprised of "the mental states and knowledge that allow individuals to engage in routine everyday activity" (Huddart Kennedy et al., 2015:8), such as riding a bike. These mental states allow us to perform most of our daily activities without much effort. Strong versions of practice theories argue that practical consciousness is our "default mode of engagement with the world" (Warde, 2014:292). Discursive consciousness, on the other hand, is about being able to verbally express what, how and why we and others do what we do. In discursive consciousness, everyday practices can be (not effortlessly, but nonetheless) "questioned or challenged, and as they are reconsidered, dismantling (and changing) a practice becomes possible" (Huddart Kennedy et al., 2015:9). To Warde (2014:292), discursive consciousness consists of "irregular and occasional" moments of attention, reflection and decisions — normal to practices as such, even when only rare.<sup>102</sup>

Giddens (1984) argues that the line between discursive and practical consciousness on the one hand, and the unconscious on the other, is strong, and stronger than that between discursive and practical consciousness. However, it may be that the line between the unconscious and practical consciousness is not very strict at all (or does not even really exist), being that it seems likely, from studying brain

---

102 To Warde (2014), social sciences should focus on the more common "mindless" action, including routine thinking and saying. He does not, however, discuss what impact a changing situation (new problems, new elements of practices, new discourses) could have, e.g. by making discursive consciousness more common.

activity, that at least some of our decisions are, in fact, first made unconsciously, and only rationalized afterwards (e.g. Chatterton, 2016). The rationalization leads us to believe that we have made such decisions consciously. Structuration theory maintains that much of our decision making regarding our daily routine practices takes place in practical consciousness, and so, combining brain sciences with Giddens, these two states of mind — unconsciousness combined with rationalization, and practical consciousness — may not be so far from each other, and we use them more than we might assume. However, even if a significant amount of decision making does not take place within discursive consciousness, there is little doubt that reflection on issues, our own practices, or those of others, does take place in conscious thinking, where we are also able to put ideas, knowledge, emotions, preferences, attitudes, value priorities or dispositions, etc. into words.<sup>103</sup>

When connecting discursive consciousness to the concept of strategic ignorance, they can be seen to an extent as opposing situations. When we are being strategically ignorant, we cannot fully reflect on our practices, and we tend to repress (into the unconscious) the conflicting emotions rising from the value conflict. Warde (2014) argues that social sciences should not focus all their attention on the exceptional moments of discursive consciousness. However, I would say that for purposive change in practices involving strategic ignorance, those rare moments can be greatly beneficial, and therefore, worth focusing attention on. In addition to strategic ignorance, the issue of dominant paradigms, frames, and ideologies can keep individuals and societies from engaging in discursive consciousness.<sup>104</sup> This is a topic returned to later on in this chapter.

In connection with everyday practices, discursive consciousness normally only arises when things go wrong (Spaargaren, 1997), and some new, corrective action or actions need to be performed. Perhaps the practice in question even requires larger changes. The corrective action is likely felt necessary, due to a “threat” of some sort. Spaargaren uses the example of a system that delivers water to people. We are likely to become aware, discursively conscious, of the system only when tap water turns brown, the pipes are leaking, or there is some similar threat to the continuity of

---

103 In the model of social practices contained in Shove et al. (2012), practical consciousness falls within the element of competencies, and discursive consciousness would potentially fall within the element of meanings, although this is not discussed. By using general understandings instead of meanings in Figure 3.3a, it is easier to see discursive consciousness connecting to general understandings which Welch and Warde (2017) argue display both discursive and tacit components.

104 One could argue that the invisibility of dominant paradigms, ideologies, or frames could even be a bigger problem than strategic ignorance. However, there are attempts, e.g. via the degrowth movement, to address the paradigm side. There seems to be much less discussion of strategic ignorance in the sense discussed in this chapter. An earlier example of such discussion as regards climate change can be found in Norgaard (2011).

our water use practices. Instead of engaging in strategic ignorance of the problem, we normally do something to take care of it, and once that is done, we are able to return to practical consciousness regarding using tap water. There are importantly, however, no real value conflicts involved, and therefore, wanting to take care of the problem is straightforward. In terms of sustainability, it is, in principle, evident what is “going wrong”, but at least until now, and for most people, the threats are not enough to counter strategic ignorance, due to the significant value conflicts and repressed emotions involved.

Likely, discursive consciousness arises more easily in connection with weaker habits where performances of practices have more variation, and value priorities change more easily, and more conscious choices are made in any case. Therefore, some people may experience engaging in more sustainable practices, such as eating less or no meat, easier than others do.

It may also be that when enough things start changing at the level of practice elements, the impersonal “something going wrong” — e.g. pollution, harm to animals, climate change — starts to feel more personal, especially, if the changed practice elements offer ways to change performances of practices. In the case of eating animals, this can be a question of new material elements (the new meats), new competencies (learning how to cook in a flexitarian way), or new general understandings (new meanings of meat, new discourses emphasizing values that facilitate sustainability, new social norms for expressing difficult emotions).<sup>105</sup>

As discussed in Section 3.3.2, focusing and reflecting on values facilitating sustainability can make them more often prioritized (Burford et al., 2015; Crompton, 2016; Lekes et al., 2012), in everyday practices as well (Maio, 2001). This can happen at the level of the individual, and, more importantly for sustained change, at the level of organisations (Hargreaves, 2011), and at the societal level, through discourses and the actions of governments (Hoff-Elimari et al., 2014).

Addressing (individual and societal) value priorities and dispositions, however, may not be enough, if the related emotions are not addressed. Andrews (2018) sees possibilities for this through the building of new social norms for expressing emotions related to climate change or other sustainability-related threats. The meat system is involved in most large-scale environmental issues. So, if we are able to be more aware of our ambivalences — express not only anxieties about threats, but also feelings of loss of our current way of life which must be transformed, and perhaps hope for a future — we may be able to ignore knowledge less and do more corrective actions. All of the above could be facilitated by societal discourses on sustainability-related issues focusing on value priorities and dispositions, and expressions of emotions, in order to address the strategic ignorance. Most likely one

---

105 Regarding new social norms for expressing difficult emotions about the ecological crisis, see Andrews (2018).

could help the other, so that focus on values could bring up related emotions, and focus on expressions of emotions could assist in clarifying values.

### Meat-eating related practices and discursive consciousness

An example specific to meat eating where practices have entered discursive consciousness and produced change can be seen in the case of *conscious flexitarians* who, according to the study by Verain et al. (2015), place the responsibility for change on regular people (including themselves), *more* than on other societal elements, including governments, supermarkets and various organisations, such as corporations more widely. These all get their share of responsibility. A conclusion may be made that, having changed their practices consciously, these people accept responsibility for themselves as well. This can be seen as conscious flexitarians showing their *political agency* which requires both intentionality and autonomy (Halkier & Holm, 2008).<sup>106,107</sup>

Finally, reframing climate change discourses by paying more attention to human-animal relations, such as those related to eating animals, could give us a more accurate picture of both the causality and effects of climate change (Twine, 2014). Specifically, it could encourage reflexivity — discursive consciousness — about responsibility and the urgency of change towards sustainability.

#### 3.4.2 General links between practices and discourses

Even if only an occasional state of mind, discursive consciousness of either practice performances, or practices as entities, is one way that social practices and discourses are linked. Further, discourses help to “shape the practical ways that people and institutions define and respond to given problems” (Tonkiss, 2004:375). In terms of practice elements, discourses can be said to shape general understandings. Moreover, central to the sociology of expectations (Magneson Chiles, 2013:514) is the idea that “speculation upon what might happen tomorrow makes things happen in the present day”, in other words, expectations are performative. So, what we expect from tomorrow, for example, in terms of how humans will get their protein in 2050, influences our actions, practices and policies today, even though 2050 is still far in the future. Discourses, and their boundaries, define what is deemed possible, what the range of issues and their solutions are. As an example, discourses regarding cell- or plant-based meat push the boundaries of what meat is, and the

106 The study by Halkier and Holm indicated that 20% of the Danish people would identify with such political agency.

107 More recently, Koch (2020) examines political consumption in the case of the popular plant-based milk product manufacturer Oatly.

mere *idea* of flexitarianism produces a workable solution to the issue of sufficient future protein for the world.

Although not focusing on discourses in her own writing on social practices, Elizabeth Shove (personal communication, 26 February 2018) agrees that discourses can be seen as part of practices, and as means of connection between them as well.

Most practices as such involve a smaller or larger component of discourses. Some practices involve more discourse only temporarily, or in some cultures more than in others. Discourses can be an inherent part of many practices, for example, legal practices or teaching practices, whereby discourses and practices are “enmeshed with each other” (Daniel Welch, personal communication, 5 September 2017). Importantly, the discourse *within* a practice and the discourse *of* a practice are often not separable. For example, in food practices, we talk about the food we buy, cook and eat, but talking (about food and other things) is also a big part of social cooking and eating. Much of this is intertwined, and these discourses remake the practice performances while sometimes affecting the practices as entities.

Welch (2017b) refers to *practice-discourse assemblages*, and he agrees that practice related ideologies such as veganism or carnism can be seen as such assemblages. Regarding the dynamics of veganism and carnism:

...in European societies most [...vegans...] choose to become vegan [...] through exposure to discourse around veganism, and vegan discourse is tightly enmeshed with the practice of being vegan, whereas for carnism, the discursive elements are both more culturally widespread and perhaps less tightly integrated with practice.  
Daniel Welch, personal communication, 5 September 2017

While critical, the relationship between practices and discourses, and the ways discourses can affect practices, have until now, however, not been widely studied. Davide Nicolini (personal communication, 26 February 2018) suspects that this is partly because the issue falls between disciplines. Discourse scholars do not focus on the effects of discourse on social practices in general, and especially contemporary social practice theorists rarely discuss discourse.<sup>108</sup>

### 3.4.3 Discursively open practices

Concluding from the above, it seems indeed that practices can change partly through changing discourses. Although at the level of practice performances changes are often slow and resisted by the complexities of the web of practices as

---

108 Foucault did work on both spheres, and their combinations. However, as I noted in Chapter 1, I am focusing in this book on the contemporary social practice theories and their views on change towards sustainability.

entities, at the level of discourses things may move faster. With the term *discursively open practice*, I refer to a practice that may be well established and discursively dominant in society but is still increasingly being questioned, creating tensions between different values, affecting general discourses and creating openings to different ways of going about the practice. Welch (personal communication, 5 September 2017) formulates this as practices potentially being opened up for change by “moving from the doxic/pre-reflexive to the discursive/reflexive”.<sup>109</sup>

Especially notable in such discursively open practices can be different and new meanings (replacing or) co-occurring alongside old meanings. The discourses also disseminate the new meanings and potential new ways of doing things to a wider social group or society. I would argue that meat-eating related practices are an emerging case of discursively open practices.

Shove (personal communication, 26 February 2018) states that “in a way, all practices are ‘open’ [...] though some are perhaps more so, at particular times, than others”. If all practices are open in principle, then differences between more stable and changing practices may partly lie in the discursive openness/closeness of practices. Discursively open practices may be purposively challenged, whereas, practices that are discursively closed may change on their own, or not. Discursive consciousness can be seen to be a key component of discursively open practices.

### 3.4.4 General understandings and discourses

As Foucault has stated, discourses produced knowledge, beliefs and “truths” (Sepänen & Välvirronen, 2012), and thereby they contribute to producing general understandings within social practices. Welch and Warde (2017:184) argue that general understandings may originate in either discourses or practices, sitting “somewhere across the boundary between the discursive and the non-discursive”. Further, they contain both tacit and discursive elements, therefore, connecting to (embodied) competencies as an element of social practices. General understandings as a concept focus attention on the relationship between practices and discourses, a “thorny” problem for social practice theories, according to Welch and Warde.

Welch and Warde (2017) see general understandings as components of individual practices and as connections between different practices, similar to Schatzki (2002). New general understandings, as well as new practices, can be seen as results of problematized existing understandings, “commonly in the context of socio-technical and political-economic change” (Welch, 2017b:9).

In conclusion, general understandings connect discourses to practices, and change in practices can start from changing general understandings, for example, the meaning of “meat”. Additionally, we may be able to become *aware* of the general

---

109 In sociology, *doxic* refers to something taken for granted, being unquestioned.

understandings of particular practices through discourses, i.e. through discursive consciousness which can result in discursively open practices. The next section will continue with the discussion on the side of discourses.

### 3.5 Further to the side of discourses

In this section, I will first present the discourse counterparts to general understandings, i.e. cognitive frames, and then go deeper into some discourse theory, discussing framing, ideologies and critical discourse analysis, all linked to this conceptual structure and to the empirical data analysis in Chapter 5.

#### 3.5.1 Cognitive frames

With reference to Figure 3.3c, the way general understandings are conceptualised by Welch and Warde (2017), and further elaborated on above as regards their connections to values, emotions, and knowledge, bears a strong resemblance to the way cognitive frames are conceptualised, for example, by Lakoff (2010). I, therefore, propose considering general understandings and cognitive frames to be counterparts, representing similar elements common to both practices and discourses.

Kuypers (2010:301) explains that “when highlighting some aspect of reality over other aspects, frames act to define problems, diagnose causes, make moral judgements, and suggest remedies”. Cognitive frames are stored in our long-term memories, and connected to meanings, experiences, emotional components and values (e.g. Darnton & Kirk, 2011; Lakoff, 2010). Semino et al. (2016) argue that frames are connected to agency and empowerment (or lack of agency and disempowerment).<sup>110</sup> When a particular frame is activated, the whole structure (of related knowledge, values, and emotions) it is connected to in our brains is also activated. Lakoff (e.g. 2010) states that human thinking, feeling and social interaction is fundamentally structured by cognitive frames.

While general understandings (in the form conceptualised in this book) are related to practices, cognitive frames are very often related to practices as well, but in principle, cognitive frames are a broader concept. To give an example related to practices, if we see a pig in a neighbour’s backyard, this may activate different long-term cognitive frames in us. It may activate a pig-as-bacon frame, and all the value, emotion and knowledge connections to it, including all the practices related to it (e.g. slaughtering, shopping, frying, eating a Sunday breakfast with family),

---

110 Semino et al. (2016) connect agency and empowerment so that empowerment or disempowerment equate to the degree of increased or decreased agency a person has, or perceives him/herself to have.

some of which we may be engaged in as a result, or alternatively, we may only think or talk about them.<sup>111</sup> The pig may also activate a pig-in-need-of-rescue frame, and lead us to potentially engage in practices related to animal protection (talk to our neighbours, educate our kids, join a local organisation). Or the pig may activate a pig-as-pet frame, which may lead again to different consequences, perhaps we end up getting our own pig for our backyard, or we manage to ban our neighbour from having one, as we imagine pigs to be smelly. Since seeing the pig itself can carry very different frames, which frame the animal ends up activating most robustly in us, and what the consequences are, depends on the long-term frames stored in our brains, and our value priorities and dispositions which assist in the activation process, as well as our knowledge, and our emotional wants.

In discourses, on the other hand, things work out slightly differently. If a newspaper has a photo of a pig in someone's backyard, we tend to use the ready-made frames offered in the attached news article in order to interpret the theme of the photo (although the concrete framing of the photo has its impact too), and the meaning of the article. Some of these frames offered match our own long-term frames, and some of them do not. The ones that do match will activate the values, emotions, and knowledge attached to them, the ones that do not match may still eventually enter our long-term system of frames if they are persistently enough being offered through different discourses. For example, what can be called *sustainability-facilitating value frames* can engage the related values in individuals and may motivate for pro-environmental action. However, as discussed earlier in this chapter, importantly, action itself may lead to changes in value dispositions, for example, in connection with social labelling.

Lakoff (2010) points to the key difference between short-term and long-term cognitive frames. We all have a large number of frames within our minds, some short-term (recently formed, but possibly disappearing when there is not enough reinforcement), but most long-term. When something we do, hear, read, or see (or taste, smell or touch) activates a certain frame, this tends to be one of the long-term frames. Long-term frames are well-established, whereas new frames are first short-term frames before some of them may become new long-term frames. This process may take quite some time, however (Lakoff, 2010).

At the societal level, long-term societal (or cultural) frames produce long-term societal (or cultural) meanings, both linking to societal value priorities. As Lorek and Fuchs (2011) argue, societal actors with discursive power (such as non-governmental organisations) may be given a task of drawing attention to sustainability-facilitating societal value priorities, in connection with a sustainability transfor-

---

111 In the future, seeing such a pig might indicate the production of cultivated meat (see van der Weele and Driessen, 2013).

mation. This can then also be in opposition to the discursive power corporations and industries have (see also Fuchs et al., 2016).

To conclude from points made above and earlier in this chapter, there are several ways general understandings and cognitive frames are conceptually similar. First, general understandings are elements of individual practices, but they are also common to and connecting different practices. Correspondingly, cognitive frames can be part of single discourses while connecting different discourses as well. Further, frames can connect different practices. For example, a *sustainability frame* connects different sustainability-related practices, such as recycling, avoiding private car use, or not eating meat (see Box 3.3). Second, through their bodily connection, general understandings relate to values, emotions, and knowledge, and produce meanings, all similar to cognitive frames. Third, general understandings are argued to sit between discourses and practices. It can be equally said, for example, that cognitive frames interpret discourses for the benefit of various practices. And finally, *ideologies* can be reproduced in everyday action through general understandings (Billig, 1995; Welch & Warde, 2017).<sup>112</sup> Likewise, ideologies are reproduced (and represented) by frames, and frames can reflect ideologies, as I will discuss later in this chapter. But first, Box 3.3 discusses the concepts of societal master frames and dominant paradigms. In the next section, I will focus on framing devices (Strydom, 2000) which are relevant to analysing frames, and therefore the data analysis in Chapter 5.

### Box 3.3. Societal master frames and dominant paradigms

Strydom (2000) refers to three historical *master frames* of modernity, from the 16th century onwards. They are the rights frame, the justice frame and the current responsibility frame, around from the late 20th century. All three master frames are still present, but the first two have currently less dominance. These frames have provided a structure for various *crisis discourses* during each historical period, including the current crisis discourse of responsibility where the main concern is the survival of society in its natural environment. Indeed, a responsibility frame is present in different forms in current societies, either as consumer/individual responsibility, societal responsibility or co-responsibility, with the last one being the original sense in Strydom (2000, but originally from Apel, 1991). Co-responsibility “brings a public level of responsibility

112 Welch and Warde refer, for example, to *banal nationalism* which refers to the ideology of nationalism expressed in everyday actions and practices of people.

for common or shared problems into play without disburdening individuals of their personal responsibility” (Strydom, 1999:67).

However, from another angle, a *dominant social paradigm* (term originally from Pirages & Ehrlich, 1974) can be seen as related to societal master frames as well, perhaps as an umbrella term. Although as a concept, a dominant social paradigm does not specifically link to any particular ideologies (or frames), it supports and reflects the dominant ideologies that are present at any particular time or location. A dominant social paradigm “helps make sense of an otherwise incomprehensible universe and [...] make organized activity possible” (Pirages & Ehrlich, 1974:23). The current dominant social paradigm in the globalized world is in conflict with a potential sustainability master frame (e.g. Peattie, 2011), as it understands humans as superior to other species, and the Earth to provide unlimited resources for humans (Park, 2007). Moreover, disconnection from nature, dependence on and faith in technology and markets, along with consumerism and materialism are considered to be part of the current dominant social paradigm (Peattie, 2011). Berzonsky and Moser (2017; the below list is directly quoted from p. 16; see also for a list of further sources Berzonsky and Moser used) list the values relating to the current dominant social paradigm that they see being problematic for sustainability as follows, with the descriptions giving the *extreme expressions* of each value:

**Anthropocentrism** Gives humans absolute superiority over any other part of nature, ultimately devaluing all things non-human; becomes speciesism and human chauvinism that rejects all human embeddedness in and dependence on non-human nature.

**Dominion over nature** Justifies human appropriation of and control over non-human nature for human benefit only.

**Scientism** Claims that the positive natural sciences provide the only model of explanation of the phenomena (natural and social) of the world and tie the rational, detached, science-based exploration and understanding of the world to the modernist ambition of becoming all-powerful, freeing humanity from the bonds of nature.

**Dualism** Insists on the physical and moral separation of humans from nature, fostering a distancing of the material from the divine, of mind from matter, and devaluing all that which is believed to be embodied in the material (feminine, indigenous, body, Earth) relative to its opposite (masculine, rational, mind, God).

**Individualism** Elevates the individual over the communal, insisting on individual rights over mutuality and responsibility; it glorifies egocentrism and selfish achievements while negating the psychological and social benefits of altruism

and self-transcendence or even denying equal rights to and responsibility toward other humans and non-humans.

**Freedom** Gives licence to live beyond or without limits and consume without restraint or regard for others, the environment or the future, and as such insists on human exceptionalism.

**Never-ending progress and growth** Expresses a future orientation that unwaveringly anticipates improvement over the past and present; has become virtually synonymous with economic development and higher levels of material consumption.

Further on frames, Strydom (2000) argues that discourses tend to move societies from one master frame to a new master frame, and during the transition period, there is competition between different frames. In his thorough analysis, Strydom shows how such competition has happened in the past between different master frames. This concept of competing frames can be applied to the conflict — playing out in discourses — between the current dominant social paradigm and a potential future sustainability master frame. The former tends to blur and obscure the idea of responsibility, seemingly placing it largely on consumers, on the one hand, but relying on market mechanisms to solve problems, on the other hand. The sustainability master frame, however, contains the idea of co-responsibility — including individuals, but heavily also other societal actors, such as governments and businesses — and does not rely on “the system” to solve problems on its own.

A final point about frames as such, Olsen (2014) notes that frames that work together can build a longer *narrative*, or a *story*. Creating new narratives can be an important part of normalising something new. An increasing amount of calls are indeed made for positive frames and narratives about sustainable futures, both in academic literature (e.g. Stibbe, 2015), within global organisations (e.g. Corner et al., 2018)<sup>113</sup> and in the media.<sup>114</sup>

While there is no categorical proof yet that hope is effective in making change happen (Chapman et al., 2017), positive narratives are not only producing hope, they are also about being able to imagine the future to aim for.<sup>115</sup> Lakoff (2010)

113 A report commissioned by Working Group I of the Intergovernmental Panel on Climate Change.

114 See e.g. <https://www.theguardian.com/sustainable-business/blog/telling-positive-stories-sustainability-marketing>, in the online Guardian, 21 January 2013.

115 Backcasting works in a similar way, starting with a desirable future, and subsequently identifying policies etc. that lead to such a future (see e.g. Vergragt & Quist, 2011).

stresses the importance of stories — for effective change in society — that exemplify values and rouse emotions. Co-responsibility could be one useful value to include in such stories. Further, discourse regarding sustainability is argued to more usefully focus on the positive side effects, and gains rather than losses (Lorek & Vergragt, 2015). For example, well-being has already largely decoupled from economic growth in the Global North, and similarly, well-being does not have to be tied to consumption.

### Meat-eating related practices and narratives

There are calls for new stories about positive futures where animals are no longer farmed for food. Currently, we have difficulties imagining a world without meat animals, arguably hindering change. In his 2017 film, Marc Pierschell tries to portray narratives of such futures.<sup>116</sup>

The meat and dairy industry has used stories to successfully sell their products for decades as “healthy, delicious, masculine, natural, and a path to love” (Stibbe, 2018:1). Stibbe calls for such stories to now be resisted, and instead, a negative image of meat, and positive visions of animals as “beings deserving respect and consideration” to be conveyed, together with positivity regarding plant-based foods.

Finally, Ferrari (2016) discusses cultivated meat, whereby several narratives already exist. On one hand, instead of focusing on the novelty of this meat, Mark Post, the scientist behind the first cultivated hamburger in 2013, emphasizes continuity with conventional animal-based meat, in that cultivated meat is different only in the way it is produced, going directly from cells to meat, skipping the animal part. On the other hand, cultivated meat is often cast as an ethical product — both in terms of sustainability and animals — of new science, better able to meet the great challenges of our time, and a sign of moral progress for humankind. Cultivated meat offers “the material basis for a profound change in culture” (Ferrari, 2016:267). Van der Weele and Driessen (2013:647) suggest that the slate is still rather blank, and with different visions, we can explore the possibilities for cultivated meat, and “ethics can take an active part in these searches, by fostering a process that integrates (gut) feelings, imagination and rational thought”. One of the visions they found in their workshops is “of a hybrid community of humans and animals that would allow for both the consumption of animal protein and meaningful relations with domestic (farm) animals” to continue.

---

116 See the discussion in the film *End of Meat* (by Marc Pierschell).

### 3.5.2 Framing devices

Welch (2017b) criticizes social practice theoretical research for using practices as the nearly exclusive focus of analysis, especially when the research is related to sustainability:

The focus on practice-as-unit-of-analysis tends to militate away from the use of concepts that capture the kind of large-scale configurations of discourse and practice that enable engagement with [...] concerns with consumer culture.

Welch (2017b:3)

Instead, he finds that concepts that connect different practices may be more illuminating in this.<sup>117</sup> I argue that cognitive frames — being rather similar to general understandings — can work in this regard as the focus of analysis related to the societal discourses relevant to purposively changing social practices. This is especially so, due to the connections from cognitive frames to values, emotions, and knowledge.

Strydom (2000, drawing from Klaus Eder and William A. Gamson) suggests a useful method for frame analysis based on the idea of various frames building larger discourses, while themselves being built by different *framing devices*. A sentence within a particular discourse can contain one or more framing devices which reflect one or more frames, while a frame is often part of a larger discourse.

Strydom conceptualises three main cognitive framing devices that appear in different proportions, and with different emphasis, to build frames in all public discourses. These three framing devices include empirical objectivity (the factual world), moral responsibility (the social world) and aesthetic judgement (the subjective world). So, it can be said that people justify some action based on facts, based on duty or morality, and/or based on aesthetics (including meaningfulness, emotions, and sensations). Environmental action, for example, can be based on facts: recycling is necessary to have enough material resources, and less pollution; on morality: as citizens, it is our responsibility to recycle; and/or on meaningfulness: a desire towards balance with nature. As regards environmental inaction, however, people often reject facts through denial or strategic ignorance; do not want to be told what to do, in effect, avoiding responsibility; and are far removed from feeling, or even wanting to feel a connection to nature as such.

I call the three framing devices here, and in my analysis in Chapter 5, as *factual*, *normative* and *emotive*. The factual framing device relates to knowledge, the norma-

---

117 For Welch (2017), one such connecting concept is *teleoaffective formations*, based on Schatzki's *teleoaffectivity* (2002). Teleoaffective formations are "characterised by a nexus of general understandings" (Welch, 2017:6).

tive framing device relates, at a more abstract level, to values,<sup>118</sup> and the emotive framing device relates to emotions.<sup>119</sup> As Strydom argues:

Employing the factual [...] framing device, actors rely on empirical knowledge of the world in order to form a concept of it. The [normative] framing device is a cultural tool by means of which actors lay down certain principles according to which they behave towards the world. By means of the [emotive] framing device, actors organise their subjective experience and perception of the world in a way that makes it meaningful to them.

Strydom (2000:64)

However, the division into three distinct framing devices simplifies matters to some extent, as there can be overlaps between them. Firstly, factual and normative can overlap, in situations where facts are used to convey a message related to normativity or morality, for example, “meat alternatives are better for the environment” (therefore you *should* eat meat alternatives instead of meat).<sup>120</sup> Further, normative and emotive can overlap, when the result of behaving in a normative or moral way produces something virtuous, for example, “not eating meat is the right thing to do” (and doing the right thing will make me happier). Despite these relevant overlaps, I keep the framing devices separate in the analysis, to explain and explore the structure more clearly. More specifically, I group statements *presented* as facts belonging to the factual, statements focusing *overtly* on the normative, as normative, and statements that are mainly related to emotional experiences belonging to the emotive, even if all of these may have some more hidden secondary elements. Analysing hidden elements is relevant, and in the data analysis, I do look for implicit meanings and hidden ideologies, for example. However, at the level of framing devices, I take the *apparent* framing device, for example, apparently factual statement, as contributing to a particular frame which can then contain hidden elements to be analysed further.

---

118 To Schwartz (2006a:3) values “transcend specific actions and situations. Obedience and honesty, for example, are values that may be relevant at work or in school, in sports, business, and politics, with family, friends, or strangers. This feature distinguishes values from narrower concepts like norms and attitudes that usually refer to specific actions, objects, or situations”. I consider the connection between values and norms therefore to be similar to that between values and attitudes. Values are a more abstract concept that can translate to either norms (how to behave in a certain situation) or attitudes (how to think about something particular and concrete).

119 Strydom (2000) also calls the aesthetic framing device a conative framing device, with “conative” referring to effort, desire or striving for something. As both “aesthetic” and “conative” have a strong emotional content, I use the term “emotive”.

120 Using “alternative facts”, or propaganda, in order to influence people also mixes these framing devices.

Table 3.1 shows an example of how discourses, frames and framing devices relate. The crisis or solution discourse related to a problem such as “there are lots of people on Earth, how can they have enough protein to eat?”<sup>121</sup> may be answered by the currently dominant frame of “meeting the demand with meat” or with what can be seen as a *counter* frame of “transformation to new meatways”. These two frames tend to be then constructed with one or more of the three different types of framing devices (as explained above and depicted in Table 3.1), emphasized in different proportions.

Table 3.1: Linking discourses, frames and framing devices

Discourses	Frames	Framing devices
<p><i>Crisis/solution discourse</i></p> <p>Problem: There are lots of people on Earth, how can they have enough protein to eat?</p>	Meeting the demand with more meat	Factual: Demand for meat is strong and will be even stronger; obstacles to more production can be overcome
		Normative: Demand for meat must be met
		Emotive: Meat tastes good; meat is satisfying
	Transformation to new meatways	Factual: Both current production scale and increased production are unsustainable; new meatways are feasible
		Normative: Co-responsibility towards Earth, and towards providing humans enough protein
		Emotive: Affection towards nature and non-human animals; fear of consequences to all life of the business-as-usual approach

Notes: The phrases used in the right-hand side column are merely for illustrative purposes, and are not from the data analysed in Chapter 5; in this particular case, the frames reflect ideologies as well, a topic for the next section.

Importantly, I argue that these three framing devices can be seen to connect to the three domains of emotions, values, and knowledge that both cognitive frames and general understandings connect to. This is significant, as it contributes to these

121 I have framed “there are lots of people on Earth” intentionally colloquially. The same can be said more formally: Currently, there are 7.5 billion people, and this is expected to rise to 9-10 billion by 2050.

framing devices being effective in translating discourses, narratives, social interactions, behaviours and events to something people can relate to.<sup>122,123</sup>

To note, at a more general level, what are often described as *framing tools*, such as metaphors, images, arguments, examples, or personification, are instances of how the three framing devices are frequently *expressed in context*. In other words, a framing device can be expressed with a tool such as an image, or a metaphor. *Conceptual metaphors* are a common and powerful framing tool which tend to rouse emotions, and with which perceptions are easily influenced, actions justified, and ideologies transmitted. Change can be generated by changing the metaphors used in discourses (Lakoff & Johnson, 1980, but see also e.g. Foss, 2009). Chapter 4 will discuss conceptual metaphors some more, as they are related to the data analysis in Chapter 5.

### 3.5.3 Ideologies

Many of the frames that are built from framing devices reflect ideologies which in turn affect the manner and emphasis with which the three framing devices are applied, delimiting or defining an issue (Strydom, 2000). It seems clear that ideologies can colour answers to questions such as, how something is defined or perceived (factual), what is important, or how to behave (normative) and how something is experienced (emotive). Ideologies can also influence how the three framing devices are expressed, or emphasized in any particular frame. Moreover, as discussed above, ideologies can create an overlap between different framing devices, such as the factual and the normative.

Van Dijk (1995:243) defines ideologies as “basic systems of fundamental social cognitions [...] organizing the [...] social representations shared by members of groups”. Social representations refer to shared notions, such as values, beliefs, ideas, knowledges, meanings, norms, practices, and so on. Van Dijk argues further that ideologies indirectly control frames that are used to interpret discourse. As regards the relationship between values and ideologies, ideologies are evaluative, in other words, they provide the basis for what is considered good or bad, right or wrong. Therefore, values are basic building blocks of ideologies, or rather, a certain value hierarchy forms the basis of an ideology.

When ideologies are dominant, they seem “neutral”, and contain assumptions that stay largely unchallenged (Wodak, 2014). Wodak defines *hegemony* as a situ-

122 However, how people respond to the framing devices is a different matter. For example, the emotions seemingly connected to a particular framing device may be quite different from the emotions experienced through a discourse, or through a practice (before, during or after).

123 One definition for *wisdom* contains the same three parts, knowledge, ethics, and aesthetics (see Hanlon et al., 2012).

ation where “people in a society think alike about certain matters, or even forget that there are alternatives to the status quo” (idem:306). *Dominant ideologies*, therefore, tend to not be visible: “the most common is the most obscure” (Lehtonen, 2000:7), or as van Dijk (2006) puts it, when an ideology becomes part of the “common ground” accepted by all, it is no longer a recognizable ideology. Dominant social paradigms contain one or often more somewhat related dominant ideologies (see Box 3.3). Dominant ideologies usually have *counter ideologies* which may paradoxically be more visible than the dominant ideologies, due to their state of being against the invisible dominant ideologies. When counter ideologies, however, become more prominent, they can make the dominant ideologies more visible as well.

### Meat-eating related practices and ideologies

The dominant ideology as regards eating animals is carnism (Joy, 2010),<sup>124</sup> and what can be called counter ideologies in this regard are meatways such as veganism, vegetarianism, or flexitarianism. Although not every person needs to be engaged with an ideology through his or her eating practices, many practices do contain elements of ideologies, such as certain value priorities, and “consuming animal meat is related to [carnism ideology], just as a plant-based diet is related to beliefs regarding veganism or vegetarianism” (Monteiro et al., 2017:59). It is clear that veganism and vegetarianism as counter ideologies tend to be more visible than carnism. Flexitarianism may contain some ideological elements even when this meatway is not named (i.e. with people eating meat only occasionally but not identifying themselves or their behaviour through this practice), but it is likely to become somewhat more ideological once called “flexitarianism”. However, the naming can have its benefits, as discussed elsewhere in this chapter.

On the other hand, naming carnism draws attention to the relationship of eating meat to not eating meat, and to how meat eating is supported discursively (Welch, personal communication, 5 September 2017). Being a dominant ideology, carnism is part of the dominant social paradigm. The new meats, such as cultivated meat, are argued by some (e.g. Miller, 2012) to support the dominant social paradigm, in this case, the importance of meat, and implicitly the idea of continued exploitation of animals.<sup>125</sup>

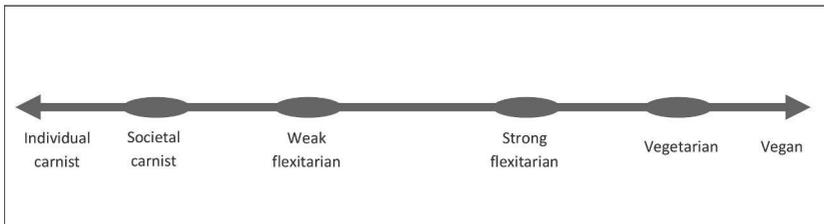
124 Joy has identified *neocarnism* (Joy, 2011) as a more recent phenomenon which has followed the increasing questioning of the dominance of eating animals. Neocarnism consists of reactions such as eating “humane” meat, and an increased emphasis on justifying meat eating.

125 On the other hand, the new meatways can offer a softer, more flexible counter point to conventional animal-based meat eating than vegetarianism and veganism have been able to do.

Monteiro et al. (2017) attempt to quantitatively measure carnism as an ideology,<sup>126</sup> using a two-way structure between *carnistic defence* and *carnistic dominance*. Carnistic defence is about defending the practice of eating animals, while not wanting to harm animals as such. Typically, this involves cognitive dissonance, strategic ignorance and various coping mechanisms, especially seeing meat as Necessary, Normal and Nice. Carnistic dominance is about supporting the killing of animals for meat, seeing meat eating as Natural, and typically this can involve being indifferent (*not* strategically ignorant) to the fate of animals, and possibly to other negative sides of the practice of eating animals. Monteiro and colleagues link carnistic domination in their study to other social domination behaviour (as do Dhont & Hodson, 2014), while strongly emphasizing that not all meat eaters would subscribe to such ideology: “carnism and meat eating are not synonymous, and it is important to distinguish between the behaviour (killing and eating animals) and the ideology associated with it (carnism)” (idem: 53).

In Section 3.3.1, I discussed the idea of seeing different ways to eat or not eat animals on a continuum (from Jallinoja et al., 2016). Figure 3.8 illustrates this continuum, from the point of view of meat-eating related practices at an individual level, but also from the ideological point of view.<sup>127</sup>

Figure 3.8: The continuum and journey of different meatways



Source: Figure by author. The idea of such a continuum is, however, present in literature (see Jallinoja et al., 2016).

Note: The positions of the vertical lines offer a rough estimation of the closeness of the meatways.

In Figure 3.8, I distinguish between an *individual* and a *societal carnist*, whereby an individual carnist would express carnistic dominance (Monteiro et al., 2017) and a societal carnist would express carnistic defence. Societal carnists prefer to eat meat on a regular (often daily) basis, out of a habit, a social convention, or because

126 Their study aims to empirically study what Joy (2010) concluded theoretically.

127 This continuum is in fact a conceptual metaphor, and metaphors can carry their own ideologies. So may this one.

meat is Nice. At the same time, these people are often somewhat uneasy about their diet, and therefore employ coping strategies. A societal carnist has normalised regular meat eating, usually as a small child. Societies tend to be supportive of carnism, both as a practice and as an ideology, but as Monteiro and colleagues suggest, not all meat eaters would support carnism as an ideology. Individual carnists, however, would likely do so. Regardless of differences between individuals, the fact that the ideology is supported by most societies, makes eating animals easier, and not eating them harder.

*Carnistic values* per se, are argued to be comprised of values such as: tradition, conformity and security (with social focus), and power, achievement and hedonism (with personal focus) (Suveri, 2016; see also Figure 3.5). These carnistic values are more likely to be prioritized by individual carnists than by societal carnists. Notably, sustainability-facilitating values, as defined in this book, are not present among these carnistic values.

The following will include some final points for this chapter on critical discourse analysis, particularly as regards research on social practices, a less common combination.<sup>128</sup>

### 3.5.4 Critical discourse analysis

Van Dijk (2015:467) understands *critical discourse analysis* as focusing “primarily on social problems and political issues rather than the mere study of discourse structures outside their social and political contexts”. He sees such analysis of social problems as usually multidisciplinary. Further, van Dijk understands critical discourse analysis necessarily bridging the gap conventionally perceived between the micro and macro levels of society, also in terms of discourses.<sup>129</sup> As especially stronger social practice theories do not perceive such a gap, to begin with (see Section 3.1.1), critical discourse analysis can be seen fitting ontologically with social practice theories.

Van Dijk (2015:479) laments that no proper theory of critical discourse analysis exists yet: “despite a large number of empirical studies [...], the details of the multidisciplinary theory of critical discourse analysis that should relate discourse and action to cognition and society are still on the agenda”. My conceptual and analytical configurations fit to this area, in relating discourse and action (social practices) to cognition (cognitive frames), and the related notions of values, emotions, and knowledge.

128 However, Fairclough (2001a) sees critical discourse analysis as a method in social sciences.

129 “Language use, discourse, verbal interaction, and communication belong to the micro-level of the social order. Power, dominance, and inequality between social groups are typically terms that belong to a macro-level of analysis” (van Dijk, 2015:468).

Wodak (2014:304) argues that the “critical” in critical discourse analysis has three dimensions. Firstly, critical discourse analysis may attempt to make “explicit the implicit relationship between discourse, power, and ideology, challenging surface meanings, and not taking anything for granted”. Secondly, being critical in critical discourse analysis includes being self-reflective and self-critical, criticizing the “critical”. Thirdly, critical discourse analysis often aims to contribute to social change.

As Chapter 4 will explain further, I carry out my analysis in Chapter 5 mainly at three levels, starting from more basic content analysis, and, via the middle level that focuses on frames, ending with some sociological analysis. Frame analysis is a frequently used method in critical discourse analysis, in particular, because of its ability to bring out otherwise possibly hidden meanings, values and ideologies (Paltridge, 2006). I would argue that a focus on frames in analysing discourses on and within social practices highlights the extent to which ideologies can be coupled with social practices.

The first notion behind the critical discourse analysis in this book is that discourses are integral to social practices (Fairclough, 2001a), and discourses determine practices to a large extent, especially due to their influence on cognitive frames and general understandings. Critical discourse analysis focuses largely on the relationship between discourses and power relations in society and attempts to contribute to solving societal problems. The focus may be on power *in* discourse (struggle over interpretations of meaning) or power *over* discourse (“access to the stage”). While not forgetting those, I focus also on the third kind of power discussed by Wodak (2014), the power *of* discourse itself (influence of macro-structures of meaning or of frames) over societies and social practices. Fairclough (2015) refers to the power *behind* discourse which includes ideologies as power behind the discourse and is therefore related to the power *of* discourse. My data analysis (in Chapter 5) explores frames in a real-life discourse context, while my conceptual analysis (in this chapter) explores the power of frames as an element of social practices, among other things. I consider the uncovering and reassessment of this kind of power critical for a transformation towards more sustainable social practices.

The next and last section of this chapter will still discuss power and agency in different forms.

### 3.6 Power and agency

Much, but not all, of what I will discuss in this section has already been covered before in this chapter. Power and agency are, nevertheless, critical to purposive changes in social practices, or society at large, and therefore, I recap the relevant issues here.

To start with, however, I will briefly discuss the differences between power and agency. Sahakian and Wilhite (2014:28) reference Ortner (1989) for a definition of *agency* as “the capability or power to be the source and originator of acts”. I see agency as focused on an *actor*, usually human, and additionally, agency is usually directed towards change (usually positive for the actor). Agency is therefore mostly centred on human-induced intentional change. On the other hand, *power* can be about a human or non-human actor maintaining the status quo, about curbing change, and about furthering change, therefore, it can be agentive or non-agentive (dominative) power. Power is, therefore, a more general and neutral term.<sup>130</sup> In line with Sahakian and Wilhite (2014), I believe that *agentive power* is therefore similar to agency, but it can also be applied to non-human, including man-made and more abstract entities, such as materials, discourses, etc., furthering change in some form. Agency is the human form of agentive power and implies intention. In any particular context, agentive power (of a non-human entity) and agency (of a human actor) can work in opposite directions as well.

In the next sections, I will discuss different forms of power and agency relevant to changing social practices.

### 3.6.1 Non-agentive (dominative) power

As regards power and social practices more generally, a criticism social practice theories have sometimes received is not focusing on power enough (e.g. Hargreaves, 2011; Weenink & Spaargaren, 2016). Watson (2017) offers defence by saying that although, for example, Shove et al. (2012)<sup>131</sup> do not focus on power, power is ubiquitous in practices — and therefore not necessarily discussed. He goes on to say that especially the interconnectedness of different practices across different sites, large or small, is important in terms of power. Indeed several authors focus on this power of networks of practices which can be seen as the “structure” in a flat practice theory ontology.<sup>132</sup> Weenink and Spaargaren (2016:77) call this network an “enormous vibrant web of interconnected practices” that intermesh, overlap and connect. This seems a useful way to solve the conflict between flat and non-flat ontologies, i.e. seeing structure as the power of networks of practices.

Several authors connect the dominative power of interconnected practices to the challenges of transforming practices (e.g. Weenink & Spaargaren, 2016), especially from the point of view of potentially motivated and empowered individu-

130 Power can be negative or positive, so to speak, so that commonly desired change would be seen as related to positive power of a human or non-human entity, and vice versa.

131 The third author of Shove et al. (2012) is Watson himself.

132 Warde (2014:295) argues that a “strong theory of practices will insist that structural characteristics are nothing other than the effects of the intermingling of many practices”.

als involved in such practices (Halkier, 2010; Verain et al., 2015). To Halkier (2010) in particular, *challenged consumption*, seen as practices, should be understood so that both the optimistic position where individuals can change things and the pessimistic position where they cannot, may be wrong. People *can* (and *want to*) change things, but the “messy” everyday contexts make it difficult.

Further, the restrictive power of practices lies not only in the interconnected network aspect but also within the elements of particular practices. For example, we can only achieve what we can imagine possible (general understandings), we can only use or employ what is available (materialities, infrastructures), and we can only do what we are able to (competencies). This, in a way, connects to the iceberg metaphor for individual practices in Figure 3.2, whereby one reason practices are hard to change lies in the invisible main part of practices, consisting of all the elements.

To look at a specific interconnected mesh of practices, meat production — comprised of bundles of large-scale practices — and meat “consumption” — comprised of bundles of smaller-scale practices — usually connect at the consumption junction (shop, restaurant, etc.). Each side holds its own restrictive powers. As discussed in Chapter 2, the power relations between production and consumption in the meat system are often presented in societal discourses as consumption (demand) holding power over production, although many argue that it is the production (marketing, the spread of industrial animal agriculture and supermarkets etc., the related lobbying and other aspects of industry power)<sup>133</sup> holding power over consumption. With the new meatways, it could be that there is a somewhat more equal power relationship between production and consumption. With the new meats and the opportunities that they offer, producers would be pressed to respond to a need towards more sustainable production and products, and away from the current meat system. Similarly, with strong flexitarianism, the idea of continued growth of production or profits could be challenged. This would then relate to collective human agency, discussed further below.

### 3.6.2 Agentive power

Regarding the issue of agency and agentive power and social practice theories (see e.g. Weenink & Spaargaren, 2016), it may be that some of the differences, especially between the stronger and weaker versions of the theories, partly arise from the history of practice theories in the context of sustainable consumption being a reaction against behaviour change policies. In part, due to this history, social practice theorists may sometimes see agency narrowly defined as only being about individual human agency, rather than about collective agency in humans. Welch

133 See Fuchs et al. (2016) for a discussion of such dominative power.

and Warde (2015) note indeed that collective agency has largely been ignored in social practice theories. Non-human agentive power is, however, often considered relevant to social practices.

Sahakian and Wilhite (2014) discuss agentive power within practices through the concept of distributed agentive power within the pillars of practices.<sup>134</sup> Below I will focus on three separate aspects of such distributed agentive power, namely, linked to discourses and general understandings, to materialities, and to human actors. There are several linkages between these spheres, which makes it impossible to separate them entirely. In short, the agentive power in discourses and general understandings can make people aware, reduce strategic ignorance and provide emotional agency; the agentive power in materialities makes change practically achievable; and the agentive power (agency) in humans, collectively or not, makes the actual purposive change possible.

### 3.6.3 Discourses and general understandings

As I discussed in Section 3.5.4, power in terms of discourses has many faces, but the one most relevant to the context of this book is the agentive power of discourses.

Earlier in this chapter, I argued for the agentive power of discursive consciousness, on the one hand, and of discursively open practices, on the other. Much of this connects to human agency, and in fact, it is the discursive consciousness of human “practitioners” that can create discursively open practices which in turn may be more susceptible to purposive change. Below are some of the links to literature.

Huddard-Kennedy et al. (2015) perceive discursive consciousness of and within social practices as creating agency. Halkier (2010) notes that some of the interventions by governments, companies or NGOs into unsustainable practices can be on purpose to initiate discourses which can then open practices up for revision, in other words, create what I call discursively open practices.

Further, arguably discourses on the new meatways, in a way, push people to reflect on their practices, and with that, make political choices, by consuming politically (e.g. less meat), or not, with the point being that discourses in a way force people to make choices, especially since not making a choice is also a choice.

Weenink and Spaargaren (2016) make a case for changes in emotionally charged general understandings, shared by several practices, helping to overcome the domineering power of the interconnectedness of practices. As argued earlier in this chapter, such general understandings are not only an element of practices but connect practices to discourses.

Lastly, individual words can have agentive power. For example, Chung et al. (2016) examine the difference between terms for certain kind of ground meat

---

134 As explained earlier, the pillars are the social world, the material world and the human body.

whereby those reading about “lean finely textured beef” were less concerned about risks related to ground meat than those reading about “pink slime” (an alternative term sometimes used for this type of meat by the media). Similarly, the new meanings of meat, such as those discussed in Section 3.3.1, may have agentic power to impact general understandings, and therefore also practices.

### 3.6.4 Materialities

Social practice theories (e.g. Shove et al., 2012) refer to Bruno Latour and Actor Network Theory in that material things have agentic power. Although they lack “intelligibility, intentionality and affectivity”, materialities can have performative power to influence the ways practices unfold (Weenink & Spaargaren, 2016:66).

As in the example I have given in Section 3.3.1, the first cultivated meat hamburger cooked in London in 2013 can be seen as having had agentic power to change discourses, cognitive frames and general understandings (e.g. in terms of what meat is). Together with other material developments — including the parallel development of the new plant-based meat products, and the attempts to popularise insect eating in the Global North — that took place in parallel and soon after the first cultivated meat hamburger, there have been concrete changes in the related industries. Further, although it is not known yet how many people have changed their meat-eating related practices due to the new plant-based meat products, such as the Impossible Burger, some likely have.<sup>135</sup> Even insect eating as a new option may have changed the practices of some people. Some may have changed their practices due to the new discourses brought on partly by these new developments. So, far, however, the most significant change from this particular material agentic power has been at the level of discourses, arguably in cognitive frames and general understandings.

### 3.6.5 Emotional and collective human agency

To Weenink and Spaargaren (2016), practices produce emotional energy, and this turns into emotional agency in humans. Weenink and Spaargaren, however, see this mostly as *collective emotional agency* which, importantly, has potential to both transform and maintain new practices (an example given by Weenink and Spaargaren is the vegan movement).

---

<sup>135</sup> Data on any concrete changes at the level of eating practices is still lacking, however, and therefore, we can only talk about likelihoods and possibilities.

Further, as argued before, acknowledging ambivalence about conflicting values and emotions can, in some situations at least, lead to a sense of agency.<sup>136</sup> Lertzman's concept of *environmental melancholia* (Lertzman, 2015) can, in a way, be seen as the opposite of the emotional agency potentially gained from social practices. In environmental melancholia, not acknowledging emotions regarding, for example, environmental destruction or climate change, leads to disempowerment. Vice versa, a process of acknowledging these emotions can lead to empowerment and a sense of agency.

Apart from collective *emotional* agency, others have argued for the potential of collective agency for change in social practices. As mentioned above, Huddard-Kennedy et al. (2015) point to its potential through discursive consciousness. Moreover, Spaargaren et al. (2012) and van Otterloo (2012) discuss human agency from a transition theory point of view. To them, individual consumers collectively “put alternative views and practices on the map” and other societal actors, such as producers and retailers, can then take notice and incorporate changes in their professional practices. Spaargaren et al. (2012) refer to a *tipping point* after which a social movement is large enough to impact the system as such.<sup>137</sup> Van Otterloo (2012) uses the phrase “frappez, frappez toujours” which refers to keeping at it, repeating your point (individually or collectively) until something desirable happens.<sup>138</sup>

Finally, on collective agency, O'Brien (2018) discusses tackling all the dimensions of systemic transformation, from systems and practices to worldviews, collectively. In this process, individuals shift from being objects (to be changed) to being subjects.

### 3.6.6 Non-collective (individual) human agency

Last, and to many practice theorists the least, is the thorny issue of individual human agency which requires a few comments. There are two potential forms of individual human agency in connection with social practices; one is acting as a *regular individual* and having power to transform one's own practices, and the other is to act as a *change agent*, transforming practices either from within or from the outside, together with others or alone.

136 From the point of view of addressing *collective* strategic ignorance (see van der Weele, 2013), collective agency would need to be harnessed.

137 According to the social tipping point argument, it may be enough for large-scale societal change to be triggered, if only 10% of people change their values and demand change (Urry, 2011; Xie et al., 2011). Erica Chenoweth has argued for an even lower percentage of 3.5% of active participants in civil resistance bringing about transformative societal change (see <https://news.harvard.edu/gazette/story/2019/02/why-nonviolent-resistance-beats-violent-force-in-effecting-social-political-change/>).

138 The Fridays for Future youth movement could be seen as an example of this.

Social practice theories tend to dismiss individual agency, although, as discussed in the above subsections and earlier in this chapter, individuals can be seen to have a certain amount of agency. In short, as Halkier (2010) argues, individual agency has to be seen in the “messy” context of the everyday performances of practices. Furthermore, in some practices, such as meat-eating related practices, individuals can be seen to have more potential for agency than in some other practices, more restricted by the general interconnectedness of practices. Halkier and Holm (2008) refer to *environmentally challenged food consumption* — such as eating vegetarian or organic food — as its own type of practice, showing political everyday agency, with the qualifying criteria of intentionality and autonomy. Eating in line with the new meatways can be seen equally political.

As regards how the publics feel about individual agency and responsibility, the meat consumption related focus group research by Wellesley et al. (2015) indicates that although in the United Kingdom and the United States, people might not take personal responsibility for causing climate change, for example, through having eaten large amounts of beef, they do (especially in the United States) seem to believe in individual agency. Further, in Brazil and China, personal responsibility for action was acknowledged among the focus group participants, and people seemed to be more open to modifying their behaviour accordingly.

The other way individual agency can have an effect is through the concept of change agent, collectively, or individually. As O'Brien argues:

Directly recognizing and engaging people as agents of change can drastically speed up [...] transformation processes because everyone is part of a system, and everyone has a sphere of influence. Activating conscious human agency that is critically reflective of individual and shared assumptions, beliefs and paradigms is a powerful way to shift norms and institutions in ways that support [a transformation].

O'Brien (2018:158)

Individual change agents are discussed in detail by Sahakian and Wilhite (2014) in connection with several real-life cases of collectively changed practices. Moreover, Jallinoja et al. (2016) discuss the power of certain societal actors, such as NGOs, politicians, celebrity chefs and teachers of home economics, in potentially affecting change in meat-eating related practices. Finally, Verain et al. (2015) discuss the topic in terms of individual consumers (however, considering their constraints), for example, in terms of flexitarians creating change in their own particular environments. Further, individual action may lead to political change: “reformation of

the self, including our behaviours as consumers, can inspire, inform and sustain political and cultural action”.<sup>139</sup>

### 3.6.7 Ought implies can

A general principle in ethics states that *ought implies can* (Voget-Kleschin et al., 2015). In other words, we cannot claim that something needs to be done on moral grounds, if it is impossible, on cognitive, physical or psychological grounds. A certain amount of agency is required for responsibility to be given. The “ethical core issue regarding sustainable consumption” is the question of whether individuals are responsible for changing their practices as regards sustainability (idem:118). Voget-Kleschin and colleagues do see changing one’s lifestyle, to contribute one’s fair share, as one of the three core duties for individuals as regards sustainable consumption.<sup>140</sup> Importantly, however, this assumes that changing lifestyle is possible and does not *overburden* individuals.

Further, in addition to the challenges posed by societal power structures (Fuchs et al., 2016) affecting the “can”, the cognitive and psychological hurdles for most individuals prevent the issue from being a *felt responsibility* (Luchs & Miller, 2015), as part of co-responsibility for sustainability shared by all societal actors. However, through the different sources of agentive power discussed in this Section 3.6, it may be possible to also tackle the problem of strategic ignorance. The example of conscious flexitarians (Verain et al., 2015) acknowledging co-responsibility, and using their political agency (Halkier & Holm, 2008) indicates that there are possibilities reflecting and applying the *ought implies can* principle.

Although practice theories have tended to argue against individual responsibility, Welch and Warde (2015:94) call for constructing “a plausible set of connections between the habits and routines of everyday life and lay normativity and collective mobilization”. The new social norms Andrews (2018) sees as necessary to allow people to express more emotion regarding the overwhelming issues of environmental destruction and threats such as climate change, could be part of this, enabling cognitive and emotional labour to resolve strategic ignorance.

---

139 David George Haskell, 17 February 2019 at <https://www.theguardian.com/books/2019/feb/17/david-wallace-wells-uninhabitable-earth-review> discussing responding to the climate crisis.

140 The other two duties are: duties to comply (with institutions aiming for more sustainable consumption), and duties to promote (institutions, e.g. with political action, but also by example).

### 3.7 Conclusion and discussion

This conceptual chapter has covered a lot of ground in an interdisciplinary manner. First, I discussed different approaches to sustainability transformation, while focusing on social practice theories in more detail. Subsequently, I presented my social practice framework as a graph and then proceeded to explain it, especially focusing on the parts that relate to my particular areas of interest here, namely the connections between practices and discourses concerning change towards sustainability. The corresponding elements of general understandings (on the side of practices) and cognitive frames (on the side of discourses) form the main connection. Values, emotions, and knowledge importantly link to both of them. Discursive consciousness of conflicts between values, emotions, and knowledge, in addition to discursive consciousness of practices themselves is a necessary step towards discursively open practices which may subsequently be open to purposive transformation.

As regards values, I emphasized the importance of seeing societal, and especially individually held values relating to specific behaviour, as not static, but as differently ordered value priorities, partly doing away with the value-action gap concept. I explored the many ways that values and emotions connect, not the least in the form of strategic ignorance of value and emotion conflicts, and ignorance of the related knowledge. Further, I stressed the importance of discourses in defining current practices, especially through various dominant ideologies often carried by cognitive frames, and in potentially leading to the unbundling and rebundling of discursively open practices. At the end of the chapter, I recapped the potential for (distributed) agentive power in social practices and the related discourses and discussed the ethics-based *ought implies can* principle for co-responsibility for sustainable societies.

I consider the sustainability-facilitating values — including co-responsibility, concern for, and unity with nature, social justice and equality — to be relevant especially at the societal level, if and when embedded in discourses and societal master frames, ideologies, and paradigms. Societal value priorities can influence individual value dispositions, and vice versa, and as social practice theories would agree — with some supporting evidence from empirical research — doing can influence thinking, as well as the other way around. In other words, we need not necessarily first prioritize, for example, nature-related values to act in ways that support the wellbeing of nature, but while doing so, our individual value dispositions may also change.

Central concepts in this chapter, strategic ignorance and discursive consciousness, tend to work in opposite directions. Although somewhat uncomfortably, strategic ignorance helps people maintain the status quo, while discursive consciousness may offer opportunities for acknowledging the ambivalence regarding

conflicting values and emotions, and thereby reflecting on practices with a more open and critical eye. Even strategic ignorance, however, although problematic, may be better for change than *true* ignorance, as strategic ignorance may already include a sense of responsibility (Onwezen & van der Weele, 2016), even if this responsibility is ignored.

Generally speaking, strategic ignorance may be an appropriate reaction in some issues — for example, we cater to terrorism, if we do *not* ignore it to an extent — but it is problematic in connection with many other societal issues, such as threats from climate change in general, and destruction of nature and its biodiversity through industrial animal agriculture in particular. As stated earlier in this chapter, strategic ignorance can, therefore, be seen directly in opposition to sustainability, as ignoring knowledge, and the related value and emotion conflicts, or ignoring difficult emotions themselves, may all help maintain unsustainability. Problems do not exist when they are ignored, so to speak. Addressing strategic ignorance — also through addressing values and emotions — is therefore vital.

The above links to the importance of societal discourses reflecting the “norms, standards and institutions” which Warde (2014:295) hopes to be a focus for social practice theoretical research in the future. Although Warde believes in the near-constant presence of practical rather than discursive consciousness in the everyday lives of people, discourses do reflect the rare instances of deliberation where changes can be instigated at any level of societies, including questioning the dominant social paradigms or master frames, and the dominant ideologies that often tend to invisibly restrict purposive change. Analysing discourses may partly help address the concern of Welch and Warde (2015) as regards the focus of social practice theoretical research largely staying at the micro-level of practice performances, and therefore it not being able to offer fully persuasive conceptual answers to policymakers on how to make societal change.

Further on policymaking, Shove et al. (2012) see the main benefit of social practice theories in their ability to redefine policy issues. Moreover, they see policymaking successfully changing practices, and behaviour with it when it: addresses all main elements of practices (including worldviews and meanings); involves also non-policy actors; recognizes the unpredictability of the process of practice transformation, and the perpetually moving targets for change; and builds networks and coalitions that facilitate the formation of new practices. Shove and colleagues ponder that one solution to unsustainable practices could be getting rid of bad practice elements, such as meat, or the valuing of convenience, in particular, since policymakers “often have a hand in influencing the range of elements in circulation” (idem:19). While trying to provoke and engender “a transition in dominant paradigms” (ibid.), Shove and colleagues wish for an explicitly practice-oriented approach to public policy.

As social practice theories argue, change is constant. However, humans do have the power to “change the change” (O’Brien, 2012:590), although this requires both agency and responsibility, and addressing the “conscious and unconscious assumptions, beliefs, values, identities, and emotions of individuals and groups that influence perceptions, interpretations, and actions” (idem: 589). Using social practice theories on analysing societal challenges as well as their potential solutions may be valuable — especially when adapted, as in this chapter, to include discourses, and when allowing for some emphasis on distributed agentive power.

Chapter 6 will reflect on this chapter in connection with both my overall conceptual research task and my more specific research question.



## 4 Data and methods

---

### 4.1 Introduction

I introduced critical discourse analysis — my main methodological approach — already in Chapter 3, as it forms an important part of the framework intended to both fulfil the research task from Chapter 1 and provide the conceptual background to the empirical analysis in Chapter 5. In this chapter, I will, therefore, focus more on the actual methods of carrying out the empirical analysis to answer my research question, in addition to other necessary considerations regarding data and its analysis. This introductory section will first discuss philosophical assumptions consistent with the applied methodology, along with assumptions about the data, and then move on to briefly describe the means used to manage both the data and the progression of the research. In Section 4.2, I will justify my choice for the type of data I have, explain the process of choosing, collecting and processing my final data, give a brief overview of it, as well as describe its preliminary analysis. Further, in Section 4.3, I will explain the main characteristics of the methods used. Section 4.4 will discuss the necessary questions of quality as regards the methodology and methods, and finally, Section 4.5 will conclude the chapter.

#### 4.1.1 Philosophical considerations

A methodology can be simply defined as the combination of methods with (compatible) positions on the nature of reality — ontology — and the ways in which we come to know reality — epistemology (Fierke, 2004). Herrera and Braumoeller (2004:16) see discourse analysis linking “epistemology to ontology in that [it] asks how we came to know the representations (words, phrases, language, gestures, etc.) that we claim constitute reality”. Since discourse, how we talk, and what we talk about, defines what we see and constructs our experienced reality (e.g. Schreier, 2012), discourse analysis attempts to uncover that reality and the production of it. This is the *critical realist position* (the position adopted in this book) whereby the world exists even if we don't know of it. Experienced reality and actual reality are separate from each other. We construct our experienced reality, and this is then

subject to revision, e.g. involving theories of actual reality. While revision of such theories does not change actual reality, our constructed reality influences nonetheless our actions, and therefore, through our actions, it also influences actual reality (Bazeley, 2013).<sup>1</sup>

Although the basic goal of discourse analysis stays the same — to analyse how discourse constructs experienced reality — there are two traditions: one which is more descriptive and linguistic, and the other which is critical discourse analysis, introduced already in Chapter 3 as the main methodological approach for the data analysis in this book.

#### 4.1.2 Two basic assumptions about the data

There are some underlying assumptions about the data I have analysed, partly arising from the assumptions in the previous section, partly relevant to the type of discourse data used.

Firstly, as meaning is a central concept in this book, I will give it some context here. Arising from the discussion in the previous section (and the previous chapter), meaning is culturally determined. Once something (an experience, an object, a way of behaving) becomes “defined and labelled, we tend to interpret it in the terms ascribed to that label and to neglect features from a wider perspective that don’t fit” (Bazeley, 2013:22). In the context of my data, for example, the meaning of “meat” is culturally — temporally and contextually — determined. Discourse, from a sociological point of view, is about filling reality with meaning (Ruiz Ruiz, 2009).

Secondly, arising from the previous section, what someone says within a discourse is not assumed as a fact — in the world in general, or for that person — but a component (a “true component”) of the discourse in question (Keller, 2013). We cannot look directly inside the minds by asking people what they think, as what people express as their attitudes depends on the situation (Billig, 2009). Wilson et al. (2004) conclude from their rhetorical study on motivations of vegetarians that since meat eating continues to be normative, and ethical motivations of not eating meat are still stigmatized, the motivations given within the discourse are about fitting the right arguments in the right places: “It is not a case of health or ethics, but rather what serves the purpose of accounting for preference best in a particular argumentative context” (idem:579). However, the point of exploring the discourse is to cover what is true within that discourse. As such, my analysis can only discover partial truths *about* the discourses reflected in the data (for example, that they are

---

1 This is by no means the only way discourse analysts can approach ontology and epistemology. In a strict version of *constructivism*, the world exists only in our construction of it, and since there are many constructions, there are also many realities. Similarly to the critical realist position, however, the construction of reality occurs through discourse (Bazeley, 2013).

seemingly rich); however, it can better discover truths *within* the discourses examined. More assumptions as regards the type of discourse data analysed in this book will be included in Section 4.2.

### 4.1.3 Management of data and research process

Over the period that I worked on this PhD project, I used a variety of methods to keep track of plans, ideas, processes, decisions, data, and so forth, both in digital and non-digital form. The main documents created were:

- Notes on issues related to the research process
- Audit trail and more general notes on methods
- Data plan and overview of final data
- Detailed track record of all final data
- Hand-drawn sketches of the discourses and the conceptual structure
- Notes on the used literature in Endnote
- A variety of further notes as regards both analysis and theoretical concepts.

Additionally, I used MAXQDA software<sup>2</sup> to aid data management, coding and analysis. Especially valuable was the ability to create individual comments (“memos”) on codes, coded segments and any interesting parts of the textual data in general, as well as a logbook, in my case used to create summaries of the different discussion threads within the data. I generated several Excel files from MAXQDA to assist in the data analysis. The final data itself was downloaded from the Guardian website into Word, processed there, and then imported to MAXQDA. Section 4.2.3 will explain my use of the software in more detail.

The above description of the various aids used may give the image of a more orderly process than the real progression of the project was at several points in time. Bazeley (2013) makes the point that indeed a “messy” process — going back and forth between theory, data, research questions, methodology, and so forth — is normal for qualitative research. The aids I employed all proved useful and necessary also from this point of view and greatly helped me to keep the tasks moving further and the project coming to an end.

Last but not least, I used literature to guide the research process and data analysis. The most useful guide for data analysis has been Bazeley (2013). Other literature used in data analysis is referenced elsewhere when appropriate.<sup>3,4</sup>

---

2 Version 11. See <https://www.maxqda.com>.

3 Additionally, of course, several people have been of great assistance. They are mentioned in the Acknowledgements.

4 For the structure of some of the chapters in this book, I used a guide by Lynch (2014).

## 4.2 Data choice, processing and preliminary analysis

In this section, I will explore the character of online news media, describe and justify the particular data chosen for this project, as well as explain how I handled it prior to the analysis proper. To start with, however, Table 4.1 shows a brief overview of the data, all from the UK based online Guardian newspaper.

Table 4.1: Overview of the data from the Guardian

Theme	Date of online publication	Title of the article	Number of reader comments included in data
Cultivated meat	20 Sep 2017	Could lab-grown fish and meat feed the world — without killing a single animal?	154
Plant-based meat	2 Jun 2016	It looks like a burger, tastes like a burger — but it's a plant	153
Insects	5 Nov 2015	Insects should be part of a sustainable diet in future, says report	147
Flexitarian-ism	25 Jun 2017	Vegans, vegetarians and now... reducetarians	153

### 4.2.1 Online news media

A large part of current and recent public discourses around meat eating — explored in general in Chapter 2 — take place online, frequently within online news media. Although there are clear differences between on- and offline news media, much of the traditional role of news media and media discourse holds online as well. What counts as news in the media has an agenda-defining function, and is a product shaped by political, economic and cultural forces (van Dijk, 2015). Even just the belief that the media influences attitudes and actions can already produce an impact (e.g. on political actions), regardless of the actual direct impact of the media (McNair, 1998). In other words, this belief is another way the media contributes to agenda setting. Further, the audiences of news media often tend to hear what they want to hear, and interpret content according to their pre-existing views, sometimes leading to misunderstanding or misremembering of news (Bell, 1991), a phenomenon also known as *confirmation bias*.

In the online news environment, reader comments become part of the news stories (Cambria, 2011; Shanahan, 2010). In an interactive process between readers and texts, readers tend to create their own meanings, rather than accept ready

meanings (Lehtonen, 2000). In the online environment, this is extended, so that old meanings may be confirmed or new meanings created in the interplay, not only between news articles and their readers but between posters and their readers as well.<sup>5</sup> Cambria (2011:135) refers to a new type of news genre, the *article-cum-comments genre* whereby, with the possibility to comment on online news, the “entire processes of producing, accessing, and perceiving news is [...] undergoing fundamental changes as regards the activities of representing, construing and experiencing news”. Similar to Letters-to-the-Editor (see Hogan, 2006), reader comments are said to influence opinions of other readers (Henrich & Holmes, 2013) and affect perceptions of what the public opinion on a particular matter is, what “my” opinion is as a reader, and indeed what the actual news is (Lee, 2012).<sup>6</sup> The comments may even have *more* influence on the readers than the actual articles (Yang, 2008).<sup>7</sup>

In the online article-cum-comments environment, the confirmation bias of readers mentioned above has an additional function in that it can lead to a more polarized discourse. Although the *argument culture* to which the media contributes has existed already before the internet (Tannen, 1998), online discourses tend to be particularly polarized (e.g. Caldwell, 2013; Pavasovic Trost & Kovacevic, 2013). This can both influence the impact such discourses have on individuals and society and affect the use of instances of such discourses as data for analysis. Caldwell (2013), for example, could not conduct his original analysis of online comments due to a large amount of flaming<sup>8</sup> in the data. However, he employed *media play theory* to reanalyse his data, and “the seemingly irrational and chaotic instances of participation” (idem:504) took on a different meaning and became part of the debate.<sup>9</sup> Further, Papacharissi (2004:259) argues that, apart from incivility, heated discussion as such is not a threat to deliberation, and that “disagreement and anarchy” might promote democratic emancipation.

Online discourse has indeed been repeatedly measured against the Habermasian criteria for deliberative democracy (see e.g. Dahlberg, 2004, for a dis-

---

5 And between the posts and the researcher.

6 However, unlike Letters-to-the-Editor, online news comments are normally not edited, and are screened only for bad language.

7 However, considering that few readers would read all of the comments in the cases when they run up to hundreds or thousands of individual posts attached to a single news article, this influence can be somewhat random and be determined more by the posts appearing at the top. Nonetheless, the posts reflect the experienced reality for the readers writing the posts, and this is relevant to the analysis.

8 *Flaming* is usually understood as hostile, offending commenting online, and *trolling* as deliberate flaming, with the purpose of disrupting or hurting the other participants.

9 Play is understood here as something between the concepts of *citizen* and *consumer*, and replaces the *rational citizen* (who would not get involved in flaming) with *cultural citizen* (who might).

ussion), and although some studies have found that the criteria are frequently not met in online discussions (e.g. Noci et al., 2010), others see more democratic potential in online deliberation (Manosevitch & Walker, 2009; Sampaio & Barros, 2012).

Flaming and trolling tend to result from the characteristics of online communication such as anonymity, lack of status cues and social context, as well as topicality (Diakopoulos & Naaman, 2011). These same characteristics can, however, also be beneficial for communication. For example, missing social cues can draw in people who would otherwise be excluded, and anonymity can equalize the interaction (e.g. Albrecht, 2006). However, gender differences do tend to be visible online based on an overview by Herring and Stoeger (2014) of two decades of studies on the topic. A further characteristic of online discourse is its *multimodality* (combining text, images, video, hypertext), and that it is spatially and temporally fragmented, something atypical for speech; nonetheless, the style of online communication is considered closer to speech than writing (Cambria, 2011; Sindoni, 2013).

Due to the often large amount of rough postings, most journalists are critical of (especially anonymous) online comments, but even so, Santana (2011) found in his study that about half of journalists had changed their reporting practices, topics, writing, and so forth, as a result of online comments.

Despite the downsides and the criticism, many researchers maintain that online news comments — as part of Discourse 2.0 (Herring, 2013) — are valuable data. Online news sites with their reader comments are seen as “naturally occurring and ecologically valid experimental setting” for researchers (Lee, 2012:43). Since a relatively large part of the population<sup>10</sup> participates in commenting and reading others’ comments, the discussion can be seen to reflect a considerable share of people. Although online comments tend to be more “impulsive, shallow and aggressive” (Henrich & Holmes, 2013:2) than public opinion obtained by more traditional means, Henrich and Holmes among others (e.g. Hancock, 2007; Pavasovic Trost & Kovacevic, 2013) argue that they may be providing a more genuine insight into people’s opinions than surveys, interviews or experimental studies,<sup>11</sup> potentially providing policymakers with another input for policymaking.<sup>12</sup>

Online discourse data allows for large sample sizes, when necessary, provides for real-time data, and has no constraints by researchers as to what is worth men-

10 For example, a PEW survey published as early (for online commenting) as in 2010 (Purcell et al.) found that 25% of users of online news in the US had commented.

11 My data is therefore mainly spontaneous discourse, as opposed to induced discourse, more common in sociological research, e.g. in interviews or surveys (Ruiz Ruiz, 2009).

12 Although one might conclude from this that more polarized opinions might be more “truthful” than less polarized opinions, one has to also keep in mind that the online environment tends to have its particular polarizing effect which adds on to otherwise more open communication.

tioning or asking. Henrich and Holmes (2011) conclude from their study on online news comments in Canada that their results have a high degree of consistency with results from other comparable, but offline studies, and suggest that this type of data works as stand-alone data, as well as in combination with other data sources.

Further, Barr (2011) claims that analysing online discussion can provide important insight into the social construction of issues to do with sustainability, something that policymakers could indeed use in making challenging, but necessary policy decisions. A study by Cooper et al. (2012) contains one such analysis of the online discussion following a Guardian journalist opinion piece on consumption, one conclusion being that the discourse analysed “echoes themes and debates within academic literature” (idem:26).

As said, media has both real and imagined power to set agendas in society. With the publics participating in creating news through their comments, ordinary people take on some of that power. Online comment forums “demonstrate the growing power of citizens to influence [the media] in their agenda-setting role” (Santana, 2011:77). Social power rests with those who talk and whose talking is listened to and thus forms dominant discourses. However, counter discourses may turn out to be future dominant discourses (Schreier, 2012). In effect then, there are two types of social power: current power and potential (future) power. Through their ability to participate in agenda-setting online, the publics have such potential social power.

#### 4.2.2 Final selection of data

In addition to what was discussed in the introductory section to this chapter, it can be assumed that differences in the kinds of comments the readers of online newspaper articles post depend on temporal and contextual factors such as:

- The type of newspaper (e.g. broadsheet vs. tabloid)
- The country/culture in which the poster is based (broadly, e.g. Global North vs. South, the United States vs. Europe, but also southern vs. northern Europe)
- The overall topic in the newspaper article: some, especially political topics are “hot” and tend to generate not only more posts but often also more posts containing flaming or trolling<sup>13</sup>
- Style and frame of the article itself, including e.g. the metaphors used
- Certain controversial elements or actors in the article, e.g. “the UN” or “Paul McCartney” acting as messengers: such elements tend to invite more derogatory posts (“shoot the messenger”)

---

<sup>13</sup> Meat related topics are often somewhat political, but they still do not get a great deal of derogatory posts containing flaming or trolling, at least not in the Guardian newspaper.

- Other contextual issues, such as the time of day the news is published (are people reading and commenting at that time the story is new and more visible?), what other news is around at the same time, and the personal situation of the poster at the time of reading and commenting.

While working on other aspects of this work, I considered various online discourse data sources, in terms of different countries (including different languages), newspapers, and specific (meat-related) topics. After deciding on the country (the United Kingdom), I then examined a large number of newspaper articles and comments from the last decade. During these phases, I read through a lot of potential data. The main benefit of having gone through this search period is that I became quite familiar with the different topics and viewpoints and the arguments existing in such discourses. I did some initial coding to get a feel for what to expect and for how the coding will work. Having decided on the specific topics to include, I continued further to select appropriate examples of the discourses, and eventually arrived at the final selection of data. During this last phase, I read through the final data in greater detail to become thoroughly familiar with it. In the following, I will justify the choices made, regarding the rough geographical location of the discourses, the particular newspaper, topics, actual articles and the kinds of posts included.

My reasons for choosing Northern discourses on meat eating over Southern ones are three-fold: one is principal, the other two more practical. First, in the climate mitigation discourse, there are two basic ways of “dividing the cake”, or justly distributing “a limited resource that no-one owns” in Peter Singer’s words<sup>14</sup> — in other words, dividing GHG emissions that stay under a critical limit. The principles are the historic principle of justice (e.g. polluter pays), and the per capita principle. According to both principles, it is the Northern nations that are (most) responsible. Similarly for intensive animal agriculture, it can be argued that both principles hold, so that this destructive industry was created in the North (in the United States), and only through it, has per capita consumption of meat been able to rise to its currently unsustainable amounts at a global level. Even though there are some exceptions of longer-term high meat consuming countries in the South, such as Argentina,<sup>15</sup> it is mainly through the exportation of intensive farming systems that Southern countries, such as China, have been able to increase their consumption of meat animals to the extent that they have.

---

14 Peter Singer in his presentation on the ethics of climate change during the Climate change — Views from the humanities conference from 3 to 24 May 2016, taking place online. See [http://ehc.english.ucsb.edu/?page\\_id=13544](http://ehc.english.ucsb.edu/?page_id=13544).

15 Even in Argentina, the high consumption of meat was not indigenous, but largely a consequence of Spanish invasion (Boyer, 2016).

Secondly, the first practical reason for my selection of geographical location is that currently there are no means of collecting similar online data from the South, as a comparable online newspaper discussion culture does not (yet) seem to exist in at least the English-speaking Southern news media. Based on my quick scan of several online English-speaking national newspaper content between 2010 and 2016, the news media in the South has not (yet) contained anywhere close to the same number of articles on the impacts of eating meat, or the alternatives to meat.

Thirdly, the global transformation of the meat system will quite possibly be a two-way cultural exchange, i.e. between the North and the South. Coming from a Northern culture, I am looking at the end that is more familiar and understandable to me.

Regarding particular newspapers, Ruiz et al. (2011) divide national (broadsheet) online newspapers into two types, 1) communities of debates (such as the New York Times, and the Guardian), in which opposite views to the majority are welcomed, and 2) homogenous communities (such as Le Monde, El País and La Repubblica), in which the comments are often a "collective reproduction of the same positions" (idem:20), i.e. less debate takes place. Ruiz and colleagues attribute these differences largely to culture and conclude that "conversations [in the New York Times and the Guardian] showed a greater deal of argumentation, respect among participants, and diversity of ideas" (ibid.) than those in the other three newspapers. Further, Ruiz et al. concluded that the comments in the first two newspapers were closer to the principles of democratic deliberation mentioned above. Moreover, Ruiz and colleagues note that the Guardian has the least amount of derogatory language out of the five news websites. Finally, their justification for choosing "quality press" for their study was that such papers portray themselves "as the main arena for public opinion formation" (idem:6).<sup>16</sup>

From my own experience, I have concluded that the discussion in the Guardian usually has a fairly high quality (reasonably long posts, relatively focused discussion, justified arguments, not a lot of flaming), in particular, when compared to

---

16 All five newspapers include moderation in their online commenting, and so, there is probably less polarization because of that. Different ways to do moderation (pre-moderation, post-moderation, in-house, outsourced) did not seem to make much difference in the study by Ruiz et al. (2011). Another feature of at least some of these newspapers is that not all stories can be commented on. The Guardian itself says on its website that "where comments are likely to add value (for us and other readers) in terms of additional insight, perspective or knowledge, and where we have time and resource to be involved in the conversation, we try to ensure commenting is turned on". So the most polarizing topics and articles do not necessarily have commenting possibilities. However, the point I wish to make in the text is about the diversity of opinion, justifying arguments etc., and this Ruiz et al. (2011) attribute to the culture of the newspapers, or more precisely the "the relationship between political systems and journalistic culture" (idem:5).

another popular UK national newspaper, the mid-market tabloid Daily Mail. Comparing these two further, the Guardian has had better technical possibilities for discussion between posters over the last few years, i.e. it has been easier to comment on others' posts. Based on my experience, such "conversations" can offer relatively rich data.

The Guardian has a background as an upmarket (i.e. traditionally "broadsheet") newspaper,<sup>17</sup> and usually, in the United Kingdom, newspaper readership profiles are particularly distinct and stable and go along socioeconomic lines (Bell, 1991). Some of this is still valid in the UK online journalism, although the readership profiles are more mixed, also geographically.<sup>18</sup> Interestingly, however, the readership profiles for *all* major UK online (traditional tabloid and broadsheet) newspapers are similarly divided across socioeconomic classes, so that the upper classes form a much larger group of readers of online news than the lower classes, whereas, for the downmarket tabloid papers (in particular, the Sun and the Daily Mirror), the lower socioeconomic classes form a larger proportion of readers for offline newspapers than the upper classes do.<sup>19,20</sup>

In Chapter 2, I discussed the new meatways as getting a fairly large amount of media attention. These are also the chosen specific topics for the Guardian articles included as my data: cultured meat, plant-based meats, insects and flexitarianism. I discussed pulses in Chapter 2 as well, and in principle, I wanted to include discourse around pulses in my data. However, as mentioned in Chapter 2, such discourse does not really exist. I, therefore, decided to discuss pulses, and the lack of enthusiasm, in Chapter 2, and include pulses only rather indirectly in the flexitarianism discourse, if and when appropriate.

Henrich and Holmes (2013) emphasize the importance of considering methodological issues when using this relatively new type of data, online news commenting, especially for qualitative research. They discuss a number of points, and these — and my choices regarding them — are:

- *Demographic depth vs. breadth:* This is a question between choosing a larger number of articles and their comments from a single newspaper or a smaller number from several newspapers. As Henrich and Holmes argue, it is challenging,

17 Similar to other UK broadsheet papers The Daily Telegraph, The Independent and The Times.

18 Based on profiles of e.g. Guardian posters, many posters live outside the UK, although the majority live in the UK. However, online *readership* may be more international.

19 The readership profile for the Daily Mail is similar to the upmarket papers in terms of differences between the off- and online versions. However, the differences are not as stark. For example, the offline Daily Mail gets proportionally more readers from the lower classes than the upmarket papers do.

20 This readership profile information is from Newsworks.org.uk, providing profiles for the UK, downloaded in March 2017.

and perhaps ill-advised to try to generalise from a few articles to the whole readership, or in this case, to the group of posters for a particular newspaper (of which we know even less, as discussed below), and therefore, comparing newspapers does not necessarily make sense. Indeed, generalisation to a population is not, and could not be the aim of my analysis. In the end, I chose four articles from a single newspaper. A larger sample would not have allowed for the same depth of analysis.

- *Uncertainty of commenters' demographics*: Profiles of commenters do not necessarily match with online or offline readership profiles, and there is a lack of research in this area. However, Chung (2008) found that for a US newspaper, the profiles of posters did match with the profiles of readers. Further, the Guardian did a large survey of their posters in 2016 and concluded that two-thirds of their posters are male, partly attributable to there being slightly more male than female Guardian readers. Nonetheless, male readers are more likely to comment: 21% of male Guardian readers said they have commented, whereas only 12% of female readers said so.<sup>21</sup> In my analysis, I do not make any assumptions about the demographics of the posters.
- *Article inclusion criterion*: After a long period of considering which articles to include, I chose the latest article I found on each topic that included rich enough discussion in terms of both the number of posts and their contents.<sup>22</sup> Originally, I did several keyword searches on the Guardian website (with keywords such as “insect”, “cultured meat”, “lab meat”, “synthetic meat”, “in-vitro meat”, “frankenmeat”, “plant-based meat”, “impossible burger”, “beyond burger”, “flexitar” etc.), but as mentioned earlier, I also followed the Guardian news over time and usually caught potentially relevant articles before even doing keyword searches.
- *Comment inclusion criterion*: After considering several different options, I decided to include “topic conversations” only, whereby one topic conversation is one discussion thread where at least half of the posts are relevant to the topic of interest.<sup>23</sup> Further, I included the around 150 first relevant conversation posts (including the last thread entirely, so the number was not exactly 150). Since many Guardian articles on controversial topics have especially lately included hundreds or occasionally even a thousand or more individual posts, this method

21 See <https://www.theguardian.com/technology/2016/apr/12/how-we-analysed-70m-comment-s-guardian-website#comment-72293328> from 12 April 2016.

22 The Guardian article on eating insects was the only one where I doubted whether I should include it, as there were fewer and shorter comments than for the other themes. However, there was much less to choose from for this theme, and so I went with the original criterion for choosing the latest article that was still adequate for my purposes.

23 “Relevant” here means that the post touched upon at least some arguments related to eating meat, not eating meat, or eating meat replacements.

does eliminate a lot of posts. However, a strict criterion was necessary to allow for depth of analysis. Moreover, some comparable research includes only one post per poster to allow for enough diversity of views. However, this method would not have worked in my data, as my main criterion was to include posts that are part of a conversation.<sup>24</sup>

- *Time-limited access to comments*: Newspapers do not tend to leave comments indefinitely to their websites. However, for me, this was not a problem. First of all, the Guardian does seem to still include all (or most of) the comments since the beginning of the possibility for such interaction on their website, and secondly, I did not go back in time for very many years for my final data.
- *Using public consensus data* (e.g. the up or down arrows next to a post showing agreement or disagreement): I decided not to use such data, as to my view it is not reliable. It may, at least on occasion, be purely by accident that some posts get lots of feedback, and others do not.

Lastly, a point not mentioned by Henrich and Holmes (2013), but discussed by e.g. Sindoni (2013) and Cambria (2011), is to consider whether or not to include multimodality in the analysis, in particular visual effects, graphs, photos or videos. There are no videos in the articles I chose, but there are several photos. Due to time constraints, I decided not to include the photos in my analysis. I did, however, consider and include in the analysis the hyperlinks contained in the reader comments.

To describe the final selection of data, again, it includes four articles from the Guardian, described in detail in Chapter 5, and shown in the overview of Table 4.1, and the first around 150 relevant posts within topic conversations. The total number of posts included in the data is 607. The articles vary somewhat in length, and the number of existing comments to them varies as well.<sup>25</sup> As regards the included threads, the final data consists of 90 different discussion threads within the four documents.<sup>26,27</sup> This amount of data is comparable to, or slightly more than in similar qualitative studies of online comments (e.g. Cooper et al., 2012; Snejder & te Molder, 2005), and less than in quantitative studies of online comments (e.g. Henrich & Holmes, 2011) or a quantitative study by Hogan (2006) on Letters-to-the-Editor.

---

24 Shanahan (2010) also included conversation threads only — or *conversational episodes* — in her data for full analysis.

25 The article on cultured meat includes 1084 posts, the one on plant-based meats 437 posts, the one on insects 302 posts and the one on flexitarianism 1033 posts.

26 The number of threads is 18 for cultured meat, 17 for plant-based meats, 16 for flexitarianism and 39 (shorter ones) for insects.

27 In Chapter 5, I use frequently the word “document” to refer to any of the four Guardian articles and the posts that follow them as one entity, the article-cum-comments entity.

Before moving on to the next section, I will briefly discuss an issue not raised in the literature I have just discussed, but something that has been in the news since the 2016 US presidential elections and the UK Brexit vote. There are clear attempts to manipulate public online discourses on certain political issues.<sup>28</sup> Additionally, many industries are known to have manipulated public discourses on science over decades, e.g. the tobacco and fossil fuel industries. There may also be purposeful attempts to manipulate online discourses on newspaper websites by individuals or groups with interests in such action, including on topics such as meat eating. Meat is a rather political issue, and involves powerful interest groups. This is an unexplored area, however, for the sake of the kind of exploration I carry out in terms of discourses on meat, it may be less relevant how and why individual posts come about. More relevant, for analysing particular discourses, is that all the posts exist, and are therefore part of the discourse and part of the news, in the way discussed earlier in this section. If some of them are produced with manipulation in mind, it may be an important issue for other research focusing on such manipulation, as it has to do with controlling discourses and with power in society. All in all, there is no way to know about the honesty or motivation of any individual poster's comments, although there is research indicating that overall, people tend to be fairly honest in (anonymous) online communication, as discussed in the previous section. In conclusion, all posters taking part in the conversation are part of the discourse and the discourse is what matters for my particular research.

### 4.2.3 Processing, coding and preliminary analysis of data

As mentioned earlier, I downloaded the final data (in a threaded form) from the Guardian website into Word, processed it there, and then imported it to MAXQDA. The preparation within Word involved cleaning the text from unnecessary (often HTML) elements, reformatting it, colour coding each post based on its relevance to the topic of the article, marking each conversation thread with another code, and saving the articles with the topic conversation threads only into a separate Word document. I then imported each of these four Word documents into MAXQDA where I processed them further. To anonymize the data (as requested by the Guardian), I coded each post with a codename — CM, PBM, INS and FLEX — and a number representing the order in which the posts appear in the threads.<sup>29,30</sup>

28 See <https://www.theguardian.com/us-news/2017/oct/14/russia-us-politics-social-media-facebook> a Guardian article from 14 October 2017 on the issue.

29 In other words, the posts were not coded in time order, as for example, two separate comments posted at 9:10 and 9:15 am could each attract tens of posts that would run possibly to the following day. These two threads would, however, appear in the data so that the whole thread started at 9:10 am would come first before the thread started at 9:15 am.

30 Each post forms one unit of analysis.

As part of the preliminary analysis, I wrote a brief summary of each thread in MAXQDA to assist in getting an overview of the data and drew a rough map of connections for each document (Bazeley, 2013).

My research question for the dissertation took its final form only during the further analysis of data discussed in the next section. Yet, the question started developing from its initial state already during the preliminary analysis, based on what was most significant or insightful about the data (Foss, 2009), and based on how the data affected the ways I approached the topic. The research task for Chapter 3 was also essentially related to my research question, and the two were formed in a simultaneous and gradual process.

The first round of coding of the data in MAXQDA was part of this first stage of analysis. I used MAXQDA primarily for coding and note taking, and to gain an overview of the data. Such limited use of the software, moreover, prevents problems with giving the software too much influence in the analysis or letting it fragment the data extensively and leaving out the important context of each coded piece of text.<sup>31</sup> The type of analysis conducted did not even call for the more advanced features of this type of software.

As regards the coding itself, the initial or primary coding was two-fold, based on concepts thought of beforehand, based on literature, and on a significant number of further concepts rising from the data, or inspired by the data. Later on, when conducting the main analysis, and when going through the existing codes, memos, notes, and so forth, I still added on to the codes in a second round of coding. Table 4.2 shows an overview of the codes from both the first and the second round of coding in MAXQDA, while Annex 1 explains the codes in more detail.<sup>32</sup>

---

31 For criticism of using software for qualitative analysis, see e.g. MacMillan and Koenig (2004) or Bong (2002).

32 Included in Annex 1 are descriptions for the codes, and an indication of where the code came from, i.e. is it from literature, or the conceptual framework more generally, or did it come directly from the data. A few of the initial codes had no actual data linked to them, especially a couple of the coping strategies identified in literature but not present in the data.

Table 4.2: Codes used for analysis

Main codes	Subcodes
Interesting	
Old meatways	Vegetarianism/veganism
	Conventional meat system
New meatways	Insects and insect protein as food
	Flexitarianism
	Plant-based meat
	Cultivated meat
Making positive future with meat alternatives	
Business/technology — meat & meat alternatives	
Labels	
Story	
Knowledge	
Conflict	
Cognitive frames about meat	
Carnism	
Metaphor	
Values and morals	Values and morals general
	Watching/not watching others and their choices
Modality	
Agency or lack of agency	
Emotions	Emotions general
	Catastrophizing
Disgust	
Environmental melancholia	
The 4 N justifications	Not normal
	Normal
	Not natural
	Natural
	Not necessary
	Necessary
	Not nice
	Nice

Acknowledging ambivalence	
Indifference	
Actual behaviour change	
Other coping strategies	All or nothing
	Animal death is unavoidable
	Devaluing vegetarians
	Freedom to choose
	Blaming vegans
	Denial of animal mind
	Denial of animal pain
	Neocarnism
	Perceived behavioural change
	Disassociation
	Avoidance

Most codes in this scheme had a description (a “code memo”, developed during the coding process) usually related to where the code came from, how it is used, and how it may be related to other codes. Table 4.3 shows examples of two such code memos. Many of the coded text segments included a further note regarding the coded data.

Table 4.3: Code memos from MAXQDA — Example

<b>Disgust</b>	<p>Disgust either towards meat/fish or towards meat/fish alternatives, such as cultured meat, insects or plant-based meats.</p> <p>Audit trail: I initially put "disgust" under coping strategies, but since it is not clearly a coping strategy in these contexts (at least not yet from CM, but maybe other docs?), and since I don't know of any literature that would define it as a coping strategy (it's just my idea, as in, alternatives to meat are disgusting, therefore, we have to keep eating normal meat). Would be interesting to see if I found that meaning for disgust in my data. If I do find it, then I should maybe have two codes separately for "disgust", one under "coping strategies" and one otherwise.</p> <p>Disgust is of course also an emotion, but since it is both an emotion and (possibly) a coping strategy, it is not under either of those.</p>
<b>Animal death is unavoidable</b>	<p>This is a version of the "all or nothing" coping strategy, but it is separate as there are a lot of references to it. So, the meaning in short: Even a vegetarian diet causes a lot of animal death (on the fields themselves, or because of agricultural expansion). Humans cannot live and not have others die for it. It's inevitable, and the more humans, the more animals die. And it is not the meat eaters' fault alone that animals die.</p> <p>I can reference this to literature, but not as a coping mechanism?</p> <p>Audit trail: I have added some stuff to the description above, so the "too many people on the planet" argument is added, although it belongs more to environmental melancholia or catastrophism than here. It is related.</p>

Qualitative research is sometimes criticized for giving coding too central of a role, especially if software is used for coding (see e.g. Bong, 2002). However, when extending the analysis to *conceptual coding* (Schreier, 2012), as is often the case in qualitative analysis, this may be less of an issue. Conceptual coding refers to creating links between data and concepts, between concepts, and between data, and can also be used to generate theory from data. Further, my specific methods of analysing the data (described in the following section) reduced the impact of coding as such. Finally, although I had a preliminary idea of the concepts significant to the research, and of what to look for in the data, the coding process was still exploratory to some extent.

### 4.3 Methods of further analysis

As explained earlier, I approached the data from a critical discourse analytical viewpoint. Since the approach taken within critical discourse analysis is intertwined with the conceptual structure of this book, I introduced this methodology already in Chapter 3. Otherwise, Chapter 3 deals with discourses at a general level, explor-

ing their importance to social practices, and, among other things, the concept of frames, and the relevance of values, ideologies, and issues of morality present in discourses. This section will outline the actual ways in which I conducted the data analysis within the critical discourse analysis framework.

My overall goal in the data analysis was to reflect the potential of certain mechanisms (as discussed in Chapter 3) to contribute to change in social practices and to look for possible levers for change. Bazeley (2013) considers a focus on processes important for qualitative research and analysis, thereby increasing the chances of legitimate generalising of research results. Qualitative research often seeks to generate — rather than test — hypotheses (Curry et al., 2009) which can then be tested in further, qualitative or quantitative research.

More specifically, critical discourse analysis involves a certain attitude with which the data is approached. According to Fairclough (2001b:236), a suitable research problem for critical discourse analysis is “a social problem which has a semi-otic aspect”. Consequently, the aim of critical discourse analysis is often not to generalise results as regards language, but to “understand and make explicit the potential social implications which follow” from certain discourses (Taylor, 2001:317).

The following sections will explain the structuring of my analysis and the different methods involved.

### 4.3.1 Structuring the analysis

The main data analysis can be seen organised at three distinct levels. Including the actual methods used, these three levels were:

- Textual/qualitative content analysis: focus on themes and dimensions
- Contextual discourse analysis: frame analysis (incl. metaphor analysis)
- Interpretation of the previous levels for sociological/societal context (incl. ideological analysis).

The first level involves close textual analysis and much of the coding of the data, looking for explicit and implicit themes, and the dimensions of the discourse. The second level entails looking at further implicit meanings in the data, using more structured methods such as frame analysis, as well as ideas from the related theory discussed in Chapter 3, in addition to further coding. Finally, the third level entails looking at the impacts of the discourses on society, drawing from the concepts discussed in Chapter 3.

Perceiving discourse analysis at three levels seems to be a relatively common way of theorizing such analysis, including critical discourse analysis. For example, Norman Fairclough (e.g. 1989; 2001b; 2015) uses it in his micro-, meso- and macro-level interpretation of discourse:

Text, interaction and social context [are] three elements of a discourse, and the corresponding distinction [...] between three stages of critical discourse analysis; *description* of text, *interpretation* of the relationship between text and interaction, and *explanation* of the relationship between interaction and social context.

Fairclough (2015:128)

Further, a similar structure going from detail, via context, to societal relevance is sometimes used in frame analysis, as with Eder (1996) in analysing ecological communication, and in Strydom (2000:84) in theorizing on frames in his work on the relationship between discourse and sociology. Also, Paltridge (2006:179) states that critical discourse analysis “may include a detailed textual analysis and move from there to an explanation and interpretation of the analysis”.

Although different authors interpret the levels somewhat differently, a three-level structure seems commonly used. Ruiz Ruiz (2009) organises his sociological discourse analysis methodology on three levels as well, as Box 4.1 explains.

#### Box 4.1. Sociological discourse analysis according to Ruiz Ruiz (2009)

Ruiz Ruiz (2009) defines a three-way structure for sociological discourse analysis, so that the first level is about textual (characterizing the discourse), second about contextual (understanding it), and the third about interpretative analysis (explaining it and its impact). The analysis is often conducted at all levels simultaneously in a dynamic dialogue between them.

To describe further, textual discourse analysis regards discourse as an object and often uses qualitative content analysis and/or semiotic analysis as tools, and involves some degree of coding of the data.

Contextual analysis, on the other hand, regards discourse as a “singular event produced by subjects” (idem: 8) in a context which is both situational (a discourse in relation to its particular production) and intertextual (a discourse in relation to other discourses). Frame analysis is one form of situational analysis (in addition to, e.g. conversation analysis), while intertextual analysis often attempts to look for the meaning of a discourse from its relationship to other discourses. Ruiz Ruiz argues that discourse analysis frequently ends at this level, but that for sociological analysis, the third level is required.

The final level interprets discourse as either social information, a reflection of ideologies, or as a social product. Social information tends to contain partial knowledge of social reality, while with ideological analysis, partiality becomes a crucial limiting factor for an informative interpretation of discourse. Critical discourse analysis often focuses on analysing hidden ideological constructs within a discourse. When

discourse is interpreted as a social product, the focus is on the social conditions under which it has been produced (and which it may in turn influence).

Both inductive and abductive reasoning are typical of the third level of analysis. On the one hand, inductive reasoning moves from the particular to the general, whereby one part of the system reveals something from the whole system. In sociological analysis, unexpected or atypical cases should either expand the theory or necessitate building new theory. On the other hand, abductive reasoning moves from the particular to the most likely explanation, in sociology often forming new hypotheses, instead of conclusions as such. Although especially abductive logic is often criticized as weak, Ruiz Ruiz argues that it is the only process “by which new ideas can be introduced in science” (idem:13) in the form of new hypotheses. Such hypotheses can initially take the form of *conjectures*, somewhat uncertain conclusions, which can later be developed into hypotheses.

Ruiz Ruiz concludes his description of sociological discourse analysis by arguing that two things differentiate it from other discourse analytical approaches, namely its eclectic character (several different traditions are combined), and the links that this analysis makes with broader social realities.

The overall analysis I conducted resembles the structure and content of the analysis described in Ruiz Ruiz (2009) and explained in Box 4.1.

#### 4.3.2 The first level of the analysis – Focus on themes, dimensions and meanings

My aim with the initial content analysis was to look for diversity and as many different aspects as possible that are relevant to the main themes in this book, and in particular, to find the most relevant research question(s) to investigate further. Upon identifying a particular theme, I identified its different dimensions, and the endpoints of these dimensions (Bazeley, 2013). To give a simple example, upon identifying the discussed impacts from a particular new meatway, say, eating insects, I would then identify extracts from the data describing the opposite, contrasting ends of the impact dimension, e.g. nature will do *better* when humans eat insects, or it will do *worse* when humans eat insects. Or similarly, a theme about the wellbeing of nature more generally would contain the contrasting ends of nature needing humans, to look after it, so to speak, and nature being better off without human influence.<sup>33</sup> The data contained most of the contrasting ends of the dimensions I found, and when it did not, for the sake of completeness of the analysis, I used a theoretical or imaginary example of the opposite end to create the dimensions

33 The focus in the particular comments was indeed on nature's wellbeing, not on humans, and it seemed that at both endpoints, humans were seen as separate from nature.

themselves, as advised by Bazeley. Searching for the dimensions of a theme greatly aided in finding the themes themselves, as well as meanings present in the data. The key task in this part of my analysis was to find the issues (related to my main themes and potential research question(s)) brought up in the discourse. The positions of the posters on these issues were not relevant as such, a key point for such qualitative analysis raised by Bazeley (2013).

To note, this type of thematic analysis is rather general with its aim being to get to know the data, and present it to others, although using the technique involving dimensions does make it more involved and detailed. Joffe (2011) advises against claiming that a superficial reading of a text — looking for themes — would be proper thematic analysis. Generally, thematic analysis is an extensive method of analysis of its own.

#### 4.3.3 The second and third levels of analysis – Focus on frames, values and ideologies

Unlike separating the first level from the rest of the analysis, it is harder to separate the second level from the third. This is because the frame analysis is more intertwined with ideological analysis, examining the more psychological aspects of the discourse and evaluating the societal dimensions. I will, therefore, discuss both levels in this same section. Most of the theory behind this stage of analysis has already been covered in Chapter 3, necessarily so, as discourses, and therefore concepts related to discourses, such as frames, are part of my conceptual structure. Further, Chapter 3 discussed the relevance of values, especially sustainability-facilitating values, and finally, the psychological concept of coping strategies concerning meat eating was also covered in Chapter 3.

My main aim with the frame analysis was to find the relevant dominant and counter frames and their implicit meanings and relations to ideologies, often expressed through values. For example, the following extract contains a counter frame to both carnism as an ideology and to an Absolute morality frame<sup>34</sup> (whereby only absolute measures count). I call the counter frame associated with the extract a Solution frame, and in this case, it is further linked to sustainability-facilitating values:

*If more suffering is reduced by many people reducing their meat consumption, as opposed to a few people becoming vegan and the rest not wanting to go that far, then I support reductarianism.*

*FLEX75, 25 Jun 2017*

---

34 Frames are often written with a capital initial letter.

In my frame analysis, I used analytical concepts and structure similar to Strydom (2000),<sup>35</sup> whereby *cognitive framing devices* help construct frames in a discourse, as explained in Chapter 3. Moreover, a larger discourse can consist of various constructed frames. Many frames reflect ideologies, which in turn affect the manner and emphasis with which each of the three framing devices are applied, delimiting or defining an issue. Indeed, frame analysis is a frequently used method in critical discourse analysis, in particular, because of its ability to bring out hidden meanings, values and ideologies (Paltridge, 2006).

Although I did not initially intend to look for metaphors, I decided in the end to include two specific *conceptual metaphors* that rose implicitly, but relatively unambiguously from the data, as discussed in Chapter 5. In fact, they both became apparent already in the first stage of analysing and coding the data.

A conceptual metaphor (originally from Lakoff & Johnson, 1980) is "a way of knowing the world" (Foss, 2009:270), where one idea (target domain, e.g. time) is understood in terms of another (source domain, e.g. money). People's knowledge of the source domain (e.g. money is valuable, not to be wasted) carries over to explain the target domain.<sup>36</sup> A conceptual metaphor can often make a point more efficiently and comprehensively than typical argumentative structures can. Further, metaphors play a key role in framing perceptions, and therefore also in framing action. Metaphor analysis is therefore frequently a part of frame analysis, as analysing metaphors can be very illuminating in identifying implicit frames, meanings, values, and so forth. Although the significance of conceptual metaphors is obvious, metaphor analysis is, however, sometimes criticized (see Box 4.2).

#### Box 4.2. Metaphors and criticism of metaphor analysis

Semino et al. (2004) are very critical of metaphor analysis. Their main issue, and a crucial one as such, is that deciding what exactly in a text is a metaphor, and further, what this particular metaphor means, is tricky, and depending on the answers (which may all be equally valid), different conclusions to the research itself may be drawn.

As regards the concepts, a *linguistic metaphor* is the way a metaphor is expressed in the actual language in use (e.g. "It's time to take stock of my life" or "You are wasting your time"), and a *conceptual metaphor* is the meaning at a more conceptual level (e.g. A PURPOSEFUL LIFE IS A BUSINESS or TIME IS MONEY). The link between these

35 Strydom (2000) partly draws from work by Klaus Eder and William A. Gamson for his theory on frames.

36 So, for example, in the conceptual metaphor TIME IS MONEY.

two, however, is often up to interpretation, in other words, the problematic issue is interpretative variability.

*Conventional metaphor* is part of a frequently occurring, systematic pattern of conceptual metaphors (i.e. not a single case, or a novel metaphor). TIME IS MONEY is a conventional conceptual metaphor.

Whether something is actually a metaphor (the *metaphoricity* of an expression), rather than a literal expression, is a matter of degree, and therefore the boundary between the literal and the metaphorical is fuzzy, and some expressions can be both literal and metaphorical.

Semino et al. (2004) emphasize that if one performs metaphor analysis, it is very important to be transparent and explicit about the criteria applied. Only rather careful and general conclusions can be made about the data, due to the challenges of metaphor analysis.

Partly due to such criticism, and even though metaphor analysis is often a considerable part of frame analysis, I decided not to do actual metaphor analysis with my discourse data.

During this stage, a notable element of my analysis was comparing the different discourse examples (of different new meatways) to each other, and interpreting their similarities or differences in light of the conceptual structure. My main aim was to widen the view on the different aspects of the discourses.<sup>37</sup> For example, a frame I named Technological innovation frame was present in both the cultured meat and plant-based meats documents, whereas it was not present in the insect and flexitarianism documents. This frame among similar ones, however, can have an impact on the kinds of values the discourses invoke, and their connections to the larger discourses regarding how societies should approach sustainability.<sup>38</sup>

Moreover, and bordering on ideological analysis, I explored how the coping strategies regarding meat eating were reflected and employed in the discourses. This included a significant amount of meaning-based questioning (Bazeley, 2013), whereby the data is questioned in order to look for the implied meanings of statements. For example, when someone says “It’s not a burger then”,<sup>39</sup> this implies certain things about the posters view on what meat is or should be, and what is important about meat or food to him/her. Additionally, it indicates that this poster may be trying to avoid information that would likely increase cognitive dissonance regarding the issues to do with eating meat.<sup>40</sup>

37 I did the comparisons mainly through iterative reading of the coded segments from the different documents within one Excel table.

38 This issue is discussed further in Chapter 5 and 6.

39 This is a comment to the plant-based burger article.

40 Avoiding information is one coping strategy, see Rothgerber (2014).

Similar to the two conceptual metaphors, a theme rose from the data that I eventually incorporated into the framework presented in Chapter 3, namely the issue of labels and labelling, including social labelling.<sup>41</sup> During the analysis, this became significant enough of an issue to not ignore. Lastly, one more focus deserves to be mentioned. After looking for normalisation of the new meatways in the data, I decided to explore the extent to which narratives about the future, or narratives about the new meatways, are part of the discourse, as such an element can be critical for normalisation. This was not a question of an issue arising from the data, as much as of me deciding to add something potentially relevant to the range of focus.

As mentioned, the third level of analysis, the societal context, was interlinked with the other analysis. Yet, as Ruiz Ruiz (2009) notes (See Box 4.1), this is an essential level for any discourse analysis with a critical approach. In my research, this level mainly served to link the discourses more firmly to the conceptual structure and to interpret the findings for further discussion and evaluation. As a result, I ended up with several conclusions which could also be seen as hypotheses (Curry et al., 2009; Ruiz Ruiz, 2009),<sup>42</sup> as answers to my research question. These are presented in the final Chapter 6.

#### 4.4 Quality criteria vs. methodological criticisms

In this section, I will address general quality criteria for qualitative research, criticisms received, and my own reflections on ways of dealing with the issues.

Although there is no definite agreement on the necessary quality criteria for qualitative research (Bryman et al., 2008), the literature discussing such criteria, however, seems to more or less agree that the following issues are important to consider (see e.g. Bazeley, 2013; Taylor, 2001):

- Objectivity/subjectivity and reliability of interpretation
- Internal validity
- Reflexivity
- Transferability/generalisability, also in terms of the data analysed
- Usefulness.

---

41 “Labelling” as such represents a conceptual metaphor, of course. For example, HOW YOU BEHAVE IS WHAT YOU ARE could describe the labelling of behaviour as a conceptual metaphor. However, since there is a distinct theory attached to it — social labelling — I did not handle labelling as a metaphor in my analysis.

42 Or perhaps conjectures, still somewhat uncertain hypotheses.

I will address these criteria in the following sections. Although much of the following applies to qualitative analysis more broadly, I will generally refer to discourse analysis, or more specifically to critical discourse analysis.

#### 4.4.1 Objectivity vs. interpretation of data

One of the main criticisms of qualitative discourse analytic research is a lack of objectivity.

Firstly, this is related to discourse analysis being inherently interpretative. Therefore, its results are criticized for being less reliable. Indeed, in critical discourse analysis, “the analyst imposes her reading [on the data] which she must be aware is only one of countless possibilities” (Mautner, 2005:819). Generally, this criticism is addressed by the analysis and its results being grounded in detailed evidence and persuasive and well-supported arguments, through which the data is not open to any number of interpretations (Tonkiss, 2004).<sup>43</sup> This is also related to the criteria of internal validity discussed more below.

Secondly, (critical) discourse analysis is challenged for researchers possibly taking sides, for example, by being politically committed (see e.g. Antaki et al., 2003; O’Halloran, 2010). Burman (2004) notes, however, that no researcher can help taking sides, and even trying not to is actually about taking sides, as the *status quo* is then maintained: “objectivity is not the absence of subjectivity, but a particular form of it” (idem:2). For Taylor (2001), the main point is about acknowledging that the research has an agenda.

Similarly, sustainability research (such as this research) often takes sides, as it usually aims to contribute to changing societies towards more sustainable ways of existence. Such research tends to be based on certain values and driven by a desire to do something good (Peattie, 2011). The criticism is, however, that *real* research should be value-free, objective and dispassionate. But Peattie notes, that most research is laden with the *dominant social paradigm* and with its associated values. As this paradigm is dominant, and therefore mostly invisible, researchers are usually not aware of it. One should not forget that in some areas of research, such as in health research, there is a clear and accepted societal goal, a desire to make populations healthier. In a similar vein, John Dewey (see e.g. in White, 1972) has argued that science in general should be directed at improving the world.

Specifically reflecting on critical discourse analysis, O’Halloran (2010) states that one way to address what he calls the “over-subjectivity” of critical discourse analysis is to incorporate corpus linguistics software, as then “it is the software which reveals salience and not the analyst” (idem:565). With software, he notes,

---

43 Hardy et al. (2004) note that differences in interpretation may, in fact, be a source of new data.

even larger data sets can be used for critical discourse analysis. Koenig (2004) also suggest using textual analysis software to aid qualitative frame analysis. Software could in principle add to the robustness of analysis (linking again to internal validity discussed below), and indeed the reliability of results. Apart from separate software packages, some of the claimed benefits could alternatively be reached by using certain advanced features of programs such as MAXQDA,<sup>44</sup> often used to manage and code discourse data.

As regards my own methods of analysis, I did consider using both the more advanced features of MAXQDA and additional corpus linguistics software. As already mentioned in Section 4.2.3, I decided not to use the MAXQDA features for more advanced analysis, for example, because doing this would have taken the focus away from the context of the data and too much towards the (reliability of the) coding itself. These features also seemed to not be particularly useful to my analysis. The separate corpus linguistics software I considered included AntConc<sup>45</sup> (freeware), with a concordance table feature where data can be compared to e.g. standard English corpora, and LIWC,<sup>46</sup> able to do more advanced textual analysis. However, I did not find that the analyses the software provided would add anything significant to what I was already pursuing with the data. It may be that the situation would have been different with a much larger dataset, but with such data, I would have had to do a different kind of analysis in any case, as the level of detail in the analysis with a much larger dataset would have had to be different.<sup>47</sup>

#### 4.4.2 Internal validity

External validity is generally not considered a reasonable criterion for qualitative discourse analysis, whereas internal validity is (discussed e.g. by Georgaca & Avdi, 2011; Taylor, 2001; Tonkiss, 2004). Taylor (2001) presents several criteria for qualitative analysis such as critical discourse analysis. Those most relevant to this section are:

- Coherence of arguments and analysis
- Persuasiveness, based on arguments

---

44 As a group, such software packages are called computer-assisted qualitative data analysis (CAQDAS) software.

45 See <http://www.laurenceanthony.net/software/antconcl/>.

46 Linguistic Inquiry and Word Count. See <http://liwc.wpengine.com>.

47 One example from a test with LIWC worth mentioning is that, according to a basic analysis of my data with this software, the article on flexitarianism is more focused on the present, and the other articles are more focused on the future (the article on insects, however, was not yet included in this test run). Although this insight seems reasonable, it did not appear as something I could not have concluded from comparing the four article texts on my own.

- Rigour, systematic analysis
- Looking for deviant cases, oppositions and diversity in the analysis.

In developing and working on my analysis, in theory development, in describing my methodology and specific methods, as well as in presenting results, I have applied such principles. In other words, I have aimed to be systematic and coherent and give enough detail of the data and the process of analysis. Having extensive notes has certainly assisted in this. My objective has been to make reasonable arguments as regards the data so that my conclusions could be tested in further research. In searching for the “counter data” (e.g. counter frames), I have also looked for diversity in the material.

Goodwin and Shoulders (2013) and Bazeley (2013) discuss peer debriefing as a validation strategy. In peer debriefing, the other person plays “devil’s advocate” (Goodwin & Shoulders, 2013), questioning the theory and methods. This is a strategy I have used on occasion.

#### 4.4.3 Reflexivity

Reflexivity is particularly important for qualitative research. Hardy et al. (2004:21) argue that in discourse analysis, reflexivity is necessarily high, as the researcher “is part of the process whereby meaning is constructed”. Reflexivity is about being critical and open about the data and its analysis, by questioning assumptions, critically examining the processes of the analysis, and evaluating how these processes affect the results (Tonkiss, 2004). Taylor (2001) asks for rich detail in explaining the process of analysis, and in presenting findings. The value of keeping an audit trail is clear for any research project, and its usefulness is probably most obvious for the criteria of reflexivity.

In my work, I have tried to be critical of my analysis, including assumptions and processes. Further, I have kept detailed notes about the developments, both in the form of an audit trail and in many other notes, as explained in Section 4.1.3. Chapter 6 will include a section on limitations where I will reflect more on what could have been done differently, but in the following criterion of transferability, I will also reflect on my choices for data.

#### 4.4.4 Transferability

Data for critical discourse research often just happens to be there. It is not random, or randomly selected, as it might be in quantitative media content analysis, for example, nor is it usually designed, as in surveys or interviews. It is frequently therefore not representative. Such is my data as well, reflecting some of the discourses around the new meatways. Taylor (2001) warns against assuming that any

results from critical discourse analysis would describe the real world in a more general way. Instead, such results are partial (not general), contingent (not necessary, but possible), and situated (claims made can only refer to the specific situation). She maintains that *all* knowledge is such, as experienced reality is inevitably influenced by any research processes. This connects back to the critical realist position discussed in Section 4.1.1.

As said, external validity is not considered a criterion for qualitative discourse analysis. The results of critical discourse analysis, for example, are usually not representative, and therefore not generalisable to a larger population. However, results of discourse analysis can be *theoretically generalisable* (Bazeley, 2013; Tonkiss, 2004), or transferable to other situations, especially when such analysis focuses on processes and mechanisms.

Regarding the value and transferability of small-scale qualitative data, Bazeley argues that:

Each singular person or event embraces a degree of universality, reflecting dimensions of the social structures and order of their time. What is learned from individual cases or case studies reflects this: it is not that we can describe the characteristics of a larger population, survey style, but rather that we gain understanding of the way some aspect of society works — an understanding of processes and principles, theory rather than facts.

Bazeley (2013:411)

Critical discourse analysis frequently engages in abductive logic (discussed in Box 4.1) involving an interplay between existing theoretical understandings and empirical data, in which the data can generate new theoretical understandings (Bazeley, 2013). In other words, abductive logic can create theoretically generalisable data. I would suggest that the conclusions (or hypotheses) from my data may be theoretically generalisable, but they could also possibly be tested in further research.

#### 4.4.5 Usefulness

Last but not least, although the claims in discourse analysis tend to be modest, with an open approach to knowledge (Tonkiss, 2004), the usefulness of the findings, both theoretically and in terms of the real world is a general criterion for research. Georgaca and Avdi (2011) suggest that findings from discourse analysis can provide new insights, and generate new questions (or theory, as argued above), and they can deconstruct dominant assumptions and challenge practices. They note further that there are no direct strategies that discourse analysis can usually lead to, but such analysis can inform interventions, especially interventions challenging dominant understandings and practices.

In line with Georgaca and Avdi, I contend that, assuming the general relevance of discourses around meat (an argument in Chapters 2 and 3), findings from research such as mine can contribute to deconstructing dominant assumptions, and challenge unsustainable practices, for example those involved in producing animals for human consumption, as well as in eating such animals. I will address this “so what” question — a key motivation for this research — again in Chapter 6, but suffice it to say here that the discourses around meat are out there, and although my interpretation of the data I have collected is likely to be only a small part of the whole discourse universe, it is valid as a justified interpretation.

## 4.5 Conclusion

In the previous sections, I have covered the main points as regards philosophical arguments, aspects of my data, and its analysis, and issues to do with the quality of research. I have also described the ways I managed the data and the project itself. Critical discourse analysis was already introduced in Chapter 3, and in this chapter, I explored it further. Chapter 6 will still get back to some of the issues mentioned in this chapter, such as limitations to the research, alternative ways of pursuing it, and the relevance of the research. My objective has been to use a methodology and create methods that are suitable, interdisciplinary, adequately adopted, and open-minded, while offering detail useful for discussion and further research.

A final point to this chapter: looking into Chapter 3 and its focus on expanded social practice theories, and the exploration of the relationship of practices and discourses, this approach to the data could be presented as a novel methodology. However, as Wiles et al. (2011) note, researchers have always adapted methods for their own purposes, and while this is good, it need not necessarily be presented as something new. Over-claiming in methods can lead to several issues: it “encourages a focus on the latest methodological fads”, instead of furthering the development of well-established methodologies, it “encourages a view that the established social science methods of the past are ‘old hat’ and inappropriate”, and it “risks losing credibility in the same way as over-claiming by academics of ‘international’ standing in research” (idem:601). In other words, new and different is not necessarily better than the old and familiar.

The following chapter will present the analysis of my discourse data.



## 5 Exploring discourses on the new meatways

---

As Chapter 4 explained, my data analysis generally progresses from several different angles to the data.<sup>1</sup> As an introduction to the data, Section 5.1 will explore the themes and dimensions of the discourse contained in the four documents,<sup>2</sup> especially as regards the new meatways.

Further, in Section 5.2, I will first discuss some of the frames found, both more dominant as well as more *counter* frames, and explore in practice the three framing devices introduced in Chapter 3. I will argue that the new meatways have relevance to the frames in the discourse and that the discourse itself matters, also in terms of the ideologies it highlights. Following from discussion in Chapter 3 on values, this section reflects upon the potential of certain frames to activate certain values, in light of the data. Additionally, I will discuss two conceptual metaphors arising from the data, and linking to wider discourses and literature. I will argue that, as important framing tools, they both have implications for potential solutions to the meat crisis.

Next, in Section 5.3, I will first explore how the four Ns (Normal, Natural, Necessary and Nice) — in other words, the four most common justifications and coping strategies for meat eating — are reflected in the discourse, and what impact the new meatways might have on how the four Ns are used. Subsequently, I will explore other coping strategies, discussed in Chapter 3, as regards cognitive dissonance and strategic ignorance to do with eating animals. These strategies may not be as obvious, but nonetheless do exist, and seeing them *vis-à-vis* the new meatways may be useful, especially considering the potential of the new meatways to create discursive consciousness and allow for more ambivalence to be acknowledged. Moreover, I will explore in this section certain morality-related questions as one clear example of the new meatways making a difference, especially in terms of issues to do with vegetarianism or veganism, on the one hand, and flexitarianism, on the other.

- 
- 1 Occasionally, this way causes the same data examples being used in different parts of the chapter, in order to demonstrate different issues, or the same issues, but from another angle.
  - 2 “Document” refers to a Guardian article and the posts that follow it as one entity.

Before concluding the chapter in Section 5.5 with a look at my research question, I will discuss two more issues in Section 5.4 as reflected in the data, namely, labels and labelling, and the potential of narratives to normalise a future with new meatways, or without meat. Both topics may have some relevance for change.

I will still reflect upon my research question in the concluding Chapter 6, together with the related research task set for Chapter 3.

## 5.1 Descriptions, themes and dimensions of the data

The following sections contain descriptions of the four online newspaper articles, including some comments about the posts following them, as well as depictions of the themes and their dimensions found in the data (including both articles and posts), relevant to the old and new meatways, and in particular to my research question.<sup>3</sup> I will discuss some topics, such as the relationship of the new meatways to vegetarianism and veganism, and the related issue of morality, however, mostly separately.

### 5.1.1 Cultivated meat<sup>4</sup>

The CM (cultivated meat) article<sup>5</sup> “Could lab-grown fish and meat feed the world — without killing a single animal?” (written by Amy Fleming, published on 20 September 2017 in the online Guardian) is written in a narrative form, with the overarching story being the journalist visiting a San Francisco prototype tasting event of cultivated carp croquettes made by Finless Foods, a start-up. This is by far the longest of the four articles.<sup>6</sup>

---

3 See Chapter 4 for more on themes and dimensions. Note that I have not determined in detail the themes I looked for in the data prior to the analysis. The only requirement has been that they are related to my research themes and/or my research question.

4 I mostly refer to cultivated, plant-based and animal-based (conventional) meat in this book. However, the data usually refers to cultured meat, instead of cultivated meat, as “cultured meat” is a somewhat older and more established term than “cultivated meat”. In fact, the term “cultivated meat” was not yet used in the wider discourses in 2017, the year for the latest data. See Chapter 3 for some more discussion on these terms.

5 I have used codenames CM, PBM, INS and FLEX in the data analysis itself, and for brevity, I also use them in this chapter when referring to the different articles, or their posts, as well as to the individual posts quoted (e.g. “CM20” would be the 20th included post for the CM article). The poster usernames are kept confidential in line with the policy of the Guardian newspaper.

6 Although the articles vary somewhat in length and style, the posts are all restricted to the first around 150 relevant posts within topic conversations (see Chapter 4 for more explanation).

Similar to the PBM (plant-based meat) article discussed later, there are several references in the CM article to the buzz in the new food high-tech start-ups,<sup>7</sup> and with a similar personal touch from the journalist. Moreover, there are references to interviews with new food innovators and researchers, and overall, the article is quite detailed and combines personal stories with facts. Although the article focuses almost entirely on the new alternative industry (mainly cultivated meat and fish, while mentioning new plant-based meats), it frames the conventional meat industry and the new alternative meat industry in a fairly balanced way in terms of attributes such as "natural/not natural" and "disgusting", concerning the process of producing conventional animal-based meat (or farmed fish) on the one hand, or cultivated meat or fish on the other. The journalist also does not frame conventional animal-based meat as much other than a clear problem, except for the organic meat industry, whereas she frames the action in the article (visiting Finless Foods and tasting their cultivated fish croquettes) as a mainly positive experience. However, a message given in the article seems to be that humans' eating animal flesh in general is something that cannot be changed as such, even if conventional animal-based meat could be replaced with cultivated meat. As regards the posts to the CM article, there is a rather clear future orientation in the posts, imagining the future often in a positive way concerning cultivated meat and fish.<sup>8</sup> Other than that, many different themes are touched upon, among them vegetarianism and veganism.

Table 5.1 shows some themes and dimensions — related to my main themes and my research question — from the CM document, with examples from the data.<sup>9</sup>

---

For the INS article, the first around 150 topic conversation posts include all relevant posts that exist for this article.

- 7 Examples of this include: "start-ups racing", "wonder food", "ideas to change the world", "dedicates every waking hour to their vocation", "exude confidence".
- 8 Regarding future orientation, I ran the articles through a simple corpus linguistics program (Linguistic Inquiry and Word Count, LIWC) which pointed to a future orientation in the CM and PBM articles, something also observable from reading them. I used this program more for experimental purposes. See also Chapter 4.
- 9 Since the examples from the posts in Tables 5.1 to 5.5 are not referenced to individual posts, they are also not entirely verbatim in that spelling mistakes have been corrected. Elsewhere in this chapter, when a particular post is referred to directly, the quotes may include spelling mistakes.

Table 5.1: Themes and dimensions in the CM document

Theme	Dimensions	Data extracts
Adequacy as a meat replacement	Works	[could be] “utterly convincing simulacrum of meat”; “cultured meat will one day be commonly eaten the world over”
	Does not work	“try marketing this dribble to a lion”; “if I can’t shoot it myself, I’m not interested in eating it”
Impacts on environment, animal welfare, human health, and culinary impact	Better	“potential solution to vile [...] cruelty”; “absolutely necessary before all our seas are dead and forests burned”; “no human contamination with disease, antibiotics, pesticides”; “subtle carp flavour”
	Worse	“where will sheep and cows go?”; “disaster for the planet” [enabling even more population]; “new threats to health”; “not appetising”
Attitude towards CM	Positive	“guilt-free”; “benchmark of scientific progress”
	Negative	“hip Californian fakemeat”; [close to] “reanimated dead corpse”
Process of take-up	Fast	[processed food companies could] “be lining up”; “start-ups racing to markets”; “for those knowing real hunger and little choice”
	Slow	“we have time to open our horizons before we have to open our wallets”; “still a long way to go”
Process of normalisation	Cultivated meat as normal	[included in] “takeaways, ready meals, burgers”; “cultured meat is [...] straightforward”
	Cultivated meat as not normal	“renewable protein source for space travel”; “lovely pink beakers of human flesh”
Cellular agriculture start-ups	Making things better for people/planet	“hurry and commercialize this”
	Making things worse for people/planet	“overpromising, under delivering”

Note: Cellular agriculture is a relatively new term preferred by the new industry. It refers to making animal-based products, such as meat, fish, eggs, etc. by culturing cells.

### 5.1.2 New plant-based meat

Similar to the CM article, the PBM article “It looks like a burger, tastes like a burger — but it’s a plant” (written by Nellie Bowles, published on 2 June 2016 in the online Guardian) is also written in a narrative form, with the main story being another California tasting event, this time of the plant-based Impossible Burgers by Impossible Meat, another start-up.

The article presents the new plant-based meat as technology not that far from processes involved in other, even basic foods like bread. The history of food is "nature combined with human ingenuity". This time, "through a deep, molecular investigation" into what makes meat meat, human ingenuity has managed to make a product that is plant-based, but so similar to meat that the company aims to "sate a beef-hungry American population" with something so realistic that "even an 'uncompromising' meat eater" cannot tell the difference. After tasting Impossible Burgers at a special tasting event, the verdicts of the Guardian journalist and others are positive, and the burgers are "pretty good", or "as good as a bad [conventional meat] burger".

The posts to the article include some positive future orientation, somewhat less than in the CM posts, but more than in the INS (insect article) or FLEX (flexitarianism article) posts. There is a significant amount of discussion about vegetarianism in the comments, although the topic of the article is a meat replacement product intended for meat eaters. This may be partly because of some confusion regarding the main target group for the Impossible Burger (i.e. it is mainly aimed for meat eaters, not vegetarians), but vegetarianism and veganism come up as significant themes in all the data. In the PBM posts, it seems that especially people who do not seem to want to change their own meat-eating habits bring this topic up. Eating a plant-based burger as meat could feel like "giving in".

Several themes and their dimensions are shown in Table 5.2 with examples from the data.

Table 5.2: Themes and dimensions in the PBM document

Theme	Dimensions	Data extracts
Adequacy of new PBM as a meat replacement	Works	"uncannily beef-like, oozing [...] fat"; [aiming to be a product that] "satisfies as only meat does"
	Does not work	"makes no sense"; "we don't reconstitute chicken to look like broccoli" [so why would we do the opposite]
Impacts on environment, animal welfare, human health	Better	"way better" [for the environment]; "clear aims" [to reduce damage]; "slightly better" [for health than meat]; "help reduce total number of animals tortured and murdered"
	Not better/worse	[what effect] "would growing these plants on a massive, global scale [have on] soil, fertiliser use and run off"; "doesn't have the nutrients of meat"
Attitude towards old PBM	Positive	"surprised at how good [Quorn] is getting nowadays"; "pleasant non-meat like texture"; "awesome" [when not trying to be like meat]
	Negative	"none taste like meat"; "texture could use a little work"; "horrid" [when trying to be like meat]
Attitude towards new PBM	Positive	[involves a] "deep molecular investigation into desirable properties" [of meat]; [aims to] "annihilate meat industry" [positive in the context]
	Negative	"turn off for many vegetarians and vegans"; "will never have mass appeal"; "fake meat for the rich"
Process of take-up	Fast	"huge market"; "the person who achieves [a successful plant-based meat product] will make shitloads of money"
	Slow	[in the] "evolution of things like this [...] the price will come down with time and popularity"
Process of normalisation — What is a burger?	New PBM burger as normal	"you can call anything a burger"; "what's in a burger anyway?"
	New PBM burger as not normal	"does not look like a burger"; "a burger with God knows what in it"
Target group of consumers for the new PBM	Vegetarians and vegans	"why do vegetarians like to pretend they are eating meat?"
	Meat eaters	[new PBM is for] "non-vegetarians who refuse to eat something that doesn't appear to be meat"; [new PBM is meant to] "reduce the damage done by cows"

Notes: Attitudes towards old and new PBM here refer to what can be called old plant-based meats, such as tempeh, Quorn etc., and the new generation of plant-based meats, i.e. the Impossible Burger, Beyond Meat products and other similar recent products from the last less than a decade, aiming to be completely meat-like (I count the time back to the first products from Beyond Meat which came out in the US in 2012).

### 5.1.3 Insects

Unlike the CM and PBM articles, the INS article “Insects should be part of a sustainable diet in future, says report” (written by Emma Howard, published on 5 November 2015 in the online Guardian) includes no personal angle of the journalist, nor does it contain any interviews with a personal angle as in the FLEX article.

The key point of this article is about using insects as a partial solution for finding sustainable protein for the near future, focusing on both the United Kingdom and the world at large. It also mentions seaweed and cultivated meat as other potential options. Although little emotion is present in the writing (even regarding the yuck-factor), the message is urgent: by 2020, land “may be pushed to its limits”. Similarly, “reining in the world’s appetite for meat is essential to tackle climate change”, and therefore, “insects should become a staple of people’s diets around the world”. At the same time, and in a contradictory way, insects are presented as a particularly important option as feed for meat animals. This may be because “the yuck-factor” is seen as a challenge as regards insects for human consumption, and because supposedly, “fears of consumer backlash are preventing change” in reducing or changing meat eating itself.

The INS article relies broadly on the UK Waste and Resources Action Programme report (WRAP, 2015) on food challenges in the next ten years. Having adequate sustainable protein for the UK population will be “one of the defining challenges of the coming decades”, according to the WRAP report. The Guardian article stays quite fact-based, picking up arguments from both the WRAP report itself, from a representative of WRAP, and from older Guardian articles and another earlier report on meat consumption.

The posts to this article include a lot of humour. This is a specific feature of the posts in this document, as compared to the posts in the other three documents. The humour is more likely to come from the theme than the article itself and is probably typical for the theme of insects more generally in current, especially online discourse.<sup>10</sup> There is a much smaller “imagining the future” orientation in the comments, as compared to the CM article.

Together with examples from the data, themes and dimensions in the INS document are shown in Table 5.3. The humour theme is, however, not included in the table.

---

10 More generally speaking, comments to articles in the online Guardian do contain such humour. However, the comments in the other three documents in the data mainly do not.

Table 5.3: Themes and dimensions in the INS document

Theme	Dimensions	Data extracts
Significance	Big	“could be an excellent source of nourishment for humans”; “once you have the choice of worms or nothing you will LOVE worms” [in reference to a food collapse]
	Small	“fine as a snack (e.g. replacing crisps)”; “only the most adventurous eaters [...] will add insects to their diet”
Impacts on environment, animal welfare, human health	Better	“there’d be a lot less cruelty”; “healthier with less saturated fats”; “your liver and intestines will be cleaner”
	Worse	“the environmental case for eating insects [is] dubious”; “how well adapted the human digestion is to eating [...] insects”
Attitude towards insect eating	Positive	“a good idea”; “gourmet grubs in the foodie section”
	Negative	[food for] “poor people”; “revolting”
Method of introduction in the Global North	In processed form	[when] “presented in an unrecognisable form” [insects can be acceptable]
	As whole animals	“let’s see them have [insects] on the menu during the Paris environment conferences”; “gourmet grubs”
Normality as food in the Global North	Insects as normal	“a lot of insects taste like pork”; “wouldn’t taste any different to the mashed up miscellaneous protein you get in nuggets, burgers and other processed crap”; “If you eat shrimp you are pretty much already eating insects”
	Insects as not normal	“for most people the ‘Yuck’ factor would prevent [insects] becoming acceptable”
	Insects as normal for meat animals and farmed fish	“the adoption of insects as a protein in animal diets will be ‘more straightforward”
Relationship between Global North and South in terms of eating insects	Influence North -> South	“newly-affluent people in emerging countries are also ditching their insect diets as they aspire to eat a meat-heavy Western diet [...] so we in the West basically need to start eating more insect-based proteins pretty sharpish...”
	Influence South -> South/North	“looks like Mexico’s finding a new appetite for the little blighters, especially in their posh restaurants”

### 5.1.4 Flexitarianism

The main content of the FLEX article “Vegans, vegetarians and now... reducetarians” (written by Nell Frizzell, published on 25 June 2017 in online Guardian) consists of an interview of Brian Kateman, the co-founder of the “Reducetarian movement”.<sup>11</sup>

The article is rather positive about flexitarianism, although the journalist questions the ethicalness of eating *some* meat when one tries to be ethical about meat eating in the first place. Indeed, the journalist focuses on ethics regarding meat animals and does not discuss the environment to the same extent, although Kateman in the included direct quotes talks about eating less meat for environmental or health reasons and not so much for the sake of the animals. According to him, the motivation, in fact, does not matter, the end result is what matters, whereas it seems that the journalist is more concerned with animal ethics, and the consistency of behaviour. The positivity from Kateman and the doubt from the journalist hold opposite ends of this dimension, with the positivity seemingly winning at the end of the article.

There is some double talk in the article about what flexitarianism actually is. On the one hand, even a small cut in meat eating is a “huge win”, but on the other hand, the article (and Kateman in particular) talks about eating meat only occasionally as the flexitarian way. These two ways of eating are very different, in practice, and in terms of their impacts, something that the article does not discuss. Most likely for Kateman, flexitarianism denotes the second, more radical way, but he tries to present it as easy, and therefore, as the first way (i.e. where every small step counts). However, and as will be discussed later in Section 5.2.3, the first way can be a route into the second way, although Kateman does not talk about this. Again, it is an easier sell, when someone just has to think about a 10% reduction, and not the further implications of a more profound change.

The posts that follow the FLEX article reflect the article well in that they are quite focused on ethics, and vegetarianism vs. flexitarianism. However, there is a lot of criticism regarding labelling the act of “eating less meat” as something in particular, i.e. reducetarianism, or flexitarianism. The posts are overall less enthusiastic about flexitarianism as part of an identity, many of those who are in principle positive about the idea of eating less meat see it just as a sensible way of eating, not anything to fuss about. But others do see a point in the labelling itself. There is less positive future orientation in the posts than in CM or PBM posts, similar to the INS posts in that respect.

---

11 “Reducetarianism” is another name for flexitarianism. As mentioned in Chapter 2, this book will usually refer to flexitarianism. It is the most commonly used term.

With data examples, Table 5.4 presents some of the many themes and dimensions in the FLEX article. The morality theme will be discussed in more detail separately, as will labels, and the transformation process.

*Table 5.4: Themes and dimensions in the FLEX document*

Theme	Dimensions	Data extracts
Voluntariness of flexitarianism	Voluntary	“doing what they can”; “I’m a convert”; “privileged choice”; “eating veggie more than not”; [for the] “meaningful impact”; “movement”; “a group committed”
	Involuntary	[eating meat as a] “vegetarian relapse”; [eating meat when] “the veggie-only choices are [...] limited”; [eating small amounts of meat] “at dinner parties just to keep people off his case”
Impacts on environment, animal welfare, human health	Better	“huge win”; “harms our planet a little less”; “just smart”; “healthier and happier” [with less meat]; [animal] “suffering reduced”; “meaningful impact”
	Worse/not better	“even a small amount [of meat] is still going too far”; “while we’re at it, let’s have a bit less slavery too. Just the odd one every so often”
Attitude towards eating meat only occasionally	Positive	“pragmatic”; “25% of people in Britain have cut back”; “good idea”; “occasional indulgence in the pleasures of flesh”; “foods that are good for the body and the planet”
	Negative	[have your] “cake and eat it”; “vegans without the willpower”; “backsliding”
Attitude towards labelling eating meat only occasionally	Label as positive	[having a label is] “convenient and it ensures that more people stop eating meat”; “motivating others” [to follow example]; “movement can be formed”
	Label as negative	“coming up with ridiculous terms”; [no need for label when not a] “hard and fast rule”; “reflects the narcissism of our age”
Transformation (motivation)	Convenience	“as the sole meat-eater in a vegetarian family I’ve [cut down] myself”
	Emotional	“feels really good” [to eat only a little meat]
	Rational	“rebalancing proportions of different foods”; “eating less meat at my age is just smart”
	Social support	“as a family we started to cut right back on meat consumption when my son turned to a vegan diet”
	Financial	“just leaving [meat] out of a couple meals a week can save you a fortune”; “the good stuff is expensive”
	Moral	“the more meat you eat, the more damage” [and vice versa]

Transformation (process)	Slow	"it makes sense that some people introduce [not eating meat] gradually into their lives"; "just phasing things out"; "I'm on the same path" [of cutting down meat]
	Fast	"I stopped eating all meats save fish around 3 years ago"; "my son switched to veganism"; "when I became a vegetarian [...] my parents kept serving me meat"
Morality	Positive	"increasing expected utility" [with more people cutting down being better than a few people turning vegan]
	Negative	"robbing one bank makes you a criminal as much as robbing ten"; "fundamental wrong" [of eating animals]; [flexitarianism is] "giving your weak will a misleading name"

Note: Veganism is included in these examples as the end point of the continuum discussed later in Section 5.2.3.

### 5.1.5 Vegetarianism and veganism

Despite vegetarianism or veganism not being significant themes in any of the four articles contained in the data, all the documents do include some discussion, and the posts have often extensive and rather rich discussion on vegetarianism or veganism. This is, therefore, an important context, or a counter theme for all the other main themes, namely, cultivated meat, new plant-based meat, insects and flexitarianism. More specifically, in the CM document there is a considerable amount of criticism of, and defence for vegetarianism and veganism. In the PBM document, there is extensive discussion on vegetarians or vegans as regards meat replacements, and on whether the new plant-based meat products are meant for vegetarians and vegans, or for meat eaters. Further, in the INS article, there is somewhat less discussion on vegetarianism and veganism, but there are still two themes around it: eating a vegetarian or vegan diet being better than eating insects (if the two were the actual available choices), and the idea of vegetarians and vegans supplementing their diet with insects. Finally, the FLEX document includes extensive discussion of vegetarianism and veganism, from a moral point of view, and from a practical point of view. There is also discussion on the process of becoming a vegetarian or vegan, and similarly to the CM document, there is both criticism and defence towards vegetarian or vegan diets.

Many of the themes and dimensions related to the discussion on vegetarianism and veganism are presented in Table 5.5 (covering all four documents, as indicated), together with some examples from the data.

Table 5.5: Themes and dimensions regarding vegetarianism and veganism in the data

Theme	Dimensions	Data extracts
Origin	Voluntary	“conscious lifestyle choice” (CM); “I’m an omnivore (digestive options) by evolution, but I choose (brain function) to eat only plant foods” (CM)
	Involuntary	“a vegetarian diet most days simply because it’s all they can afford” (FLEX)
Impacts on environment, animal welfare, human health, and culinary impact	Better	“you’ll never look back” [as regards health] (FLEX); [cook in a plant-based restaurant as a] “masseur of vegetables” (CM); [as a meat eater] “you are asking someone to respect your choice of contributing to damaging the planet and promoting the mistreatment of animals” (CM)
	Worse	[vegetarian/vegan food] “doesn’t have the nutrients of meat” (PBM); “anyone who tells themselves they are vegetarian for environmental reasons is kidding only themselves” (FLEX); “furry bunnies and rodents and fluffy feathered friends are slaughtered in huge quantities to grow, store and transport grains and pulses” (CM)
Importance	Big	“what we eat has a huge impact on” [climate change] (FLEX)
	Small	“fooling around with veganism and vegetarianism is nothing more than fiddling while Rome burns” (CM)
Attitude towards vegetarianism or veganism	Positive	“being vegetarian or vegan has become fashionable” (FLEX); “three and a half times as many vegans [in the UK] in 2016 as 10 years earlier” (FLEX)
	Negative	[vegetarians in their] “sad little no fun caves” (PBM); “giving up” [meat] (INS, PBM, FLEX); “restrictive and hypocritical rules” [of vegans] (FLEX); “your proclivities” [of eating a vegetarian diet] (FLEX)
Character of vegetarianism or veganism	Dichotomous (black and white)	“being vegetarian is seen as a black-and-white deal” (FLEX); “when the choice for a certain kind of nutrition is turning into a religion” (FLEX); “Single-Issue Fanatics” (CM); “you can’t be a vegetarian and eat meat” (FLEX)
	Not dichotomous (not black and white)	“the free range stuff, I like it too much to be totally veggie” (CM); “I’m simply eating a vegetarian diet more days than not” (FLEX)
Managing	Easy	“quite happy already being a vegetarian” (CM)
	Difficult	“vegetarian relapse” (CM)

Relationship to meat (defined by vegetarians and vegans themselves)	Liking meat	“as a vegetarian I would love there to be a guilt-free, environmentally friendly, and utterly convincing simulacrum of meat, in all its glory” (CM); “people who ethically avoid meat-eating still miss what is for them [...] a lovely form of food” (CM)
	Not liking meat	“I have never loved meat and gave it up when I was about 11” (CM); “never been keen on meat substitutes — no need!” (CM); “As a vegetarian I don’t look for veggie alternatives that look/taste like meat” (PBM)
Relationship to meat (defined by others)	Liking meat	“why do so many vegetarians like to pretend they’re eating meat?” (PBM)
	Not liking meat	“who gets distressed by seeing a raw hamburger patty? (besides a very militant vegan)” (PBM)
Relationship to meat eaters	Open	“Q: How do you know someone is vegan? A: They’ll tell you.” (CM); “any thread about [vegetarianism] here is overwhelmed with [vegetarians] banging the drum while the other 98% [...] ignore the issue completely” (FLEX); “I am [...] perfectly willing to make my dietary choices a subject of discussion, but [meat eaters] don’t really like that either because I stand up to them and I’ve thought the philosophy through more than they have” (FLEX)
	Closed	“you chose to be vegan. That is your business” (CM); “if you’d ever been vegetarian, you would know that many people [...] accuse you of being a hypocrite [...] even though you have no wish to discuss your choice with them” (FLEX); “the excuse I use” [for being vegetarian] (FLEX)
Morality about meat	Positive	“guilt-free” [cultivated meat for vegetarians] (CM); “people who ethically avoid meat-eating” (CM)
	Negative	“resolution-snapping burden of guilt” [when a vegetarian eats meat] (PBM); “restrictive and hypocritical rules” [of vegans] (FLEX)

This introduction has demonstrated the rich discussion in the four documents, pointing out many of the specific themes and dimensions relevant to the new (and old) meatways, and to my research question. In the next sections, I will move to the main analysis.

## 5.2 Framing

This section will draw more heavily from Chapter 3, in terms of how framing works, and the connection to values. In Section 5.2.1, I will first discuss some conclusions of analysing frames in the data. Subsequently, Section 5.2.2 will continue with the frame theme, focusing on sustainability-facilitating values potentially being more related to certain frames than to others. I will discuss what this may mean for discourses around the new meatways. Finally on the focus on frames, in Section 5.2.3, I will present two topics arising from the data that are related to conceptual metaphors as framing tools: the demand-supply dilemma discussed in Chapter 2, which shows up in the data, and the idea of seeing daily (conventional animal-based) meat eating, flexitarianism, vegetarianism and veganism on the same continuum, as “stops” on a road on which one may travel, in whichever direction.

Firstly, however, I will briefly outline the most relevant principles and conclusions from Chapter 3 before moving on to the frames found in the data. Frames are often an important focus in analysing discourse due to their power of defining what is discussed, or not discussed, and how something is discussed. Discourses create and change cognitive frames, and frames impact on discourses in return. Through different frames, discourses also create and change meanings, activate certain values (and emotions), and vice versa, certain values can impact on the kinds of frames and discourses that exist or dominate. Similarly, there is a two-way connection between discourses, frames and knowledge. When discourses change or new discourses are born, new, but frequently present cognitive frames may not only have an impact on value priorities or dispositions. Through general understandings, they may be able to discursively open the relevant social practices, as long as any potential new practice elements are in congruence with each other. Further on reviewing Chapter 3, the potential of prioritizing sustainability-facilitating values through certain frames could be crucial for realising sustainable practices — both at the individual and the societal level — as prioritizing certain values may connect to (acceptance of) action towards sustainability, as long as these values are salient enough, and different values regarding practices are in alignment, rather than in conflict with each other.<sup>12</sup>

As discussed in Chapter 3, I use the analytical concepts in Strydom (2000, drawing from Klaus Eder and William A. Gamson) whereby three specific cognitive framing devices help construct various frames in a discourse. These three framing devices appearing in different proportions, and with different emphasis, to build frames in public discourses are “factual”, “normative” and “emotive”. As illustrated

---

12 Action towards sustainability need not involve only altruistic values, it can also, for example, be about responsibility towards one’s own health and wellbeing, which in the context of meat is a relevant connection.

with the example in Chapter 3, framing devices build frames, and a larger discourse can be seen to be built up from several different but generally compatible frames. The division into three distinct framing devices simplifies matters to some extent, as there can be overlaps between them, especially as regards the normative framing device. Despite such overlaps, I keep the framing devices mostly separate in the analysis, and name them based on what is most apparent.<sup>13</sup>

## 5.2.1 Frames in the data

In general, the data consists of what can be seen as either crisis discourses — the crisis of meat production with its disastrous impacts, and the crisis of sustainably feeding a growing world population — or solution discourses, i.e. the ways the crises can be resolved. Choosing between these two is also about framing.

All three framing devices can be recognized in the data, although the emotive framing device shows up to a lesser extent than the other two. The titles and leads of any newspaper articles influence the initial frame taken in by the readers, and this frame is often reflected in the article itself as well as the posts that follow. Therefore, Table 5.6 shows the titles and leads for each article, together with the strongest framing devices present.<sup>14</sup>

---

13 See Chapter 4 for more on this issue.

14 I briefly considered multimodality in terms of frame analysis, in particular the visual effects such as photos in the online articles. The conclusion is that the photos in these articles seem to be largely supporting the generally fairly positive frames about the topics. In the end, I did not include photos in my analysis.

Table 5.6: Titles and leads of the articles — Framing devices

Title	Lead	Framing devices
Could lab-grown fish and meat feed the world — without killing a single animal?	Critics dismiss it as unnatural “Frankenmeat”, but the San Francisco startups racing to take animal-free meat and fish to market think it’s wonder food. So how were the carp croquettes at the world’s first cultured fish tasting?	Normative, emotive
It looks like a burger, tastes like a burger — but it’s a plant	Impossible Foods is on a mission to make a burger so similar to beef that even the most ardent meat lovers can’t tell the difference. Have they succeeded?	Factual, emotive
Insects should be part of a sustainable diet in future, says report	Alternative protein sources will be needed for humans and livestock to reduce land and energy use, says UK government’s waste agency	Factual, normative
Vegans, vegetarians and now... reducetarians	For anyone who has tried to cut out meat entirely and failed, there’s a new movement which tries to take a more pragmatic approach	Normative, emotive

The titles, leads and article texts do seem to influence the discourse that takes place in the posts. This can be seen, for example, from the way moral aspects are emphasized or not emphasized in the titles, leads and article texts and how this is reflected in the posts. For the PBM and INS articles, moral aspects are mostly not explicitly present,<sup>15</sup> and so it is also largely for the posts, especially for INS posts. For the CM article, moral aspects are somewhat, although not very present, and the posts follow this line. The only article that does reflect extensively on moral aspects is the FLEX article where flexitarianism is seen as an at least partial solution to the moral dilemmas around meat (more on this topic in Section 5.3.2). The posts that follow this article reflect extensively on various moral aspects as well.

Further, Table 5.7 shows some examples from the different documents — including the articles, but mostly from the posts — for the different framing devices present. These are not meant to be inclusive of all different ways these framing devices are used, but only include some of the typical uses. Section 5.2.3 concentrates separately on two frames defined by two different conceptual metaphors.

15 Although here could be an example of two different framing devices overlapping: the new meats are seen as better for the environment (factual), and therefore something worth pursuing (normative).

Table 5.7: Typical framing devices in the data

Framing device	Context in which applied	Data extracts
<b>Factual</b>	Challenges	“the problem of supplying the UK’s population with a nutritional and sustainable protein supply will be ‘one of the defining challenges of the coming decades’, says the report” (INS article); “the road to public acceptance of cultured meat is paved with ‘gnarly problems, communication issues, regulatory issues’” (CM article); “the company in the article are trying to provide an alternative to that which satisfies as only meat does” (PBM posts)
	Environmental impact (cultivated / new plant-based meat)	“how a clean-meat revolution could affect the landscape and environment is riddled with ifs and buts” (CM article); “the other potential problem that is not addressed in the article is how much carbon emissions is generated in the processing vegetables to creating [the Impossible Burger]” (PBM posts)
	Motivations for eating food	“the more likely scenario isn’t that you would have people eating insects instead of meat but as well as meat. We don’t eat only the nutrients we need and nothing else” (INS posts); “one of the best reasons for cutting back on meat is financial; the good stuff is expensive — either in terms of its asking price — or the amount of energy required to cook it” (FLEX posts)
	Historical scale	“during the Second World War, people accepted significant changes to their lives” (FLEX posts) “the meat industry is the biggest source of human-caused suffering in history. [...] Factory farming in particular will be a thing of the past one day” (FLEX posts); “[mock meat] started with the Buddhists creating [it] for non-harm festivals that get the greater part of the meat-eating population abstaining for meat for the duration of the festival” (PBM posts)

	Marketplace approach	“the only way you're going to do [replace meat] is a marketplace approach and that entails creating a food that outperforms this market” (PBM article); “ultimately it's going to come down to cost. If these companies can get the cost of their animal protein below the cost of farming the real thing then all the companies who make processed foods will be lining up for it and finding a way of selling it to consumers (probably also based around cost)” (CM posts)
	Competition	“Selden, Post and the other cultured meat startups exude confidence about solving the serum puzzle: with venture capitalists to keep sweet, and stiff competition, a certain swagger must be displayed at all times” (CM article); “and you're right. Nobody will ever compete — these guys will own this market as a monopoly forever. After all, Google tried but couldn't buy them out, so obviously Google will now lose all interest in the field after that setback. And it is incredibly unlikely that anybody else is thinking 'gee, if Google wanted in that badly, I want in even worse!’” (PBM posts)
	New innovations over time and economies of scale	“the costs will come down (and as the article says, are doing so). Think of the difference between the powerful computer in your phone today, and room-sized computers fifty years ago” (CM posts); “it's a pity that when things get popular and mass produced the price doesn't fall. Like people ten years ago saying PV would fall to a couple of bucks a watt. Bet they are feeling dumb now huh? Oh, hang on...” (PBM posts)
	Consumer power	“but fears of a consumer backlash are preventing change [in policies about meat], according to a leading think tank [Chatham House]” (INS article)
	Efficiency	“If [the Impossible Burger] takes off it will likely become a consumer product eventually [...] Animal Flesh is an expensive product to make, it requires an intense amount of water, crops, and land to produce. Through in the cost of the machines and electricity used to slaughter and cut the livestock into meat to consume and [the Impossible Burger] might end up being cheaper than beef under the right circumstances” (PBM posts); “eating insects is still higher up the food chain than a vegetarian diet and the insects would have to be bred on something. So we are more talking about insect farms. While you could get some recycling we already are doing food waste to energy” (INS posts)
	Meeting the demand	“the interest in meatless meat has to do with finding an economically viable substitute for a growing population of meat eaters” (PBM posts); “[another poster:] ‘an industry that is shovelling 10 billion pounds of ground mince into Americans' mouths every year’ In response to consumer demand, you should note. They aren't being force-fed in detention” (PBM posts); “which product can satisfy the craving of the population for meat?” posits [Mark] Post (CM article)

<b>Normative</b>	Co-responsibility	“everything we do has an impact, veganism has an impact. [...] No-one is perfect, or innocent, so let’s just all do what we can” (FLEX posts); “I think we all do our bit, it’ll at least help. I’ve not the crusading temperament, but I’m willing to pitch in” (FLEX posts); “look, if you don’t want to eat meat, that’s absolutely fine and dandy, but that doesn’t absolve you from the responsibility of doing your part in the much more important and urgent need to reduce emissions in all other areas” (PBM posts)
	Meat is a choice	“there are enough plants with enough protein to eat, so you’d need to insist a lot in eating some animal to prefer worms and bugs over lentils” (INS posts); “I’m an omnivore (digestive options) by evolution, but I choose (brain function) to eat only plant foods” (CM posts)
	Hypocrisy	“not sure why meat eaters tie themselves in knots trying to point out relatively minor contradictions in other people’s behaviour instead of facing their own shortcomings” (FLEX posts); “let’s see them have insects on the menu during the Paris environment conferences. It would be nice if they could provide the lead on this.....” (INS posts); “the ‘holier than thou’ brigade” [vegetarians/vegans] (CM posts); “what gets my goat is finger-wagging vegetarian hypocrites who have multiple offspring but still get on their stupid box and lecture others about the unsustainability of eating meat” (PBM posts); “I love how meat eaters blame sanctimonious vegans for their refusal to consider being vegetarian. Nothing like missing the point entirely. ‘I’d be all for women’s rights, but those damn feminists are so annoying!’” (CM posts)
	Sacrificing for common good	“the Vegan Society’s formal definition may be that ‘veganism is a way of living which seeks to exclude, as far as is possible and practicable, all forms of exploitation of, and cruelty to, animals for food, clothing or any other purpose;’ but what we hear is ‘veganism is a way of life that ruthlessly excludes anyone who enjoys milk in their tea and will joylessly judge every element of your life until you give in and start wearing hemp’” (FLEX article); “during the Second World War, people accepted significant changes to their lives — rationing was the norm, and recycling went through the roof. We can do this” (FLEX posts)

	Freedom to choose	"I don't think I should be told whether or not to eat meat" (FLEX posts); "telling people you need to eat less meat is never going to work, especially uneducated, red neck, libertarian Americans" (PBM posts); "are you scared you might eat a vegetable burger by mistake one day?" (PBM posts)
	Responsibility lies with policymakers	"the problem of supplying the UK's population with a nutritional and sustainable protein supply will be 'one of the defining challenges of the coming decades', says the report" (INS article); "here's an idea — ban intensive farming" (CM posts)
	Only vegetarianism /veganism as moral (flexitarianism as not moral)	"I'm sure the infrequency of your meat consumption is a great comfort to the animal you do eat, which had a crap life/death because you, however infrequently, are the market for its flesh" (FLEX posts); [have your] "cake and eat it! Basically 'reduce your guilt over contributing to animal suffering, by giving your weak will a misleading name'" (FLEX posts); "robbing one bank makes you a criminal as much as robbing 10. And many people have that moral basis for their vegetarianism or veganism" (FLEX posts)
	Cultivated meat solving the moral question about eating animals	"clean meat, clean conscience" (CM article); [cultivated meat can be a] "guilt-free, environmentally friendly, and utterly convincing simulacrum of meat" (CM posts); "if it tasted good I would much rather eat cultured meat than a real animal or fish" (CM posts); "I would feel much happier about myself if I knew no animals were being bred and the environment destroyed to suit my appetites" (CM posts)
	Eating insects as immoral	"even though I deem it unlikely that insects can feel pain or suffer, the fact that we would be farming millions upon millions of them would still be negative on the ethical scales, considering that there is a non-zero probability that they can actually feel pain and suffer" (INS posts)
<b>Emotive</b>	Joy	"afterwards, Selden and Wyrwas [from Finless Foods] are flushed with the raw elation of having given birth to something important" (CM article); "love the idea of eating kill-free meat" (CM posts); "we celebrate anyone who decides to reduce the number of animal products they eat" (FLEX article)

Ambivalence	"I used to think I'd eat [my chickens in the backyard] but I've got soft-hearted" (FLEX posts); "the Impossible Burger is targeted to meat eaters who are uneasily aware of the high environmental costs of the cattle industry" (PBM posts); "have you ever thought that killing those animals [you eat] might contribute to making you unhappy?" (CM posts)
Fear	"millions — if not billions — of people are going to die from [climate change] impacts before this century is through and what we eat has a huge impact on that" (FLEX posts); "please God they hurry and commercialise [cultivated meat] before all our seas are dead and all the forests burnt" (CM posts)
Being part of a community	"as a family we started to cut right back on meat consumption when my son turned to a vegan diet. Everyone is healthier and happier with their diet and we're all trying different things" (FLEX posts)
Positive/negative connection to nature	"the animal world is being fucked up by technology, modern farming and overpopulation" (CM posts); "more farmers would become custodians of nature, rather breeders of animals" [if people did not eat so many animals] (CM posts)
Positivity of something special	"eat more plant-based meals, save a packet and occasionally indulge in the pleasures of a special piece of flesh" (FLEX posts)

The framing devices in Table 5.7 point to some common frames contained in the articles. For example, for the CM and PBM articles and posts, typical frames include what can be called the Market frame,<sup>16</sup> the Innovation frame, the Efficiency frame and the Competition frame which all emphasize the factual framing device, and can be seen exemplified in Table 5.7 under "factual".<sup>17</sup> On the other hand, the Responsibility frame, introduced in Chapter 3 as a historical master frame (for the present times, according to Strydom, 1999; 2000), and emphasizing the normative framing device, is more typical of the FLEX document, although it also shows up in the other documents to an extent. Especially in the FLEX document, we can speak of a Co-responsibility frame (Strydom, 1999), as there is a sense of society and collective human behaviour being able to transform itself, if "everyone does

16 Frames are often written with an initial capital letter.

17 However, to build a whole frame from framing devices, often more than one framing device would be employed. So, for example, for an Innovation frame, one of the factual framing devices, e.g. related to costs of cultivated meat coming down, could be combined with a normative framing device whereby, when cultivated meat is cheap enough, the moral question related to eating animals can be solved. In other words, innovation will solve the issue.

their bit”, even if not all posters agree with such a sentiment, or the need to touch meat-eating related practices in the first place. In the other three documents, co-responsibility is visible as well, although to a much lesser extent. Remarkably, these documents include more focus on blame and reasons for inaction, along with giving responsibility for change more to policymakers.

As I mentioned in Chapter 3, some frames built from the framing devices tend to reflect ideologies, which in turn affect the manner and emphasis with which the three framing devices are applied (Strydom, 2000).

The dominant ideology as regards meat eating is carnism (Joy, 2010).<sup>18</sup> However, as discussed in Chapter 3, dominant ideologies tend to not be visible: “the most common is the most obscure” (Lehtonen, 2000:7), or as van Dijk (2006) puts it, when an ideology becomes part of the “common ground” accepted by all, it is no longer a recognizable ideology. However, perhaps since carnism has historically had counter ideologies in vegetarianism and veganism, it can be a recognizable ideology, although not easily so. In the data, many of the frames do reflect carnism, in other words, the Carnism frame is rather present, as so much of the discussion circles around the necessity, naturalness, normalness, or niceness of meat, the four Ns that are used as common justifications for eating meat. However, not everyone calling meat Nice, or Normal, for example, is an (individual) carnist.<sup>19</sup> Especially societal carnism is, however, present also in other ways. First, in the following data extracts, the underlying carnism is used for justifying cultivated meat as a necessary product, as opposed to the new plant-based meats:

*So why isn't [Josh Tetrick, CEO of Hampton Creek] making plant-based meat alternatives? "I can't imagine the people I was raised with in Birmingham Alabama under any scenario choosing a plant-based hamburger ... it's an identity thing."*  
CM article

*"The question is, which product can satisfy the craving of the population for meat?" posits [Mark] Post. "At the moment it's there and it's increasing ... culturing is going to cover the entire gamut of meats that are out there. It will be much more difficult to achieve that goal with vegetable-based proteins."*  
CM article

And, the underlying carnism is used to justify the need for the new generation of plant-based meats:

---

18 Joy (2011) argues that neocarnism is another, more recent dominant ideology as regards meat.

19 Section 5.3.1 will discuss the four Ns further.

*The goal [of Impossible Foods] is to offset some of the damage done by cows and to satiate a beef-hungry American population that consumes 10bn pounds of ground beef every year. Doing this requires science.*

PBM article

Secondly, implied criticism of carnism is present in the data:

*Like you have no other choices [than to eat meat]. Free yourself from the indoctrination of what is "normal" food. Humans can live healthily without the brainwashing of needing meat and dairy in their diet.*

CM12, 20 Sep 2017

*What a bizarre observation [that vegetarians would prefer eating meat to a plant-based burger]. That's like saying every non-smoker secretly wants to neck down a whole pack in an hour.*

PBM46, 3 Jun 2016

The more commonly recognizable frames mentioned above, i.e. Market frame, Efficiency frame, Competition frame, Innovation frame, but also Consumer power frame and Meeting the demand frame found in the data and included in Table 5.7, can be grouped together to a frame reflecting capitalism (Capitalism frame), as they all rely one way or another in capitalism's take on how markets, economies and societies work. In other words, such frames indicate that markets, new innovations and competition and efficiency will solve problems (such as meeting the unsustainable and growing demand for meat) by making tasty, efficiently produced, innovative products cheap enough so that as many people as possible can buy them, e.g. cultivated meat or the new generation plant-based meats. Additionally, because of the supposed consumer power to both create demand (whether for meat, or for meat replacements), and reject unpleasant policies (such as a meat tax or other restrictions on meat consumption), the hands of policymakers are often tied, and the markets will deliver better solutions than policymakers could.

Rather central to the discourses around meat, the Meeting the demand frame is, in fact, connected to the Carnism frame. Meeting the demand is a topic for Section 5.2.3.

The Capitalism and Carnism frames can be seen as dominant frames in most current societies, defining much of the discourse around meat, as well as meat replacements, to the extent that the replacements feature in the discourses in the first place. Both of these frames can also be seen as part of the *dominant social paradigm*, introduced in Chapter 3, and seen by some as incompatible with sustainability (e.g. Berzonsky & Moser, 2017; Peattie, 2011).

Another dominant frame existing in the data could be thought of as the Absolute morality frame which is evident in the discourse around vegetarianism and

veganism, in that nothing short of absolute abstention from meat can be defined as vegetarianism or veganism, and additionally, vegetarians and vegans should behave consistently in all areas of life, for example, so that vegans do not use any leather. Flexitarianism as an ideology counters the Absolute morality frame.

Defining what are dominant ideologies and what are counter ideologies may not always be straightforward, but it can safely be said that emerging ideologies are likely to be counter ideologies (at first at least), and flexitarianism can certainly be seen as an emerging ideology. Another emerging ideological frame, regarding the larger sustainability discourse, could be called the Sufficiency frame, and flexitarianism would certainly fit under that as well. The other new meatways, eating cultivated meat, new plant-based meats and insects are alternatives that may fit with both capitalism and carnism, in addition to, in part, the idea of a sustainability transformation. This is a relevant distinction to make between these new meatways. The probable conflict between strong sustainability and capitalism (as part of the dominant social paradigm) is increasingly recognized in literature (see e.g. Peet et al., 2011; Schmelzer & Eversberg, 2017), and between truly sustainable future food systems and growth-based economies (Hadjikakou & Wiedmann, 2017), and more specifically between meat eating and capitalism (e.g. Nibert, 2013; Twine, 2014).<sup>20</sup> In the context of the new meatways, it can be said that those frames may be competing with each other as regards possible aims for a transformation.<sup>21</sup> The different frames most closely associated with the different new meatways may suggest somewhat different futures, although they may also possibly combine and benefit from each other. These topics will be returned to in Chapter 6.

The individual behaviour change policy frame<sup>22</sup> (or the “ABC model”, Shove, 2010) or Individual responsibility frame, still rather present in policy discourses regarding more general sustainability issues, such as energy use or transportation, is not directly present in the data, but could be said to be implicitly so, as it is in opposition to the Co-responsibility frame. In the data, some people resist changing their own meatways or the meatways of the world, and some people consider change necessary, at the individual level as well, and many posters seem to have already changed their own meatways. To the extent that it is present in this implicit way, the Individual responsibility frame is likely to be either reflected here from discourses around, for example, energy use or transportation, or it may be a

20 However, synergistic frameworks between capitalism and strong sustainability are also explored (see Geels et al., 2015).

21 See Strydom (2000) and Eder (1996) for frame competition.

22 The Individual behaviour change policy frame refers to policymakers giving the main responsibility for sustainable society to consumers rather than to the policymakers themselves, or to other societal actors. This is not about co-responsibility which implies that all societal actors are partially responsible for making change.

product of civil society discourses around meat. The missing discussion as regards policies or policymakers and meat eating is likely to do with the fact that policymakers have until now indeed barely touched the topic, as discussed in Chapter 2.

## 5.2.2 Frames and sustainability-facilitating values

As discussed in Chapter 3, sustainability-facilitating values (see Figure 3.5) — including co-responsibility, concern for, and unity with nature, social justice and equality — are linked to concern for and action on environmental and social causes, as well as general higher well-being (for the body of literature, see Chapter 3). Also eating less meat is linked to such values being prioritized (de Boer et al., 2007). Importantly, according to Schwartz value theory, people's value systems universally include these values, even though they may not be prioritized in daily lives or expressed in behaviour. Moreover, these values are higher in terms of value hierarchies, as they are related to the successful functioning of human groups (Schwartz, 2012).

Reviewing Chapter 3 further, values can be better engaged by certain discourse frames than by others (Lakoff, 2010). Significantly, pro-social, or pro-environmental policies can activate the related values in the larger society, rather than (just) the other way around, with societal value priorities producing certain kinds of policies (Hoff-Elimari et al., 2014). However, value conflicts are common within not only societies, but also within individuals, and they may prevent the engagement of these sustainability-facilitating values (e.g. Maio, 2011) at both societal and individual levels. In short, value frames related to sustainability, such as co-responsibility or concern for nature, present in discourses can help prioritize such values. Depending on what value conflicts may or may not be present, prioritizing sustainability-facilitating values can motivate people for action, for demanding change, or for accepting otherwise tough sustainability-related policies (e.g. Crompton, 2016). The frames that do not prioritize such values may be less likely to motivate for *persistent* environmentally beneficial action. For example, discourse frames related to money tend to link to values that can hinder sustainability, such as the cultural or societal level values of hierarchy and mastery (Kasser, 2011).

In this brief section, I will have a look at how, and if, sustainability-facilitating values are present in the frames the data contains. There is, in fact, a similar division between the articles for this as there is regarding the Co-responsibility frame. In other words, although frames related to sustainability values *are* present for the CM, PBM and INS articles, they are less present there than they are in the FLEX article. For example, the PBM article focuses largely on the new plant-based meat products and their qualities. However, on the sustainability-facilitating value side, a partial motivation for these new products is given as “to offset some of the damage done by cows”. Further, a particularly powerful statement in the PBM article

is that “the biggest threat to the global environment right now [is] the use of animals for food” (discussed later in the posts that follow the article). Similarly, the INS article frames using insects as food or feed as a partial solution to the problem of “supplying the UK’s population with a nutritional and sustainable protein supply” in the near future, and “reining in the world’s appetite for meat is essential to tackle climate change”. Although the need to protect the environment is present, both of these articles have a rather human-centred view. The CM article has a human-centred approach as regards the importance of protecting the environment, but it also celebrates the idea that with cultivated meat, it may be possible to not cause cruelty to animals while continuing to eat meat. In other words, caring for nature — as far as farm animals can be seen as part of nature — matters in and of itself.

On the other hand, the FLEX article is to a significant extent built around sustainability-facilitating values. Protecting the environment, or nature, for humans, and for its own sake, is more present than in the other articles. Besides, these values are touched upon with the specific features of flexitarianism. It is constructed as responsible, honest, yet broad-minded (in that it is not a strict way of eating), incorporating some freedom and providing for inner harmony (in that cognitive dissonance need not be involved). Likewise, flexitarianism is framed as *not* being about public image or social recognition.<sup>23</sup> For example:

*For anyone who has tried to cut out meat entirely and failed, there’s a new movement which tries to take a more pragmatic approach.*

*FLEX article*

*We celebrate anyone who decides to reduce the number of animal products they eat — and the motivation doesn’t matter.*

*FLEX article*

*The reason people eat less meat isn’t for some badge, some public status, it’s because it has a meaningful impact on the world.*

*FLEX article*

The posts that follow the four articles largely reflect the value presence in the articles. Therefore, the FLEX posts contain the most discussion that can be linked to sustainability-facilitating values, as already reflected in the data extracts earlier in this Section 5.2 in the discussion regarding frames. However, some of the points that are brought up in the FLEX article as essential to flexitarianism, are criticized

---

23 Preserving public image and gaining social recognition are related to self-enhancing values which less often coincide with self-transcending values. See Chapter 3.

in the posts. To some, flexitarianism seems to be, in fact, about irresponsibility and dishonesty:

*Basically "reduce your guilt over contributing to animal suffering, by giving your weak will a misleading name" [...] There is no negotiation with dead animals, either they're suffering and dead or they're not, this is just excusing inability to "stick to it".*

FLEX134, 25 Jun 2017

Or, to others, it is indeed about public image:

*This simply reflects the narcissism of our age where everyone has to have a label attached to them as if to say "look at me, this is what makes me different".*

FLEX129, 25 Jun 2017

Yet, most of the posters seem to embrace the idea of flexitarianism, and one can theorize that for these people, sustainability-facilitating values are being activated, perhaps more so than from reading the other articles or posts, in particular since these values can be seen as more relevant to the concept of especially strong flexitarianism.

Following the discussion in the previous section, those frames that tend to be fairly dominant in the discourse about the new meatways — new, more sustainable products — tend to also not have as strong links to sustainability-facilitating values, whereas the still somewhat less dominant frames about the new meatways — e.g. flexitarianism — do tend to have stronger links to such values.

As discussed earlier, conflicts between values are often preventing sustainability-facilitating values from influencing action. However, all the new meatways may have, in principle, a benefit linked to value expression in behaviour, as opposed to vegetarianism or veganism. The new meatways may, at least in some contexts, be better in line with values such as providing for family, convenience, tradition, freedom, politeness, and pleasure, than vegetarianism or veganism alone have traditionally been able to be. To note, the above values do mostly *not* belong to the self-transcending values (considered facilitating sustainability), and so, importantly, the new meatways can better align sustainability values with other values prioritized by people more generally.

### 5.2.3 Two conceptual metaphors as framing tools

Conceptual metaphors were discussed in Chapter 4. In short, a conceptual metaphor (originally from Lakoff & Johnson, 1980) is "a way of knowing the world" (Foss, 2009:270), where one idea (*target domain*, e.g. time) is understood in terms of another (*source domain*, e.g. money). People's knowledge of the source domain (e.g. that money is valuable, not to be wasted) carries over to explain the target

domain.<sup>24</sup> A conceptual metaphor can often make a point more efficiently and comprehensively than typical argumentative structures can. Moreover, metaphors play a key role in framing perceptions, and therefore, in framing action. Foss argues further that change in society or, change at an individual level, can be generated by changing metaphors.

The two conceptual metaphors in the following two subsections can in part be traced back to the *Metaphorlist* (Lakoff et al., 1991), a compilation and analysis of conceptual metaphors found in (mostly) academic literature.

### 5.2.3.1 Journey on a continuum

Smil's (2002) suggestion for a global shift in replacing a significant amount of meat in processed meat products with plant-based proteins is seen by Jallinoja et al. (2016) not only as a practical way to go about a somewhat involuntary transformation to using more plant-based proteins instead of meat, but also, as mentioned in Chapters 2 and 3, as a way into seeing meat eating, and plant-based proteins and vegetarianism, as different points on the same continuum, rather than as opposites. Much of that continuum is then comprised of different versions of flexitarianism (from weak to strong), and its endpoints are veganism at one end, and individual carnism<sup>25</sup> at the other end.

The conceptual metaphors of a continuum, as well as a journey,<sup>26</sup> might be helpful in several distinct ways, all of which can be found in the data. As a counterpoint, the more relaxed attitude in flexitarianism (the term coming from “flexible vegetarianism”) causes some tension between those (vegetarians or vegans) who call for a more black-and-white moralism — referred to in this chapter as an all-or-nothing approach<sup>27</sup> — about meat eating and those who accept the imperfection of their own vegetarianism, or that of others. The all-or-nothing approach refers to two ways of reacting in this case, either justifying no action or defining one's own action rigidly. For an example of the first reaction: why cut car driving, if one still flies? Why mess with diet (to decrease its impact), if one still drives? Also, why eat a vegetarian diet when even with that diet some animals will die? These kinds of arguments are present in the data likely as coping strategies for cognitive dissonance. They will be returned to in Section 5.3.

---

24 So, in the traditional format of writing out conceptual metaphors in statements and in capital letters, TIME IS MONEY.

25 See Chapter 3.

26 In the traditional format of conceptual metaphors, we could say, for example, that DIET CHANGE IS A JOURNEY, or more generally LONGTERM PURPOSEFUL ACTIVITY IS A JOURNEY. The latter metaphor can be found in the *Metaphorlist* (Lakoff et al., 1991).

27 In psychology literature, all-or-nothing thinking is referred to as *splitting*.

The second reaction, relating to defining foodways strictly, is more relevant to flexitarianism and the continuum idea:

*That's fine if your basis for not eating meat is environmental or health-based. In that case a reduction rather than elimination is still a positive thing. If the basis is that it's simply morally wrong to eat other living creatures then even a small amount is still going too far. Robbing one bank makes you a criminal as much as robbing 10. And many people have that moral basis for their vegetarianism or veganism. I'm not disagreeing with his general concept that it's good to cut down. As the sole meat-eater in a vegetarian family I've done that myself. Just not sure the justification would fly with a lot of people.*

FLEX68, 25 Jun 2017

Here, on the other hand, is an example of a counter point to the above, i.e. accepting that flexitarianism, although imperfect, may be a good way to go about reducing harm:

*As a utilitarian, morality is about increasing expected utility: it's not an all-or-nothing thing. Black-and-white deontological morality is outdated. If more suffering is reduced by many people reducing their meat consumption, as opposed to a few people becoming vegan and the rest not wanting to go that far, then I support reducetarianism. As it happens, I don't know which approach is the best, but I suspect reducetarianism is part of the solution. I'm a vegan myself, and I do encourage people to go as far as they possibly can, but if reducetarianism really is the only way to get certain people to reduce their meat consumption, then I support it.*

FLEX75, 25 Jun 2017

The second of the two above examples points to flexitarianism possibly helping people to start a journey towards less meat, and for them “to go as far as they possibly can”, on a road, so to speak. Moving along — back or forth — on that continuum is also acceptable for the more relaxed attitude inherent to flexitarianism (e.g. de Boer et al., 2014), and so, speaking of a “vegetarian relapse” (CM34, 20 Sep 2017) becomes unnecessary.<sup>28</sup> As Jallinoja et al. (2016) argue, the continuum idea may make replacing (some, or an increasing amount of) meat with plant-proteins a more relaxed affair, and therefore, more easily a routinized and embodied practice.

Even though e.g. Verain et al. (2015) note that flexitarianism can just be a food style among many others, rather than a step on the road towards vegetarianism, it could be that the different clusters of eaters (such as those identified by Verain

---

28 Conceptualising the journey as nonlinear, and not unidirectional, may be quite central in fact: “If progress is movement in a forward direction then stopping, slowing down, or stepping off the path altogether may seem like failure, even though that could be a counter movement to achieve a sense of balance” (Andrews, 2017a:274).

and colleagues) are indeed on the same continuum from avid meat lovers to vegans, but they are just at different points on that journey. Importantly, some might never move forward, while others walk all the way. Even if flexitarianism was “only” another food style, promoting it (Jallinoja et al., 2016) becomes easier when it (the road) has a name:

*Giving it a label means that a movement can be formed. It's a bit like a political party. You could say "we believe that policies x, y and z should be implemented" or you could say "I'm a member of the Labour Party" or "I'm left-wing".*

FLEX133, 25 Jun 2017

The relaxed attitude around flexitarianism as a food style could make trying a partly vegetarian diet possible for more people, some of which will make a permanent change: “[A label] ensures that more people stop eating meat” (FLEX 133, 25 Jun 2017).<sup>29</sup>

Another benefit to thinking of reducing meat eating as a journey is that generally, a slower change in individual eating habits may be better than a fast switch. For example, Zaraska (2016a) argues that a fast change tends to be resisted more than a slower change. Similarly, a considerable number of people (also represented in my data) are ex-vegetarians or vegans, so-called *lapsed* vegetarians or vegans (see Asher et al., 2016) due to the, often especially social, difficulties of maintaining the diet. When seen as a journey on which one can go back and forth, there is no need to think of oneself being an “ex-veggie”.

People do tend to think of “going veggie” as a switch (rather than a journey), sometimes in a positive sense, especially when referring to a personal or family change that has taken part in the past:

*Go vegetarian or vegan. You'll never look back in terms of health.*

FLEX46, 25 Jun 2017

*The kids have gone vegan and vegetarian and we've supported them in that (which has been a hassle but they have ended up eating much healthier [...] food I think) — and we have gone almost fully vegetarian partly for simplicity, but mainly due to an acceptance of the arguments for, such as health, environmental concerns and animal welfare.*

FLEX103, 25 Jun 2017

*When I first went veggie I used to use meat substitutes, but the[n] I learned to cook.*

PBM25, 3 Jun 2016

However, even in these examples, a journey is referred to in “you’ll never look back”, and “going veggie” could actually be seen as going somewhere, i.e. being on a jour-

---

29 Labels will be explored more in Section 5.4.1.

ney, although most often this phrase seems to be understood as referring to a quicker change. However, a “switch” is also seen in a negative sense, especially when talking about a larger group of people and potential change in the future:

*The switch to a vegetarian diet just isn't feasible for many.*

CM5, 20 Sep 2017

Here the idea of a switch is seen concretely, hypothetically positive if it existed:

*I do not think human beings are to blame for our evolutionary proclivity for delicious meat. If only that were a switch we could turn off.*

PBM131, 3 Jun 2016

Seeing the process of change as a slow journey, at least on a scale of individual human lives, is specifically present in some posts:

*I think not eating meat is now one of the solutions to our species's survival, and as such it makes sense that some people introduce it [not eating meat] gradually into their lives.*

FLEX123, 25 Jun 2017

*I'm on the same path. I stopped eating mammals some time ago, recently stopped eating chicken.*

FLEX87, 25 Jun 2017

There is a considerable amount of discussion in the data (mostly outside the FLEX document) regarding vegetarians and vegans either liking meat (but not eating it) or vegetarians and vegans disliking meat.<sup>30</sup> The idea of a journey would seem particularly crucial for those who continue to desire eating meat, even though they try to follow a low/no meat diet. For example, cultivated meat can be seen as “a great halfway house” on a more general journey from meat eating to vegetarianism or veganism for those who do not find following a vegetarian or vegan diet (yet) “feasible” (both quotes are from CM5, 20 Sep 2017). Further, “mock meat” (plant-based meat) is referred to as “transitional food” (by PBM39, 3 Jun 2016), when on transit, i.e. on a journey from meat eating to veganism.

In the posts following the FLEX article, eating animals is compared to slavery. The topic is introduced by someone making an argument against flexitarianism (“lets have a bit less slavery too”, FLEX118, 25 Jun 2017), but then as a counter point, this comparison is made to support the idea of flexitarianism:

*Slavery didn't just end instantly either. There were incrementalists and people who wanted reform of the system to “reduce” its severity, too. If people were so resistant to abandoning slavery, then a kind of reducetarianism for slavery would have been justified*

---

30 Table 5.5 reflects some of this discussion.

too.

FLEX121, 25 Jun 2017

The FLEX document is indeed the one that is mainly concerned with the metaphor of a continuum and a journey. The posts to the FLEX article itself certainly reflect on the article referring to meat reduction as a point on a continuum (or spectrum):

*“The central premise of reductarians is that vegans and vegetarians — who have reduced their animal intake so successfully that they’re not eating any at all — are part of the same spectrum as people who are dissatisfied with factory farming and so have decided to, say, only eat meat once in a while”, says Kateman.*

The article also sees flexitarianism as a more relaxed way than all-or-nothing vegetarianism or veganism. Right from the beginning, the article lead frames this: “For anyone who has tried to cut out meat entirely and failed, there’s a new movement which tries to take a more pragmatic approach”.

Even just calling flexitarianism a movement, can actually be seen as “moving” along a path. However, and as mentioned in Section 5.1, the FLEX article somewhat fails to emphasize the idea of a journey, and instead conceptualises flexitarianism, conflictly, either as a small and easy switch: “if people were to cut back by just 10% that would be a huge win” (quoting Brian Kateman), or as a more radical change, in that reductarians would “only eat meat once in a while” as in the above longer quote from Kateman.

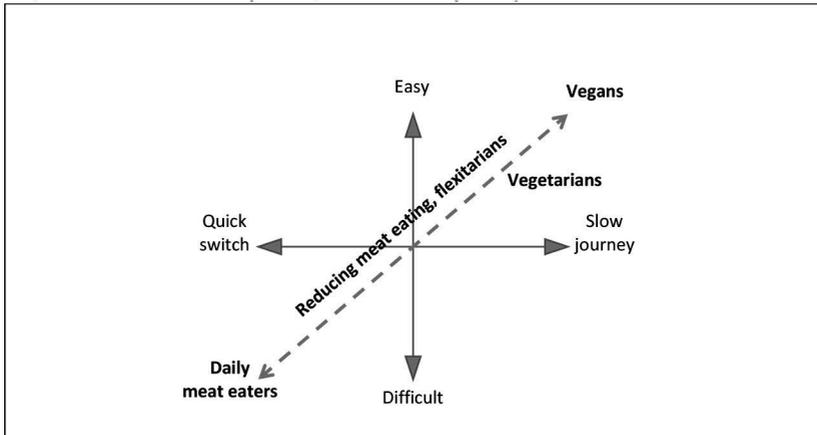
However, as shown above, the posts to the FLEX article certainly help one see meat reduction as a journey. Figure 5.1 visualises these ideas in two-dimensional space.

To explain the diagonal, meat reduction and flexitarian line in Figure 5.1, the closer the intended change is to a quick switch (from daily meat to much less, or no meat), the more difficult it is likely to be, and the more likely one is to stay close to a daily meat eater. On the opposite end of the meat reduction and flexitarian line, the slower the journey of change is, the easier it is, and the more likely one is to eventually be able to eat even a vegetarian or vegan diet, if desired. However, the reason why the diagonal line is also the flexitarian line (and not only about meat reduction) is that flexitarianism can usefully be seen as a journey, on which one may move more freely, and sometimes also “backwards”.

### 5.2.3.2 The hungry beast

Chapter 2 discussed the meat demand paradigm, or frame, according to which the world will need 75% more meat production by 2050, due to population and income increases along with rapid further urbanization, and importantly, it is this demand that the meat industry tries to adjust to. Moreover, this frame largely excludes other ways to supply the majority of the world population with adequate

Figure 5.1: Meat reduction process, and flexitarian journey



Source: Figure by author.

Note: The diagonal arrow indicates the flexitarian journey.

protein. According to this frame, intensive meat production needs to intensify further to cut greenhouse gas production, and less intensive, or extensive production (in the Global South) needs to either transform into intensive production or use other ways to make meat production more efficient. This frame is still strongly present in policy discourses.<sup>31</sup> However, very lately, mainly following the increasing awareness of the contributions from meat production to climate change and biodiversity loss, has some discussion on reducing meat eating in the Global North entered certain policy documents, for example, some documents published by the IPCC (e.g. IPCC, 2015; 2018; 2019). The topic has, however, been present in academic discourses, as well as in some civil society discourses for a considerably longer time.

As regards my discourse data, there are several expressions that I interpret as corresponding to a conceptual metaphor related to the Meeting the demand frame, namely, what I call the *hungry beast*. To explain, the articles, especially the PBM article, but also the CM and INS articles, and a number of posts (especially to the PBM article) refer to different groups of people, in the Global North (especially in the United States) or in the South, as if they were one singular entity with certain beast-like qualities. Importantly, the beast metaphor is not meant to depict actual humans as animal-like or to dehumanize anyone; the idea is simply to reveal the metaphorical dimensions of seeing meat demand as something natural, unified

31 The assumption that intensification significantly decreases GHG emissions from extensive animal farming has been called into question (see Hayek, 2019).

and something that cannot be argued with. The qualities of unpredictability, large size and power are linked to the idea of the demand for meat in this metaphor. The beast also some powerful own will (and a great hunger), whereby the industries just have to comply with the demands (of the beast).

In the examples that follow, this beast must be fed, and in particular, fed with meat, for it to be satisfied:<sup>32,33,34</sup>

*US may be among the world's most **carnivorous nations**, but as China's economy swells, the planet's most populous country is catching up.*

CM article

*The promise from Impossible Foods [...] is they will be making burgers so realistic that even an "uncompromising" meat eater won't be able to tell the difference. The goal is to offset some of the damage done by cows and to **satiating a beef-hungry American population** that consumes 10bn pounds of ground beef every year. Doing this requires science.*

PBM article

*Yes, apparently if [a domestic animal is] not a dog or a cat it is just an object to be abused, terrified and murdered to **satisfy the obese masses**.*

PBM92, 3 Jun 2016

*As the article says, they're a company trying to diminish the negative impact of the beef industry—an industry that is **shovelling 10 billion pounds of ground mince into Americans' mouths every year**. They're trying to produce a viable substitute.*

PBM126, 3 Jun 2016

Here is an answer to the above post (PBM126), emphasizing the demand factor:

*[PBM126:] "an industry that is shovelling 10 billion pounds of ground mince into Americans' mouths every year"*

32 The expressions that refer to the hungry beast are in bold in the examples that follow.

33 This analysis combines extracts from different articles and different posts to build the metaphor, via showing different aspects of a narrative of a "hungry, uncontrollable, meat-eating beast" present in the discourse. Although the purpose is not to claim that any one article or post would have all these aspects within it, the PBM document as a whole does actually contain all the elements.

34 In the traditional format of writing out conceptual metaphors, we can use, for example, a statement such as HUNGRY POPULATION IS A BEAST or POPULATION IS A HUNGRY BEAST. Similar, even stronger statements, PEOPLE ARE ANIMALS or LUSTFUL PERSON IS AN ANIMAL ("lust" does not (need to) refer to sexual desire here, but other desires such as a strong appetite), can be found in the Metaphorlist (Lakoff et al., 1991).

*In response to consumer demand, you should note. They aren't being force-fed in detention.*

PBM128, 3 Jun 2016

An uncontrollable desire makes humans more like animals. Sometimes it is the appetite itself that is a beast that needs to be controlled, rather than simply fed:

***Reining in the world's appetite for meat** is essential to tackle climate change, according to a report published last year by the Intergovernmental Panel on Climate Change. INS article<sup>35</sup>*

The wild animal is also growing bigger, even in an uncontrollable way:

*The biggest threat is undoubtedly the **out-of-control** human population **growth**. All these sticking plasters aren't going to change that (and just wait till the Chinese demand for beef catches up to the Americans.) Fewer **meat-hungry people** means fewer methane-emanating cows, it really isn't that hard to understand. Yet many governments are subsidising childbirth. Insanity.*

PBM75, 3 Jun 2016

*The interest in meatless meat has to do with finding an economically viable substitute for **a growing population of meat eaters**.*

PBM22, 2 Jun 2016

*It's simple maths. The world has a steadily increasing population. **As the middle classes of poorer countries grow, so does their appetite for meat**.*

PBM23, 2 Jun 2016

In other instances, the beast that needs to be fought is the Western food culture:

*The target market for these products is people who wouldn't have eaten those veggies anyway. They would just keep eating beef burgers, which is an unsustainable practice long-term. It would be nice to encourage people to come back to eating healthy foods properly, but this would take a long time (if it was even possible). You would be **battling against an entire culture of fast food and instant gratification**.*

PBM7, 3 Jun 2016

And in other instances, the beast is more addicted to meat than just hungry (a carnivorous animal does need meat):

---

35 "Reining in" refers to controlling something, including controlling a large animal by using "reins", straps.

*But in the eyes of the cultured meat trailblazers, fancy vegetarian food will never have mass appeal. Demand for meat, and fish, is only going one way. "The question is, which product can **satisfy the craving of the population for meat?**" posits Post.*

*CM article*

*There isn't enough farm land on the planet to raise the livestock and grow the crops to feed the livestock to **supply the global meat habit.***

*PBM23, 2 Jun 2016*

There is some criticism as well for the existence of the hungry beast:<sup>36</sup>

*You don't counter propaganda by providing fakes. The key problem **is induced desires and resultant massive over-consumption.** It's not about substitution for reasonable levels of food intake, or about nutrition, or about taste. The fake meat is not the solution to a problem, it perpetuates the primary problem.*

*PBM130, 3 Jun 2016*

*Like you have no other choices [than to eat meat]. Free yourself from the **indoctrination of what is "normal" food.** Humans can live healthily without **the brainwashing of needing meat and dairy** in their diet.*

*CM12, 20 Sep 2017*

Parallels to this metaphor could be drawn from Edward Bernays' (a nephew of Sigmund Freud) theories, applied to the public relations industry he created in the United States in the 1930s, of how advertising can tap into people's unconscious needs to create desires. So, the beast, or the uncontrollable wild animal, would then be the Freudian unconscious human mind (Nadine Andrews, personal communication, 10 May 2018).

The hungry beast metaphor connects my data well with the more general discourse (see Chapter 2) about the near future of humanity, as regards food and population growth, and as regards the future of eating meat. Metaphors activate certain frames, and in the case of the hungry beast (in this context) the frame being rather naturally activated is the Meeting the demand frame. This metaphor can also be seen to combine the Capitalism frame with the Carnism frame in connection with the new meats, as the proponents of new meat products aim to satisfy the (societal and/or individual) carnists world over.

The new meats, i.e. cultivated meat, the new plant-based meats, and even insects to an extent, are functioning in the same Hungry beast (Meeting the demand)

---

36 In these two extracts, the bold text refers to the idea of "induced desires", or of the beast actually being a creation of the meat industry and the current global discourse around meat.

frame. In particular, the ambition of the start-ups is to create huge worldwide markets for these new meats, to replace (much of) conventional animal-based meat. The beast has to be fed with meat, or with something *like* meat. The underlining notion that such a product (old meat or new meat) is absolutely necessary is usually not touched upon in the dominant discourses, often reflecting capitalism or carnism.

Finally, the hungry beast metaphor intriguingly links to a dog metaphor that Zaraska (2016a:102) uses when discussing our current meat-eating practices: “we love eating meat because it is well sold to us”, and the meat industry “wag[s] the dog of demand as hard as it can”. The dog metaphor links to both the hungry beast metaphor and the demand-supply dilemma of whether it is the industry largely creating the demand, or whether the industry is just responding to an urgent need. There seem to generally be two main interpretations for the tail wagging the dog metaphor. The first is that the action of the tail wagging the dog takes place, for example, when followers control their leader.<sup>37</sup> In Zaraska’s sense above, the demand is the leader (the dog), but the meat industry (the tail, a follower) controls it. The second interpretation is that to “wag the dog” means to “purposely divert attention from what would otherwise be of greater importance, to something else of lesser significance”.<sup>38</sup> So, in this interpretation, the discourse of meat demand may be distracting from the meat industry’s strategy to actually create the demand. Neatly combining to this, the “dog of demand” itself (from Zaraska, above) can be seen as a meat-eating beast which needs to be fed (by the meat industry).

### 5.2.3.3 Metaphors and the policy context

One of the crucial consequences of the dominance of the Meeting the demand frame in mainstream discourses regarding how to handle meeting the food and/or protein demand by 2050 is that research into behaviour change in meat is still lagging far behind research on technological emission reduction from meat production, due to the low priority among policymakers (Garnett, 2011). Remarkably, flexitarianism runs counter to the Meeting the demand (with meat) frame. Noting from the data, the counter discourses around flexitarianism imply a different way of meeting the challenges as regards food futures.

Metaphors themselves have a connection to policy (Spencer, 2010) in that, by activating certain frames, metaphors contribute to the discursive construction of an issue (e.g. meat as a problem or not), and therefore they contribute to the policies seen as relevant to that issue. Both of the conceptual metaphors discussed above call for certain — although potentially different — kinds of policies, with the first (the

37 Longman Dictionary of Contemporary English, 1978.

38 From UsingEnglish.com, viewed on 23 May 2018. Also, similar definitions can be found in UrbanDictionary.com and Dictionary.com. This interpretation of the metaphor seems to be a more recent one.

journey) more likely to activate a counter frame which encourages flexitarianism, and the second (the hungry beast) a currently dominant frame which encourages more meat production, whether old or new meat. It will be seen whether a struggle (Strydom, 2000) between these two different and somewhat opposing frames will take place in the context of meat,<sup>39</sup> or whether the frames could somehow combine, in particular, so that the demand for the new meats would be balanced with the principle of strong flexitarianism. Being aware of the frames expressed through these two metaphors can, in any case, be very useful, and contribute to change as such. For example, the “beast” may be hungry, but it need not necessarily be fed with meat. Instead, it can be fed with a combination of new meats and pulses, in the spirit of strong flexitarianism, for example.

Finally, in addition to the individual level journey towards less or no meat, the societal transformation away from the old meatways into new meatways can be seen as the *grand journey of transformation* of the meat system,<sup>40</sup> involving experimentation (going back and forth) with different alternatives. This journey is then part of the larger sustainability transformation journey. As regards the new meatways and the discourses around them, and the increasing problematization of the current meat system, this journey has already started.

## 5.3 Meat-eating related challenges

### 5.3.1 Coping strategies and the new meatways

In Chapter 3, I discussed the different strategies used by many meat eaters to cope with cognitive dissonance, a common phenomenon arising from the conflict between eating animals, yet not wanting to hurt animals — a conflict in values. Similarly, cognitive dissonance can be said to arise from not wanting to harm the environment or even one’s own health, and yet engaging in activities that do harm them. Changing actual behaviour is also a coping strategy, with vegetarianism or veganism being the traditional ways to do this, and the new meatways adding important options to these.

By all means, not everyone who eats meat uses coping strategies. In Chapters 2 and 3, I discussed the idea of a continuum to cover all meatways. The previous section in this chapter explored the data as regards the impact of thinking of different

---

39 Magneson-Chiles (2013) refers to a *discursive struggle*, in connection with cultivated meat and various future expectations regarding it. Comparable discursive struggles could be fought between different new meatways.

40 Calling the societal level transformation of the meat system as a journey is from van der Weele (personal communication, 25 January 2019).

meatways as on a continuum. This continuum covers everyone from an avid (individual) carnist to a strict vegan. At the individual carnist end, it may well be that coping strategies are not required, if no prioritized values are in conflict, whereas someone at the vegan end of the continuum is likely to have used the coping strategy of changing his or her actual behaviour, i.e. by ceasing to use animal products, at least for food and drink. A good part of the continuum consists of flexitarians, from weak to strong, and most flexitarians do use either their flexitarianism as a coping strategy, or they use some other strategy, as do what I call societal carnists, i.e. people who prefer to eat meat on a regular (usually daily) basis, out of a habit, a social convention, or because meat is Nice. At the same time, these people may be somewhat uneasy about their diet. A societal carnist has normalised regular meat eating (usually as a small child), but carnistic values (see Chapter 3) are likely to not all be prioritized by societal carnists.

In literature (discussed also in Chapter 3), coping strategies include the four Ns<sup>41</sup> — meat being Normal, Natural, Necessary and Nice — as justifying meat eating, in addition to a group of other coping strategies identified especially by Rothgerber (2014) and by Onwezen and van der Weele (2016). Together with some of the other coping strategies, the four Ns can be seen as more direct justifications, whereas indirect justifications include some of the other strategies for coping with cognitive dissonance. These justifications, as discussed in Chapter 3, are often part of strategic ignorance of the value and emotion conflicts, and of knowledge regarding what eating animals actually entails. Importantly, the (on- or offline) presence of vegetarians or vegans makes meat eaters particularly prone to using coping behaviours (Rothgerber, 2014).

As regards the data, there is a range of coping strategies present, many of which are identified in literature. However, some of the strategies identified in literature are not really present, or if they are, they are only present concerning a discussion of the behaviour of others. In terms of the four Ns, the data has somewhat different takes on the concepts. Below, I have attempted to include all the ways that the four Ns are used either for justifying meat eating or for justifying the new meatways. I also include the Not Ns, i.e. expressing something as Not normal, Not natural, and so forth.

First, although the traditional sense of meat being Normal is indeed expressed: “more than half of the animal kingdom eats the other half. Hence I think it’s normal” (CM43, 21 Sep 2017), much of the use for Normal in the data is for normalising the new meatways. The articles do this:

---

41 Joy (2010) discusses the first three Ns, Normal, Natural and Necessary in her theory regarding carnism. The fourth N has been added later by Piazza et al. (2015).

*People are already coming around to the idea of produce grown in factories rather than fields. Marks and Spencer has introduced microherbs cultivated free from pesticides in air-raid shelters [...] And perhaps knowing that cultured meat isn't a new idea might help normalise it. Winston Churchill was banging on about it in 1932. "We shall escape the absurdity of growing a whole chicken in order to eat the breast or wing, by growing these parts separately under a suitable medium," he wrote, presciently.*

CM article

*Comparing the process of culturing meat cells to [...] brewing beer. That hallowed, ancient process tends to happen in giant, sterile, sealed fermenters, which are not unlike the bioreactors that will be used for culturing meat in industrial quantities.*

CM article

*Ground cricket flour is already being used as a protein source in North America, [Swannell] said. The adoption of insects as a protein in animal diets will be "more straightforward", added Swannell.*

INS article

*For Brown, all food manufacturing relies on technology to some extent. "The entire history of food has been nature combined with human ingenuity", he said. "Bread isn't something that falls off a plant."*

PBM article

*At the tasting, the crowd lined up for sliders. The general consensus was a lot of shrugging. "Burger", one tester described it as between bites. "Pretty good."*

PBM article

Further, the posts are using Normal in a way that can be seen as working towards normalising the new meatways:

*Mock meat is created for meat-eaters, an attempt to get meat-eaters to eat less meat. Not many vegans eat this — it's considered a transitional food. It started with the Buddhists creating fake meat for non-harm festivals that get the greater part of the meat-eating population abstaining for meat for the duration of the festival.*

PBM39, 3 Jun 2016

*And time, I feel, will also produce more willing consumers, people not yet born who will grow up with this as an entirely normal idea. I feel absolutely certain that cultured meat will one day be commonly eaten the world over.*

CM143, 20 Sep 2017

*Yes, yes [the Impossible Burger] is [a burger]. Burger these days refers to the form. It isn't a hamburger, but nor are chicken burgers, fish burgers, etc.*

PBM2, 3 Jun 2016

*I just eat food too. But I only eat meat two or three days a week. I now eat more fruit and veg than ever in my life.*

FLEX16, 25 Jun 2017

In particular, many of the INS posts are about normalising insects as food:

*A lot of insects taste like pork, particularly in the larval stage and you'd eat the ones that are palatable and we have history digesting.*

INS16, 5 Nov 2015

*The Aztecs and Maya ate -- and still do -- insects for their protein. Fried worms are tasty and crunchy with a texture like cheeze puffs. Grasshoppers are something like popcorn vinaigrette.*

INS73, 5 Nov 2015

*Do you eat prawns, crab or lobster? I know they're not the same as insects, but they certainly share a number of traits and it turns out they're probably more closely related to insects than previously thought. Lobsters really are cockroaches of the sea.*

INS4, 5 Nov 2015

Normalising the new meatways will be returned to in Section 5.4.2. In opposition to Normal, Not normal is used occasionally for the new meatways or for vegetarianism or veganism, but additionally, it is used for conventional meat eating, as in “free yourself from the indoctrination of what is ‘normal’ food” (CM12, 20 Sep 2017) or in “meat from animals will become a premium product and with time may become socially unacceptable in many societies” (CM132, 20 Sep 2017).

Second, and different from Normal, Natural is used mainly to justify meat eating, this being a typical example: “whilst I hate the term natural there can be little debate; we evolved from an omnivore diet so clearly eating meat was natural” (CM65, 20 Sep 2017). However, there are also attempts to make the new meats more Natural: “she describes the raw paste of harvested cells within them as having a delicate flavour of the sea, a little like the water in an oyster shell” (CM article). Further, there is criticism for the importance of Natural as an argument, for example in the CM article: “Naturalness is perhaps one of the most slippery concepts ever to have been massaged by advertising copywriters”. The posts reflect this as well: “What’s so good about things being ‘natural’, whatever that means? Smallpox is natural, mosquitoes are natural” (CM67, 20 Sep 2017). The opposite, Not natural, is used more variably, often for cultivated meat: “Frankenstein’s creation was a re-

animated dead corpse. Are cells grown invitro far removed?" (CM140, 20 Sep 2017), and for eating conventional animal-based meat:

*We are only omnivores in the sense that we do eat meat, not because our biology is adapted to meat consumption. Eating meat is as "natural" as eating a deep-fried Mars bar; we can do it, but if we do it everyday there are health consequences.*

CM75, 21 Sep 2017

Additionally, and as could be expected, Not natural is often used for the way conventional animal-based meat is produced:

*No one can argue that intensive farming is natural. Eating insects is arguably more natural, and yet westerners turn their noses up at the idea.*

CM article

*The critics who dismiss [cultivated meat] as unnatural are going to be very upset when they find out where their meat currently comes from.*

CM121, 20 Sep 2017

*Animal Flesh is a[n] expensive product to make, it requires an intense amount of water, crops, and land to produce.*

PBM68, 3 Jun 2016

Third, Necessary is used in equally varied ways. There are some, although not many references to people personally finding meat eating Necessary, however, it is more common to say that farming animals is Necessary:

*Here we go again. If we didn't eat cows, we wouldn't breed them. Therefore they wouldn't even exist in the first place.*

PBM95, 3 Jun 2016

*We do need our grasslands for biodiversity.*

CM21, 21 Sep 2017

*Total rubbish [to say that if you care about the environment, you should not eat meat]. Wait till you have to denude all the forests to plant your silly soya bean and other crops to sustain the population of the planet on only vegetable matter. Let's see how the world is then.....*

PBM139, 3 Jun 2016

However, a common use for Necessary is also to justify the new meatways:

*Alternative protein sources will be needed for humans and livestock*

INS article

*"I decided that without question the biggest threat to the global environment right now was the use of animals for food", Brown said. "But the only way you're going to [replace meat] is a marketplace approach and that entails creating a food that outperforms this market."*

PBM article

*We're already at the stage where we need to start eating less meat in order to not completely destroy the planet. But telling people you need to eat less meat is never going to work, especially uneducated, red neck, libertarian americans. But imagine if you can make a burger that tastes like meat, costs a 5th of the price, is actually healthy, and doesn't decimate the environment. The person who achieves that will make sh\*t loads of money!*

PBM23, 2 Jun 2016

*[Cultivated meat] will get there because it has to. too many humans on this rock.*

CM3, 20 Sep 2017

*More worrying is the fact that because us Westerners don't have much tradition of eating insects, newly-affluent people in emerging countries are also ditching their insect diets as they aspire to eat a meat-heavy Western diet. And the last thing the planet needs is the whole of China and India getting hooked on meat, with all its disastrous environmental impacts. So we in the West basically need to start eating more insect-based proteins pretty sharpish...*

INS46, 5 Nov 2015

*I think not eating meat is now one of the solutions to our species's survival, and as such it makes sense that some people introduce it [not eating meat] gradually into their lives, and should not be made to feel like advocates for rape/slavery for doing so.*

FLEX123, 25 Jun 2017

The opposite justification, Not necessary, is similarly used in varied ways, to either justify that the new meatways are Not necessary, or that meat as such is Not necessary. Sometimes criticism of the new meatways is to defend the status quo:

*Insects are fine as a snack (eg replacing crisps) but they just don't do the job of a steak. So we either need genetically modified, cow-sized insects (the stuff of horror) or to stop listening to these ridiculous think tanks.*

INS93, 5 Nov 2015

However, most of these justifications seem to be used to support discontinuing meat eating, as even when the new meatways are considered Not necessary, it is to say that vegetarianism or veganism is all that is needed:

*I don't even see the point of cultured meat at all on this basis, it would be easier and better to turn farming around the world to vegetables, nuts and grains used to feed people.*

CM2, 20 Sep 2017

*Anyone would think getting more than adequate protein from plant sources was difficult (it isn't). There are many vegan bodybuilders and athletes who do well without any animal form of protein. So why bother with insects.*

INS66, 5 Nov 2015

*The key problem is induced desires and resultant massive over-consumption [...] the fake meat [such as the Impossible Burger] is not the solution to a problem, it perpetuates the primary problem.*

PBM130, 3 Jun 2016

*Given that we don't live in [a hunter-gatherer] society however, meat eating results in animals being imprisoned and oppressed all their lives which makes eating meat under these circumstances all the more wrong, and as it is arguably no longer necessary for survival it is even less defensible.*

FLEX126, 26 Jun 2017

Fourth and last, when Nice is used to describe meat, it is often with short and confident appeals to senses: “a lovely form of food”, “delicious”, “yummy”, “meat, in all its glory”. Especially the CM article focuses, however, on similar sensory aspects of cultivated meat and fish: “a succulent beef meatball”, “sushi or sashimi softer and better than the best sushi you have tasted”. In addition, it talks about the new plant-based proteins, with the Impossible Burger being “uncannily beef-like, oozing cholesterol-free fat and pink through the middle”. The PBM article also describes the Impossible Burger as “very tasty”. As regards the posts in general, the only new meat (in the sense of this book) the posters in the data have had an opportunity to taste are insects, and this personal experience is shared by many, for example:

*I've tried several types [of insects]. Some were quite delicious.*

INS10, 5 Nov 2015

*I remember the excitement of handing over the cash for a tin of Za-Za insects at the deli in Broomhill, Sheffield, back in 1964. [...] What were they like? Chewy and the main flavour I remember was salty — possibly soy sauce. [...] Still wish that I'd tried the neighbouring can of chocolate coated ants.*

INS65, 5 Nov 2015

Not nice is applied less frequently than Nice. The first 2013 cultivated burger is described in the CM article as “dry and anaemic”, insects are claimed by a couple of INS posters to be “tasteless”, and a PBM poster guesses that the Impossible Burger would taste “gross”. Some posters are identifying as vegetarians or vegans who refer to meat as Not nice: “never loved meat”, “not pleasant”, and “repellent”, but many of the posters identifying as vegetarians or vegans talk about meat as Nice.<sup>42</sup>

As regards the other coping strategies expressed in the data, as said, many, but not all of those discussed in literature (and mentioned in Chapter 3) can be found in the data. In addition, there are some that I consider to work as coping strategies, but to my knowledge, they are not discussed as such in literature.<sup>43</sup> Table 5.8 lists a variety of the strategies together with examples from the data. In some cases, the data contains criticism of certain coping strategies, rather than expressions of the actual strategies.<sup>44</sup> I will discuss the most interesting issues for the new meatways after the table.

Table 5.8: Further coping strategies in the data in addition to the four Ns

Coping strategy	Description	Data extracts
All or nothing	Unless one tries to eliminate all harmful impacts, it is not worth just doing some (e.g. Rothgerber, 2014)	“what gets my goat is finger-wagging vegetarian hypocrites who have multiple offspring but still get on their stupid box and lecture others about the unsustainability of eating meat” (PBM posts); “it’s impossible to be vegetarian. If you eat bread, vegetables or fruits you are complicit in the death of thousands of rodents and other pests from pest control (which is arguably the death of more animal life per calorie than meat)” (PBM posts); “why is the life of an animal more important than the life of a plant?” (FLEX posts); “if you’d ever been vegetarian, you would know that many people take it as a personal insult, and accuse you of being a hypocrite in some way” (criticism, FLEX posts)

42 A strict vegetarian or vegan referring to meat as nice, is probably less about a coping strategy, and more about stating one’s opinion about meat. If however, someone identifying as a vegetarian or a vegan still eats meat, Nice may be a coping strategy. Further, a vegetarian or vegan referring to meat as Not nice, may indeed be using a coping strategy.

43 It may be that the discourses around meat currently develop, diversify and change fairly rapidly, and academic literature may not be able to keep up with them in all cases.

44 In Table 5.8 these cases are indicated with the word “criticism” in brackets after the quotes.

<p><b>Disassociation</b></p>	<p>The animal is separate from the food product (e.g. Rothgerber, 2014)</p>	<p>“frankly, the vast majority of people who eat meat would never be able to slaughter their own meat and will only buy, cook and eat it so long it’s no longer recognisable as the animal it once was” (criticism, CM posts); “it would be great to see a move to sustainable agriculture (and meat raising is/should be a big part of that)” (PBM posts, note “meat raising”); “how many billions of cows, calfs per year are chopped up and their dead bodies eaten? Most folks can’t make the connection” (criticism, PBM posts)</p>
<p><b>Avoidance</b></p>	<p>One actively avoids situations and information that would likely increase cognitive dissonance (e.g. Rothgerber, 2014)</p>	<p>“have you ever thought that killing those animals might contribute to making you unhappy? It will make more sense if you see where your food comes from” [link to Earthlings video about cruelty to farm animals] (criticism, CM posts); “you have no qualms [about the way meat is currently produced]? Factory farmed chickens???” (criticism, CM posts); “[the Impossible Burger is] not a burger then. We don’t reconstitute chicken to look like broccoli. I don’t get this” (PBM posts, note equating making vegetables like meat and making meat like vegetables)</p>
<p><b>Devaluing vegetarians</b></p>	<p>Criticizing vegetarians and vegans makes one less inclined to feel uncomfortable about meat eating (e.g. Rothgerber, 2014); do-gooder derogation (Minson and Monin, 2012)</p>	<p>“there you go, virtue signalling, holier than thou attitude and all. Man I am sick of this behavior. Respect others. [referring to another poster saying that he/she found it easy to become a vegetarian]” (CM posts); “many of these Single-Issue Fanatics hate fellow humans, more than their love of animals” (CM posts); “go peddle your Gaia guilt trip somewhere else. I’m not interested in your vegan horse shit. Meat is delicious!” (PBM posts); “Plus the vegans will be up in arms due to us finding another of gods ‘wonderful creatures’ [insects] to abuse and kill mercilessly” (INS posts)</p>

<b>Envi-ron-mental melan-cho-ia</b>	One's personal (food) choices do not matter, we are all doomed anyway (concept from Lertzman, 2015, but not in connection with meat)	"fooling around with veganism and vegetarianism is nothing more than fiddling while Rome burns" (CM posts); "the biggest threat is undoubtedly the out-of-control human population growth. All these sticking plasters [such as new plant-based meats] aren't going to change that" (PBM posts); "unless fossil fuel use is scaled back drastically soon, all talk of burger choices — ham, fish, chicken, or lentil — is just ineffectual tinkering on the edges" (PBM posts)
<b>Disgust</b>	One feels disgust towards meat alternatives (no need to eat), or towards meat (not possible to eat) (not yet in literature as a coping strategy for meat)	"Try marketing this dribble [cultivated meat] to a lion ..." (CM posts); "clear, pink liquid resembling the run-off from defrosting pork" (CM article); "I know it is a good idea I am just not sure I can stomach it" (INS posts); "the difference is that [if you] eat some invertebrates they can leave eggs and end up eating you. When you [hear] stories of tapeworms in the brain it really doesn't make someone feel hungry for eating live insects" (INS posts); "I've been a vegetarian for over forty years & for the record I've never missed meat — if they got that close to the taste & texture of a burger made from an animal it would be repellent to me" (PBM posts)
<b>Free-dom of choice</b>	One should be free to choose what to eat (not yet in literature as a coping strategy for meat)	"I care about the environment but only a wanker will tell me 'I shouldn't be eating meat'" (PBM posts); "I care more about ignoring what sanctimonious people tell me to do [when they tell me to not eat meat]" (PBM posts); "I try not to mess with people about what they're eating as a rule. I eat what I want, they eat what they want" (FLEX posts)
<b>Blam-ing vegans</b>	It is the fault of annoying vegans that more people are not trying to not eat meat (not yet in literature as a coping strategy for meat)	"we're omnivores; it's not unnatural [to eat meat]. That's the sort of hyperbolic bullshit that turns people off vegetarianism" (CM posts); "it's attitudes like yours which actually encourages people to not try the alternative" [referring to another poster saying that eating some meat is morally just as bad as eating a lot of it] (FLEX posts)

As mentioned in Section 5.1, one observation from the data is that vegetarianism and veganism seem to hold such power in the discourse that even when they are not the topics of the articles in question, a considerable amount of the discussion revolves around them, and various coping strategies are employed. For some posters, the new plant-based meats seem to hold similar agentive power as vegetarians and vegans in terms of causing resentment. But here it may be because the new plant-based meats are (supposed to be) just as good as meat, so there would

be no reason *not* to eat them instead of meat. This brings out the value conflict (in those employing coping strategies) and restricts freedom of choice, and in fact, makes it more obvious that meat eating is a choice, not a necessity. One *should*, therefore, in principle, switch from eating meat to eating the new plant-based (or cultivated) meat products as soon as they are widely available.

Many of the traditional coping strategies (as discussed in literature) are not used extensively in this particular data. For example, the four Ns are often used in ways that justify the new meatways, rather than just the status quo, i.e. the old meatways. It can be said that the meanings of the four Ns are particularly varied, as discussed above. The main conclusions are that Normal focuses often on a new normal, e.g. eating the alternatives, or not eating conventional animal-based meat, or at least not eating industrial meat in the future; Necessary focuses on the urgent change required; and Nice is often also applied to the new meatways, in addition to the old meatways. Only Natural is most often used in the traditional sense of eating animals being innate to humans. The varied ways of using the four Ns may have some significance for opening up meat-eating related practices discursively.

Combining and comparing Nice and Necessary, a noteworthy observation can be made between those posters who identify as meat eaters and those who identify as vegetarians or vegans. Meat eaters employ both Nice and Necessary (regarding meat), and many vegetarians or vegans employ Nice and Not necessary (and some combine Not nice and Not necessary). There may be two linked explanations to this. Either the realisation that meat is Not necessary makes it indefensible for some people to continue eating it, despite it being Nice, or, those who do not want to give meat up justify their practice by it being Necessary. Further, the posters who identify as vegetarians or vegans tend to be criticized for claiming that some old plant-based meats would have the same qualities as meat, or be just as Nice as meat: “these claims of ‘taste like meat’ usually come from people who rarely eat meat and who seem to not remember what it actually tastes like” (PBM55, 3 Jun 2016). Whether meat is addictive to humans (Zaraska, 2016a) or not, it might at least be possible to move away from that addiction. However, dislike or disgust towards meat can even be seen as a coping strategy in terms of coping with vegetarianism or veganism which are often difficult to maintain, especially socially.

Several of the coping strategies identified in literature — such as denial of animal mind, or denial of animal pain — are not employed in this data. And, in some cases, important coping strategies are more criticized, rather than employed, in particular so with disassociation and avoidance (see Table 5.8) which have been considered perhaps the most fundamental coping strategies in general as regards meat eating. It could be that the new meats “create a kind of safe space in which there is room for ambivalence that in daily life [would normally lead] to strategic ignorance” (van der Weele, personal communication, 25 January 2019). Therefore, these basic coping strategies need not be employed as much in this context. It may

also be that some people are more aware of these strategies due to the discourses from the last years, thus employing discursive consciousness.

Criticism of vegetarians and vegans — especially in the general devaluing sense — is, however, fairly common in the data. This discourse has historic roots, as mentioned in Chapter 3, and much recent and current media discourse around vegetarianism and veganism is negative (see Cole & Morgan, 2011; Nørregård Vørre, 2011). Minson and Monin (2012) call the putting down of vegetarians and vegans by meat eaters *do-gooder derogation*. The all-or-nothing criticism, focusing largely on the idea of hypocrisy and inconsistent behaviour, is a widely used coping strategy. The all-or-nothing issue is actually a larger point that connects to the issue of morality, a topic for the next section.

The three coping strategies identified above as “not yet in literature as a coping strategy for meat” need some further mention. Firstly, disgust need not be a coping strategy, but from the data, it seems that it can be used as such. As mentioned in Table 5.8, disgust can be used to justify both continuing to eat meat — when expressed towards alternatives such as cultivated meat or insects — and not eating meat when the disgust is expressed towards meat, as in the case of some vegetarians or vegans. Secondly, employing the need for freedom of choice — linked to individualism and the current dominant social paradigm — is likely to be one of the reasons policymakers have not really touched meat eating as a practice. At least it is one of the reasons used as a justification in the data for continuing with meat eating. Lastly, blaming “militant veganism” for one’s own inaction may be a rather new and perhaps still rarer coping strategy, and although it is related to the more general criticism of vegetarianism and veganism, it is still worth a separate mention.

Environmental melancholia is not discussed by Lertzman (2015) as a coping strategy in connection with eating animals, but it certainly seems to fit in this context. Environmental melancholia tends to prevent action, and therefore, it can be used as a coping strategy for maintaining the status quo, in this case continuing with meat eating, even when the awareness of the many negative environmental impacts is there.

As discussed in Chapter 3, strategic ignorance helps to keep certain problematic practices from changing in a deliberate manner towards being less problematic. The wider, more varied and in-depth the discourses about these practices are, however, the less convenient strategic ignorance may be to maintain, the more likely discursive consciousness about the practices is, and the easier a certain amount of ambivalence about the practices may be to acknowledge by recognizing the conflicting values and related emotions (see also van der Weele, 2013). Acknowledging the ambivalence may on its own lessen denial and strategic ignorance, and reveal similarities between meat eaters and vegetarians and vegans. The new meatways, therefore, offer a way to expand the discourse, away from the conventional animal-

based meat vs. no meat dichotomy whereby the vast majority of people in the Global North reject the no meat option. There is a possibility that the new meatways may eventually lessen the negative (coping strategy) type discourses around vegetarianism and veganism, and even help normalise these diets further by bringing them to the wider discourses. The fact that vegetarianism and veganism appear to be so strongly present in the discourses around the new meatways, at least in my data, can be a sign of such a process.

### 5.3.2 Morality and the new meatways

Questions of morality are about right and wrong. While moral questions related to eating have been more or less ignored by most, eating animals, in particular, has been a significant moral question to a small minority of people for millennia, generally solved by abstaining from meat or other animal products. In the last decades, questions of morality as regards industrial animal farming and eating intensively farmed animals have become an additional moral issue for a growing number of people, as discussed in Chapter 2. Even so, this has been reflected largely only at the level of discourse, and the amount of animal flesh eaten has seemingly not been substantially affected by these moral concerns. It is one thing to be concerned, even in a moral sense, and quite another to act upon on the concerns in terms of practices so central to human lives as eating. Adopting a consistent vegetarian or vegan diet has been beyond most people's realm of everyday possibilities in locations of the world where meat is widely available. Therefore, strategic ignorance and the related coping strategies, discussed in Chapter 3 and in the previous section, have been a relevant, yet unacknowledged part of life for many, but by no means all meat eaters. As will be seen from the below discussion, strong flexitarianism, while breaking some moral codes, stands out from the new meatways as being, however, able to offer a workable solution to the morality of meat.

As regards the data, moral aspects are variably reflected on in the articles and posts. In the PBM and INS articles, moral issues are not really present, at least not explicitly, and so it is also largely for the posts, especially for INS posts.<sup>45</sup> For the CM article, moral aspects are somewhat more present, and the posts follow this line. The only article that does reflect extensively and explicitly on morality is the FLEX article. The posts that follow this article reflect widely on various moral aspects and challenge the position taken in the article itself. In the case of all the four documents, the posts reflect on morality more than the articles do, which could

---

45 The relative absence of explicit moral statements in the articles may be accidental, or it may be intentional. Further, as in the frame analysis, I focus mainly on explicit expressions of morality. However, morality may be hidden, e.g. in factual statements such as “meat is bad for the environment” (“therefore it *should not* be eaten”).

indicate the importance of such issues to people. Section 5.2.1 looked at framing devices and frames, and in connection with this, and Table 5.7 included some of the moral arguments included in the data. Therefore, I will not repeat this exercise but concentrate on a few key points where the new meatways make a difference to the discourse, and could help transform meat-eating related practices.

First, Section 5.2.1 mentioned the Absolute morality frame, evident in the discourses around vegetarianism and veganism in the data, in that nothing short of absolute abstention from meat can be defined as vegetarianism or veganism in this frame, and additionally, vegetarians and vegans should behave consistently in all areas of life. This morality can be thought of as an all-or-nothing approach which can be understood in two distinct ways, as mentioned earlier. First, unless one does everything (to avoid harm, for example) it is not worth doing just something, and since doing everything would be impossible, one needs not do anything. Second, only absolutely clean behaviour is good enough, therefore one must be strict about one's own behaviour. Meat eaters (see Table 5.8) tend to justify their behaviour with the first understanding: “[quote from another post, PBM136:] ‘the bottom line is this, if you care about the environment, you shouldn’t be eating meat’; Or driving, or flying, or travelling anywhere unless by bike or foot, etc.” (PBM145, 3 Jun 2016). Meat eaters can also blame vegetarians and vegans for hypocrisy using the second understanding: “finger-wagging vegetarian hypocrites” (PBM14, 3 Jun 2016).<sup>46</sup> Finally, vegetarians and vegans in the data are using the second understanding to blame flexitarianism for immorality: “robbing one bank makes you a criminal as much as robbing ten” (FLEX6, 25 Jun 2017). Posters themselves refer to this as “black-and-white morality”.<sup>47</sup>

As seen in the data, flexitarianism counters the Absolute morality frame as an ideology, and in both senses of the all-or-nothing approach: flexitarianism is about less harm being better than more harm which makes it, on the one hand, *difficult* for meat eaters to deny on moral grounds as a viable strategy, and makes the argument about vegetarian or vegan hypocrisy lose ground. On the other hand, it may be *easy* for strict vegetarians or vegans to deny flexitarianism on moral grounds. Being that the meat eaters currently vastly outnumber strict vegetarians and vegans, it may matter more for societal change how flexitarianism is received among meat eaters.

Additionally, however, many vegetarians and vegans are in reality strong flexitarians, even if they would not call themselves that. Flexitarians (who do call them-

---

46 See also Section 5.4 on meat eaters acting as guardians of morality in social situations with vegetarians or vegans present. This is also about using the second understanding of the all-or-nothing approach.

47 This second understanding can also be seen as a conceptual metaphor: GOODNESS IS WHITE/BADNESS IS BLACK, whereby only “white” i.e. “completely pure” is good and acceptable. This metaphor can also be found in the Metaphorlist (Lakoff et al., 1991).

selves that) are similar to out-of-choice vegetarians or vegans in the sense that all three groups are likely to have acknowledged some degree of their ambivalence about meat and have decided to change their own practices, but the key differing characteristics of flexitarianism are flexibility and absence of absolutism. Being that vegetarians and vegans often cease to follow their diets due to absolute morality being very difficult to follow in practice and especially socially, flexitarianism — in particular, the strong version — can be an attractive option to them.

Ideally, flexitarians would be satisfied with long-standing, cheap, much less resource-intensive protein alternatives, such as pulses, in addition to the occasional meat. In my discourse data, nobody is really combining flexitarianism as a diet with the new meats, cultivated or new plant-based meats, or insects, as the discourses around the different themes are not yet properly merging. However, it would be hard to claim that using the new meats (as much as they exist as real products) as part of a flexitarian diet would be wrong (arguing this would be against the flexibility principle), and the new meats could indeed work as an enrichment of a flexitarian diet, as long as the principle of absolute strong reductions in impacts is followed. Further, using the new meats as part of a strong flexitarian diet *replacing* conventional animal-based meat, rather than in addition to conventional animal-based meat would be very relevant in terms of impacts.

As argued in Section 5.2.3 following frame analysis of the data, flexitarianism goes against the Meeting the demand frame, whereas the new meats would likely support the Meeting the demand frame. Vegetarianism and veganism also run counter to the Meeting the demand frame. However, due to the difficulty of realising the Absolute morality frame, vegetarianism and veganism, in fact, paradoxically support the Meeting the demand frame. To explain, strict vegetarianism and veganism often end up as unsuccessful projects — there are five times as many lapsed vegetarians and vegans in the United States, as there are current vegetarians and vegans (Asher et al., 2016) — and since conventional meat eating has been the only identified fall-back option, the unsuccessful vegetarians and vegans have ended up as, somewhat involuntarily, supporting conventional meat eating as the only realistic option.<sup>48</sup>

Remarkably in the data, vegetarians and vegans are blamed for being hypocritical, but flexitarians are generally *not* blamed for being hypocritical.<sup>49</sup> Generally, if flexitarians are blamed for something, they are blamed for being immoral, as they are still involved in eating animals. Considering which accusation is worse from a moral point of view is instructive: pretending not to harm at all (but still harming), or knowingly and admittedly harming, but harming significantly less that would

48 However, many of the lapsed vegetarians and vegans end up eating less meat than an average American (Asher et al., 2016).

49 Except in the “calling weak will [vegetarianism as] flexitarianism” (FLEX posts).

be possible. Hypocrisy can be seen as a form of lying (about good behaviour), and lying about good behaviour could be expected to be seen as worse than honest bad behaviour.<sup>50</sup>

A further relevant point as regards morality and the new meatways, as opposed to the old meatways, is related to guilt. This moral emotion has two basic links to meat eating. Firstly, meat eaters may feel guilty about eating animals (or causing serious environmental harm with their diet) whether or not this shows up in their behaviour, hence the need for coping strategies, and the strong reactions to the presence of vegetarians and vegans (Adams, 2001; Rothgerber, 2014). Secondly, vegetarians and vegans often feel guilty when “falling off the wagon”, i.e. when failing to follow their diets strictly. Here is one instance for each from the data:

*Reduce your guilt over contributing to animal suffering [when not being able to follow vegetarianism/veganism], by giving your weak will a misleading name [flexitarianism]*  
FLEX134, 25 Jun 2017

*Sadly though I shell out for the free range stuff, I like it too much to be totally veggie.*  
CM1, 20 Sep 2017

Presumably, the new meatways could cause less guilt, as neither cultivated meat nor new plant-based meats are supposed to involve the purposeful killing of sentient animals, and they are supposed to be environmentally considerably less harmful. Further, insects may not be categorized as sentient animals either (although the science is not yet clear on this), and it has been calculated that growing insects on an industrial scale could be environmentally advantageous, as compared to conventional animal-based meat. Although even strong flexitarianism may still involve killing sentient animals, it is about radical reductions in harm — a result that would be likely to cause less guilt as such.<sup>51</sup> In the data, there are indeed signs of seeing the new meatways positively in this way:

*I would feel much happier about myself [eating cultivated meat] if I knew no animals were being bred and the environment destroyed to suit my appetites.*  
CM50, 20 Sep 2017

*[Cultivated meat could be a] guilt-free, environmentally friendly, and utterly convincing simulacrum.*  
CM11, 20 Sep 2017

50 The post-truth era may of course change that perception.

51 Not following the new meatways, i.e. going back to conventional meat eating would be likely to cause guilt, but the likelihood of that happening with flexitarianism might be considered smaller than with vegetarianism and veganism.

*Are reducetarians just vegans without the willpower? Or, are they simply doing what they can do without the resolution-snapping burden of guilt?*

*FLEX article*

The final point related to morality to make in this section is about the idea of “clean meat”.<sup>52</sup> The CM article refers to clean meat as a term that is “catching on: clean meat, clean conscience”, although no posts in the data pick up on this theme. As mentioned in Chapter 3, some instances have extended “clean meat” to cover the new plant-based meats. Both are often presented as perfect replacements (from the point of view of the eater) for conventional animal-based meat, and both are supposed to be “clean” in a moral sense, with plant-based meat perhaps even more “clean” in this sense than cultivated meat, not purposefully using animals at all. Adopting “clean meat”, or another similar term — such as “new meats” — as a larger category consisting of cultivated and plant-based meats could further erase the strict definition of meat, and facilitate a transformation away from conventional meat eating. The current competition between the start-ups working towards each alternative, cultivated on the one hand, and plant-based on the other, could deter the companies from using the same umbrella term if each group would prefer to see themselves as the only real solution to the meat crisis.

Finally, the other two new meatways, eating insects and eating a flexitarian diet, are morally not as clean, as one is about eating large amounts of tiny animals, and the other one is usually about continuing with eating conventional animal-based meat, although radically less of it.

## 5.4 Additional tools for change

### 5.4.1 About labelling

A relevant topic rising from the data, and worthy of a separate discussion, is the issue of labelling, i.e. the function and usefulness of labels, in this case concerning meat eating.<sup>53</sup> The topic is mainly found in the FLEX document, but it also comes up in the INS posts.

The title for the FLEX article — “Vegans, vegetarians and now...reducetarians” — suggests that there are many different labels related to (not) eating meat. However,

---

52 The term “clean meat” was created in 2016 for cultivated meat by the Good Food Institute, an organisation involved in advancing the development of cultivated meat and new plant-based meats.

53 As mentioned in Chapter 3, this discussion is not about eco-labelling which is related to products, but about the labelling of behaviour.

the article is not going into a discussion about labels, and it mainly seems to regard “reducetarianism” as a fitting name for a new movement. The posts that follow FLEX article reflect the article’s focus on ethics, and vegetarianism vs. flexitarianism. They are, however, overall less enthusiastic about flexitarianism (or reducetarianism) as part of an identity. Many of the posters in principle positive about the idea of eating only a little meat see it more as just a sensible way of eating, rather than anything to fuss about. There is, therefore, a significant amount of criticism regarding labelling “eating less meat” as something in the first place (reducetarianism, flexitarianism, etc.). Some posters consider such labels unnecessary for themselves or for others:

*Yeah, the name is silly. See also flexitarian or sustainetarian for equally silly names for about the same thing. It doesn't really need a label of its own when it's not a hard and fast rule imho. Personally I'm simply eating a vegetarian diet more days than not.*

FLEX4, 25 Jun 2017

The above post is arguing that labels are necessary for describing strict diets, not for flexible ones. There is no need for labels for something that does not involve hard rules as such. By definition, flexitarianism is flexible, so it automatically makes its own label unnecessary.

Other posters go further, up to the point of considering labels ridiculous: “where I draw the line is coming up with ridiculous terms for someone who just cuts down on meat consumption” (FLEX3, 25 Jun 2017), embarrassing: “it seems I’m one of these, I agree with some of the other commenters here that the new label isn’t really necessary, I’d feel a bit of a nob referring to myself as a reducetarian” (FLEX103, 25 Jun 2017) or narcissistic: “this simply reflects the narcissism of our age where everyone has to have a label attached to them as if to say ‘look at me, this is what makes me different’” (FLEX129, 25 Jun 2017). It could be of course that new labels tend to be embarrassing in the beginning when they are new (to an individual, or to society).

Other posters consider the informative function of labels, even though still criticizing it:

*I call myself vegetarian, but I hate the expression, simply because it creates this false dichotomy, and sounds as if I'm trying to stand on moral high ground. I use the expression, though, because otherwise I'm forced into eating obscene quantities of meat whenever I socialise or attend anything with food.*

FLEX144, 25 Jun 2017

In the above post, the label for vegetarianism is used in an informative function, in order to simplify the social situation, to make it clearer to a host what is wished for in terms of food, and to help the vegetarian guest to enjoy him/herself. It is used out of necessity, however, and to this poster using a (vegetarian) label brings with it

a false image of standing on “moral high ground” (a topic for the previous section). Indeed, the difference between labels “vegetarian” or “vegan”, on the one hand, and “flexitarian”, on the other, is quite clear. When observed vegetarianism is flexible, and so, in practice actually flexitarianism, insisting on still calling it vegetarianism tends to create conflict:

*Actually, I'm vegetarian, except when other people are cooking, in which case I think it a bit rude to make them do something different for me — a position which actually seems to irritate some vegetarians more than simply carnivorism...*

FLEX7, 25 Jun 2017

*Well it probably is a bit rude to impose on someone's hospitality in that way and expect them to cater for your proclivities, but at the same time, you can't be a vegetarian and eat meat. So, a dilemma.*

FLEX8, 25 Jun 2017

These appear to be typical problems for vegetarians to encounter. If they are flexible about their meat eating (and eat some meat when offered), they are good guests, but get blamed by guardians of moral vegetarianism, i.e. meat eaters who guard the moral behaviour of others, and if they are not flexible, they get a label(!) as difficult guests. Eventually, these problems can turn a vegetarian into an ex-vegetarian, as social reasons seem to be among the most significant for this reverse process (see Asher et al., 2016). However, when there is a label for it, you *can* be a flexible vegetarian (flexitarian) and eat some meat. Among meat-related food labels, a flexitarian label may be likely to create a less strong reaction than a vegetarian or vegan label, even though vegetarians and vegans might still feel uneasy about flexitarianism.

Other posters do see a point in labelling as such, beyond the informative function, and regard labels as potentially powerful. For them, labels make things exist, and they make patterns of behaviour easier to adopt:

*You see, these "ridiculous terms" [such as "flexitarianism"] often motivate others to reduce their own meat consumption.*

FLEX17, 25 Jun 2017

*Giving it a label means that a movement can be formed. It's a bit like a political party. You could say "we believe that policies x, y and z should be implemented" or you could say "I'm a member of the Labour Party" or "I'm left-wing". It's convenient and it ensures that more people stop eating meat, which is only a good thing.*

FLEX133, 25 Jun 2017

Flexitarianism “ensures that more people stop eating meat” because of the power of a movement tends to lead to more recruits, but perhaps also because flexitarianism

may be appealing to more people than vegetarianism or veganism, and when it is labelled, adopting it becomes easier.

The INS posts consider the potential of positive labels helping people to overcome initial negative feeling or reactions as well: "do you think if [insects] were referred to as land shrimp it could help get over typical Western reactions?" (INS4, 5 Nov 2015).

Individual words — and therefore, labels — can have a lot of agentive power.<sup>54</sup> In addition to the above examples of flexitarianism and insects, the label "clean meat", or even "new meat" could potentially be a powerful way to get more people interested in trying the new plant-based and cultivated meat products.

It seems obvious that labelling can help with behaviour that requires a particular effort. Labelling creates identity, and identity helps to keep the behaviour. However, as discussed in the previous section, in the case of strict labels, such as vegetarianism or veganism, labelling can create guilt when one does not follow it to the letter. A label for flexible behaviour can, therefore, be seen as ideal from this point of view. The label helps to keep the behaviour, and at the same time, there is less reason for guilt. Additionally, a label about flexible behaviour may be seen as a positive label more often than not.

From the data arises also a theme of "watching (or not watching) other people's behaviour", in particular in the FLEX posts. Some posters claim this not to be an issue:

*To grow up is to realise that no one is watching you; to mature is to realise no one cares enough to watch you. Just live your life.*

FLEX25, 25 Jun 2017

*I try not to mess with people about what they're eating as a rule. I eat what I want, they eat what they want.*

FLEX36, 25 Jun 2017

Such obliviousness might seem to go against certain theory, including social labelling theory. Indeed, several posts are arguing the opposite position:

*Not sure why meat eaters tie themselves in knots trying to point out relatively minor contradictions in other people's behaviour instead of facing their own shortcomings.*

FLEX96, 25 Jun 2017

*I take the mickey [out] of vegetarians. My best [mate] is one of them. Here's the thing*

---

54 See e.g. a study by Chung et al. (2016) for the difference in people's reactions to "pink slime", in contrast with "finely textured beef" — different words / labels for the same "meat" used for certain processed meat products.

*though, I don't hate them. I don't dislike them. I take the mickey because I don't care and it's their choice to take the mickey out of me back. I don't understand why people don't get this.*

FLEX28, 25 Jun 2017

*Although if you'd ever been vegetarian, you would know that many people take it as a personal insult, and accuse you of being a hypocrite in some way, even though you have no wish to discuss your choice with them.*

FLEX26, 25 Jun 2017

*People are watching me. [...] if people observe vegetarian behavior, they take it as a personal insult. It's quite odd. One person I know who normally avoids meat eats small amounts of it at dinner parties just to keep people off his case. I am more truculent and perfectly willing to make my dietary choices a subject of discussion, but the believers don't really like that either because I stand up to them and I've thought the philosophy through more than they have.*

FLEX34, 25 Jun 2017

Who is watching whom is, however, up for debate:

*You really think non-vegetarian spend more time badgering vegetarians than vice versa? 2% of the UK population (mostly kids waiting to grow up) and any thread about it here is overwhelmed with them banging the drum while the other 98% (OK, besides me now) ignore the issue completely.*

FLEX35, 25 Jun 2017

If someone has a label, it seems to be calling for other people to somehow evaluate it, and the more controversial the label is, the more social evaluations. There tend to be certain values attached to labels, and these values may make other people feel threatened if they feel they should prioritize these particular values, but they do not. This links to Section 5.3.1 and the coping strategies of meat eaters. A vegetarian often arouses negative emotions in meat eaters, thereby the label is viewed negatively, especially if the vegetarianism is ethically based on environmentalism, or the right of animals to not be harmed or killed for human pleasure. Health vegetarianism seems to be viewed more positively, as it is associated with values that tend to be easier to acknowledge, or prioritize, than the values associated with vegetarianism based on environmentalism or animal rights. Therefore, there are vegetarians who publicly often justify their vegetarianism on health reasons, even though their actual motivation would be related to animal ethics (Wilson et al., 2004), as they do not want to be labelled as “PETA people”. The data has an example of this:

*I'm pretty much vegetarian. The excuse I use is that I have IBS and that digesting meat is difficult. Indigestion is an excuse anyone can use; it's true that humans don't digest meat as efficiently as carnivores.*

FLEX33, 25 Jun 2017

Labelling and social labelling (Cornelissen et al., 2007; Lacasse, 2016) have certain benefits for the new meatways, especially flexitarianism: labelling itself helps to keep the behaviour, as long as it is seen by others as positive, and additionally; social labelling can eventually help shift motivations, e.g. a behaviour that is environmentally more sustainable may start from health or social reasons, but end up being about sustainability. This further enables people to persist with the diet. In the data, this can be observed for the families who initially turn “flexitarian” (by purposefully eating less meat) to support their vegan or vegetarian children, but eventually start preferring the flexitarian diet for its own sake, as a kinder way towards oneself, the animals and the environment, as in the following:<sup>55</sup>

*As a family we started to cut right back on meat consumption when my son turned to a vegan diet. Everyone is healthier and happier with their diet and we're all trying different things.*

FLEX53, 25 Jun 2017

*The kids have gone vegan and vegetarian and we've supported them in that [...] and we have gone almost fully vegetarian partly for simplicity, but mainly due to an acceptance of the arguments for, such as health, environmental concerns and animal welfare. [...] It feels really good and I think we'll stick to it.*

FLEX103, 25 Jun 2017

The positivity of the label is a crucial factor, as when the label is viewed negatively, such shifts in motivation can actually go the other way, as is the case for lapsed vegetarians mentioned earlier (and in Asher et al., 2016). As a potentially more positive label, flexitarianism may have power over labels such as vegetarianism or veganism. Promoting flexitarianism as a more feasible meatway than total abstention from meat would indeed seem useful (see also Jallinoja et al., 2016). However, for sustainability, it is crucial to focus on strong flexitarianism and radical absolute reductions in impacts.

---

55 However, these posters have likely not recognized themselves as flexitarians, merely as people eating less meat. Of course, “eating less meat” can be seen as a distinct meatway, although not as recognizable as flexitarianism.

## 5.4.2 Normalising futures with the new meatways

As discussed in Section 5.3.1, some of the discourse reflected in the data involves attempts to normalise the new meatways. On the one hand, through this, the meaning of Normal (as one of the four Ns) is therefore extended by some towards covering cultivated meat, insects and even the new plant-based meats. Even “occasional meat eating” is presented as normal by some, i.e. nothing to make a fuss about (nor use a label for). On the other hand, the normalness of meat as such is questioned by some posters. Although the meaning of Normal requires constant reproduction in any case (Shove, 2010), such a purposive process of normalisation within discourses is an important way of how something unfamiliar can have a chance of becoming part of everyday practices.

Extending the meaning of Normal meat is *semantic broadening* in the use of words or expressions; it is about extending the meaning of meat to cover previous non-meats that may or may not have been food in general.<sup>56</sup> A sign of the power of such semantic broadening is the fight over the meaning of meat or milk that is currently going on in courts in the United States and Europe. Donaldson (2016a) defends the trend of calling new plant-based protein products meat (or milk or eggs) with the idea that such repurposing of narratives of meat (or milk or eggs) away from what the industries have done until now (happy cows in the field) may change the connotations towards plant-based foods in general into more positive ones. Jallinoja et al. (2016) also call for new meanings and associations for plant-based foods, including pulses, to enable them to be normalised as meat replacements.

There is a possibility that the new meatways could help normalise vegetarianism and veganism further as realistic options for the future, by lessening the need for negative discourses around vegetarianism and veganism — currently often used as a coping mechanism in connection with cognitive dissonance — and by bringing them to the wider discourses, as can be seen to an extent in the data discussing the new meatways.

As mentioned in Chapter 3, creating new narratives can be an important part of normalising something new. It can be about imagining a future where this “something” is a positive part of life (Stibbe, 2015). Not being able to imagine such a future, makes this “something” much less likely to become reality. An increasing amount of calls are indeed made for positive frames and narratives about sustainable futures, both in academic literature and in the media. On similar lines, there are calls for new stories about a future where animals are no longer farmed for

---

56 In many languages, e.g. in English, the original meaning for “meat” was actually “food”, as discussed in Chapter 3.

food, as currently, we have difficulties imagining a world without meat animals.<sup>57</sup> To some extent, the data does include such stories, including stories of the future involving the new meatways.

The CM article, in particular, is imagining positive futures when talking about “doing something new” with cultivated meat and fish; them having “taste of the future”, with their inventors exploring “new culinary possibilities” and “extraordinary dishes” with “structural wonders”, and the plant-based protein innovators’ “life mission” being to “transform the food industry”. The CM posters focus less on the future food products themselves — apart from reassuring doubters that cultivated meat will become feasible in terms of price in the not so far future, and this will make it sellable to consumers — and more on imagining a world where cultivated meat is widely eaten instead of conventional animal-based meat:

*Meat from animals will become a premium product and with time may become socially unacceptable in many societies. It's easily possible to imagine a world where eating animals is viewed as little better than cannibalism is viewed now.*

CM132, 20 Sep 2017

*Even more farmers would become custodians of nature, rather breeders of animals [in response to a question by another poster as to what will happen to all the animal farmers of today].*

CM133, 20 Sep 2017

*Time, I feel, will also produce more willing consumers, people not yet born who will grow up with this as an entirely normal idea. I feel absolutely certain that cultured meat will one day be commonly eaten the world over.*

CM143, 20 Sep 2017

*It will take a sufficiently long time, and grow sufficiently gradually, that all livestock alive today will have been and gone. Fewer sheep and cows will be bred. Although we'll still presumably want wool and milk, at least until someone grows a wool or milk culture.*

CM150, 20 Sep 2017

The FLEX article imagines how a small reduction in meat eating (10%), feasible for everyone, would be “a huge win” for lessening the negative impacts from meat, in addition to being positively less than “perfect”, while one would eat “as many foods as possible that [are] good for [one’s] body and good for the planet”. In this narrative, the negativity associated with vegetarianism and veganism is wiped away with flexitarianism, since “you cannot ‘fail’ at trying to eat better; and you’re not a hypocrite if you do your best”. Although such a 10% reduction may be unrealistic in

---

57 See e.g. the 2017 film *End of Meat* by Marc Pierschell.

terms of creating “a huge win”, and the idea behind the kind of flexitarianism that the FLEX article is promoting is actually about much larger reductions, the positivity of the narrative could no doubt help start a change at some level at least. The FLEX posts include stories of positive change in the present, but equally applicable for the future:

*As a family we started to cut right back on meat consumption when my son turned to a vegan diet. Everyone is healthier and happier with their diet and we're all trying different things.*

FLEX53, 25 Jun 2017

*The kids have gone vegan and vegetarian and we've supported them in that [...] and we have gone almost fully vegetarian partly for simplicity, but mainly due to an acceptance of the arguments for, such as health, environmental concerns and animal welfare. [...] It feels really good and I think we'll stick to it.*

FLEX103, 25 Jun 2017

And the FLEX posts also include a narrative of a future without meat:

*The meat industry is the biggest source of human-caused suffering in history. But reduc-tarianism is surely part of the solution. The meat industry and factory farming in partic-ular will be a thing of the [past] one day.*

FLEX121, 25 Jun 2017

The PBM article is more modest in using emotive framing, nonetheless, the positive future promise of plant-based meat start-ups is to make “burgers so realistic that even an ‘uncompromising’ meat eater won’t be able to tell the difference” while offsetting “some of the damage done by cows and [satiating] a beef-hungry American population”. On similar lines, the PBM posts focus on the future products, with some posters imagining “a burger that tastes like meat, costs a 5th of the price, is actually healthy, and doesn’t decimate the environment” being a winner for both its inventor and the world, while “having a part in annihilating the meat industry”. The making of the future products would be relatively straightforward as:

*Plants grow almost everywhere on earth. Breaking crops down to their molecular struc-tures and rebuilding them into a “meat” alternative would not necessarily require a specific crop. Local production facilities would reduce the issue of transportation.*

PBM119, 3 Jun 2016

As regards how to manage future agriculture with the new plant-based proteins providing food for everyone:

*They could use the land that is currently used to grow food for cattle. Then they can re-habilitate the land the cows currently use into forest. Or whatever it was before the cows*

*got there.*

PBM118, 3 Jun 2016

The INS article is the least enthusiastic about positive future with new meatways and merely asserts that “novel foods in Western diets will incorporate insects to some degree, in a similar way to the spread of sushi from Japan in 2000s”. Some of the posts that follow the INS article take an equally pragmatic view to the future of eating insects as the PBM posts do with new plant-based meats, in imagining insects simply incorporated in existing processed foods:

*If it looks the same or better, tastes the same or better, is healthier with less saturated fats, and is safer for the reasons above, plus all the other reasons, least of all price, why not?*

INS13, 5 Nov 2015

Similarly, farming insects in the future will be straightforward:

*Sometimes the improved in new and improved isn't a lie. And you could farm insects the way we currently farm free range chickens or grow tomatoes in greenhouses, except there'd be a lot less cruelty, and they'd be easier to harvest at the end.*

INS16, 5 Nov 2015

Frames that work together can build a narrative (Olsen, 2014). Viewed together as groups of frames, the above narratives about the future with new meatways incorporate all three framing devices, factual, normative and emotive, focusing on practical aspects, how things ought to be, and how positive such new meatways can be. Incorporating all three elements in single narratives would likely be important for impactful, positive stories about the future.

## 5.5 Conclusion

My two research goals set in Chapter 1 are, firstly, about exploring social practice theories and the connections between discourses and social practices, in order to create a framework that could help enable purposive change in unsustainable social practices, and secondly, and more specifically, about how the new meatways and discourses around them could enable a purposive transformation in meat-eating related practices. Chapter 6 will present more specific findings from this Chapter 5 related to my research question while reflecting in detail on the first more general research task.

As regards this chapter, in employing critical discourse analysis to study my research question, I have taken a kind of wait-and-see attitude (Tonkiss, 2004) to the data. As a result, I have found several potential ways discourses around the new

meats can make a difference for transforming unsustainable meat-eating related practices. Some of these are based on concepts discussed and developed earlier in the book and reflected in the data, and some are arising from the data itself.

Based on the conceptual developments in Chapter 3, I argue that the discourses around the new meatways can enable purposive transformation in meat-eating related practices through their agentic power to increase discursive consciousness of current, unsustainable practices, and the related conflicting values and emotions. In the process, strategic ignorance may be diminished, discursive consciousness increased, and value priorities and dispositions better acknowledged. The practices may open up discursively, which can be seen as a prerequisite for purposive change.

Each of the sections to this Chapter 5, apart from the introductory Section 5.1, includes one or more answers to my research question. Cognitive framing is relevant throughout. More specific discussion will follow in Chapter 6, but to describe the sections briefly, Sections 5.2.1 and 5.2.2 examined frames and their connection to values. Section 5.2.3 studied the two conceptual metaphors of the journey/continuum and the hungry beast in relation to how they can explicitly and implicitly impact on the stability and instability of meat-eating related practices. Section 5.3.1 focused on strategic ignorance and the related coping strategies, while Section 5.3.2 examined the relationship between the new meatways and vegetarianism and veganism. Finally, Section 5.4.1 centred on labels and labelling, and Section 5.4.2 examined processes of normalisation of the new meatways, as reflected in the discourses.

In Chapter 6, I will elaborate further on the results from the data, while connecting them more with the conceptual developments in Chapter 3. I will also make connections from the discourse level back to the level of social practices.

## 6. Conclusions and discussion

---

As scientists from the Johns Hopkins Center for a Livable Future in the United States write:

Demand-side food system solutions such as shifting diets and reducing wasted food have vast potential for helping to achieve the Paris Agreement goals and keep global warming within 1.5°C. Without recognizing this and taking action, there is virtually zero chance we as a global community can meet our climate goals. Without recognizing and implementing this critical solution, the global community will also miss out on opportunities for supporting health and environmental co-benefits.

Johns Hopkins Center for a Livable Future (2018:7)

Part of the larger journey towards societal sustainability, the grand journey of transformation of the current meat system has arguably already started, even though meat consumption statistics still indicate otherwise. Increasingly, the production and consumption of meat are problematized, and simultaneously, new meatways are created. Discourses around these new meatways create potential leverage points for purposive change, as established practices and frames are questioned and reflected on within discursive consciousness, new meanings created, and value conflicts around meat acknowledged. These discourses link further to the larger sustainability questions, and the meat system could even function as a test case for our collective agencies and capacities to transform.

Apart from focusing on the issue of meat, I have explored social practice theories in this book, and specifically, drawn a bridge between social practices and discourses. Until recently, this connection has received less attention in the social practice theory literature of the new millennium. As I will discuss later, discourses are, however, rather essential for purposive change towards sustainability in the mesh of an infinite number of social practices that constitute our current societies.

In this last chapter, I will first revisit, in Section 6.1, my two research goals, the *research task* for Chapter 3 and the *research question* for Chapter 5, and the purpose of the work itself. Subsequently, I will present conclusions from both the conceptual work and the empirical analysis and make some further comments on those.

In Section 6.2, I will recapture my thoughts on what specifically to do with the problem of meat, in light of the explorations in this book. I will also briefly bring up some issues related to research on transforming the meat system. Section 6.3 will conclude the chapter by including a brief discussion on limitations as regards the empirical part, by discussing the contribution that this work could make, and finally, by reflecting on the work as a whole.

## 6.1 Conclusions from the analyses

The purpose of this book, and the work that it is based on, has been two-fold. My general research task from Chapter 1 was to explore social practice theories and the connections between discourses and social practices, in order to create a framework that could help enable purposive change in unsustainable social practices both at individual and societal levels. As regards my empirical focus, my more specific research question explored how the new meatways and, in particular, discourses around them could enable a purposive transformation in meat-eating related practices, an urgent issue, as discussed in Chapter 2. For both analyses, I have focused on discourses, and their connections — through cognitive frames (on the side of discourses) and general understandings (on the side of practices) — to values, emotions, and knowledge, as well as on strategic ignorance of knowledge and conflicts between values and emotions.

My foremost ambition in this work has been to obtain new insights into social practice theories, potentially useful for policymaking. As Shove et al. (2012) argue, the main benefit of social practice theories for policymaking processes is in that they redefine the policy focus, and in particular, emphasize the need to address all main elements of practices, rather than (only) consumer behaviour. An example from past policymaking is the Japanese Cool Biz/Warm Biz campaign which in effect reconfigured elements (meanings, technologies, competencies) of the practices of office clothing in Japan with a successful outcome. Taking a practice theory view on general healthy eating as another example, such policy could address comprehensively the obesogenic environment, the availability and pricing of foods in shops, schools and other public catering (e.g. through taxes, regulations, guidelines, etc.), offer free cooking classes, and work on the meaning of healthy/unhealthy foods, rather than merely produce nutrition guidelines for education, and place responsibility for following those on individuals.<sup>1</sup> To the above I would add,

---

1 The Cool Biz/Warm Biz campaign was not intentionally a policy project based on social practice theories. Further, as Shove et al. (2012) remind their readers, large-scale policy projects need a support network of non-policy actors, and “transition-style policy is not about deliv-

together with Mont and Power (2013), that policymakers need to take the issue of strategic ignorance seriously, as it tends to prevent action at different levels.

My objective for the empirical part in Chapter 5 has been to examine some of the conceptual structure developed in Chapter 3 through real-life discourse data. My ultimate ambition in this work has been to produce something that could, in a small way, contribute to helping societies move away from environmentally destructive ways, in particular including those related to intensive animal agriculture.

Among other things, qualitative research seeks to *generate* new hypotheses, rather than prove existing ones (Curry et al., 2009). My conclusions, as discussed in the following sections, can be seen as such hypotheses, some of them to be investigated further.

### 6.1.1 Theory on transforming social practices towards sustainability

In this section, I will explain, via a sketch in Figure 6.1, how a purposive transformation of social practices can take place via their connections to discourses.<sup>2</sup> These pathways would apply particularly to those unsustainable practices which are more complex and deeply embedded in societies, and people's lives, and therefore particularly challenging to transform. Change may be partly technological and material or involve challenging and transforming various powerful industries. However, it also involves changing value priorities and worldviews at individual and at societal levels, addressing emotions and strategic ignorance, along with tackling the habitualness of practices.

According to social practice theories, the world we live in largely consists of an innumerable and often interconnected social practices as a nexus, or rather, multiple nexuses. With the broad aim of sustainability, many of these practices need to transform in smaller or greater ways. Since practices are largely interconnected, to be effective, the transformative changes often need to apply to not just individual practices, but societies in general. The concept of distributed agentive power is significant, however. The different old, and importantly, *new* elements of practices, as well as the connected discourses, have such agentive power, and this means that practices can transform from within, rather than from the outside, especially since there is no true "outside" in a world of interconnected practices.

The process in Figure 6.1 originates from, for example, a sustainability-related societal problem *seen as new*, due to more societal focus on it, and especially due to *emerging new solutions* (such as new meatways), often involving changing elements of the social practice(s) in question. A previously common path towards ei-

---

ering plans and advancing on ready-made goals, but about moving towards always-moving targets" (idem:162).

2 Some of the connections are from literature discussed in Chapter 3, others are original ideas.

ther indifference or strategic ignorance becomes somewhat less universal in such a new situation. The issue of strategic ignorance — of knowledge, and conflicting values and emotions — is critical, and helps to keep practices discursively closed (something that is ignored, is not discussed), which in turn can benefit some of the societal vested interests that wish to maintain the status quo. Related unsustainable practices would tend to persist together. However, the difference between actual indifference — where no conflict between values, for example, exists — is that strategic ignorance includes a sense of responsibility (Onwezen & van der Weele, 2016).

Although practice theories maintain that the everyday lives of people are not spent in discursive consciousness, but rather in practical consciousness and routine, autonomous action, discourses do encompass the rare instances of deliberation about social practices. As I argued in Chapter 3, the particular link between discourses and social practices occurs through cognitive frames (on the side of discourses) and general understandings, an element of social practices, as depicted in the conceptual structure in Chapter 3, and in Figure 3.3. Discourses can, therefore, be seen as essentially connected to social practices. Moreover, the connections from both cognitive frames and general understandings to values, emotions, and knowledge, and the power of cognitive frames to produce, maintain or transform meanings, are all essential to the framework.

Importantly, conflicts between values, between emotions or between knowledges are common to both practices — partially determining what we *actually* do — and discourses — partially determining how we talk (or do not talk) about what we do, might do, or do not do. Where doing and talking about doing are not in line with each other, it is exactly these conflicts that cause the discrepancy. However, when there are no conflicts (e.g. with individual carnists), what we do and what we say may be more in line with each other. The critical point to note about this is that when necessary change is restricted at some levels of societies or individuals, these conflicts and their strategic ignorance need to be addressed first, and addressing them through discourse is a realistic way to do this.

Further on Figure 6.1, the related new discourses create new discursive consciousness of the practices, and possibly awareness of conflicting values and emotions as well. Strategic ignorance and discursive consciousness work in opposite directions. Although somewhat uncomfortably (due to emotional conflicts), strategic ignorance helps to maintain the status quo, while discursive consciousness may offer opportunities for change. Therefore, the more public discourses there are about, not only problematic practices, but the related values (or emotions), the better — and values facilitating or hindering sustainability are of particular relevance here. An important distinction is that between more stable *societal* value priorities and *individual* value systems which, on the one hand, include more stable value dispo-



gether with the related values, worldviews, and paradigms. Awareness of these frames as not something inevitable, but challengeable, is also important.

Still further regarding Figure 6.1, discursive consciousness as such creates discursively open practices which, combined with the new potential solutions, can lead to purposive change. New practice elements (such as new material products) tend to steer towards changing practices in any case; however, such changes may not be compatible with a transformation towards sustainability. Therefore, discursive consciousness can be seen as important for change that has larger implications to more sustainable practices. Discursive consciousness and awareness of value and emotion conflicts can create agency, and if combined with a principle of co-responsibility (the *ought implies can* principle in Figure 6.1), it can further help create purposive change. However, it is important to keep in mind that *simply doing something new* can also change frames and values, in other words, these may change during or after a particular practice transforms itself. The positive feedback loop mentioned earlier in this chapter can apply here too.

Regarding responsibility and social practice theories, seeing social practices collectively as a mesh or a nexus of many interconnecting practices, and framing them (individually) as icebergs — whereby the invisible main part of the iceberg (see Figure 3.2) is the difficult-to-change practice as an entity, involving societal power imbalances — largely invalidate individual “consumer” responsibility for change. However, distributed agentic power — found in especially new practice elements, and in new discourses, but expanded to cover societal actors involved in the practices — makes co-responsibility for change more realisable.

Although the common social practice theory view on change is that purposive change should mainly be led by policy, and/or should be collective rather than individual based (e.g. Welch, 2016), and although the dominative power of interconnected practices often inhibits purposive change at the level of individuals, some practices are more susceptible than others to individual agency. In particular, changing how and whether we eat meat, as individuals and as collectives of individuals, in particular in connection with the new meatways, such as flexitarianism, is seen possible by many.<sup>3</sup> Individual action as such may be a prerequisite for political change, especially in the most challenging issues, and meat-eating related practices seem to belong to those. In return, political change can further change individual attitudes and values, enabling a positive feedback loop.

As mentioned in Chapter 3, Voegt-Kleschin et al. (2015) see changing one’s lifestyle, in order to contribute one’s fair share, as a core duty for individuals as regards sustainability. Importantly, however, this assumes that changing lifestyle

---

3 See e.g. Goodland (2014), Raphaely & Marinova (2014), or the Guardian column by George Monbiot, <https://www.theguardian.com/commentisfree/2018/jun/08/save-planet-meat-dairy-livestock-food-free-range-steak>, from 8 June 2018.

does not *overburden* individuals, in other words, “ought implies can”. Some lifestyle changes may be considered overburdening individuals, and others not. Giving up, or radically reducing, conventional animal-based meat in one’s diet could be seen as unlikely to overburden anyone, as long as other sufficient protein sources were available. It could in principle, therefore, be seen as an individual duty to do this. However, it seems that strategic ignorance, in addition to other challenges, can be a considerable issue for individuals. New discursive consciousness can, however, greatly aid in this regard.

As Shove et al. (2012) argue, a practice-oriented approach to public policy could eventually help transform the current dominant social paradigm. Changing world-views and societal value priorities is, however, particularly challenging when the dominant social paradigm is largely invisible (as it is taken for granted), yet strongly connected to unsustainable social practices, and societal value priorities. Nonetheless, at the individual level, value conflicts are connected to emotional conflicts which cannot always be ignored due to the tensions and uncomfortableness they generate. Moreover, as noted above, more stable value dispositions can change also after the fact, in other words, after concrete action towards more sustainable practices, at either individual or societal levels, potentially creating a positive feedback loop for change.

One more immediate cause for optimism is likely to lie in widened discourses and increased discursive consciousness of unsustainable practices, and increased awareness of ambivalence and strategic ignorance of the value and emotion conflicts, and knowledge. Talking about and better appreciating the difference between more stable value *dispositions* at the individual level, and value *priorities* at individual and societal levels, and understanding that in *most* everyday situations some values are in conflict, could help us to better question, explore and challenge societal value priorities and certain unsustainable practices.<sup>4</sup> Understanding, for example, that it is not one’s “fault” to want to eat meat, even if regularly, could be morally liberating. Nonetheless, that want may have to simply be sacrificed so that a future for human societies can better be realised.

A recent case of a purposive attempt to do many of the things discussed above can be seen in what Extinction Rebellion (XR) — a new movement for societal change — is doing.<sup>5</sup> By demanding that governments “tell the truth” about climate

---

4 To have more of an impact, such wide and open discussions could be carried out in schools, in the media, in communities, in public or other non-profit campaigns, in citizen committees, in public service, etc., and be initiated by local and national governments, as well as many other organisations.

5 In addition, there is of course the Fridays for Future movement that has resulted in numerous other For Future groups. Their strategies are somewhat different from the XR movement, however.

change XR groups are likely to increase discursive consciousness and possibly manage to challenge paradigms. By demanding citizens' assemblies on climate change they are in effect asking for discourses to be more inclusive of all of society, something that can enable otherwise difficult policy action.<sup>6</sup> By setting up so-called XR cafes, or various sharing circles, the movement is offering safe spaces for value and emotion expression and discussion. And finally, the way XR refers to the "right and duty to act" in terms of citizens pushing for policymakers to act implies agency and co-responsibility.<sup>7</sup>

Regarding changing practices from within, meat-eating related practices are a particularly good example of such potential, and the empirical analysis in Chapter 5 indicates that many potential elements of change can be found in discourses around the new meatways, as noted in the following section. Meat-eating related practices are linked in various ways to many other practices (within food provisioning, within economies, and within communal and individual lives), and the meat system is an essential part of the current dominant social paradigm and capitalist market system. Confronting this to the extent necessary will likely indeed be extremely challenging, yet arguably important and urgent for sustainability. Transforming the meat system could also, however, act as a test case for how humanity can transform other unsustainable, complex systems deeply tied into established ways; systems whereby such transformation is strongly resisted by various actors.

As I argued in Chapter 3, meat-eating related practices can have particularly strong distributed agentic power, in terms of the new meats themselves, in terms of the discourses around the new meatways changing meanings, lessening strategic ignorance of knowledge and of value and emotion conflicts (or lessening the need for other strategies for coping with cognitive dissonance) and increasing the acknowledgement of ambivalence. Further, both individual agency and collective emotional agency can be deployed by individuals or by communities for changing meat-eating related practices from within. The example of conscious flexitarians (Verain et al., 2015) acknowledging co-responsibility, and using their political

---

6 The work of a citizens' assembly on abortion rights enabled policy action and led to a successful referendum expanding abortion rights in Ireland in 2018. This is referred to by Extinction Rebellion as an example of how citizens' assemblies can bring about change. Citizens' assembly as such is a fairly established form of deliberation (relating to the concept of deliberative democracy) used in certain nationally important issues in a number of countries. In 2019-2020, a Citizens' Convention on Climate met in France (for results, see: <https://www.democracy-international.org/final-propositions-french-citizens-convention-climate>).

7 The primary way in which Extinction Rebellion tries to actively create change is with non-violent civil disobedience. However, it can be argued that the means discussed in the text here may be equally important, and importantly less divisive. For more on Extinction Rebellion, see for example, their own website at <https://rebellion.earth/>.

agency (Halkier & Holm, 2008) indicates that there are possibilities reflecting and applying the *ought implies can* principle.

As social practice theories argue, change as such is constant in social practices. However, humans can “change the change” (O’Brien, 2012:590), although this requires both agency and responsibility, and addressing the “conscious and unconscious assumptions, beliefs, values, identities, and emotions of individuals and groups that influence perceptions, interpretations, and actions” (idem:589). Using social practice theories for analysing the challenges, as well as the solutions, may be valuable.<sup>8</sup> This may be especially so when the theory is adapted to include discourses, and strong connections to values and emotions, and when allowing for some emphasis on distributed agentic power.

### 6.1.2 Empirical data on discourses

In this section, I will recontextualize my findings from Chapter 5, taking into consideration the conceptual structure in Chapter 3. The data consists of four online articles on the new meatways from the Guardian newspaper (between 2015 and 2017) and discussions by posters following the articles. In short, my main claim is that discourses around the new meatways can help open meat-eating related practices up discursively, reveal somewhat hidden frames that have supported existing practices in the last decades, and subject these practices to *purposive* change. Two conceptual metaphors present in the data nail down well two main issues regarding transforming the meat system towards radically less, non-intensive production with radically lower negative impacts. I will discuss them first in the following paragraphs. After that, I will outline several other issues related to the new meatways that the data analysis has brought up.

The first metaphor, the *hungry beast*<sup>9</sup> addresses the still very present meat demand paradigm which needs critical reassessment. The issue of whether feeding the future world with conventional animal-based meat is more about demand (actual need among populations), or supply (further expansion of the meat industry and its dominative power), can be seen through the hungry beast metaphor in the data. The beast is a singular entity consisting of (various groups of) meat-hungry humans in the world. Alternatively, it is the (somewhat abstract) demand for meat itself, as suggested with certain expressions in the data. The beast metaphor is not

---

8 Until now, policymakers have on occasion used social practice theories for problem analysis, but have then usually gone back to older, individual behaviour change related policy methods in their search for solutions (Welch, 2017a).

9 To my knowledge, this is not an established conceptual metaphor, although similar expressions can be found in the Metaphorlist (Lakoff et al., 1991).

meant to depict actual humans as animal-like, nor to deny that there might be populations, especially in the Global South, for whom eating some more meat could significantly increase food security; it is simply a tool to reveal the metaphorical dimensions of seeing the global meat demand as a natural force and something that cannot be argued with.<sup>10</sup>

The new meats, i.e. cultivated meat, the new plant-based meats, and even insects to an extent, are partially functioning in the same Hungry beast (Meeting the demand) frame<sup>11</sup> with the underlining notion that these new food products are absolutely necessary to satisfy the starkly increasing demand for meat. One of the consequences of the dominance of the Meeting the demand frame in policy documents, research reports, and mainstream discourses regarding how to handle meeting the global food and/or protein demand by 2050 is that until recently, policies have not supported meat reduction, or a transformation towards plant-based proteins, anywhere in the world.<sup>12</sup>

The second metaphor of a *journey* illustrates how sustainable ways of eating protein, including some meat, *can* be realised. This metaphor is present in the data, and in literature (Jallinoja et al., 2016). When framing meat eating and its transformation using this metaphor, different meatways are seen as points on a continuum, where many possible journeys along that continuum can be made (see Figure

---

10 In fact, the hungry beast could even be seen as the big and powerful meat industry, hungry for growth and more profits.

11 Frames are often written with an initial capital letter.

12 One significant sign for change are at least the 2021 Danish and 2019 Canadian food guidelines that both seemingly encourage people to eat more plant-based proteins than meat. See <https://altomkost.dk/raad-og-anbefalinger/de-officielle-kostraad-godt-for-sundhed-og-klima/spis-mindre-koed-vaelg-baelgfrugter-og-fisk/> (in Danish) and <https://food-guide.canada.ca/en/>.

6.2).<sup>13,14</sup> Seeing the different meatways as points along a continuum can facilitate even more radical changes.

There are three specific benefits to using a frame that employs this metaphor. Firstly, when all meatways (including veganism) are seen as stops on the same road, they are not as different from each other, and people at different points of their journey may have more understanding and tolerance towards each other. Coping strategies to deal with cognitive dissonance may be less present. Secondly, a benefit to thinking of reducing meat eating as a journey is that for many, a slower change in individual eating habits may be better — easier to work through, and more durable in the longer term — than a quicker switch (also argued by Zaraska, 2016a).<sup>15</sup> Thirdly, when moving from one meatway to another is seen as a journey, one can indeed go back and forth on this journey, and there is less need to identify oneself, for example, as a lapsed or failed vegetarian when currently eating some meat. Moving away from strict to more relaxed thinking can, in fact, help change (de Boer et al., 2014; Jallinoja et al., 2016). Important from the sustainability point of view would, of course, be to keep moving, at least collectively, as much as possible, towards less resource-intensive and destructive meatways.

As regards the relationship between the new meatways and the above frames, as portrayed by the two metaphors, the new meats — cultivated and plant-based meat and insects — can in principle work in both frames. However, whether the new meats can be truly sustainable, if they simply replace animal-based meat (satisfying the hungry beast) without the principle of meat reduction, i.e. flexitarianism, is by no means clear. This depends on whether the scale of impact reduction would

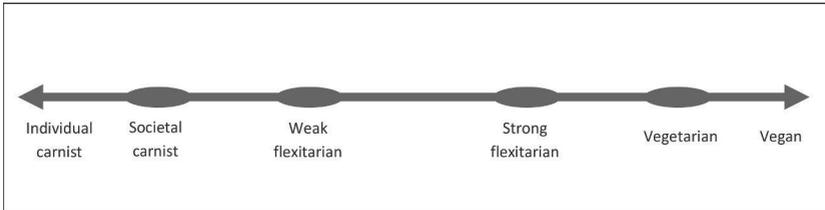
---

13 Figures 3.8 and 6.2 are identical. Figure 6.2 is provided only for convenience.

14 Carnism (in Figure 6.2) is the ideological background to eating meat. The socially shared beliefs of this particular ideology would include meat being Normal, Natural, Necessary and Nice (Joy, 2010; Piazza et al., 2015). I argue in Chapter 3 that an *individual carnist* tends to express *carnistic dominance*, for example, supporting the killing of animals for meat, or being indifferent to the fate of animals (Monteiro et al., 2017), and a *societal carnist* tends to express *carnistic defence*, i.e. defending the practice of eating animals, while at the same time not wanting to harm animals (idem). As non-dominant meatways, vegetarianism and veganism may seem to have strong ideology behind them, but this is not necessarily so, or at least the ideology need not be stronger than that behind carnism. Generally in this book, I refer to vegetarianism and veganism to describe certain meatways. However, some people make a clear distinction between a vegetarian or vegan diet and the ideology itself. I do not see that the distinctions are clear and strong enough to necessarily differentiate between the two. Firstly, there is no single definition for vegetarianism or veganism as an ideology to separate it from a diet that is in no way ideological. Secondly, as meat eating is usually not seen as an ideology, although it can arguably often be such (as carnism), one can see vegetarianism and veganism in a similar light.

15 The discourse data also includes indications that this could be the case at least for some people.

Figure 6.2: The continuum and journey of different meatways revisited



Source: Figure by author. The idea of such a continuum is, however, present in literature (see Jallinoja et al., 2016).

Note: The vertical lines offer an estimate of the closeness of the meatways, also from an ideological point of view.

be large enough, and whether or not new, similarly problematic issues would be created with such new massive-scale industries. Such a replacement is, however, more or less the stated future aim of the emerging industries that are forming around the new meats, in particular the cultivated and plant-based meats. On the other hand, the new meats can work well when replacing conventional animal-based meat along the journey of meat reduction, within the principle of flexitarianism, especially its stronger forms. Whichever paths are explored and taken — or parallel paths may be taken simultaneously — the ultimate goal has to be about radical absolute reductions in negative impacts.

The empirical analysis also looked for specific values connected to frames, with the idea from literature that a stronger presence (or prioritization) of certain values, at individual and at societal or cultural levels, can facilitate sustainability, while a stronger presence of certain other values can hinder it. Seen through the Schwartz value theory (Schwartz, 2006b; 2012), the values potentially facilitating sustainability include values such as co-responsibility, concern for, and unity with nature, social justice and equality, while the values that can hinder sustainability include values especially related to power and achievement, seen as materialistic values at the cultural level (Schwartz, 2006b). The frames that tend to be fairly dominant in the discourse data about the new meatways — exploring new, seemingly better products for the market — may not have strong links to the sustainability-facilitating values. On the other hand, the still somewhat less dominant frames about the new meatways — particularly to do with *sufficiency* — may have stronger links to these values. Although value conflicts may prevent sustainability-facilitating values as such from influencing action (see e.g. Maio, 2011), all the new meatways have, in principle, a benefit for sustainability. This is because, compared to the old meatways (eating conventional animal-based meat daily or following a vegetarian

or vegan diet), the new meatways can better align values related to sustainability with values often being prioritized in daily food-related practices, such as providing for family, convenience, tradition, freedom, politeness, and pleasure. This is a clear benefit for the new meatways, as value conflicts, and strategic ignorance of them, are a significant issue hindering change.

Further, regarding frames, ideologies, and paradigms present in societies, and especially present in discourses around sustainability, the emergent frame related to flexitarianism, at least in the way it is constructed in my data, supports the concept of sufficiency, important for those seeing *strong sustainability* as a necessary societal goal.<sup>16</sup> On the other hand, the new meats are alternatives that can function well in the current dominant social paradigm, represented, for example, by capitalism and carnism. I will still return to this distinction later in this chapter.

Specific value related issues to do with meat-eating related practices include various coping strategies. The new meatways, and the discourses around them, can have an impact on these. Firstly, strategic ignorance of value and emotion conflicts, and related knowledge, is a less discussed, but rather present phenomenon that helps to keep certain problematic practices, such as those related to meat eating, from being purposively changed. It also prevents the sense of emotional agency, necessary for change (Weenink & Spaargaren, 2016). The wider, more varied and in-depth the discourses about problematic practices are, however, the less convenient strategic ignorance is to maintain, the more discursive consciousness there is likely to be, and the easier ambivalence — regarding the conflicting values or emotions — about the practices may be to acknowledge.

The new meatways, therefore, offer a way to expand the discourse, away from the conventional animal-based meat vs. no meat dichotomy. Although the data includes resistance to the new meatways, they might eventually be less threatening than strict vegetarianism or veganism, and they might lessen the negative, coping strategy inducing discourses around vegetarianism and veganism, and even help normalise these diets further by bringing them to the wider discourses, as in my data. However, for some posters, the new plant-based meats, in particular, seem to cause similar resentment as vegetarians and vegans often do. In this case, however, it is likely to be because the new plant-based meats are presented as just as good as meat (in taste, texture, and so on), and that being so, there would be no reason *not* to eat them instead of meat. This brings out the value conflict (in those employing coping strategies) and restricts freedom of choice (for the indifferent), and in fact, the new meats make it more obvious that meat eating is a choice, not a necessity.

Meat is also a moral question that the new meatways address in different ways. Firstly, by directing discourses away from all-or-nothing (black-and-white) dichotomous thinking, the new meatways can release some of the moral burden

---

16 For a brief discussion on weak and strong sustainability, see Chapter 2.

and guilt related to meat eating via the recognition that daily meat eating and vegetarianism or veganism are not the only choices. As seen in the data, flexitarianism, in particular, runs counter to the all-or-nothing approach: it is about less harm being better than more harm. This makes it, on the one hand, difficult for meat eaters to deny on moral grounds as a viable strategy, and makes the argument about vegetarian or vegan hypocrisy<sup>17</sup> equally lose ground. On the other hand, it may be easy for strict vegetarians or vegans to disapprove of flexitarianism on moral grounds. However, many of those identifying as vegetarians are in reality strong flexitarians, i.e. occasionally still eating meat (or fish). Given that vegetarians and vegans may cease to follow their diets due to the all-or-nothing principle being difficult and impractical, especially socially, strong flexitarianism may be an identity that would be easier to maintain in the longer term.

There are two more issues to be discussed here, as regards ways in which meat-eating related practices could open up discursively. The first of these relates to labels and the second to the issue of normalisation.

Although the data includes resistance to labels such as flexitarianism, it also contains support for them. Labels can assist change in several ways. Positive labels may help people overcome initial negative reactions, such as towards some of the new meats. Further, when flexitarianism is labelled as a movement, it can help more people reduce meat eating, as the collective agency of a movement tends to lead to more recruits, and perhaps because flexitarianism may be appealing to more people than vegetarianism or veganism. Moreover, once something is labelled, adopting it becomes easier, and labelling can help with behaviour that requires particular effort through creating identity which helps to keep the behaviour. Additionally, *social labelling* can eventually help shift motivations, e.g. a behaviour that is environmentally more sustainable may start from health or social reasons, but end up being about sustainability (Cornelissen et al., 2007). This shifting motivation further enables people to persist with the diet, as indicated by some of the data. The positivity of the label is important, however, as when the label is viewed negatively by others, motivation can be lost more easily. This is often the case for lapsed vegetarians who far outnumber current vegetarians, at least in the United States (Asher et al., 2016). Although the data includes criticism, the label of flexitarianism may have potential to be seen positively, and it may, therefore, have power over labels such as vegetarianism or veganism. Promoting strong flexitarianism as a more feasible meatway than total abstention from meat would indeed seem beneficial.

Lastly, my data consists of many attempts to normalise the new meatways, partly through personal experiences (in the case of insects), through playing with

---

17 This argument about hypocrisy is about vegetarians and vegans *supposedly* pretending to be morally clean. Making such claims can be seen as one of the coping strategies for meat eaters.

concepts (e.g. insects as land shrimp) and through attempts at extending the meaning of “normal” to cover cultivated meat or the new plant-based meats, or flexitarianism, and to present conventional animal-based meat as not normal. Such processes may also change the connotations towards plant-based foods, and vegetarianism and veganism in general, into more positive ones (Donaldson, 2016a). Discourses around the new meatways could help normalise vegetarianism and veganism as more realistic options for the future, by lessening the need for negative discourses around vegetarianism and veganism, and by bringing them to the wider discourses. Imagining positive futures around sustainability is necessary, as it can help these become reality (Stibbe, 2015). To some extent, my data does include narratives of the future involving the new meatways. Viewed together from all the data, these narratives can be seen to incorporate the three framing devices, factual (practical aspects), normative (how things ought to be) and emotive (how positive such new meatways could be), constructing discursive frames more generally (Strydom, 2000).<sup>18</sup> Incorporating all three elements into *single* narratives could be relevant to impactful, positive stories about the future, making further transformation seem more feasible.

## 6.2 Final words on transforming meat-eating related practices

Since my primary focus in Chapters 2 and 5, and partial focus in Chapter 3, has been on a transformation of meat-eating related practices, as opposed to more general sustainability transformation, I will still include in this last chapter a brief discussion on how specifically the conceptual structure in this book can contribute to such a transformation. I see this transformation of the meat system as an urgent task for societies, for many reasons, but especially for both the biodiversity and climate crises. The section will end with a brief word on the potential for more research on the issue.

Even at this moment, finishing this book in late 2020, the vast majority of policymakers still seemingly ignore the issue of meat,<sup>19</sup> while an increasing number of scientists point to it as a central issue, identified as such even because of COVID-19. The discrepancy is also clear between the IPCC reports, with the SR1.5 report (IPCC, 2018) and the land-use report (IPCC, 2019) both considering GHG mitigation through diet shift an important option,<sup>20</sup> and the climate conferences (COPs), such

---

18 See Chapter 3 for more on framing devices.

19 For the denial of the problem among policymakers, see, for example, a 2018 column <https://euobserver.com/opinion/141344> by the EU Observer.

20 IPCC Special Report on Global Warming of 1.5° C states, for example, that “1.5°C pathways that include low energy demand [...], low material consumption, and low GHG-intensive food

as in Katowice in 2018, which are more political and where the issue of meat has still mainly been dealt with in the side events.<sup>21</sup> The issue may be gradually moving closer to the centre, however, possibly indicated, for example, by the critical calls from some of the Katowice participants and presentations for policymakers to take it seriously.<sup>22</sup> The 2019 IPCC land-use report may be helping push the issue onto the agendas for future rounds of negotiations. Indeed, at least at the 2019 Madrid COP25 meeting, animal agriculture was somewhat more present as an issue,<sup>23</sup> and the next COP in Glasgow, postponed until 2021 because of the corona crisis, is supposed to give agriculture a more central role.<sup>24</sup>

Generally, one argument against radical changes in animal agriculture is that many economies in the world are dependent on it. However, changing the way protein foods are produced does not mean that they would cease to be produced. The world obviously needs protein food production, but it needs different kind of production systems in order for both the natural and human-created systems to cope in the future. Imagining the specifics of an actual animal-free agricultural future for the largest economy in the world, the United States, Emery and Almy (2018)<sup>25</sup> argue that such a system could be well functioning, while offering benefits that the current system lacks, for example, in terms of healthier diets, more biofuel production and areas for rewilding and improved habitats for endangered species.

### 6.2.1 Some suggestions

Chapter 2, and in particular Box 2.3 include recommendations from literature on how to transform meat-eating related practices towards radically lower meat consumption wherever consumption is currently high, or even medium high. In con-

---

consumption have the most pronounced synergies and the lowest number of trade-offs with respect to sustainable development and the SDGs" (IPCC, 2018:21).

- 21 The meat and GHG -heavy menu of the COP24 Katowice meeting itself illustrates how difficult it is for policymakers to take the meat issue seriously, see e.g. <https://www.bloombergr.com/news/articles/2018-12-03/un-climate-conference-features-meat-and-emissions-heavy-menu>.
- 22 Some reports produced for the Talanoa Dialogue, designed to help countries contribute to the UNFCCC dialogue between COP23 and COP24, also argue for the necessity of radically reducing meat consumption. See e.g. Johns Hopkins Center for a Livable Future (2018).
- 23 See e.g. <https://brightergreen.org/cop25/>.
- 24 See e.g. <https://www.carbonbrief.org/cop25-key-outcomes-agreed-at-the-un-climate-talks-in-madrid>.
- 25 This short report produced for the Good Food Institute is in reaction to a journal article by White and Hall (2017) whereby it is argued that such a transformation away from animal agriculture would leave the US economy and population worse off. Emery and Almy offer proof of a bias in favour of the livestock industry in the White and Hall article, while pointing out their flawed modelling and erroneous assumptions.

nection with this discussion, and based on relevant literature from Chapter 2 and my work in Chapters 3 and 5, I would emphasize the following, as regards the connections between practices and discourses supporting other (policy) action for change:

1 — There needs to be a further increase in discussions around the issue of meat, spreading to as many parts of society as possible, and encouraged by civil society organisations (CSOs) and policymakers. The main focus should be on the multiple benefits of eating less or no meat, so that most people could agree with some part of the message.<sup>26</sup> Further focus should be placed on positive narratives about a future with little or no intensive animal agriculture, on questioning assumptions such as the Meeting the demand frame (the conceptual metaphor of the hungry beast), and on talking about value priorities and value and emotion conflicts, strategic ignorance of the issue at different levels of society, and co-responsibility for solving the problem. Importantly, wide discourses may help gain support for new, transformative policies. Moreover, the wider, more varied and in-depth the discourses are, the less the issues may be ignored. The case of Extinction Rebellion discussed earlier in this chapter indicates that the pathways in Figure 6.1 may not be theoretical only.

2 — The main focus of the transformation needs to be on the radical reduction of environmental impacts.<sup>27</sup> Options having the largest positive impacts while still being pragmatic, flexible, and maintaining some cultural diversity should be promoted by policymakers, CSOs, change agents, and other societal actors, and enforced by regulation, while, to the extent necessary, working with especially farmers, and the rest of the relevant industries. Most likely such options would entail strong flexitarianism, i.e. consuming pulses, with some new meats and occasional conventional animal-based meat. While flexitarianism can be used as a concept within weak sustainability, implying smaller reductions in meat eating together with efficiency gains in meat production, when focusing on the idea of sufficiency, flexitarianism can also function as a way of possibly getting people used to the idea of strong sustainability in other areas of life and society as well.<sup>28</sup> The idea of the journey of meat eating along the continuum (the conceptual metaphor discussed earlier) can be very helpful in enabling change.

---

26 Indeed, many recent reviews of the issue combine benefits from reduced meat consumption to both sustainability and human health. See, for example, IAP (2018).

27 For discussion regarding the critical relevance of a focus on impacts of sustainability transformations, see e.g. Geiger et al. (2018) and Gjerris et al. (2016).

28 Verain et al. (2015) argue that the contrast between weak flexitarianism and strong flexitarianism can indeed be seen in terms of an efficiency approach (or *product-related consumption*, consuming differently and more efficiently in terms of resources), and a sufficiency approach (or *act-related consumption*, consuming less).

3 — The good news regarding change is that meanings and value priorities (or individual value dispositions) can, and probably will change during and after such processes or journeys of transformation, if not already beforehand. This is a point that does not invalidate a focus on values, but gives some optimism, as regards the generally slower societal change in value priorities and cultural meanings.

## 6.2.2 Note on future research on transforming the meat system

Many mainstream recommendations call for research on making the production of meat more efficient and intensive (e.g. Gerber et al., 2013, a report by the FAO), in line with the demand paradigm. However, some recommendations are focusing more on transforming the system, and on reducing especially consumption and demand for meat. A consequence of the meat demand paradigm is, however, that research into behaviour change in meatways has still been lagging far behind research on technological emission reduction from meat production (Garnett, 2011). Among others, Wellesley et al. (2015), Hartmann and Siegrist (2017) and IAP (2018) all call for more research on how to encourage or motivate individual behaviour change in terms of eating less meat. More comprehensively, Garnett (2011) sees a need for more research on how to shift food consumption in the Global South so that the rich world problems with diet — for example, to do with overconsumption of meat — could be better avoided.<sup>29</sup>

Notably, there are few if any research recommendations, however, on how to tackle the perhaps most challenging issues: to decrease (from a sustainability point of view) negative industry influence on meat-related policy,<sup>30</sup> to decrease individual or societal strategic ignorance, and to widen the range of research being funded, so that research on changing the production of meat includes research on a fundamental transformation of the system.

On the theme of what to research, Elliott (2013:329) argues that *selective ignorance* (a kind of strategic ignorance as well) affects what is researched and what is not researched, for example, via "decisions about what questions to ask, what metrics or standards to employ, what concepts to use, what research strategies to

29 This in a similar way in which some locations in the Global South have managed to shift from having few, if any electricity supplies, to using renewable energy, without having to go through a phase of getting electricity from fossil fuels.

30 The meat industry power and influence are discussed in Chapter 2, and power is also discussed in Chapter 3. More generally, and as discussed earlier, a social practice theory approach, especially in the stronger versions of the theories, takes dominative power in society, often inhibiting change, to largely reside in practices themselves (practices as entities), i.e. in the invisible iceberg (see Figure 3.2), as well as in the interconnectedness of practices. I consider discourses to be connected but separate from social practices, and power in discourses is another issue discussed in Chapters 2 and 3.

pursue, what technological applications to develop, and what information to disseminate". Therefore, discussing, for example, the values behind certain research could be more important than trying to obtain as much knowledge as possible, as with the obtaining of that knowledge we have already made some choices (about what to obtain) based on values. However, these influential values are normally barely discussed, if at all (Sarewitz, 2004). Elliott (2013:342) sees this issue applying in particular to agriculture-related research, as the research choices in this area affect "society's awareness of the environmental and social problems associated with current agricultural practices" and "whether specific alternatives to current agriculture appear feasible and important".

## 6.3 Discussion

In this last section, I will first make some reflections on working on this project and go briefly over the limitations and alternative paths to the empirical part. Following this, I will discuss the potential contribution that this work could make, before concluding with a broader reflection on both the conceptual and empirical work.

### 6.3.1 Autobiographical reflections

During this project, I have dealt with my own strategic ignorance as regards meat to a considerable extent (as compared to before) and nowadays identify as being somewhere between a strong flexitarian and a vegetarian, eating a good amount of pulses, but being curious about the new meats, as well as experimenting with some old plant-based meat replacements. Similarly, I have ended up in some way dealing with my strategic ignorance as regards ecological threats such as climate change or biodiversity loss. In 2016, my emotions finally fully caught up with my long-time awareness of the issues, and after some discussions and self-reflection, I realised that the best way to deal with the related negative emotions was to acknowledge them. I felt that, in addition to being less stressful, this could lead to positive actions at a personal level, such as completing my doctoral dissertation that led to this book.

Further on the work itself, I have learned to find some balance in my writing, somewhere between detached and passive, and emotional and involved. As is often the case in qualitative research projects (Bazeley, 2013), putting together the work has been a question of going back and forth between the potential research questions, the (potential and final) data, and the conceptual structure. Each of these elements has been shaped and reshaped by the other elements several times during the process. This all has helped me build some more confidence in my abilities to develop and link ideas and express them in a more comprehensible manner.

One event particularly helped me forward in the conceptual part and is therefore worth mentioning. The research task I set for Chapter 3 was born at a workshop in Helsinki in 2017, from discussions regarding potential connections between social practices and discourses. Senior colleagues there suggested that making this link as strong as possible could be challenging, but it could also be a theoretical contribution in this work. In the end, this connection did turn out to be central to the conceptual structure.

While working on this project, I have read and learned a lot, and widened my understanding of human behaviour, as individuals, as collectives, and as carriers of social practices, implicitly or explicitly embracing or rejecting the linked paradigms, worldviews, and values. Peattie (2011) argues that sustainability researchers need to be paradigm breakers and paradigm makers, instead of paradigm takers. I believe that a paradigm shift lies ahead for humanity — by design or by disaster — and making sense of the kinds of futures that may be possible through a transformation is vital.

### 6.3.2 Limitations of the empirical analysis and alternative paths

Perhaps the most significant limitation of online data such as the data I used is its anonymity. Not only because of the negative issues that anonymity can bring about, as discussed in Chapter 4 (although anonymity has its positive sides too), but because there are usually few or no demographic data elements attached to such data. However, seeing the discussions as entities — rather than as a group of individual comments from posters the analyst would wish to know more about — and as reflections of particular discourses, makes the demographics somewhat less important. Nonetheless, seeing differences or similarities between locations (e.g. posters living in the United Kingdom or the United States) or gender, for example, would be interesting. Likewise, being able to identify comments that originate from organised attempts to influence the discourses would be useful in terms of discussion on power.<sup>31</sup>

Another limitation of the empirical study in this book may be that I restricted the data to one newspaper and four documents.<sup>32</sup> A larger amount of data at least could have allowed for some possibilities for comparisons. However, had I included significantly more data, the level of detail would have necessarily been less intensive, or the analysis itself would have had to be different, perhaps including some quantitative elements. The richness of the discourse did become evident already from this smaller amount of data.

31 Assuming that such attempts at least occasionally might exist in this kind of data. See a brief discussion in Chapter 4.

32 A “document” refers to a newspaper article together with its reader comments.

The way that I used the discourse data in this book was intended firstly, to explore some of the concepts discussed in Chapter 3 (such as coping strategies in connection with the meat paradox), and secondly, to study the discourses with a more open mind. A smaller amount of data has seemed to fulfil these two purposes, although having the time to analyse a larger amount of data, in the same manner, would have been useful as well. In a way, the empirical part of this book can also be seen as a case study, being somewhat limited in scale.

Finally, it might have been interesting or useful to include a variety of different data, in addition to the particular discourse data; for example, expert interviews or focus groups, to test some of the elements in the conceptual structure, or to discuss the results of the analysis of the online data. Given that the conceptual work is at least as important for this book as the empirical analysis, and that completing the conceptual work was equally or more time-consuming than the empirical part, expanding to different kinds of data would not have been practicable. However, such research might be an avenue to pursue in the future.

### 6.3.3 Potential contribution of the work

As regards the conceptual structure in this book, scholars writing on social practice theories in this millennium, and especially in the last 5-10 years or so have developed the theories extensively, even if there still exists more of a multiplicity of theories, rather than one single social practice theory. However, they have mostly not engaged in examining in detail the relationship between discourses and social practices. This is likely to be so at least in part because scholars usually originate from either tradition and do not tend to cross over (Nicolini, personal communication, 26 February 2018). Examining this relationship is one of the main focuses in Chapter 3, and I believe this work to be an original contribution to theory on this issue.<sup>33</sup>

Analysing societal discourses may partly address the concern of Welch and Warde (2015) as regards the focus of social practice theoretical research largely staying at the micro-level of practice performances, and therefore it not being able to offer more persuasive conceptual answers to policymakers on how to make societal change. Focused on the links between discourses and social practices, my work aspires to offer some help in finding such answers.

Furthermore, in an interdisciplinary manner, the conceptual structure includes concepts from outside social practice theories to expand on the connections from

---

33 The critical discourse analysis in Chapter 5 can be seen theoretically compatible with social practice theories (Daniel Welch, personal communication, 18 December 2018), for example, through the work of Norman Fairclough. This link further sets the connections between discourses and social practices.

practice elements to values, emotions, and knowledge. Especially the connection to values has often had a minor, or near non-existent role, in social practice theoretical writings. However, as Bai et al. (2016) argue, a future in the Anthropocene requires an emphasis on underlying values. Since values, emotions, and knowledge are closely connected (as also discussed in Chapter 3), I see all of these connections as vital, especially when focusing on transforming unsustainable social practices towards something the natural and human world can sustainably cope with. On a more practical level, my work could contribute to ideas on how to purposively transform unsustainable social practices into more sustainable ones.

Meat-eating related practices are largely unsustainable and, therefore, in need of transforming. Together with the empirical work in Chapter 5, this book suggests different pathways that could be further explored. Findings from discourse analysis can provide new insights, deconstruct dominant assumptions and challenge practices (Georgaca & Avdi, 2011), such as those involved in producing animals for human use, as well as in eating such animals.

### 6.3.4 Reflections on both the conceptual and empirical work

In earlier sections in this chapter, I have covered in some detail conclusions from the conceptual and empirical work done in this book. However, in this last section, I will still reflect on working on these parts as a whole, especially as regards what has been unexpected, or particularly notable issues, viewing both parts together.

Firstly, getting into the detail of how value systems work, in individuals and at the societal level, has been a very informative experience. The value-action or knowledge-action gaps no longer seem to be the main issues inhibiting change, but indeed understanding the functioning of the value systems, and everything related to them (practices, worldviews and ideologies, emotions, and discursive framing) seems to offer more opportunity to make progress towards societal transformation.

Secondly, it has been useful to recognize that although social practice theories tend to traditionally omit the significance of the individual, and importantly, stand in opposition to behaviour-change based policymaking, there are ways to bring the individual back, so to speak, conceptually, and in actuality, in terms of collective change, and even in terms of empowerment of the individual. I appreciate the recent metaphors of seeing the social world as an infinite mesh of interlinked practices, and individual practices as icebergs where what lies underwater is the main, difficult-to-change part of the practices. I further appreciate the contradiction whereby behaviour change policies at the same time treat people in a way as objects to be changed, and as subjects capable of taking responsibility for change. It is easy to regard policymakers as necessarily first movers for change. At the same time, I see including the individual as a subject with agency, and co-responsibil-

ity, as essential for a sustainability transformation.<sup>34</sup> The positive feedback loop between individual and collective citizen action and policy action enabling and facilitating each other can work. However, it needs to start somewhere. The meat system is one area where action at the citizen level may have potential to break the cycle of inertia. And certainly, the case of Extinction Rebellion discussed earlier in this chapter shows that there can be ways to tackle inertia even on a worldwide scale.<sup>35</sup>

Thirdly, it has been a satisfying realisation to see how social practices and discourses indeed can conceptually connect through the corresponding notions of general understandings (as one of the main social practice elements) and cognitive frames (as part of discourses), both neatly connecting onto values, emotions, and knowledge. Additionally, the three framing devices from Strydom (2000)<sup>36</sup> correspond neatly to these connections. The connection between social practices and discourses also links to the above point about agency, as I believe that only through discursive consciousness of practices (rare, but still occurring condition) can agency be realised. Further, understanding how conflicts between values, emotions, or knowledges function as the glue between difficult-to-change practices and the way they are discussed, or often not discussed, has been enlightening.

Fourthly, and more specific to the empirical part, recognizing and distinguishing between the different frames linked to meat-eating related practices has been illuminating. Flexitarianism, as an acknowledged unique meatway and as an ideology, is something at least partly new to modern societies (while at the same time, without its label, being a very old and common meatway), while the new meats are innovative and have some considerable potential for change. However, how these new meats and meatways turn out to be employed is to be seen. Flexitarianism can be used as yet another food style whereby one sometimes skips conventional animal-based meat in a “flexitarian style”. Moreover, the new meats can be mainly utilised for profits by various industries, possibly just added to conventional meat eating on the side of individual eaters, in a system which will aim to integrate only weak sustainability. Such a system would be susceptible to eventual collapse due to the related ecological crises.

Fifthly, while working on the dissertation that led to this book, it has been thought-provoking to see how closely the transformation called for in the meat system relates to the journey of a larger sustainability transformation, called by

---

34 See also O'Brien (2018) for a discussion on this.

35 However, what the Fridays for Future movement has done since 2018 has certainly increased discursive consciousness as well.

36 The three framing devices from are factual, normative and emotive.

some *the great transformation*.<sup>37</sup> More specifically, there are at least two ways that the new meatways discussed in this book are related to such a transformation, as explained below.

On the first of these connections eating radically less meat, in line with strong flexitarianism, connects to the idea of strong sustainability and sufficiency. In other words, “enough” meat is greatly preferable to “more” meat. Further, and perhaps more crucially the continuum of meatways links well with the concept of *consumption corridors* (Di Giulio & Fuchs, 2014) which aspires to be part of strong sustainable consumption governance (Fuchs, 2020; Fuchs & Lorek, 2005). To explain, a particular consumption corridor is defined by certain minimum and maximum standards, “allowing every individual to have a good life” while ensuring limits on the use of natural and social resources, so that access to a “sufficient level of resources [...] for others in the present and in the future” can be guaranteed (Di Giulio & Fuchs, 2014:184). The similarity between the continuum of meatways – which also includes the idea of a minimum and maximum level of meat consumption for an individual, or for a society — and the policy-relevant concept of consumption corridors could well be worth paying attention to.

On the second of these connections, there are arguments in literature (e.g. Díaz & Merino, 2018; Twine, 2014) that it would be essential for those critical of the capitalistic market system, such as the *degrowth movement*, to reconsider human-animal relations and their connections to capitalism. Moreover, Nibert (2013) explores the link between capitalism and intensive animal agriculture and suggests that we can only transform away from intensive animal agriculture in a system that does not embrace capitalism. In Chapter 5, I also argued that, in my data reflecting the discourses around the new meats, the Capitalism and Demand frames seemingly connect to each other. Specifically on the connection between cultivated meat, capitalism and human-animal relations, Miller (2012) sees that cultivated meat succeeds in hiding the reality of both capitalism and animal exploitation, as its (future) existence maintains the importance of meat, while furthering the separation between meat and its animal origin. On the other hand, van der Weele and Driessen (2013) suggest that it would be important to approach cultivated meat openly, allowing it to have potential for different futures, including one where humans could continue with animal protein consumption while having meaningful relationships with domesticated animals.<sup>38</sup>

---

37 The concept of a great transformation in terms of ecological, economic and social concerns is originally from Polanyi (1944). In this book, the main focus has been on ecological sustainability, with the argument that it is a prerequisite for social and economic sustainability. For discussion of the great transformation, see e.g. Beling et al. (2018) and Spangenberg (2016).

38 Cultivated meat could actually mean that the production of meat is once again brought out into the open (e.g. in a brewery-style production), instead of being increasingly hidden in

Finally, the link between the meat system crisis and the wider ecological and unsustainability crises relate to the two conceptual metaphors discussed above in connection with the conclusions from the empirical data. More specifically, the Hungry beast is the mainstream discursive frame justifying continuing increased, further intensified, and more efficient meat production, while being employed by the emerging alternative meat industry to justify replacing conventional animal-based meat with the new meats. On the other hand, seeing different meatways, and especially both individual and societal transformation towards less meat as a positive journey, offers an alternative frame for the future. Whether these frames could successfully coexist, or whether a discursive struggle would ensue, remains to be seen.

---

the huge closed intensive industrial production units with hundreds or thousands of actual animals.



## 7. References

---

- Adams, C. J. (1991). The social construction of edible bodies and humans as predator. Ecofeminism and the eating of animals. *Hypathia*(6), 134-137.
- Adams, C. J. (2001). *Living among meat eaters. The vegetarian's survival handbook*. New York: Continuum.
- Aiking, H. (2011). Future protein supply. *Trends in Food Science & Technology*, 22(2), 112-120.
- Albrecht, S. (2006). Whose voice is heard in online deliberation? A study of participation and representation in political debates on the Internet. *Information, Communication & Society*, 9(1), 62-82.
- Alexandratos, N., & Bruinsma, J. (2012). *World agriculture towards 2030/2050: the 2012 revision. ESA Working paper No. 12-03*. Rome, Italy: Food and Agriculture Organization.
- Allen, M. W., & Baines, S. (2002). Manipulating the symbolic meaning of meat to encourage greater acceptance of fruits and vegetables and less proclivity for red and white meat. *Appetite*, 38(2), 118-130.
- Anderson, E. W., & Shugan, S. M. (1991). Repositioning for changing preferences: The case of beef versus poultry. *Journal of Consumer Research*, 18(2), 219-232.
- Andrews, N. (2017a). *Psychosocial factors affecting enactment of pro-environmental values by individuals in their work to influence organisational practices*. (Doctoral thesis), Lancaster University.
- Andrews, N. (2017b). Psychosocial factors influencing the experience of sustainability professionals. *Sustainability Accounting, Management and Policy Journal*, 8(4), 445-469.
- Andrews, N. (2018). Conflicted about emotions: ecological grief, love and truth. Retrieved from <https://cultureprobe.wordpress.com/2018/11/05/conflicted-about-emotions-ecological-grief-love-and-truth/>
- Andrews, N., & Hoggett, P. (2019). Facing up to ecological crisis: A psychosocial perspective from climate psychology. In J. Foster (Ed.), *Facing up to climate reality: Honesty, disaster and hope*: Green House / London Publishing Partnership.

- Antaki, C., Billig, M., Edwards, D., & Potter, J. (2003). Discourse analysis means doing analysis: A critique of six analytic shortcomings. *Discourse Analysis Online*, 1(1).
- Apel, K.-O. (1991). A planetary macroethics for mankind: The need, the apparent difficulty, and the eventual possibility. In E. Deutsch (Ed.), *Culture and modernity: East-West philosophical Perspectives* (pp. 261-278). Honolulu, US: University of Hawaii Press.
- Asher, K., Green, C., Gutbrod, H., Jewell, M., Hale, G., & Bastian, B. (2014). *Study of current and former vegetarians and vegans - Initial findings*. Retrieved from <https://faanalytics.org/study-of-current-and-former-vegetarians-and-vegans>
- Asher, K., Green, C., Peake, C., Jewell, M., Gutbrod, H., Hale, G., & Bastian, B. (2016). *Study of current and former vegetarians and vegans - Secondary findings*. Retrieved from <https://faanalytics.org/study-of-current-and-former-vegetarians-and-vegans>
- Asif, M., Rooney, L. W., Ali, R., & Riaz, M. N. (2013). Application and opportunities of pulses in food system: a review. *Crit Rev Food Sci Nutr*, 53(11), 1168-1179.
- Austgulen, M. H. (2014). Environmentally sustainable meat consumption: An analysis of the Norwegian public debate. *Journal of Consumer Policy*, 37(1), 45-66.
- Bai, X., van der Leeuw, S., O'Brien, K., Berkhout, F., Biermann, F., Brondizio, E. S., Cudennec, C., et al. (2016). Plausible and desirable futures in the Anthropocene: A new research agenda. *Global Environmental Change*, 39, 351-362.
- Bailey, R., & Harper, D. R. (2015). *Reviewing interventions for healthy and sustainable diets. Research paper*. London: The Royal Institute of International Affairs - Chatham House.
- Bajzelj, A., & Bothra, S. (2016). The rise of non-veg - Meat and egg consumption and production in contemporary India. In B. Donaldson & C. Carter (Eds.), *The future of meat without animals*. London: Rowman & Littlefield International, Ltd.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ, US: Prentice Hall.
- Bankier, D. (1996). *The Germans and the final solution: Public opinion under nazism*. Hoboken, NJ: Wiley-Blackwell.
- Bar-On, Y. M., Phillips, R., & Milo, R. (2018). The biomass distribution on Earth. *Proceedings of the National Academy of Sciences*, 115(25), 6506-6511.
- Barnett, C., Clarke, N., Cloke, P., & Malpass, A. (2011). *Globalizing responsibility: The political rationalities of ethical consumption*. Chichester, UK: Wiley-Blackwell.
- Barr, S. (2011). Climate forums: Virtual discourses on climate change and the sustainable lifestyle. *Area*, 43(1), 14-22.
- Bauer, M., Howard, S., Hagenhoff, V., Gasperoni, G., & Rusanen, M. (2006). The BSE and CJD crisis in the press. In C. Dora (Ed.), *In Health, hazards and public debate: Lessons for risk communication from the BSE/CJD saga* (pp. 125-164). Geneva: World Health Organization.

- Bazeley, P. (2013). *Qualitative data analysis: Practical strategies*. Los Angeles, CA: SAGE Publications.
- Bazerman, M. H., Tenbrunsel, A. E., & Wade-Benzoni, K. (1998). Negotiating with yourself and losing: Making decisions with competing internal preferences. *The Academy of Management Review*, 23(2), 225-241.
- Beling, A. E., Vanhulst, J., Demaria, F., Rabi, V., Carballo, A. E., & Pelenc, J. (2018). Discursive synergies for a "Great Transformation" towards sustainability: Pragmatic contributions to a necessary dialogue between human development, degrowth, and buen vivir. *Ecological Economics*, 144, 304-313.
- Bell, A. (1991). *The language of news media*. Oxford: Basil Blackwell Ltd.
- Belz, F.-M., & Peattie, K. (2009). *Sustainability marketing - A global perspective*. Chichester, UK: John Wiley & Sons, Ltd.
- Benton, T. G., Bieg, C., Harwatt, H., Pudasaini, R., & Wellesley, L. (2021). *Food system impacts on biodiversity loss: Three levers for food system transformation in support of nature. Chatham House report*. London: The Royal Institute of International Affairs.
- Berzonsky, C. L., & Moser, S. C. (2017). Becoming homo sapiens sapiens: Mapping the psycho-cultural transformation in the anthropocene. *Anthropocene*, 20, 15-23.
- Beyond Zero Emissions. (2014). *Zero carbon Australia. Land use: Agriculture and forestry. Discussion paper*. Fitzroy, Australia: Beyond Zero Emissions.
- Billig, M. (1995). *Banal nationalism*. London: Sage.
- Billig, M. (2009). Discursive psychology, rhetoric and the issue of agency. *Semen*, 27.
- Blake, J. (1999). Overcoming the "value-action gap" in environmental policy: Tensions between national policy and local experience. *Local Environment*, 4(3), 257-278.
- Blonk, H., Kool, A., & Luske, B. (2008). *Milieueffecten van Nederlandse consumptie van eiwitrijke producten (in Dutch, Environmental effects of Dutch consumption of protein-rich products)*. Gouda: BMA/VROM.
- Bolderdijk, J. W., & Steg, L. (2015). Promoting sustainable consumption: The risks of using financial incentives. In L. A. Reisch & J. Thøgersen (Eds.), *Handbook of research on sustainable consumption* (pp. 328-342). Cheltenham, UK: Edward Elgar Publishing Ltd.
- Bong, S. A. (2002). Debunking myths in qualitative data analysis. *Forum: Qualitative Social Research*, 3(2).
- Bork, H. R. (2006). *Landschaften der Erde unter dem Einfluss des Menschen*. Darmstadt, Germany: Primus in Wissenschaftliche Buchgesellschaft (WBG).
- Boyer, M. (2016). *Argentina: Bringing beef to the modern age*. (Master's thesis), Washington State University.

- Bratanova, B., Loughnan, S., & Bastian, B. (2011). The effect of categorization as food on the perceived moral standing of animals. *Appetite*, 57(1), 193-196.
- Brester, G. W., & Schroeder, T. C. (1995). The impacts of brand and generic advertising on meat demand. *American Journal of Agricultural Economics*, 77(4), 969-979.
- Broom, M. (2016). *Trends in pulse consumption: Now and on the horizon*. Presentation for the Grains and Legumes Nutrition Council. Paper presented at the Future of pulse production and consumption.
- Bryman, A., Becker, S., & Sempik, J. (2008). Quality criteria for quantitative, qualitative and mixed methods research: A view from social policy. *International Journal of Social Research Methodology: Theory & Practice*, 11(4), 261-276.
- Burford, G., Hoover, E., Dahl, A., & Harder, M. (2015). Making the invisible visible: Designing values-based indicators and tools for identifying and closing "value-action gaps". In V. W. Thoresen, D. Doyle, J. Klein, & R. J. Didham (Eds.), *Responsible living: Concepts, education and future perspectives* (pp. 113-133). Switzerland: Springer International Publishing.
- Burman, E. (2004). Discourse analysis means analysing discourse: Some comments on Antaki, Billig, Edwards and Potter "Discourse analysis means doing analysis: A critique of six analytic shortcomings". *Discourse Analysis Online*.
- Caldwell, M. (2013). On the use of play theory in analyses of online public commentary. *Communicatio*, 39(4), 501-517.
- Cambria, M. (2011). Opinions on the move: An exploration of the "Article-cum-comments" genre. In S. Sarangi, V. Polese, & G. Caliendo (Eds.), *Genre(s) on the move: Hybridization and discourse change in specialized communication* (pp. 135-150). Naples, Italy: Edizioni Scientifiche Italiane.
- Cassidy, E. S., West, P. C., Gerber, J. S., & Foley, J. A. (2013). Redefining agricultural yields: From tonnes to people nourished per hectare. *Environmental Research Letters*, 8(3).
- Cernay, C., Pelzer, E., & Makowski, D. (2016). A global experimental dataset for assessing grain legume production. *Sci Data*, 3, 160084.
- Chapman, D. A., Lickel, B., & Markowitz, E. M. (2017). Reassessing emotion in climate change communication. *Nature Climate Change*, 7(12), 850-852.
- Chatterton, T. (2016). An introduction to theories of behaviour. In F. Spotswood (Ed.), *Beyond behaviour change: Key issues, interdisciplinary approaches and future directions* (pp. 27-48). Bristol, UK: Policy Press.
- Chilton, P., Crompton, T., Kasser, T., Maio, G. R., & Nolan, A. (2012). *Common Cause Research: Communicating bigger-than-self problems to extrinsically-oriented audiences*. Woking, Surrey, UK: Common Cause Foundation.
- Christensen, J. (2008). Smoking out objectivity - Journalistic gears in the agnogenesis machine. In R. N. Proctor & L. Schiebinger (Eds.), *Agnotology - The making and unmaking of ignorance* (pp. 266-282). Stanford, CA: Stanford University Press.

- Chung, D. S. (2008). Interactive features of online newspapers: Identifying patterns and predicting use of engaged readers. *Journal of Computer-Mediated Communication*, 13(3), 658-679.
- Chung, J., Runge, K., Su, L. Y.-F., Brossard, D., & Scheufele, D. (2016). *Media framing and perceptions of risk for food technologies: The case of "pink slime"*. Paper presented at the Food futures: Ethics, science and culture, Porto, Portugal.
- Cole, J. R., & McCoskey, S. (2013). Does global meat consumption follow an environmental Kuznets curve? *Sustainability: Science, Practice and Policy*, 9(2), 26-36.
- Cole, M., & Morgan, K. (2011). Vegaphobia: derogatory discourses of veganism and the reproduction of speciesism in UK national newspapers. *Br J Sociol*, 62(1), 134-153.
- Colyvan, M. (2008). The ontological commitments of inconsistent theories. *Philosophical Studies*, 141(1), 115-123.
- Cooper, G., Green, N., Burningham, K., Evans, D., & Jackson, T. (2012). Unravelling the threads: Discourses of sustainability and consumption in an online forum. *Environmental Communication*, 6(1), 101-118.
- Cornelissen, G., Dewitte, S., Warlop, L., & Yzerbyt, V. (2007). Whatever people say I am, that's what I am: Social labeling as a social marketing tool. *International Journal of Research in Marketing*, 24(4), 278-288.
- Corner, A., Shaw, C., & Clarke, J. (2018). *Principles for effective communication and public engagement on climate change: A Handbook for IPCC authors*. Oxford, UK: Climate Outreach.
- Crompton, T. (2010). *Common cause: The case for working with our cultural values*. Woking, Surrey, UK: World Wildlife Fund.
- Crompton, T. (2016). Values and public expressions of concern. In F. Spotswood (Ed.), *Beyond behaviour change: Key issues, interdisciplinary approaches and future directions* (pp. 217-236). Bristol, UK: Policy Press.
- Csutora, M. (2012). One more awareness gap? The behaviour–impact gap problem. *Journal of Consumer Policy*, 35(1), 145-163.
- Csutora, M., & Zsóka, Á. (2016). Breaking through the behaviour impact gap and the rebound effect in sustainable consumption. In S. Lorek & E. Vadovics (Eds.), *Sustainable consumption and social justice in a constrained world. SCORAI Europe Workshop Proceedings* (pp. 122-130). Budapest, Hungary.
- Curry, L. A., Nembhard, I. M., & Bradley, E. H. (2009). Qualitative and mixed methods provide unique contributions to outcomes research. *Circulation*, 119, 1442-1452.
- Dagevos, H., & Voordouw, J. (2013). Sustainability and meat consumption: Is reduction realistic? *Sustainability: Science, Practice and Policy*, 9(2), 60-69.
- Dagevos, H., Voordouw, J., van Hoeven, L., van der Weele, C., & de Bakker, E. (2012). *Meat as (yet) a matter-of-course: Consumers about eating meat and reducing meat. Summary of LEI report 2012-029*. The Hague: LEI Wageningen UR.

- Dahlberg, L. (2004). The Habermasian public sphere: A specification of the idealized conditions of democratic communication. *Studies in Social and Political Thought*, 10, 2-18.
- Dahlstrand, U., & Biel, A. (1997). Pro-environmental habits: Propensity levels in behavioral change. *Journal of Applied Social Psychology*, 27(7), 588-601.
- Darnton, A., & Kirk, M. (2011). *Finding Frames: New ways to engage the UK public in global poverty*. Retrieved from <https://www.semanticscholar.org/paper/Finding-g-frames%3A-new-ways-to-engage-the-UK-public-in-Darnton-Kirk/d014db665268760e320bb736d6e80879c4b39ba5>
- Davis, K. F., Gephart, J. A., Emery, K. A., Leach, A. M., Galloway, J. N., & D'Odorico, P. (2016). Meeting future food demand with current agricultural resources. *Global Environmental Change*, 39, 125-132.
- Davis, S. L. (2003). The least harm principle may require that humans consume a diet containing large herbivores, not a vegan diet. *Journal of Agricultural and Environmental Ethics*, 16(4), 387-394.
- de Bakker, E., & Dagevos, H. (2012). Reducing meat consumption in today's consumer society: Questioning the citizen-consumer gap. *Journal of Agricultural and Environmental Ethics*, 25(6), 877-894.
- de Boer, J., de Witt, A., & Aiking, H. (2016). Help the climate, change your diet: A cross-sectional study on how to involve consumers in a transition to a low-carbon society. *Appetite*, 98, 19-27.
- de Boer, J., Helms, M., & Aiking, H. (2006). Protein consumption and sustainability: Diet diversity in EU-15. *Ecological Economics*, 59(3), 267-274.
- de Boer, J., Hoogland, C. T., & Boersema, J. J. (2007). Towards more sustainable food choices: Value priorities and motivational orientations. *Food Quality and Preference*, 18(7), 985-996.
- de Boer, J., Schösler, H., & Aiking, H. (2014). "Meatless days" or "less but better"? Exploring strategies to adapt Western meat consumption to health and sustainability challenges. *Appetite*, 76, 120-128.
- de Boer, J., Schösler, H., & Boersema, J. J. (2013). Climate change and meat eating: An inconvenient couple? *Journal of Environmental Psychology*, 33, 1-8.
- Deckers, J. (2013). Obesity, public health, and the consumption of animal products. *J Bioeth Inq*, 10(1), 29-38.
- Dhont, K., & Hodson, G. (2014). Why do right-wing adherents engage in more animal exploitation and meat consumption? *Personality and Individual Differences*, 64, 12-17.
- Di Giulio, A., & Fuchs, D. (2014). Sustainable consumption corridors: Concept, objections, and responses. *GAIA - Ecological Perspectives for Science and Society*, 23(3), 184-192.

- Diakopoulos, N., & Naaman, M. (2011). *Towards quality discourse in online news comments*. Paper presented at the Proceedings of the ACM 2011 conference on Computer supported cooperative work, Hangzhou, China.
- Díaz, E., & Merino, A. (2018). *The elephant is still in the room: Animals and the degrowth movement*. Paper presented at the The institutionalisation of degrowth and post-growth: The European level, Brussels, Belgium.
- Donaldson, B. (2016a). Exploiting fantasy - Overconformity in animal agriculture, meatless meat and animal ethics. In B. Donaldson & C. Carter (Eds.), *The future of meat without animals*. London: Rowman & Littlefield International, Ltd.
- Donaldson, B. (2016b). In the blink of an eye - Reimagining our futures of food. In B. Donaldson & C. Carter (Eds.), *The future of meat without animals*. London: Rowman & Littlefield International, Ltd.
- Donaldson, B., & Carter, C. (Eds.). (2016). *The future of meat without animals*. London: Rowman & Littlefield International, Ltd.
- Driessen, C., & Korthals, M. (2012). Pig towers and in vitro meat: Disclosing moral worlds by design. *Social Studies of Science*, 42(6), 797-820.
- Eder, K. (1996). *The social construction of nature: A sociology of ecological enlightenment*. Thousand Oaks, CA, US: Sage Publications, Inc.
- Eder, P., & Delgado, L. (2006). *Environmental impact of products (EIPRO) - Main report*. Luxembourg: Office for Official Publications of the European Communities.
- Edwards, D. (1999). Emotion Discourse. *Culture & Psychology*, 5(3), 271-291.
- Elliott, K. C. (2013). Selective ignorance and agricultural research. *Science, Technology & Human Values*, 38(3), 328-350.
- Emery, I., & Almy, J. (2018). *Flaws in the feedlot diet study: Scientific commentary on "Nutritional and greenhouse gas impacts of removing animals from US agriculture"*. Washington, DC: The Good Food Institute.
- EUFIC. (2009). *Food-based guidelines in Europe. EUFIC Review, Reference paper of the European Food Information Council*. Brussels, Belgium: EUFIC.
- European Heart Network. (2017). *Transforming European food and drink policies for cardiovascular health*. Brussels, Belgium: European Heart Network.
- Evans, A. B., & Miele, M. (2012). Between food and flesh: How animals are made to matter (and not matter) within food consumption practices. *Environment and Planning D: Society and Space*, 30(2), 298-314.
- Fairclough, N. (1989). *Language and Power, 1st ed.* London, UK: Longman.
- Fairclough, N. (2001a). Critical discourse analysis as a method in social scientific research. In R. Wodak & M. Meyer (Eds.), *Methods of critical discourse analysis*. London: SAGE Publications Ltd.
- Fairclough, N. (2001b). The discourse of New Labour: Critical discourse analysis. In M. Wetherell, S. Taylor, & S. J. Yates (Eds.), *Discourse as data: A guide for analysis* (pp. 229-266). Milton Keynes, UK: The Open University.
- Fairclough, N. (2015). *Language and power, 3rd edition*. New York: Routledge.

- FAIRR. (2016). *The future of food: The investment case for a protein shake up*. London: Farm Animal Investment Risk & Return.
- FAO-FNS Forum. (2016). *Pulses are praised for their health, environmental and economic benefits How can their full potential be tapped? Summary of the online discussion no. 128: Global Forum on Food Security and Nutrition - Food and Agriculture Organization*.
- FAO. (2007). *State of the world's animal genetic resources*. Rome, Italy: Food and Agriculture Organization.
- FAO. (2009). *The state of food and agriculture: Livestock in the balance*. Rome, Italy: Food and Agriculture Organization.
- FAO. (2011). *Global food losses and food waste – Extent, causes and prevention*. Rome, Italy: Food and Agriculture Organization.
- Ferrari, A. (2016). *Envisioning the futures of animals through in vitro meat*. Paper presented at the Food futures: Ethics, science and culture, Porto, Portugal.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.
- Fiddes, N. (1991). *Meat: A natural symbol*. Abingdon, UK: Routledge.
- Fierke, K. (2004). *World or worlds? The analysis of content and discourse*. Paper presented at the Symposium: Discourse and Content Analysis.
- Foer, J. S. (2009). *Eating animals*. New York, US: Back Bay Books.
- Foodwatch. (2009). *Organic: A climate saviour? The foodwatch report on the greenhouse effect of conventional and organic farming in Germany, based on the study "The impact of German agriculture on the climate" by the Institute for Ecological Economy Research (IÖW)*. Berlin: Foodwatch.
- Foss, S. K. (2009). *Rhetorical criticism - Exploration and practice* (Fourth edition ed.). Long Grove, Illinois: Waveland Press, Inc.
- Fuchs, D. (2020). Living well within limits: The vision of consumption corridors. In A. Kalfagianni, D. Fuchs, & A. Hayden (Eds.), *Routledge handbook of global sustainability governance* (pp. 296-307). Abingdon, UK: Routledge.
- Fuchs, D., Di Giulio, A., Glaab, K., Lorek, S., Maniates, M., Princen, T., & Røpke, I. (2016). Power: the missing element in sustainable consumption and absolute reductions research and action. *Journal of Cleaner Production*, 132, 298-307.
- Fuchs, D. A., & Lorek, S. (2005). Sustainable Consumption Governance: A History of Promises and Failures. *Journal of Consumer Policy*, 28(3), 261-288. doi:10.1007/s10603-005-8490-z
- Galbraith, J. K. (1971). *The new industrial state*. New York: Houghton-Mifflin.
- Gärling, T., & Friman, M. (2015). Unsustainable travel becoming (more) sustainable. In L. A. Reisch & J. Thøgersen (Eds.), *Handbook of research on sustainable consumption* (pp. 163-177). Cheltenham, UK: Edward Elgar Publishing Ltd.

- Garnett, T. (2011). Where are the best opportunities for reducing greenhouse gas emissions in the food system (including the food chain)? *Food Policy*, 36, *Supplement 1*, S23-S32.
- Garnett, T. (2012). Food sustainability: Problems, perspectives and solutions *Proceedings of the Nutrition Society* (Vol. 72, pp. 29-39). Aberdeen, UK: Nutrition Society.
- Garnett, T. (2017). Livestock and climate change. In J. D'Silva & J. Webster (Eds.), *The meat crisis: Developing more sustainable and ethical production and consumption*, 2nd ed. (pp. 31-51). Abingdon, UK: Routledge.
- Garnett, T., Godde, C., Muller, A., Rös, E., Smith, P., de Boer, I., zu Ermgassen, E., et al. (2018). *Grazed and confused? Ruminating on cattle, grazing systems, methane, nitrous oxide, the soil carbon sequestration question – and what it all means for greenhouse gas emissions*: Food Climate Research Network.
- Geiger, S., Fischer, D., & Schrader, U. (2018). Measuring what matters in sustainable consumption: An integrative framework for the selection of relevant behaviors. *Sustainable Development*, 26(1), 18-33.
- Georgaca, E., & Avdi, E. (2011). Discourse analysis. In D. Harper & A. R. Thompson (Eds.), *Qualitative research methods in mental health and psychotherapy: A guide for students and practitioners*. Chichester, UK: John Wiley & Sons, Ltd.
- Gerber, P. J., Steinfeld, H., Henderson, B., Mottet, A., Opio, C., Dijkman, J., Faluccci, A., & Tempio, G. (2013). *Tackling climate change through livestock – A global assessment of emissions and mitigation opportunities*. Rome, Italy: Food and Agriculture Organization.
- Giddens, A. (1984). *The constitution of society: Outline of the theory of structuration*. Berkeley, CA: University of California Press.
- Gjerris, M., Gamborg, C., Röcklinsberg, H., & Anthony, R. (2011). The Price of Responsibility: Ethics of Animal Husbandry in a Time of Climate Change. *Journal of Agricultural and Environmental Ethics*, 24(4), 331-350.
- Gjerris, M., Gamborg, C., & Saxe, H. (2016). What to buy? On the complexity of being a critical consumer. *Journal of Agricultural and Environmental Ethics*, 29, 81-102.
- Global Pulse Confederation. (2016). *10-year research strategy for pulse crops*: Global Pulse Confederation.
- Godfray, H. C. J., Aveyard, P., Garnett, T., Hall, J. W., Key, T. J., Lorimer, J., Pierrehumbert, R. T., et al. (2018). Meat consumption, health, and the environment. *Science*, 361(6399), eaam5324.
- Goldstein, B., Moses, R., Sammons, N., & Birkved, M. (2017). Potential to curb the environmental burdens of American beef consumption using a novel plant-based beef substitute. *PLoS ONE*, 12(12), e0189029.

- González, A. D., Frostell, B., & Carlsson-Kanyama, A. (2011). Protein efficiency per unit energy and per unit greenhouse gas emissions: Potential contribution of diet choices to climate change mitigation. *Food Policy*, 36(5), 562-570.
- Gonzalez Fischer, C., & Garnett, T. (2016). *Plates, pyramids and planets - Developments in national healthy and sustainable dietary guidelines: A state of play assessment*. Rome, Italy: The Food and Agriculture Organisation.
- Goodland, R. (2014). A fresh look at livestock greenhouse gas emissions and mitigation potential in Europe. *Global Change Biology*, 20, 2042-2044.
- Goodland, R., & Anhang, J. (2009). Livestock and climate change. *World Watch Magazine*, 22, 10-19.
- Goodwin, J. N., & Shoulders, C. W. (2013). The future of meat: A qualitative analysis of cultured meat media coverage. *Meat Science*, 95(3), 445-450.
- Goulden, M., Bedwell, B., Rennick-Egglestone, S., Rodden, T., & Spence, A. (2014). Smart grids, smart users? The role of the user in demand side management. *Energy Research & Social Science*, 2, 21-29.
- Gouveia, L., & Juska, A. (2002). Taming nature, taming workers: Constructing the separation between meat consumption and meat production in the US. *Sociologia Ruralis*, 42(4), 370-390.
- Graça, J., Calheiros, M. M., & Oliveira, A. (2014). Moral disengagement in harmful but cherished food practices? An exploration into the case of meat. *Journal of agricultural & environmental ethics*, 2014 v.27 no.5(no. 5), pp. 749-765.
- GRAIN-IATP. (2018). *Emissions impossible - How big meat and dairy are heating up the planet*. Barcelona, Spain: GRAIN and the Institute for Agriculture and Trade Policy.
- Greger, M. (2017). Industrial animal agriculture's role in the emergence and spread of disease. In J. D'Silva & J. Webster (Eds.), *The meat crisis: Developing more sustainable and ethical production and consumption*, 2nd ed. (pp. 217-227). Abingdon, UK: Routledge.
- Gura, S. (2010). Industrial livestock production and biodiversity. In J. D'Silva & J. Webster (Eds.), *The meat crisis - Developing more sustainable production and consumption*. London: Earthscan.
- Haddad, E. H., & Tanzman, J. S. (2003). What do vegetarians in the United States eat? *The American Journal of Clinical Nutrition*, 78(3), 626S-632S.
- Hadjikakou, M., & Wiedmann, T. (2017). Shortcomings of a growth-driven food system. . In P. A. Victor & B. Dolter (Eds.), *Handbook on Growth and Sustainability* (pp. 256-276). Cheltenham, UK: Edward Elgar Publishing.
- Halkier, B. (2010). *Consumption challenged - Food in medialised everyday lives*. Farnham, UK: Ashgate Publishing Ltd.
- Halkier, B., & Holm, L. (2008). Food consumption and political agency: on concerns and practices among Danish consumers. *International Journal of Consumer Studies*, 32(6), 667-674.

- Halkier, B., Holm, L., Domingues, M., Magaudda, P., Nielsen, A., & Terragni, L. (2007). Trusting, complex, quality conscious or unprotected?: Constructing the food consumer in different European national contexts. *Journal of Consumer Culture*, 7(3), 379-402.
- Hallström, E., & Börjesson, P. (2013). Meat-consumption statistics: Reliability and discrepancy. *Sustainability: Science, Practice and Policy*, 9(2), 37-47.
- Hancock, J. T. (2007). Digital deception: Why, when and how people lie online. In A. N. Joinson, K. Y. A. McKenna, T. Postmes, & U.-D. Reips (Eds.), *The Oxford Handbook of Internet Psychology* (pp. 289-301). Oxford, UK: Oxford University Press.
- Hanlon, P., Carlisle, S., Hannah, M., Lyon, A., & Reilly, D. (2012). A perspective on the future public health: An integrative and ecological framework. *Perspectives in Public Health*, 132(6), 313-319.
- Hardy, C., Harley, B., & Phillips, N. (2004). *Discourse analysis and content analysis: Two solitudes?* Paper presented at the Symposium: Discourse and content analysis.
- Hargreaves, T. (2011). Practice-ing behaviour change: Applying social practice theory to pro-environmental behaviour change. *Journal of Consumer Culture*, 11(1), 79-99.
- Hartmann, C., & Siegrist, M. (2017). Consumer perception and behaviour regarding sustainable protein consumption: A systematic review. *Trends in Food Science & Technology*, 61, 11-25.
- Hayek, M. N. (2019). *Underestimates of US emissions and global implications for industrializing animal agriculture. A guidance memo for the Tiny Beam Fund*. Retrieved from <https://www.semanticscholar.org/paper/Underestimates-of-US-emissions-and-global-for-Hayek/005f9dc986d1f04aaa8091bb15d3e8f2c71e26d89>
- Heinrich Böll Foundation. (2014). *Meat Atlas: Facts and figures about the animals we eat*. Berlin, Germany: Heinrich Böll Foundation and Friends of the Earth Europe.
- Heinrich Böll Foundation. (2017). *AgriFood Atlas: Facts and figures about the corporations that control what we eat*. Berlin, Germany: Heinrich Böll Foundation, Rosa Luxemburg Foundation and Friends of the Earth Europe.
- Henning, B. G. (2016). Towards 2050 - The projected costs of and possible alternatives to industrial livestock production. In B. Donaldson & C. Carter (Eds.), *The future of meat without animals*. London: Rowman & Littlefield International, Ltd.
- Henrich, N., & Holmes, B. (2011). What the public was saying about the H1N1 vaccine: Perceptions and issues discussed in on-line comments during the 2009 H1N1 pandemic. *PLoS ONE*, 6(4), e18479.
- Henrich, N., & Holmes, B. (2013). Web news readers' comments: Towards developing a methodology for using on-line comments in social inquiry. *Journal of Media and Communication Studies*, 5(1), 1-4.
- Herring, S. C. (2013). Discourse in Web 2.0: Familiar, reconfigured, and emergent. In D. Tannen & A. M. Trester (Eds.), *Discourse 2.0: Language and new media*. Washington, DC: Georgetown University Press.

- Herring, S. C., & Stoerger, S. (2014). Gender and (a)nonymity in computer-mediated communication. In S. Ehrlich, M. Meyerhoff, & J. Holmes (Eds.), *The Handbook of Language, Gender, and Sexuality, 2nd edition* (pp. 567-586). Chichester: JohnWiley and Sons Ltd.
- Hicks, T. M., Knowles, S. O., & Farouk, M. M. (2018). Global provisioning of red meat for flexitarian diets. *Frontiers in nutrition, 5*, 50-50.
- Hindess, B. (1988). *Choice, rationality, and social theory*. Boston, MA: Unwin Hyman.
- Hoekstra, A. Y. (2017). The water footprint of animal products. In J. D'Silva & J. Webster (Eds.), *The meat crisis: Developing more sustainable and ethical production and consumption, 2nd ed.* (pp. 21-30). Abingdon, UK: Routledge.
- Hoff-Elimari, E., Bardi, A., Matti, S., & Östman, K. (2014). Collective action problems: Disentangling possible feedback loops between government policies and the public's value-change. *European Journal of Government and Economics, 3*(1), 24-46.
- Hogan, J. (2006). Letters to the Editor in the "War on terror": A cross-national study. *Mass Communication and Society, 9*(1), 63-83.
- Holm, L., & Mohl, M. (2000). The role of meat in everyday food culture: An analysis of an interview study in Copenhagen. *Appetite, 34*(3), 277-283.
- Holmes, T., Blackmore, E., Hawkins, R., & Wakeford, T. (2011). *The Common Cause Handbook*. Retrieved from [https://developmenteducation.ie/media/documents/Common%20Cause%20Handbook\(2\).pdf](https://developmenteducation.ie/media/documents/Common%20Cause%20Handbook(2).pdf)
- Hölscher, K., Wittmayer, J. M., & Loorbach, D. (2018). Transition versus transformation: What's the difference? *Environmental Innovation and Societal Transitions, 27*, 1-3.
- Hopkins, P. D. (2015). Cultured meat in western media: The disproportionate coverage of vegetarian reactions, demographic realities, and implications for cultured meat marketing. *Journal of Integrative Agriculture, 14*(2), 264-272.
- Hsu, S.-Y. (2013). *Critical tests of altermtaive theories of cultural value orientations on consumers' international service purchases and experiences*. (Doctoral thesis), Auckland University of Technology.
- Huddart Kennedy, E., Cohen, M. J., & Krogman, N. T. (2015). Social practice theories and research on sustainable consumption. In E. H. Kennedy, M. J. Cohen, & N. T. Krogman (Eds.), *Putting sustainability into practice: Applications and advances in research on sustainable consumption* (pp. 3-21). Cheltenham, UK: Edward Elgar Publishing.
- Hunter, E., & Rösös, E. (2016). Fear of climate change consequences and predictors of intentions to alter meat consumption. *Food Policy, 62*(C), 151-160.
- Hurst, M., Dittmar, H., Bond, R., & Kasser, T. (2013). The relationship between materialistic values and environmental attitudes and behaviors: A meta-analysis. *Journal of Environmental Psychology, 36*, 257-269.

- IAP. (2018). *Opportunities for future research and innovation on food and nutrition security and agriculture The InterAcademy Partnership's global perspective - Synthesis by IAP based on four regional academy network studies*. Trieste, Italy: InterAcademy Partnership.
- Ignatow, G. (2007). Theories of embodied knowledge: New directions for cultural and cognitive sociology? *Journal for the Theory of Social Behaviour*, 37(2), 115-135.
- IPCC. (2015). *Meeting Report of the Intergovernmental Panel on Climate Change Expert Meeting on Climate Change, Food, and Agriculture*. Geneva, Switzerland: World Meteorological Organization.
- IPCC. (2018). Summary for Policymakers. *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways*. Geneva, Switzerland: World Meteorological Organization.
- IPCC. (2019). Summary for Policymakers. *Climate Change and Land: An IPCC Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems*. Geneva, Switzerland: World Meteorological Organization.
- IPES FOOD. (2017). *Unravelling the food-health nexus: Addressing practices, political economy, and power relations to build healthier food systems*. Brussels, Belgium: International Panel of Experts on Sustainable Food Systems.
- Jäger, S. (2001). Discourse and knowledge: Theoretical and methodological aspects of a critical discourse and discursive analysis (I. Bünger & R. Tonks, Trans.). In R. Wodak & M. Meyer (Eds.), *Methods of critical discourse analysis*. London: SAGE Publications Ltd.
- Jallinoja, P., Niva, M., & Latvala, T. (2016). Future of sustainable eating? Examining the potential for expanding bean eating in a meat-eating culture. *Futures*, 83, 4-14.
- Joffe, H. (2011). Thematic analysis. In D. Harper & A. Thompson (Eds.), *Qualitative Research Methods in Mental Health and Psychotherapy: A Guide for Students and Practitioners* (pp. 209-223). Chichester: Wiley-Blackwell.
- Johns Hopkins Center for a Livable Future. (2018). *Climate solutions: Shifting diets and reducing wasted food. Talanoa dialogue submission*. Baltimore, MD: Johns Hopkins Center for a Livable Future.
- Joy, M. (2010). *Why we love dogs, eat pigs and were cows - An introduction to carnism*. San Francisco, CA: Conari Press.
- Joy, M. (2011). Understanding neocarnism: How vegan advocates can appreciate and respond to “happy meat,” locavorism, and “paleo dieting”. Retrieved from <http://www.onegreenplanet.org/lifestyle/understanding-neocarnism/>
- Kahneman, D. (2011). *Thinking, fast and slow*. New York, US: Farrar, Straus and Giroux.

- Kanerva, M. (2013). *Meat consumption in Europe: Issues, trends and debates*. artec-paper Nr. 187. Bremen, Germany: Sustainability Research Center (artec), University of Bremen.
- Kasper, D. (2015). Contextualizing social practices: Insights into social change. In E. H. Kennedy, M. J. Cohen, & N. T. Krogman (Eds.), *Putting sustainability into practice: Applications and advances in research on sustainable consumption* (pp. 25-46). Cheltenham, UK: Edward Elgar Publishing.
- Kasser, T. (2011). Cultural values and the well-being of future generations: A cross-national study. *Journal of Cross-Cultural Psychology*, 42(2), 206-215.
- Kasser, T. (2016). Materialistic values and goals. *Annual Review of Psychology*, 67(1), 489-514.
- Kasser, T., Ryan, R. M., Couchman, C. E., & Sheldon, K. M. (2004). Materialistic values: Their causes and consequences. In T. Kasser & A. D. Kanner (Eds.), *Psychology and consumer culture: The struggle for a good life in a materialistic world* (pp. 11/28). Washington, DC: American Psychological Association.
- Keith, L. (2009). *The vegetarian myth: Food, justice, and sustainability*. Crescent City, CA: Flashpoint Press/PM Press.
- Keller, R. (2013). *Doing discourse research: An introduction for social scientists* (B. Jenner, Trans.). London: SAGE Publications Ltd.
- Keyzer, M. A., Merbis, M. D., Pavel, I. F. P. W., & van Wesenbeeck, C. F. A. (2005). Diet shifts towards meat and the effects on cereal use: can we feed the animals in 2030? *Ecological Economics*, 55(2), 187-202.
- Kim, B., Neff, R., Santo, R., & Vigorito, J. (2015). *The importance of reducing animal product consumption and wasted food in mitigating catastrophic climate change*. Baltimore, MD: Johns Hopkins Center for a Livable Future.
- Kjærnes, U., & Torjusen, H. (2012). Beyond the industrial paradigm? Consumers and trust in food. In G. Spaargaren, P. Oosterveer, & A. Loeber (Eds.), *Food practices in transition - Changing food consumption, retail and production in the age of reflexive modernity* (pp. 86-106). New York: Routledge.
- Kjørstad, I. (2005). Consumer concerns for food animal welfare, Part I A, Literature Reviews. In J. Roex & M. Miele (Eds.), *Farm animal welfare concerns: Consumers, retailers and producers (Welfare Quality Report No. 1)*. Cardiff, UK: Cardiff University.
- Kmietowicz, Z. (2017). Red meat consumption is linked to higher risk of death from most major causes. *BMJ*, 357, j2241.
- Koch, C. H. (2020). Brands as activists: The Oatly case. *Journal of Brand Management*, 27(5), 593-606. doi:10.1057/s41262-020-00199-2
- Koenig, T. (2004). *Routinizing frame analysis through the use of CAQDAS*. Paper presented at the RC33 Sixth International Conference on Social Science Methodology, Amsterdam, the Netherlands.

- Kollmuss, A., & Agyeman, J. (2002). Mind the Gap: Why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental Education Research*, 8(3), 239-260.
- Korthals, M. (2016). *Ethics of dietary guidelines: Nutrients, processes and meals*. Paper presented at the Food futures: Ethics, science and culture, Porto, Portugal.
- Kuypers, J. A. (2010). Framing analysis from a rhetorical perspective. In P. D'Angelo & J. A. Kuypers (Eds.), *Doing news framing analysis: Empirical and theoretical perspectives*. New York: Routledge.
- Lacasse, K. (2016). Don't be satisfied, identify! Strengthening positive spillover by connecting pro-environmental behaviors to an "environmentalist" label. *Journal of Environmental Psychology*, 48, 149-158.
- Laestadius, L. I., & Caldwell, M. A. (2015). Is the future of meat palatable? Perceptions of in vitro meat as evidenced by online news comments. *Public Health Nutrition*, 18(13), 2457-2467.
- Laestadius, L. I., Neff, R. A., Barry, C. L., & Frattaroli, S. (2014). "We don't tell people what to do": An examination of the factors influencing NGO decisions to campaign for reduced meat consumption in light of climate change. *Global Environmental Change*, 29, 32-40.
- Lakoff, G. (2010). Why it matters how we frame the environment. *Environmental Communication*, 4(1), 70-81.
- Lakoff, G., Espenson, J., & Schwartz, A. (1991). Master metaphor list. Second edition.
- Lakoff, G., & Johnson, M. (1980). *Metaphors we live by*. Chicago, IL: The University of Chicago Press.
- Lalwani, A. K. (2009). The distinct influence of cognitive busyness and need for closure on cultural differences in socially desirable responding. *Journal of Consumer Research*, 36(2), 305-316.
- Lamey, A. (2007). Food fight! Davis versus Regan on the ethics of eating beef. *Journal of Social Philosophy*, 38(2), 331-348.
- Lang, T. (2017). Meat and policy. In J. D'Silva & J. Webster (Eds.), *The meat crisis: Developing more sustainable and ethical production and consumption*, 2nd ed. (pp. 317-334). Abingdon, UK: Routledge.
- Lang, T., Wu, M., & Caraher, M. (2010). Meat and policy: Charting a course through the complexity. In J. D'Silva & J. Webster (Eds.), *The meat crisis: Developing more sustainable production and consumption*, 1st ed. (pp. 254-274). Abingdon, UK: Routledge.
- Lange, H. (2016). Same, same - but different: On increasing meat consumption in the Global South. In M. Sahakian, C. Saloma, & S. Erkman (Eds.), *Food consumption in the city: Practices and patterns in urban Asia and the Pacific* (pp. 23-45). London: Routledge.

- Latour, B. (2000). When things strike back: A possible contribution of "science studies" to the social sciences. *The British Journal of Sociology*, 51(1), 107-123.
- Lawrie, R. A. (1977). Introductory editorial - Meat: Current developments and future status. *Meat Science*, 1, 1-13.
- Lea, E., & Worsley, A. (2001). Influences on meat consumption in Australia. *Appetite*, 36(2), 127-136.
- Leach, A. M., Galloway, J. N., Bleeker, A., Erismann, J. W., Kohn, R., & Kitzes, J. (2012). A nitrogen footprint model to help consumers understand their role in nitrogen losses to the environment. *Environmental Development*, 1(1), 40-66.
- Leahy, E., Lyonsa, S., & Tol, R. S. J. (2010). *An estimate of the number of vegetarians in the world*. ESRI Working Paper No. 340. Dublin, Ireland: Economic and Social Research Institute.
- Lee, E.-J. (2012). That's not the way it is: How user-generated comments on the news affect perceived media bias. *Journal of Computer-Mediated Communication*, 18(1), 32-45.
- Lee, L., & Simpson, I. (2016). *Are we eating less meat? A British Social Attitudes report, prepared for the Vegetarian Society*. London: NatCen Social Research.
- Lehtonen, M. (2000). *The cultural analysis of texts*. London: SAGE Publications Ltd.
- Lekes, N., Hope, N. H., Gouveia, L., Koestner, R., & Philippe, F. L. (2012). Influencing value priorities and increasing well-being: The effects of reflecting on intrinsic values. *The Journal of Positive Psychology*, 7(3), 249-261.
- Lertzman, (2015). *Environmental melancholia: Psychoanalytic dimensions of engagement*. Hove, UK: Routledge.
- Looy, H., Dunkel, F. V., & Wood, J. R. (2014). How then shall we eat? Insect-eating attitudes and sustainable foodways. *Agriculture and Human Values*, 31(1), 131-141.
- Lorek, S., & Fuchs, D. (2011). Strong sustainable consumption governance – precondition for a degrowth path? *Journal of Cleaner Production*, 38, 36-43.
- Lorek, S., & Vergragt, P. (2015). Sustainable consumption as a systemic challenge: Inter- and transdisciplinary research and research questions. In L. A. Reisch & J. Thøgersen (Eds.), *Handbook of research on sustainable consumption* (pp. 19-32). Cheltenham, UK: Edward Elgar Publishing Ltd.
- Loughnan, S., Bastian, B., & Haslam, N. (2014). The psychology of eating animals. *Current Directions in Psychological Science*, 23(2), 104-108.
- Loughnan, S., Haslam, N., & Bastian, B. (2010). The role of meat consumption in the denial of moral status and mind to meat animals. *Appetite*, 55(1), 156-159.
- Luchs, M. G., & Miller, R. A. (2015). Consumer responsibility for sustainable consumption. In L. A. Reisch & J. Thøgersen (Eds.), *Handbook of research on sustainable consumption* (pp. 254-267). Cheltenham, UK: Edward Elgar Publishing Ltd.
- Lynch, T. (2014). *Writing up your PhD (qualitative research) - Independent study version*: University of Edinburgh.

- Macdiarmid, J. I., Douglas, F., & Campbell, J. (2016). Eating like there's no tomorrow: Public awareness of the environmental impact of food and reluctance to eat less meat as part of a sustainable diet. *Appetite*, 96, 487-493.
- MacDonald, M., & Iyer, S. (2012). Veg or non-veg? India at the crossroads. A policy paper. New York, US: Brighter Green.
- Machovina, B., Feeley, K. J., & Ripple, W. J. (2015). Biodiversity conservation: The key is reducing meat consumption. *Science of The Total Environment*, 536, 419-431.
- MacLachlan, I. (2015). Evolution of a revolution: Meat consumption and livestock production in the developing world. In J. Emel & H. Neo (Eds.), *Political ecologies of meat* (pp. 21-41). Abingdon, UK: Routledge.
- MacMillan, K., & Koenig, T. (2004). The wow factor: Preconceptions and expectations for data analysis software in qualitative research. *Social Science Computer Review*, 22(2), 179-186.
- Magneson Chiles, R. (2013). If they come, we will build it: in vitro meat and the discursive struggle over future agrofod expectations. *Agriculture and Human Values*, 30, 511-523.
- Maio, G. R. (2011). *Common Cause Briefing Paper: Don't mind the gap between values and action*. Woking, Surrey: Common Cause Foundation.
- Maio, G. R. (2017). *The psychology of human values*. Abingdon, UK: Routledge.
- Maio, G. R., Pakizeh, A., Cheung, W. Y., & Rees, K. J. (2009). Changing, priming, and acting on values: effects via motivational relations in a circular model. *J Pers Soc Psychol*, 97(4), 699-715.
- Manosevitch, E., & Walker, D. (2009). *Reader comments to online opinion journalism: A space of public deliberation*. Paper presented at the 10th International Symposium on Online Journalism, Austin, TX.
- Marder, M. (2016). Meat without flesh. In B. Donaldson & C. Carter (Eds.), *The future of meat without animals*. London: Rowman & Littlefield International, Ltd.
- Marí, F., & Buntzel, R. (2008). *The Global Chicken: Chicken breast and chicken wings - But who eats the leftovers?* Frankfurt am Main, Germany: Brandes & Apsel.
- Markard, J., Raven, R., & Truffer, B. (2012). Sustainability transitions: An emerging field of research and its prospects. *Research Policy*, 41(6), 955-967.
- Matthies, E., Kuhn, S., & Klöckner, C. A. (2002). Travel mode choice of women: The result of limitation, ecological norm, or weak habit? *Environment and Behavior*, 34(2), 163-177.
- Mattick, C. S., Landis, A. E., Allenby, B. R., & Genovese, N. J. (2015). Anticipatory life cycle analysis of in vitro biomass cultivation for cultured meat production in the United States. *Environ Sci Technol*, 49(19), 11941-11949.
- Mautner, G. (2005). Time to get wired: Using web-based corpora in critical discourse analysis. *Discourse & Society*, 16(6), 809-828.
- McCurdy, E. (1932). *The mind of Leonardo da Vinci*. London: Cape.

- McLeod-Kilmurray, H. (2012). Commoditizing nonhuman animals and their consumers: Industrial livestock production, animal welfare, and ecological justice. *Bulletin of Science, Technology & Society*, 32(1), 71-85.
- McMullen, S. (2016). An ethical consumer capitalism. In B. Donaldson & C. Carter (Eds.), *The future of meat without animals*. London: Rowman & Littlefield International, Ltd.
- McNair, B. (1998). *The sociology of journalism*. London: Arnold.
- Meadows, D. H. (2008). *Thinking in systems - A primer*. Posthumously edited by Diane Wright: Chelsea Green Publishing.
- Meadows, R. (2016). The quest for quick cooking Beans. *Crops, Soils, Agronomy News*, 61(5), 4-7.
- Michaels, D. (2008). Manufactured uncertainty - Contested science and the protection of the public's health and environment. In R. N. Proctor & L. Schiebinger (Eds.), *Agnology - The making and unmaking of ignorance* (pp. 90-107). Stanford, CA: Stanford University Press.
- Miller, J. (2012). In vitro meat: Power, authenticity and vegetarianism. *Journal for Critical Animal Studies*, 10(4), 41-63.
- Minson, J. A., & Monin, B. (2012). Do-Gooder Derogation: Disparaging Morally Motivated Minorities to Defuse Anticipated Reproach. *Social Psychological and Personality Science*, 3(2), 200-207.
- Mont, O., & Power, K. (2013). *Understanding factors that shape consumption*. ETC/SCP Working Paper No 1/2013. Copenhagen: European Topic Centre on Sustainable Consumption and Production.
- Monteiro, C. A., Pfeiler, T. M., Patterson, M. D., & Milburn, M. A. (2017). The Carnism Inventory: Measuring the ideology of eating animals. *Appetite*, 113, 51-62.
- Msangi, S., & Rosegrant, M. W. (2011). *Feeding the future's changing diets implications for agriculture markets, nutrition, and policy*. 2020 Conference Paper 3. Washington, DC: International Food Policy Research Institute.
- Mudryj, A. N., Yu, N., & Aukema, H. M. (2014). Nutritional and health benefits of pulses. *Applied Physiology, Nutrition, and Metabolism*, 39(11), 1197-1204.
- Nam, K. C., Jo, C., & Lee, M. (2010). Meat products and consumption culture in the East. *Meat Sci*, 86(1), 95-102.
- Nash, N., Whitmarsh, L., Capstick, S., Hargreaves, T., Poortinga, W., Thomas, G., Sautkina, E., et al. (2017). Climate-relevant behavioral spillover and the potential contribution of social practice theory. *Wiley Interdisciplinary Reviews: Climate Change*, 8(6), e481.
- Nestle, M. (2007). *Food politics: How the food industry influences nutrition and health*. Revised edition. Los Angeles, CA: University of California Press.
- Nestle, M. (2018). *Unsavoury truth - How food companies skew the science of what we eat*. New York: Basic Books.

- Nibert, D. A. (2013). *Animal oppression & human violence: Domesecration, capitalism, and global conflict*. New York: Columbia University Press.
- Nicolini, D. (2017). Is small the only beautiful? Making sense of "large phenomena" from a practice-based perspective. In A. Hui, T. Schatzki, & E. Shove (Eds.), *The nexus of practices: Connections, constellations, practitioners* (pp. 98-113). Abingdon, UK: Routledge.
- Noci, J. D., Domingo, D., Masip, P., Mico, J. L., & Ruiz, C. (2010). *Comments in news, democracy booster or journalistic nightmare: Assessing the quality and dynamics of citizen debates in Catalan online newspapers*. Paper presented at the International Symposium on Online Journalism, Austin, TX.
- Norgaard, K. M. (2011). *Living in denial - Climate change, emotions, and everyday life* MIT Press.
- Nørregård Vørre, K. (2011). *Vegetarians in the press: Myths and assumptions on the meat free minority* (Master's thesis), Copenhagen Business School.
- O'Brien, K. (2012). Global environmental change III: Closing the gap between knowledge and action. *Progress in Human Geography*, 37(4), 587-596.
- O'Halloran, K. (2010). How to use corpus linguistics in the study of media discourse. In A. O'Keeffe & M. McCarthy (Eds.), *The Routledge Handbook of Corpus Linguistics* (pp. 563-576). Abingdon: Routledge.
- O'Riordan, T., & Stoll-Kleemann, S. (2015). The challenges of changing dietary behavior toward more sustainable consumption. *Environment: Science and Policy for Sustainable Development*, 57(5), 4-13.
- O'Brien, K. (2018). Is the 1.5°C target possible? Exploring the three spheres of transformation. *Current Opinion in Environmental Sustainability*, 31, 153-160.
- OECD/FAO. (2014). *OECD-FAO Agricultural Outlook 2014-2023*: OECD Publishing.
- Okin, G. S. (2017). Environmental impacts of food consumption by dogs and cats. *PLoS ONE*, 12(8), e0181301.
- Olsen, K. A. (2014). Telling our stories: Narrative and framing in the movement for same-sex marriage. *Social Movement Studies*, 13(2), 248-266.
- Onwezen, M. C., & van der Weele, C. N. (2016). When indifference is ambivalence: Strategic ignorance about meat consumption. *Food Quality and Preference*, 52, 96-105.
- Ortner, S. B. (1989). *High religion: A cultural and political history of Sherpa Buddhism*. Princeton: Princeton University Press.
- Oslo Roundtable. (1994). Part 1 - The imperative of sustainable production and consumption. Retrieved from <http://enb.iisd.org/consume/oslo004.html>
- Palmer, C. (1997). The Idea of the Domesticated Animal Contract. *Environmental Values*, 6(4), 411-425.
- Paltridge, B. (2006). *Discourse analysis: An introduction*. London: Continuum.
- Papacharissi, Z. (2004). Democracy online: civility, politeness, and the democratic potential of online political discussion groups. *new media & society*, 6(2), 259-283.

- Park, C. (2007). *Oxford dictionary of environment and conservation*. Oxford, UK: Oxford University Press.
- Parsons, T. (1951). *The social system*. Glencoe, IL, US: Free Press.
- Pavasovic Trost, T., & Kovacevic, N. (2013). Football, hooliganism and nationalism: the reaction to Serbia's gay parade in reader commentary online. *Sport in Society*, 16(8), 1054-1076.
- PBL. (2008). *The Netherlands in a sustainable world: Poverty, climate and biodiversity. Second sustainability outlook*. Bilthoven, The Netherlands: Netherlands Environmental Assessment Agency.
- Peattie, K. (2011). Developing and delivering social science research for sustainability. In A. Franklin & P. Blyton (Eds.), *Researching sustainability: A guide to social science methods, practice and engagement* (pp. 54-70). Abingdon, Oxon, UK: Earthscan.
- Peet, R., Robbins, P., & Watts, M. J. (Eds.). (2011). *Global political ecology* London and New York: Routledge.
- Piazza, J., Ruby, M. B., Loughnan, S., Luong, M., Kulik, J., Watkins, H. M., & Seigerman, M. (2015). Rationalizing meat consumption. *The 4Ns. Appetite*, 91, 114-128.
- Pirages, D. C., & Ehrlich, P. R. (1974). *Ark II: Social response to environmental imperatives*. New York: Viking Press.
- Polanyi, K. (1944). *The great transformation: The political and economic origins of our time*. Boston, MA: Beacon Press.
- Poore, J., & Nemecek, T. (2018). Reducing food's environmental impacts through producers and consumers. *Science*, 360(6392), 987-992.
- Popkin, B. M. (1999). Urbanization, Lifestyle Changes and the Nutrition Transition. *World Development*, 27(11), 1905-1916.
- Popkin, B. M., Adair, L. S., & Ng, S. W. (2012). Global nutrition transition and the pandemic of obesity in developing countries. *Nutrition reviews*, 70(1), 3-21.
- Postill, J. (2010). Introduction: Theorising media and practice. In B. Bräuchler & J. Postill (Eds.), *Theorising Media and Practice*. Oxford, UK: Berghahn.
- Power, K. (2011). *Consumer communication: CORPUS* The SCP Knowledge Hub.
- Power, K., & Mont, O. (2013). *The role of values and public perceptions in policy making for Sustainable Consumption. ETC/SCP Working Paper No 2/2013*. Copenhagen: European Topic Centre on Sustainable Consumption and Production.
- Pradhan, P., Reusser, D. E., & Kropp, J. P. (2013). Embodied greenhouse gas emissions in diets. *PLoS ONE*, 8(5), e62228.
- Proctor, R. N. (2008). Agnotology - A missing term to describe the cultural production of ignorance (and its study). In R. N. Proctor & L. Schiebinger (Eds.), *Agnotology - The making and unmaking of ignorance* (pp. 1-33). Stanford, CA: Stanford University Press.
- Purcell, K., Rainie, L., Mitchell, A., Rosenstiel, T., & Olmstead, K. (2010). *Understanding the participatory news consumer*. Washington, DC: Pew Internet.

- Raphaely, T., & Marinova, D. (2014). Flexitarianism: Decarbonising through flexible vegetarianism. *Renewable Energy*, 67, 90-96.
- Rawles, K. (2017). Developing ethical, sustainable and compassionate food policies. In J. D'Silva & J. Webster (Eds.), *The meat crisis: Developing more sustainable and ethical production and consumption*, 2nd ed. (pp. 259-275). Abingdon, UK: Routledge.
- Reckwitz, A. (2002). Toward a theory of social practices: A development in culturalist theorizing. *European Journal of Social Theory*, 5(2), 243-263.
- Reckwitz, A. (2017). Practices and their affects. In A. Hui, T. Schatzki, & E. Shove (Eds.), *The nexus of practices: Connections, constellations, practitioners* (pp. 114-125). Abingdon, UK: Routledge.
- Rees, J. H., Klug, S., & Bamberg, S. (2015). Guilty conscience: motivating pro-environmental behavior by inducing negative moral emotions. *Climatic Change*, 130(3), 439-452.
- Regmi, A., & Gehlhar, M. (2001). Consumer preferences and concerns shape global food trade. *Food Review*, 24(3), 2-8.
- Rivera-Ferre, M. G. (2009). Supply vs. demand of agri-industrial meat and fish products: A chicken and egg paradigm? *International Journal of Sociology of Agriculture & Food*, 16(2), 90-105.
- Rogers, C. R. (1964). Toward a modern approach to values: The valuing process in the mature person. *The Journal of Abnormal and Social Psychology*, 68(2), 160-167.
- Röös, E., Patel, M., Spångberg, J., Carlsson, G., & Rydhmer, L. (2016). Limiting livestock production to pasture and by-products in a search for sustainable diets. *Food Policy*, 58, 1-13.
- Rosaldo, M. Z. (1984). Toward an anthropology of self and feeling. In R. A. Shweder & R. A. LeVine (Eds.), *Essays on Mind, Self, and Emotion* (pp. 137-157). Cambridge, UK: Cambridge University Press.
- Rothgerber, H. (2013). Real men don't eat (vegetable) quiche: Masculinity and the justification of meat consumption. *Psychology of Men & Masculinity*, 14(4), 363-375.
- Rothgerber, H. (2014). Efforts to overcome vegetarian-induced dissonance among meat eaters. *Appetite*, 79, 32-41.
- Rouhani, M. H., Salehi-Abargouei, A., Surkan, P. J., & Azadbakht, L. (2014). Is there a relationship between red or processed meat intake and obesity? A systematic review and meta-analysis of observational studies. *Obes Rev*, 15(9), 740-748.
- Rozin, P. (1996). Towards a psychology of food and eating: From motivation to module to model to marker, morality, meaning, and metaphor. *Current Directions in Psychological Science*, 5(1), 18-24.
- Rozin, P., & Haidt, J. (2013). The domains of disgust and their origins: contrasting biological and cultural evolutionary accounts. *Trends in Cognitive Sciences*, 17(8), 367-368.

- Rozin, P., Markwith, M., & Stoess, C. (1997). Moralization and becoming a vegetarian: The transformation of preferences into values and the recruitment of disgust. *Psychological Science*, 8(2), 67-73.
- Ruby, M. B. (2012). Vegetarianism. A blossoming field of study. *Appetite*, 58(1), 141-150.
- Ruby, M. B., & Heine, S. J. (2011). Meat, morals, and masculinity. *Appetite*, 56(2), 447-450.
- Ruiz, C., Domingo, D., Micó, J. L., Díaz-Noci, J., Meso, K., & Masip, P. (2011). Public sphere 2.0? The democratic qualities of citizen debates in online newspapers. *The International Journal of Press/Politics*, 16(4), 463-487.
- Ruiz Ruiz, J. (2009). Sociological discourse analysis: Methods and logic. *Forum: Qualitative Social Research*, 10(2).
- Sahakian, M., & Wilhite, H. (2014). Making practice theory practicable: Towards more sustainable forms of consumption. *Journal of Consumer Culture*, 14(1), 25-44.
- Sampaio, R. C., & Barros, S. A. R. (2012). Can news sites stimulate online deliberation? A study of readers' comments posted on folha.com. *Brazilian Journalism Research*, 8(2), 188-205.
- Sandel, M. J. (2012). *What money can't buy: The moral limits of markets*. New York: Farrar, Straus and Giroux.
- Sanderson, B. (2014). *Food Values - A position paper for the Organic Centre Wales from the Public Interest Research Centre*. Machynlleth, Wales, UK: Public Interest Research Centre.
- Santana, A. D. (2011). Online readers' comments represent new opinion pipeline. *Newspaper Research Journal*, 32(3), 66-81.
- Santini, F., Ronzon, T., Araujo Enciso, S. R., Perez Dominguez, I., & Proietti, I. (2015). *What if meat consumption would decrease more than expected in the high-income countries?* Paper presented at the 4th AIEEA Conference "Innovation, productivity and growth: Towards sustainable agri-food production", Ancona, Italy.
- Sarewitz, D. (2004). How science makes environmental controversies worse. *Environmental Science & Policy*, 7(5), 385-403.
- Sayer, A. (2013). Power, sustainability and well-being: an outsider's view. In E. Shove & N. Spurling (Eds.), *Sustainable practices: social theory and climate change* (pp. 292-317). London: Routledge.
- Schatzki, T. (1996). *Social practices: A Wittgensteinian approach to human activity and the social*. New York: Cambridge University Press.
- Schatzki, T. R. (2002). *The site of the social: A philosophical account of the constitution of social life and change*. University Park, PA, US: The Pennsylvania State University.
- Scheer, M. (2012). Are emotions a kind of practice (and is that what makes them have a history)? A Bourdieuan approach to understanding emotion. *History and Theory*, 51(2), 193-220.

- Schmelzer, M., & Eversberg, D. (2017). Beyond growth, capitalism, and industrialism? Consensus, divisions and currents within the emerging movement for sustainable degrowth. *Interface: A Journal on Social Movements*, 9(1), 327-356.
- Schneider, A. V. C. (2002). Overview of the market and consumption of pulses in Europe. *British Journal of Nutrition*, 88(S3), 243-250.
- Schösler, H., Boer, J. d., & Boersema, J. J. (2012). Can we cut out the meat of the dish? Constructing consumer-oriented pathways towards meat substitution. *Appetite*, 58(1), 39-47.
- Schreier, M. (2012). *Qualitative content analysis in practice*. London: SAGE Publications Ltd.
- Schroeter, C., & Foster, K. (2004). *The impact of health information and demographic changes on aggregate meat demand*. Paper presented at the AAEA Annual Meeting, Denver, CO, US.
- Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. In M. P. Zanna (Ed.), *Advances in Experimental Social Psychology* (Vol. 25, pp. 1-65): Academic Press.
- Schwartz, S. H. (2006a). Basic human values: Theory, measurement, and applications. *Revue française de sociologie*, 47(4).
- Schwartz, S. H. (2006b). A theory of cultural value orientations: Explication and applications. *Comparative Sociology*, 5(2-3), 137-182.
- Schwartz, S. H. (2012). An overview of the Schwartz theory of basic values. *Online Readings in Psychology and Culture*, 2(1).
- Schwartz, S. H., & Bardi, A. (2001). Value hierarchies across cultures: Taking a similarities perspective. *Journal of Cross-Cultural Psychology*, 32(3), 268-290.
- Schwartz, S. H., Verkasalo, M., Antonovsky, A., & Sagiv, L. (1997). Value priorities and social desirability: Much substance, some style. *British Journal of Social Psychology*, 36(1), 3-18.
- Schyver, T., & Smith, C. (2005). Reported attitudes and beliefs toward soy food consumption of soy consumers versus nonconsumers in natural foods or mainstream grocery stores. *Journal of Nutrition Education and Behavior*, 37(6), 292-299.
- Semino, E., Demjen, Z., & Demmen, J. (2016). An integrated approach to metaphor and framing in cognition, discourse, and practice, with an application to metaphors for cancer. *Applied Linguistics*, 2016, 1-22.
- Semino, E., Heywood, J., & Short, M. (2004). Methodological problems in the analysis of metaphors in a corpus of conversations about cancer. *Journal of Pragmatics*, 36(7), 1271-1294.
- Seppänen, J., & Väliaverronen, E. (2012). *Mediayhteiskunta*. Tampere, Finland: Vastapaino.
- Shanahan, M.-C. (2010). Changing the meaning of peer-to-peer? Exploring online comment spaces as sites of negotiated expertise. *Journal of Science Communication*, 9(1), 1-13.

- Shephard, R., & Raats, M. (2006). Preface. In R. Shephard & M. Raats (Eds.), *The psychology of food choice*. Wallingford, UK: CAB International.
- Shiv, B., & Fedorikhin, A. (1999). Heart and mind in conflict: Interplay of affect and cognition in consumer decision making. *Journal of Consumer Research*, 26(3), 278-282.
- Shove, E. (2003). Converging conventions of comfort, cleanliness and convenience. *Journal of Consumer Policy*, 26(4), 395-418.
- Shove, E. (2010). Beyond the ABC: Climate change policy and theories of social change. *Environment and Planning A*, 42(6), 1273-1285.
- Shove, E., Pantzar, M., & Watson, M. (2012). *The dynamics of social practice - Everyday life and how it changes*. London: SAGE Publications Ltd.
- Shove, E., & Spurling, N. (2013). Sustainable practices: Social theory and climate change. In E. Shove & N. Spurling (Eds.), *Sustainable practices: social theory and climate change* (pp. 1-13). London: Routledge.
- Shprintzen, A. D. (2011). *Abstinence to consumption: The development of American vegetarianism, 1817-1917*. (Doctoral thesis), Loyola University Chicago. Retrieved from [http://ecommons.luc.edu/luc\\_diss/75/](http://ecommons.luc.edu/luc_diss/75/)
- Siddique, K. H. M., & Sykes, J. (1997). Pulse production in Australia past, present and future. *Australian Journal of Experimental Agriculture*, 37(1), 103-111.
- Simon, M. (2013). *And now a word from our sponsors - Are America's nutrition professionals in the pocked of Big Food? : Eat Drink Politics*.
- Sindoni, M. G. (2013). *Spoken and written discourse in online interactions - A multimodal approach*. New York: Routledge.
- Sinha, R., Cross, A. J., Graubard, B. I., Leitzmann, M. F., & Schatzkin, A. (2009). Meat intake and mortality: a prospective study of over half a million people. *Arch Intern Med*, 169(6), 562-571.
- Siri-Tarino, P. W., Sun, Q., Hu, F. B., & Krauss, R. M. (2010). Meta-analysis of prospective cohort studies evaluating the association of saturated fat with cardiovascular disease. *Am J Clin Nutr*, 91(3), 535-546.
- Smetana, S., Mathys, A., Knoch, A., & Heinz, V. (2015). Meat alternatives: life cycle assessment of most known meat substitutes. *The International Journal of Life Cycle Assessment*, 20(9), 1254-1267.
- Smil, V. (2002). Worldwide transformation of diets, burdens of meat production and opportunities for novel food proteins. *Enzyme and Microbial Technology*, 30(3), 305-311.
- Smil, V. (2011). Harvesting the biosphere: the human impact. *Popul Dev Rev*, 37(4), 613-636.
- Smil, V. (2013). *Should we eat meat? Evolution and consequences of modern carnivory*. Chichester, UK: John Wiley & Sons, Ltd.
- Smith, P., Bustamante, M., Ahammad, H., Clark, H., Dong, H., Elsiddig, E. A., Haberl, H., et al. (2014). Agriculture, Forestry and Other Land Use (AFOLU).

- In O. Edenhofer, R. Pichs-Madruga, Y. Sokona, E. Farahani, S. Kadner, K. Seyboth, A. Adler, I. Baum, S. Brunner, P. Eickemeier, B. Kriemann, J. Savolainen, S. Schlömer, C. von Stechow, T. Zwickel, & J. C. Minx (Eds.), *Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge, UK, and New York, US: Cambridge University Press.
- Sneijder, P., & te Molder, H. F. M. (2005). Moral logic and logical morality: Attributions of responsibility and blame in online discourse on veganism. *Discourse & Society*, 16(5), 675-696.
- Sobal, J., Bisogni, C. A., Devine, C. M., & Jastran, M. (2006). A conceptual model of the food choice process over the life course. In R. Shephard & M. Raats (Eds.), *The psychology of food choice*. Wallingford, UK: CAB International.
- Soil Association. (2010). *Telling porkies - The big fat lie about doubling food production*. Bristol, UK: Soil Association.
- Southerton, D., McMeekin, A., & Evans, D. (2011). *International review of behaviour change initiatives: Climate change behaviours research programme (Scottish Government Report)*. Edinburgh: Scottish Government.
- Southerton, D., Warde, A., & Hand, M. (2004). The limited autonomy of the consumer: Implications for sustainable consumption. In D. Southerton, H. Chappells, & B. Van Vliet (Eds.), *Sustainable consumption: Implications of changing infrastructures of provision*. Manchester, UK: Edward Elgar.
- Spaargaren, G. (1997). *The ecological modernization of production and consumption: Essays in environmental sociology*. (Doctoral thesis), Wageningen University.
- Spaargaren, G. (2013). The cultural dimension of sustainable consumption practices: An exploration in theory and policy. In M. J. Cohen, H. S. Brown, & P. J. Vergragt (Eds.), *Innovations in sustainable consumption - New economics, socio-technical transitions and social practices* (pp. 229-251). Cheltenham, UK: Edward Elgar.
- Spaargaren, G., Loeber, A., & Oosterveer, P. (2012). Food futures in the making. In G. Spaargaren, P. Oosterveer, & A. Loeber (Eds.), *Food practices in transition: Changing food consumption, retail and production in the age of reflexive modernity* (pp. 312-337). New York: Routledge.
- Spaargaren, G., Oosterveer, P., & Loeber, A. (2012a). Sustainability transitions in food consumption, retail and production. In G. Spaargaren, P. Oosterveer, & A. Loeber (Eds.), *Food practices in transition: Changing food consumption, retail and production in the age of reflexive modernity* (pp. 1-31). New York: Routledge.
- Spaargaren, G., Oosterveer, P., & Loeber, A. (Eds.). (2012b). *Food practices in transition: Changing food consumption, retail and production in the age of reflexive modernity*. New York: Routledge.
- Spangenberg, J. H. (2016, 29-30 August). *Sufficiency, degrowth and sustainable consumption*. Paper presented at the Sustainable consumption and social justice in a constrained world. SCORAI Europe Workshop, Budapest, Hungary.

- Spencer, A. (2010). *The tabloid terrorist: The predicative construction of new terrorism in the media*. Basingstoke, UK: Palgrave Macmillan.
- Spiller, A., & Nitzko, S. (2015). Peak meat: The role of meat in sustainable consumption. In L. A. Reisch & J. Thøgersen (Eds.), *Handbook of research on sustainable consumption* (pp. 192-208). Cheltenham, UK: Edward Elgar Publishing Ltd.
- Spotswood, F., & Marsh, A. (2016). Conclusion: What is the future of "behaviour change"? In F. Spotswood (Ed.), *Beyond behaviour change: Key issues, interdisciplinary approaches and future directions* (pp. 257-298). Bristol, UK: Policy Press.
- Springmann, M., Clark, M., Mason-D'Croz, D., Wiebe, K., Bodirsky, B. L., Lassalle, L., de Vries, W., et al. (2018). Options for keeping the food system within environmental limits. *Nature*, 562, 519-525.
- Springmann, M., Mason-D'Croz, D., Robinson, S., Wiebe, K., Godfray, H. C. J., Rayner, M., & Scarborough, P. (2016). Mitigation potential and global health impacts from emissions pricing of food commodities. *Nature Climate Change*, 7, 69.
- Springmann, M., Spajic, L., Clark, M. A., Poore, J., Herforth, A., Webb, P., Rayner, M., et al. (2020). The healthiness and sustainability of national and global food based dietary guidelines: Modelling study. *BMJ*, 370, m2322.
- Spurling, N., McMeekin, A., Shove, E., Southerton, D., & Welch, D. (2013). *Interventions in practice: re-framing policy approaches to consumer behaviour*. Swindon, UK: Economic and Social Research Council - Sustainable Practices Research Group.
- Stănescu, V. (2016). Beyond happy meat - The (im)possibilities of "humane", "local" and "compassionate" meat. In B. Donaldson & C. Carter (Eds.), *The future of meat without animals*. London: Rowman & Littlefield International, Ltd.
- Stangor, C. (2010). *Introduction to psychology. First Canadian edition*. Canada: BCcampus.
- Steg, L. (2015). Environmental psychology and sustainable consumption. In L. A. Reisch & J. Thøgersen (Eds.), *Handbook of research on sustainable consumption* (pp. 70-83). Cheltenham, UK: Edward Elgar Publishing Ltd.
- Steinfeld, H., Gerber, P. J., Wassenaar, T., Castel, V., Rosales, M., & de Haan, C. (2006). *Livestock's long shadow - Environmental issues and options*. Rome, Italy: Food and Agriculture Organization.
- Stern, S. N. (2015). *Why are we waiting? The logic, urgency, and promise of tackling climate change*. Cambridge, MA: The MIT Press.
- Stibbe, A. (2015). *Ecolinguistics: Language, ecology and the stories we live by*. Abingdon, UK: Routledge.
- Stibbe, A. (2018). *Stories of the meat and dairy industries. Unpublished consultancy report by Greenpeace*.
- Strydom, P. (1999). The challenge of responsibility for sociology. *Current Sociology*, 47(3), 65-82.

- Strydom, P. (2000). *Discourse and knowledge: The making of Enlightenment sociology*. Liverpool, UK: Liverpool University Press.
- Suveri, L. (2016). "Plants are living too" the diverse carnism of fur farming discourses in Finland - Values and institutions. (Master's thesis), The University of Turku.
- Swatland, H. J. (2010). Meat products and consumption culture in the West. *Meat Sci*, 86(1), 80-85.
- Tabi, A., Kerekes, S., Csutora, M., Wüstenhagen, R., & Wetzker, K. (2013). *Megújuló energia felmérés 2013 / A megújuló energiatechnológiák társadalmi elfogadottságának vizsgálata*. Budapest: Corvinus University of Budapest.
- Tan, H. S. G., Fischer, A. R. H., Tinchan, P., Stieger, M., Steenbekkers, L. P. A., & van Trijp, H. C. M. (2015). Insects as food: Exploring cultural exposure and individual experience as determinants of acceptance. *Food Quality and Preference*, 42, 78-89.
- Tangney, J. P., Stuewig, J., & Mashek, D. J. (2007). Moral emotions and moral behavior. *Annual Review of Psychology*, 58, 345-372.
- Tannen, D. (1998). *The argument culture: Moving from debate to dialogue*. New York: Random House.
- Taylor, S. (2001). Evaluating and applying discourse analytic research. In M. Wetherell, S. Taylor, & S. J. Yates (Eds.), *Discourse as data: A guide for analysis* (pp. 311-330). Milton Keynes, UK: The Open University.
- Tenbrunsel, A. E., Diekmann, K. A., Wade-Benzoni, K. A., & Bazerman, M. H. (2010). The ethical mirage: A temporal explanation as to why we are not as ethical as we think we are. *Research in Organizational Behavior*, 30, 153-173.
- The Pew Commission. (2008). *Putting meat on the table: Industrial farm animal production in America. A report of the Pew Commission on industrial farm animal production: A Project of The Pew Charitable Trusts and Johns Hopkins Bloomberg School of Public Health*.
- The World Bank. (2017). *An overview of links between obesity and food systems*. Retrieved from <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/222101499437276873/an-overview-of-links-between-obesity-and-food-systems-implications-for-the-agriculture-gp-agenda>
- Tian, S., Wang, Y., & Zhao, M. (2016). The "Vegetable basket project" - Tracking the increase of meat production and consumption in China since the 1980s (Y. Gao, Trans.). In B. Donaldson & C. Carter (Eds.), *The future of meat without animals*. London: Rowman & Littlefield International, Ltd.
- Tonkiss, F. (2004). Analysing text and speech: Content and discourse analysis. In C. Seale (Ed.), *Researching Society and Culture* (Second edition ed., pp. 368-382). London: Sage Publications.
- Tudge, C. (2017). How to raise livestock / and how not to. In J. D'Silva & J. Webster (Eds.), *The meat crisis: Developing more sustainable and ethical production and consumption*, 2nd ed. (pp. 9-20). Abingdon, UK: Routledge.

- Tuomisto, H. L., Ellis, M., & Haastrup, P. (2014). *Environmental impacts of cultured meat: Alternative production scenarios*. Paper presented at the The 9th International Conference on Life Cycle Assessment in the Agri-Food Sector (LCA Food 2014), San Francisco, CA.
- Tuomisto, H. L., Mols, R., Allan, S., & Ellis, M. (2017). *Environmental impacts of large-scale cultured meat production?* Paper presented at the The 3rd Cultured Meat Conference, Maastricht, The Netherlands.
- Tuomisto, H. L., & Teixeira de Mattos, M. J. (2011). Environmental impacts of cultured meat production. *Environmental Science & Technology*, 45(14), 6117-6123.
- Twine, R. (2014). *Climate change and other animals. Keynote presentation*. Paper presented at the Centre for Human Animal Studies (CFHAS) inaugural & launch conference, Edge Hill University, Lancashire, UK.
- Tyrovolas, S., & Polychronopoulos, E. (2010). Lessons from studies in middle-aged and older adults living in mediterranean islands: the role of dietary habits and nutrition services. *Cardiology research and practice*, 2011, 901651-901651.
- Urry, J. (2011). *Climate and society*. Cambridge, UK: Polity Press.
- van der Weele, C. (2013). Meat and the benefits of ambivalence. In H. Röcklinsberg & P. Sandin (Eds.), *The ethics of consumption: The citizen, the market and the law*. Wageningen, The Netherlands: Wageningen Academic Publishers.
- van der Weele, C. (2017). Cultured meat, better than beans? In J. Duncan & M. Bailey (Eds.), *Sustainable food futures - Multidisciplinary solutions*. London: Routledge.
- van der Weele, C., & Driessen, C. (2013). Emerging profiles for cultured meat: Ethics through and as design. *Animals : an open access journal from MDPI*, 3(3), 647-662.
- van Dijk, T. A. (1995). Discourse semantics and ideology. *Discourse & Society*, 6(2), 243-289.
- van Dijk, T. A. (1998). *Ideology - A multidisciplinary approach*: SAGE Publications Ltd.
- Van Dijk, T. A. (2006). Ideology and discourse analysis. *Journal of Political Ideologies*, 11(2), 115-140.
- van Dijk, T. A. (2015). Critical discourse analysis. In D. Tannen, H. E. Hamilton, & D. Schiffrin (Eds.), *The handbook of discourse analysis, 2nd edition* (pp. 466-485). Hoboken, NJ: Wiley Blackwell.
- van Harreveld, F., van der Pligt, J., & de Liver, Y. N. (2009). The agony of ambivalence and ways to resolve it: Introducing the MAID model. *Personality and Social Psychology Review*, 13(1), 45-61.
- van Otterloo, A. H. (2012). Healthy, safe and sustainable: Consumers and the public debate on food in Europe and the Netherlands since 1945. In G. Spaargaren, P. Oosterveer, & A. Loeber (Eds.), *Food practices in transition: Changing food consumption, retail and production in the age of reflexive modernity* (pp. 60-85). New York: Routledge.

- Verain, M. C. D., Dagevos, H., & Antonides, G. (2015). Flexitarianism: A range of sustainable food styles. In L. A. Reisch & J. Thøgersen (Eds.), *Handbook of research on sustainable consumption* (pp. 209-223). Cheltenham, UK: Edward Elgar Publishing Ltd.
- Verbeke, W., Marcu, A., Rutsaert, P., Gaspar, R., Seibt, B., Fletcher, D., & Barnett, J. (2015). "Would you eat cultured meat?": Consumers' reactions and attitude formation in Belgium, Portugal and the United Kingdom. *Meat Science*, 102, 49-58.
- Vergragt, P. J., & Quist, J. (2011). Backcasting for sustainability: Introduction to the special issue. *Technological Forecasting and Social Change*, 78(5), 747-755.
- Verplanken, B., & Roy, D. (2015). Consumer habits and sustainable consumption. In L. A. Reisch & J. Thøgersen (Eds.), *Handbook of research on sustainable consumption* (pp. 243-253). Cheltenham, UK: Edward Elgar Publishing Ltd.
- Voegt-Kleschin, L., Baatz, C., & Ott, K. (2015). Ethics and sustainable consumption. In L. A. Reisch & J. Thøgersen (Eds.), *Handbook of research on sustainable consumption* (pp. 118-128). Cheltenham, UK: Edward Elgar Publishing Ltd.
- Wansink, B., & Sobal, J. (2007). Mindless eating: The 200 daily food decisions we overlook. *Environment and Behavior*, 39(1), 106-123.
- Warde, A. (2013). What sort of practice is eating? In E. Shove & N. Spurling (Eds.), *Sustainable Practices - Social theory and climate change* (pp. 17-30). Abingdon, UK: Routledge.
- Warde, A. (2014). After taste: Culture, consumption and theories of practice. *Journal of Consumer Culture*, 14(3), 279-303.
- Warde, A., Welch, D., & Paddock, J. (2017). Studying consumption through the lens of practice. In M. Keller, B. Halkier, T.-A. Wilska, & M. Truninger (Eds.), *Routledge Handbook on Consumption* (pp. 25-35). Abingdon, UK: Routledge.
- Watson, M. (2017). Placing power in practice theory. In A. Hui, T. Schatzki, & E. Shove (Eds.), *The nexus of practices: Connections, constellations, practitioners* (pp. 169-182). Abingdon, UK: Routledge.
- Weenink, D., & Spaargaren, G. (2016). Emotional agency navigates a world of practices. In G. Spaargaren, D. Weenink, & M. Lamers (Eds.), *Practice theory and research* (pp. 60-84). Abingdon, UK: Routledge.
- Welch, D. (2016). Social practices and behaviour change. In F. Spotswood (Ed.), *Beyond behaviour change: Key issues, interdisciplinary approaches and future directions* (pp. 237-256). Bristol, UK: Policy Press.
- Welch, D. (2017a). Behaviour change and theories of practice: Contributions, limitations and developments. *Social Business*, 7(3-4), 241-261.
- Welch, D. (2017b). Consumption and teleoaffective formations: Consumer culture and commercial communications. *Journal of Consumer Culture*, 20(1), 61-82.

- Welch, D., & Warde, A. (2015). Theories of practice and sustainable consumption. In L. A. Reisch & J. Thøgersen (Eds.), *Handbook of research on sustainable consumption* (pp. 84-100). Cheltenham, UK: Edward Elgar Publishing Ltd.
- Welch, D., & Warde, A. (2017). How should we understand "general understandings"? In A. Hui, T. Schatzki, & E. Shove (Eds.), *The nexus of practices: Connections, constellations, practitioners* (pp. 183-196). Abingdon, UK: Routledge.
- Wellesley, L., Happer, C., & Froggatt, A. (2015). *Changing climate, changing diets - Pathways to lower meat consumption. Chatham House Report*. London: The Royal Institute of International Affairs.
- Westhoek, H., Lesschen, J. P., Rood, T., Wagner, S., De Marco, A., Murphy-Bokern, D., Leip, A., et al. (2014). Food choices, health and environment: Effects of cutting Europe's meat and dairy intake. *Global Environmental Change*, 26, 196-205.
- Westhoek, H., Rood, T., van den Berg, M., Janse, J., Nijdam, D., Reudink, M., & Stehfest, E. (2011). *The Protein Puzzle: The consumption and production of meat, dairy and fish in the European Union*. The Hague: PBL Netherlands Environmental Assessment Agency.
- White, M. (1972). *Science and sentiment in America: Philosophical thought from Jonathan Edwards to John Dewey*. New York, US: Oxford University Press.
- White, R. J., & Razgour, O. (2020). Emerging zoonotic diseases originating in mammals: A systematic review of effects of anthropogenic land-use change. *Mammal Review*, 50(4).
- White, R. R., & Hall, M. B. (2017). Nutritional and greenhouse gas impacts of removing animals from US agriculture. *Proceedings of the National Academy of Sciences*, 114(48), E10301-E10308.
- WHO. (2015). What to do about resistant bacteria in the food-chain? *Bulletin of the World Health Organization*, 93(4), 217-218.
- Wieland, J. W. (2017). Willful ignorance. *Ethical Theory and Moral Practice*, 20(1), 105-119.
- Wiles, R., Crow, G., & Pain, H. (2011). Innovation in qualitative research methods: a narrative review. *Qualitative Research*, 11(5), 587-604.
- Wilk, R. (2018). *Abstraction: Barriers in communicating the impacts of consumerism. Presentation*. Paper presented at the Third International Conference of the Sustainable Consumption Research and Action Initiative (SCORAI), Copenhagen, Denmark.
- Willett, W., Rockström, J., Loken, B., Springmann, M., Lang, T., Vermeulen, S., Garnett, T., et al. (2019). Food in the Anthropocene: the EAT-Lancet Commission on healthy diets from sustainable food systems. *The Lancet*, 393(10170), 447-492.
- Willett, W. C., & Stampfer, M. J. (2013). Current evidence on healthy eating. *Annu Rev Public Health*, 34, 77-95.

- Wilson, J. (2015). Political discourse. In D. Tannen, H. E. Hamilton, & D. Schiffrin (Eds.), *The handbook of discourse analysis, 2nd edition* (pp. 775-794). Hoboken, NJ: Wiley Blackwell.
- Wilson, M. S., Weatherall, A., & Butler, C. (2004). A rhetorical approach to discussions about health and vegetarianism. *Journal of Health Psychology, 9*(4), 567-581.
- Wodak, R. (2014). Critical Discourse Analysis. In C. Leung & B. V. Street (Eds.), *The Routledge companion to English studies* (pp. 302-316). Abingdon, UK: Routledge.
- WRAP. (2015). *Food futures: From business as usual to business unusual*. Banbury, UK: Waste and Resources Action Programme
- Xie, J., Sreenivasan, S., Korniss, G., Zhang, W., Lim, C., & Szymanski, B. K. (2011). Social consensus through the influence of committed minorities. *Physical Review E, 84*(1).
- Yang, H. S. (2008). The effects of the opinion and quality of user postings on Internet news readers' attitude toward the news issue. *Korean Journal of Journalism and Communication Studies, 52*, 254-280.
- York, R., & Gossard, M. H. (2004). Cross-national meat and fish consumption: exploring the effects of modernization and ecological context. *Ecological Economics, 48*(3), 293-302.
- Zaraska, M. (2016a). *Meathooked - The history and science of our 2.5-million-year obsession with meat*. New York: Basic Books.
- Zaraska, M. (2016b). Mind over meat. *Scientific American Mind, 32*-37.
- Zhou, W. (2015). Triangle - The evolution and future of industrial animal agriculture in the U.S., China, and Brazil. A policy paper. New York, US: Brighter Green.
- Zimmerman, F. J. (2011). Using marketing muscle to sell fat: the rise of obesity in the modern economy. *Annu Rev Public Health, 32*, 285-306.
- Zimmerman, F. J., & Shimoga, S. V. (2014). The effects of food advertising and cognitive load on food choices. *BMC Public Health, 14*, 342.



## 8. Annex 1 – Coding system used in MAXQDA

---

Main code	Sub code	Explanation
Threads		Marks each thread (i.e. chain of posts)
Posts		Marks each post
Interesting		Marks instances where I thought I might use the data later, but there was no existing suitable code yet, neither was there any need for creating a new code at that point
Old meatways		I did not code data with this main code
	Vegetarianism/ veganism	Marks instances where vegetarianism or veganism is discussed or referred to (code included prior to analysis)
	Conventional meat system	Marks instances where any positive or negative (or neutral) aspect of some type of conventional (intensive, extensive, organic etc.) animal agriculture is discussed or referred to (code included prior to analysis)
New meatways		I did not code data with this main code
	Insects and insect protein as food	Marks instances where insects as potential or existing food for humans are discussed or referred to (code included prior to analysis)
	Flexitarianism	Marks instances where flexitarianism is discussed, implied or referred to, including instances where infrequent or occasional meat eating is discussed without calling it flexitarianism (code included prior to analysis)
	Plant-based meat	Marks instances where either new or old plant-based meat is discussed or referred to, including other plant-based “animal protein”; note that when the topic is “old” plant-based meat replacements, this is included in a note attached to the data (code included prior to analysis)
	Cultivated meat	Marks instances where cultivated meat is discussed or referred to, including other cultivated animal protein (code included prior to analysis)
Making positive future with meat alternatives		Marks instances where various meat alternatives are discussed as positive in/for the future (code from data)

Business/technology—meat and meat alternatives		Marks instances where businesses or technologies are discussed in connection with, also conventional animal-based meat, but mostly meat alternatives (code from data)
Labels		Marks instances where labelling meat-eating related behaviour is discussed or referred to; this mostly relates to flexitarianism (code from data)
Story		Marks instances where a "story" of some sort is contained in the post (code from literature)
Knowledge		Marks instances where knowledge regarding "where meat comes from" and the impacts from meat production or consumption are discussed or referred to; it is about ethical aspects about animals, and about other impacts of meat production, as well as similar impacts of meat alternatives (code from data)
Conflict		Marks instances of either a personal conflict between two posters (when it is related to the topic), or a conflict between ideas (related to the topic); in many cases, a conflict between two posters is also a conflict between ideas (code from literature)
Cognitive frames about meat		Includes all cognitive frames that were first coded generally as "frames" in MAXQDA, and then analysed in more detail outside MAXQDA (using mainly Excel for organisation); the frames are discussed in Chapter 5 (code from theory building and literature)
Carnism		Marks direct references to something more or less ideological as regards eating meat; note that this code does not mark instances where carnism is not obvious, e.g. it is not meant for instances when someone says that they love meat, or use one of the four Ns, or other coping strategies (code from literature)
Metaphor		Marks certain conceptual metaphors that were repeated in the data, and I considered potentially relevant to the research questions (code from data, but in relation to literature)
Values and morals		I did not code data with this main code

	Values and morals general	Marks instances with any (implied or direct) reference to morals or values in connection with eating or not eating animals (code from theory building and literature)
	Watching/not watching others and their choices	Marks instances of discussion regarding whether people care (or do not care) about what other people are doing somehow in connection with eating or not eating meat (code from data)
Modality		Marks instances where the use of a modal verb (in particular “should”) is ambiguous, i.e. the modal verb can refer at the same time to something probably happening (epistemic modality) and something being “morally right” to do (“root” modality) (code from literature)
Agency or lack of agency		Marks instances where feeling of agency or lack of agency to change one’s own meat-eating related practices is discussed or referred to (code from theory building and literature)
Emotions		I did not code data with this main code
	Emotions general	Marks instances where a positive or negative emotion (related to the topic of meat) is expressed or discussed (code included prior to analysis)
	Catastrophizing	Marks instances where it seems that a poster is catastrophizing, i.e. when a situation (somehow in relation to impacts from the meat system) is viewed or presented as extreme; this is placed under “emotions”, as catastrophizing is related to anxiety (code from data)
Disgust		Marks instances where disgust, either towards meat, or towards meat alternatives is expressed or discussed; disgust is also an emotion, but since it is both an emotion and (possibly) a coping strategy, it is not under either of those, and is listed as a main code (code included prior to analysis)

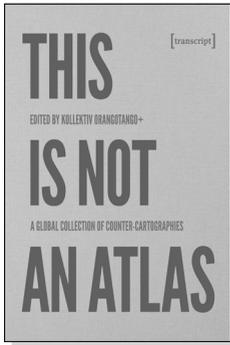
Environmental melancholia		Marks instances which can be seen to relate to environmental melancholia (and disempowerment) as regards meat eating; environmental melancholia can be seen as an emotion, and a coping strategy, so it is listed as a main code (code from literature)
The 4 N justifications		I did not code data with this main code; the 4 N justifications coded here include instances where the 4 Ns are used as coping strategies, or related to carnism (all these codes are from literature and theory building)
	Not normal	Marks instances where eating meat or eating meat alternatives, or very occasionally processes related to the production of meat or meat alternatives, are referred to as not normal
	Normal	Marks instances where eating meat or eating meat alternatives, or very occasionally processes related to the production of meat or meat alternatives, are referred to as normal
	Not natural	Marks instances where eating meat or eating meat alternatives, or often in this case, processes related to the production of meat or meat alternatives are referred to as not natural
	Natural	Marks instances where eating meat or eating meat alternatives, or often in this case, processes related to the production of meat or meat alternatives are referred to as natural
	Not necessary	Marks instances where eating meat or eating meat alternatives are referred to as not necessary; note that this code is restricted to the food products, not processes of production
	Necessary	Marks instances where eating meat or eating meat alternatives are referred to as necessary; note that this code is restricted to the food products, not processes of production
	Not nice	Marks instances where (eating) meat or (eating) meat alternatives are referred to as not nice; note that this code is restricted to the food products, not processes of production
	Nice	Marks instances where (eating) meat or (eating) meat alternatives are referred to as nice; note that this code is restricted to the food products, not processes of production

<p>Acknowledging ambivalence</p>		<p>Marks instances where ambivalence related to meat eating is in some form implied or discussed; this code is not used for instances where a poster may have acknowledged his/her ambivalence and changed behaviour (i.e. by becoming a vegetarian) (code from literature and theory building)</p>
<p>Indifference</p>		<p>Marks instances where no justification for meat eating seems necessary for a poster, also when related negative issues are acknowledged; discussion of such behaviour is included; the code also marks instances where one or more of the four Ns are used, but seemingly for social reasons only, i.e. no personal values or emotions appear to be in conflict (code from data)</p>
<p>Actual behaviour change</p>		<p>Marks instances where the process of eating less meat, or organic meat, or becoming vegetarian or vegan is discussed; this is in fact a coping strategy in literature, but listed as a main code here</p>
<p>Other coping strategies</p>		<p>I did not code data with this main code; these coping strategies are instead of, or in addition to the 4 N justifications, and are generally related to strategic ignorance</p>
	<p>All or nothing</p>	<p>Marks instances where it is implied that unless one can do everything to eliminate harm it is not worth doing just some of it; instances where such an attitude is discussed or criticized are included; further, instances of "shooting the messenger" are included, i.e. criticism for someone discussing a moral behaviour, but not following it him/herself; included are those posts, usually from posters identifying as vegetarians or vegans, where less harm is considered no better than a lot of harm, and only no harm is good enough (i.e. a "black and white" attitude); as regards meat eaters, this "all or nothing" coping strategy may actually be related to the "freedom to choose", as any restrictions by definition impact on freedom to choose, however, it is a somewhat different argument, therefore I have separated these two codes (code from literature)</p>

	Animal death is unavoidable	A version of the "all or nothing" coping strategy, but marked separately due to its popularity; in short: even a vegetarian diet causes a lot of animal death (on the fields themselves, or because of agricultural expansion); humans cannot live without animals dying; animal death is inevitable, and the more humans, the more animals die; in other words, meat eaters are not any more principally responsible than those not eating meat (code from data)
	Devaluing vegetarians	Marks instances where deficiencies and inconsistencies among vegetarians or vegans are specifically discussed; includes instances where such discussion is criticized and vegetarians and vegans are defended; this code is also linked to the "all or nothing" code, but considered separately, as it is not only about excuses for not changing one's own behaviour (by eating less or no meat), and about putting others down (code from literature)
	Freedom to choose	Marks instances where freedom to choose what kind of food to eat is considered more important than any negative issues related to eating meat; also relates to people seemingly being afraid of being fooled or forced to eat "fake meat", i.e. unidentifiable meat replacements; included are instances where any ambivalence about eating meat is ridiculed, and eating meat is presented as a simple choice, either eat it or don't (code from data)
	Blaming vegans	Marks instances where vegans are being blamed for why the poster him/herself is not trying veganism/vegetarianism, i.e. due to the hypocrisy and bad behaviour of vegans (code from data)
	Denial of animal mind	Marks instances where meat animals are considered less intelligent than other animals, such as pets (code from literature)
	Denial of animal pain	Marks instances where meat animals are considered to not feel pain when mistreated or killed (code from literature)

	Neocarnism	Marks instances of discussion of behaviour change, e.g. eating only organic or “humane” meat, however, without being strict with the choices, or without finding out how the animals have actually been raised, i.e. relying on the images and promises; a strong need to use justifications is linked to this (code from literature)
	Perceived behavioural change	Marks instances of discussion of behaviour where a person perceives to not eat (much) meat, although in reality doing so (code from literature)
	Disassociation	Marks instances of discussion, or expression of behaviour where the animal is separated from the food product (code from literature)
	Avoidance	Marks instances of discussion, or expression of behaviour where situations and information that would likely increase cognitive dissonance are actively avoided (code from literature)

# Social Sciences



kollektiv orangotango+ (ed.)

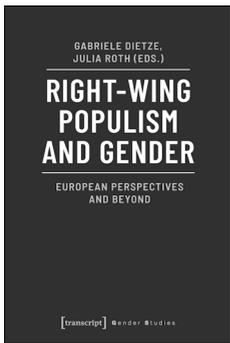
## **This Is Not an Atlas**

**A Global Collection of Counter-Cartographies**

2018, 352 p., hardcover, col. ill.

34,99 € (DE), 978-3-8376-4519-4

E-Book: free available, ISBN 978-3-8394-4519-8



Gabriele Dietze, Julia Roth (eds.)

## **Right-Wing Populism and Gender**

**European Perspectives and Beyond**

April 2020, 286 p., pb., ill.

35,00 € (DE), 978-3-8376-4980-2

E-Book: 34,99 € (DE), ISBN 978-3-8394-4980-6



Mozilla Foundation

## **Internet Health Report 2019**

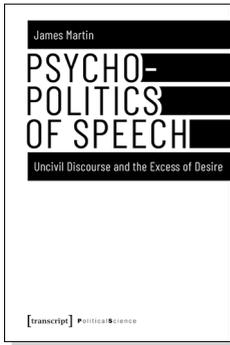
2019, 118 p., pb., ill.

19,99 € (DE), 978-3-8376-4946-8

E-Book: free available, ISBN 978-3-8394-4946-2

**All print, e-book and open access versions of the titles in our list  
are available in our online shop [www.transcript-verlag.de/en/](http://www.transcript-verlag.de/en/)!**

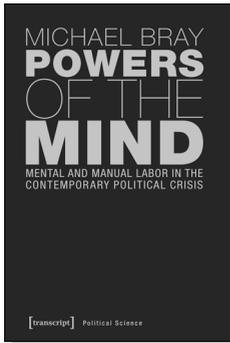
# Social Sciences



James Martin

**Psychopolitics of Speech**  
Uncivil Discourse and the Excess of Desire

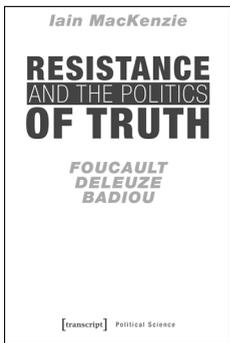
2019, 186 p., hardcover  
79,99 € (DE), 978-3-8376-3919-3  
E-Book: 79,99 € (DE), ISBN 978-3-8394-3919-7



Michael Bray

**Powers of the Mind**  
Mental and Manual Labor  
in the Contemporary Political Crisis

2019, 208 p., hardcover  
99,99 € (DE), 978-3-8376-4147-9  
E-Book: 99,99 € (DE), ISBN 978-3-8394-4147-3



Iain MacKenzie

**Resistance and the Politics of Truth**  
Foucault, Deleuze, Badiou

2018, 148 p., pb.  
29,99 € (DE), 978-3-8376-3907-0  
E-Book: 26,99 € (DE), ISBN 978-3-8394-3907-4  
EPUB: 26,99 € (DE), ISBN 978-3-7328-3907-0

**All print, e-book and open access versions of the titles in our list  
are available in our online shop [www.transcript-verlag.de/en/](http://www.transcript-verlag.de/en/)!**