



## **Sustainability in Cooking Shows**

A qualitative content analysis on framing of sustainability in the cooking show MasterChef Germany and MasterChef US

Laura Mettke

Media and Communication Studies: Culture, Collaborative Media, and Creative Industries

One-year master | 15 credits

Submitted: VT | 2020-06-07

Supervisor: Pille Pruulmann Vengerfeldt

Word Count: 17 761

## ABSTRACT

Many environmental organisations are trying to counter the negative effects of climate change. The film- and television industry are increasingly becoming the focus of attention, because, although it repeatedly advocates sustainability, it often gets lost in its own productions. The presentation of sustainability is often not visible or clearly recognizable by the viewer. Cooking shows are often criticised by the public for being environmentally friendly in terms of food waste.

The goal of this research is to determine how sustainability is presented in cooking shows in Germany and the USA. For this purpose, the following research question is asked: How is sustainability framed in the television cooking series MasterChef US and Germany? And is there a difference between those two countries?

The theoretical framework is presented by the framing theory of Erving Goffmann (1974), with the use of this approach sustainability was framed in TV shows and used for the analysis and its results. To answer the research question, a qualitative content analysis was carried out, which analyses both the German and the American version of MasterChef in 2018/2019. The research was divided into indirect and direct events. The results of the study show that the German MasterChef included significantly more sustainable topics than the American one. This confirms that there is a significant difference in the cooking shows between the two countries.

*Keywords:* cooking tv shows, sustainability, food waste, Germany, United States of America, MasterChef, qualitative analysis, framing

# TABLE OF CONTENT

List of Figures and Tables.....	VI
List of Abbreviations.....	VII
<b>1. Introduction.....</b>	<b>01</b>
<b>2. Background.....</b>	<b>03</b>
2.1. Sustainability in the United States of America.....	03
2.2. Sustainability in Germany.....	05
2.3. Culinary TV Show: MasterChef.....	07
<b>3. Literature Review .....</b>	<b>09</b>
3.1. Sustainability on media .....	09
3.2. Food on media .....	10
3.3. Research Gap.....	13
<b>4. Theoretical Framework .....</b>	<b>15</b>
4.1. Framing Theory .....	15
4.2. Framing Sustainability .....	17
<b>5. Methodology .....</b>	<b>19</b>
5.1. Research Approach and Paradigm .....	20
5.2. Qualitative Analysis.....	21
5.3. Data Collection and Data Analysis.....	22
5.4. Limitations.....	23
<b>6. Ethical Considerations.....</b>	<b>25</b>
<b>7. Analysis and Findings .....</b>	<b>27</b>
7.1. Sustainability in MasterChef Germany.....	27
7.1.1. Indirect Incidents.....	27
7.1.2. Direct Incidents.....	29
7.1.3. Innovation of the Show.....	31
7.1.4. Related Findings.....	33
7.2. Sustainability in MasterChef US .....	34
7.2.1. Indirect Incidents .....	34
7.2.2. Direct Incidents.....	35

7.2.3. Related Findings.....	36
7.3. Germany VS. USA .....	37
<b>8. Discussion.....</b>	<b>41</b>
<b>9. Conclusion .....</b>	<b>46</b>
<b>References .....</b>	<b>48</b>
Appendix	

## List of Figures and Tables

<b>Figure 01:</b> Increased support for prioritizing policies on the environment and climate change since 2011 (Pew Research Center, 2020)	4
<b>Figure 02:</b> Where is food waste generated in Germany? (Own diagram based on the data of the BMEL, 2019)	5
<b>Figure 03:</b> Percentage of population actively involved in environmental protection and nature conservation or who could imagine becoming involved. Federal Ministry of Food and Agriculture (2018)	6
<b>Figure 04:</b> MasterChef Germany contestants at Challenge on a boat (MasterChef, 2019)	7
<b>Figure 05:</b> MasterChef US contestants while opening the mystery box for the next Challenge (MasterChef, 2018)	8

## List of Abbreviations

BAFTA	British Academy of Film and Television Arts
BBC	British Broadcasting Corporation
BCFN	The Barilla Center for Food & Nutrition Foundation
BMEL	Bundesministeriums für Ernährung und Landwirtschaft (Federal Ministry of Food and Agriculture)
CO <sub>2</sub>	Carbon dioxide
EMA	Environmental Media Association
EPA	United States Environmental Protection Agency
FAO	Food and Agriculture Organization
FDA	U. S. Food and Drug Administration
TV	Television
WWF	World Wildlife Fund
UBA	Umweltbundesamt (German Environment Agency)
UCLA	University of California, Los Angeles
UK	United Kingdom
UN	United Nations
USA	United States of America
USDA	United States Department of Agriculture

# 1. Introduction

Climate change is a big issue, but we can all make a difference in the decisions we make every day – from the products and services we buy, the financial products we use, how we travel, to almost every aspect of how we live our lives. There are plenty of awareness-raising documentaries, films and children's animations dedicated to sustainability issues, but one element that is still missing, are characters in big-budget films and populist TV programmes carrying out simple activities such as recycling, cycling, water saving and buying sustainable products. Tv shows and films have raised awareness and understanding of some complex issues over the years, from HIV, to bullying, child grooming and body image issues, but very little has been done to cover climate change, our part in and to inspire behaviour change. Therefore, it is important analyse how television programs address the topic of sustainability directly or mention environmental issues in dialogues. The purpose of this study is to find out how sustainability is presented in cooking tv shows and also contains a comparison of the shows in Germany and the USA. Due to the cultural differences of these countries, especially in terms of sustainability, it is especially interesting to compare these two countries. The overall aim of this thesis is to observe if tv shows sufficiently deal with the topic of sustainability and can use their popularity to develop more attention and consciousness for the topic. After the data has been evaluated and presented, a discussion will be held to find out what could be the reason for the fact that sustainability is not sufficiently shown in media productions and what effects it could have on the audience. Does the issue of sustainability not fit into the atmosphere and themes of populist television programmes, or is it because producers are afraid that the audience cannot identify with these issues and feel preached? The underlying assumptions of the thesis is that new creative forces can create an individual space of reflections for each of us, where we can connect with new impressions, feelings of change and imagery. More importantly, they can create a personal and tangible connection to topics that seem abstract. A strong climate change message should appeal to a broad audience using many kinds of tools and effects. To achieve this, different change makers will need to come together: designers, artists, performers, filmmakers, scriptwriters, innovators, branding experts etc.

This thesis is divided into eight different sections. Section 1 will introduce the purpose of introducing the topic of the thesis and the research questions. It also provides a guide to the

structure of the thesis. Section 2 gives an overview of the context of the thesis and presents the necessary background information for the overarching concept of the thesis - sustainability. Since this analysis compares two countries with regard to their sustainability, Section 2 gives an overview of how both countries deal with the issue of sustainability. In addition, the TV Show MasterChef will be the subject of analysis and therefore the layout of the show will be explained in detail.

Section 3 presents the literature review that was carried out to build on previous research and subsequently identifies gaps in knowledge. The work of scientists such as Sachs and Finkelpearl (2010), Hill (2011), Ehrenberg, (2019), and Van Ryn (2018) contribute a great deal to understanding the background of sustainability in the media, specifically the perception of food in the media. Phillipov and Kirkwood (2018), discuss the issues of alternative food politics and the representation of food on media. Meanwhile Van Ryn (2018) examines the food sustainability and explores how food is used in the context of media.

Section 4. presents the theoretical background which was used to analyse sustainability in TV shows. This theory will mainly build on the work of Robert Entman (1993) and also contains some basic background information about Erving Goffmans (1974) theory, whose respective works have strongly influenced the frame theory and whose research component runs through this whole thesis. This is further discussed in Section 5, Methodology, where the chosen methods are discussed and justified. The research consists of a detailed qualitative content analysis according to the guidelines of Philipp Maying (2010). The analysis includes 44 episodes in total, 18 episodes of the German MasterChef and 23 episodes of the American MasterChefs accessed via the provider Sky.

Section 6 contains the results and analysis of the study, analysing and presenting the portray of sustainability in tv cooking shows and comparing the two countries. Although the analysis did not involve direct contact with the public, some ethical considerations have been taken into account which apply to every researcher. These are outlined in Section 7. In the following section 8 a discussion based on the theoretical and empirical part is carried out, before a short summary of the results concludes the thesis in section 9.

## 2. Background

This section provides the necessary contextual background for the dissertation by looking at both countries studied from the perspective of each key topic, with the aim of creating a concise and synthesized conceptual framework on which to build. Since this work aims to analyse the different representations of sustainability in the cooking shows from the US and Germany, it is important to understand how both countries position themselves with regard to the issue of sustainability. To better understand the contextualization of the analysis, both countries were portrayed in terms of their current sustainability strategy and the general perception of the population of both countries was presented to better understand the cultural differences.

The Barilla Center for Food and Nutrition developed a sustainability index in order to measure the sustainability in countries. The coexistence of hunger and obesity, the overexploitation of natural resources and the large amounts of food lost and wasted are the three food paradoxes identified by the Barilla Center for Food & Nutrition Foundation (BCFN, 2018). The BCFN adopts a multidisciplinary approach to help address today's major nutritional problems from an environmental, economic and social perspective in order to ensure the well-being and health of people and the planet. The Food Sustainability Index (FSI) assesses 67 countries with regard to the sustainability of their food system. It is a quantitative and qualitative benchmarking model consisting of 38 indicators and 90 individual indicators that measure the sustainability of food systems in three categories: Food loss and waste, sustainable agriculture and nutritional challenges. The index has three main types of performance indicators - environmental, social and economic (BCFN, 2018).

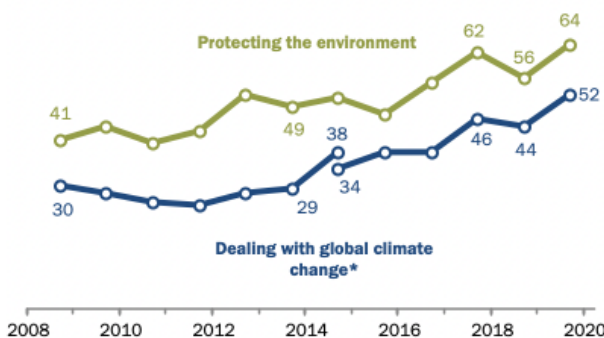
### 2.1. Sustainability in the United States of America

In the Food Sustainability Index 2016, the US ranks third last in terms of food waste, with about one third (30-40%) of the food produced in the country being wasted - more than 20 pounds per person per month. Political developments at the federal, state and local levels are also showing signs of change, and some cities are showing signs of action. Although the United States has one of the highest per capita percentages of food waste, much is being done to make a change, for example the Good Samaritan Law, which makes it easier for retailers to donate food (BCFN, 2018). In the United States, food waste is estimated at between 30–40 percent of the food supply. Effectively reducing food waste requires cooperation between federal, state,

tribal and local governments, religious institutions, environmental organizations, communities and the entire supply chain. The U.S. Department of Agriculture (USDA), the U.S. Environmental Protection Agency (EPA) and the U.S. Food and Drug Administration (FDA) signed a joint formal agency agreement as part of the Winning on Reducing Food Waste Initiative. The agreement aims to improve coordination and communication among federal agencies to better educate Americans about the impact and importance of reducing food loss and waste (FDA, 2020).

**Increased support for prioritizing policies on the environment, climate change since 2011**

% U.S. adults who say \_\_\_\_ should be a top priority for the president and Congress



\*In 2014 and earlier, respondents were asked about dealing with "global warming." In 2015 half the sample was asked about either "global warming" or "global climate change"; 34% called "global climate change" a top priority while 38% said this about "global warming." Source: Survey of U.S. adults conducted Jan. 8-13, 2020. "As Economic Concerns Recede, Environmental Protection Rises on the Public's Policy Agenda"

PEW RESEARCH CENTER

Figure 01: Increased support for prioritizing policies on the environment and climate change since 2011 (Pew Research Center, 2020)

The Pew Research Center in America contacted a survey in October 2019 to find out the public opinion of Americans about global climate change and environment, which can be seen in detail in Figure 1. Their findings state that in comparison to a decade ago, more Americans are convinced that protecting the environment and dealing with global climate change should be a top priority for the President and Congress. Figure 1. shows that nearly two-thirds of adult Americans (64%) say that protecting the environment should be a top priority, while about half (52%) say the same about dealing with global climate change, according to a January 2020 poll.

These proportions have increased significantly since 2011 (Funk & Kennedy, 2020). These findings demonstrate, that the topic of sustainability is more and more important in the USA. Climate expert Brian La Sehr also says that the under-30's is significantly more environmentally and climate-conscious than the 40-70-year-old Americans. Ganslmeier (2018) says in an article that: "The next generation shows promise, especially when it comes to voting. The fight against climate change is a high priority for them. This will lead to a significant change in American policy."

## 2.2. Sustainability in Germany

Of the three pillars that make up the Food Sustainability Index (BCFN, 2018), Germany performs strongly in terms of food loss and waste, as the second-highest ranked country globally. It also ranks highly for sustainable agriculture, coming in at fifth (BCFN, 2018). Nevertheless, in Germany almost 13 million tons of food end up in the waste stream every year. Until now, the per capita share of food waste in private households has varied: A study by the Society for Consumer Research came up with at least 55 kilograms (BMEL, 2019); the University of Stuttgart spoke of 81.6 kilograms in a 2012 study (Rohm, 2019). More than half of the food waste comes from households, almost 40 percent of the food waste in households is avoidable (BMEL, 2019).

As stated in figure 2. the majority of food waste, 52 percent (6.1 million tonnes), is generated in private households. Each consumer therefore throws away about 75 kilograms of food a year. This makes it clear that education in private households must be increased in order to reduce food waste. According to the study, 34 percent of food waste is fresh fruit and vegetables, 14 percent is bread and bakery products, followed by beverages (11 percent) and dairy products (9 percent). Another finding of the study: the younger the head of the household,

the more potentially usable food is thrown away. Households with older persons tend to throw away less (BMEL, 2019). To make people more aware with the topic the information campaign “Zu gut für die Tonne!” (eng.: Too good for the bin) the Federal Ministry of Food and Agriculture (BMEL) is campaigning for the appreciation and against the throwing away of food. That and other initiatives such as food sharing and corresponding media coverage have reached people and impacted them to better appreciate the value of food.

Environmental and climate protection were considered a priority challenge among the German people in 2018 and 2019, according to the research shown in the Umweltbundesamt’s Environmental Awareness Study of 2018 (UBA, 2020). In comparison to studies carried out in

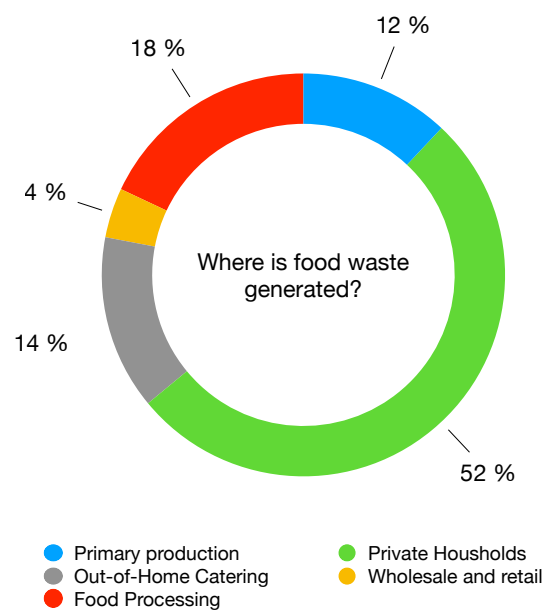
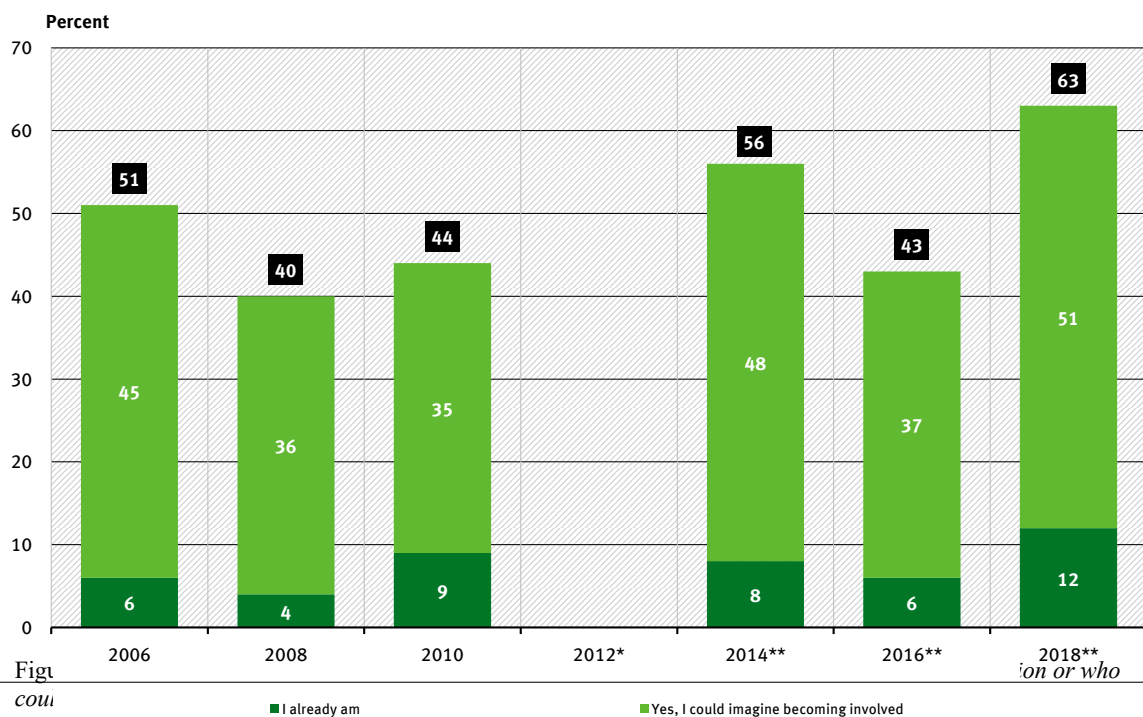


Figure 02: *Where is food waste generated in Germany?*  
(Own diagram based on the data of the BMEL, 2019)

previous years, it is clear that the importance has increased. For example, in 2016 around half of the survey takers stated that environmental and climate protection was a very important issue. Whereas in 2018 number jumped from around 50% to 64% and in 2019 it was 68%. According to the majority of respondents, the state is one of the three actors with the greatest influence on more environmentally friendly agriculture (UBA, 2018). The view about sustainability and environmental protection also shifted a lot in the last few years in Germany. As shown in Figure 3. around one in two Germans could actively imagine participating in environmental protection and nature conservation projects in 2018. In 2016 this was only about a third. A high level of environmental awareness is not only essential for a sustainable living, it is also an important driver for a robust environmental policy that can adequately protect natural resources (UBA, 2020).

**Percentage of the population actively involved in environmental protection and nature conservation or who could imagine becoming involved\***



This question was answered by a representative sample of about 2.000 persons each  
 \* The question was not included in the 2012 survey  
 \*\* Online survey, only to some extent comparable with previous years

Source: Federal Ministry for the Environment, Nature Conservation and Nuclear Safety/German Environment Agency (Ed.), Umweltbewusstsein in Deutschland (various years; in German only)

Figure 03: Percentage of population actively involved in environmental protection and nature conservation or who could imagine becoming involved. Federal Ministry of Food and Agriculture (2018).

Overall, the findings suggest that people in both Germany and the USA have become more aware of sustainable living over the last few years. Nevertheless, both countries struggle with

a lot of food waste 6.1. million tons in Germany and America even 40 million tons, food waste is a big concern in both countries. The United States for example, the global leader in food waste, discards nearly 40 million tons of food every year (USDA's Economic Research Service, 2014), but also Germany with a smaller population is throwing away 13 million tons of food every year (Statista, 2018).

As can be seen from the figures of the research institutes, most food is thrown away in private households in both the USA and Germany. In order to bring the topic of food waste closer to people and to sensitize them to environmental problems, it is important that these topics are presented in the media. By implementing sustainability in TV shows, people can be reached who have not previously engaged with the topic.

### 2.3. Culinary TV Show: MasterChef



Figure 04: *MasterChef Germany contestants at the Mussle Challenge on a boat (MasterChef, 2019)*

One of the biggest food television shows is MasterChef. The concept of the show is simple and resembles a typical casting show. 100 hobby chefs compete in a cooking competition to be accepted into a "Master Class" with only 20 spots to be culinary coached. The jurors are often well-known chefs, for example Gordon Ramsey in the US version of MasterChef. MasterChef US and

Germany are based on the British BBC series MasterChef. The competition usually takes place on a MasterChef sound stage, which has a large kitchen area with several cooking stations and one that is overlooked from a balcony. A well-equipped pantry, a freezer/fridge area and a gourmet restaurant/seat dining room used for specific challenges.

On the official website (Endemol Shine 2018), the show is "produced in over 50 territories worldwide and broadcast in over 200 territories", and "MasterChef is seen by over 250 million viewers worldwide and has turned over 100 amateur chefs into professionals". It goes on to say that "MasterChef's success is due to its highly adaptable format, which stimulates the global

appetite to watch everyday people fulfil their dreams of something extraordinary" (Hill, 2018). An important core aspect of cooking shows is the emotional focus of these shows on people's relationship to food. As one executive producer explained, "One of the key elements is that it is completely assignable to anyone; it evokes an emotional response when you look at it and when you think of food" (Hill, 2018, p. 144), which makes the show a powerful tool in mass media and audience behaviour.



Figure 04: *MasterChef US* contestants while opening the mystery box for the next Challenge (MasterChef, 2018)

According to the BBC (2019), MasterChef is very strict about how they source the ingredients they use. Therefore, the contestants are asked to only order the quantity of ingredients necessary to make the required number of plates of food and to take into account the current guidelines on sustainable product sourcing. An example of this is only sourcing from reputable sources and in the correct season and making sure they consult the most recent guidelines from marine conservation organisations on fish sourcing when using fish or seafood in their menus (BBC, 2019). With MasterChef Germany, Sky has realised the first green in-house production in the show area that focuses on sustainability both in front of and behind the camera. Unfortunately, nothing can be found online about the practices of MasterChef USA. Therefore, it is questionable if they follow the same values.

## 3. Literature Review

The first step in identifying topic parameters was to discover what research already exists about the portrayal of sustainability and food in media, but also how this medium is used for communicative purposes. Over the last three decades, not only the perception of sustainability in general and in the media has changed but has also developed as an academic field of research. The current state of research is of potential importance for the investigation of the representation of sustainability in cooking shows. In media and communication sciences, however, not too much can be found yet about the presentation and impact of the integration of sustainability, especially in TV shows.

### 3.1. Sustainability on media

In the USA, the Environmental Media Association has been awarding films and TV programmes for highlighting sustainability issues since 1989. The Environmental Media Association (EMA) is a non-profit organization founded in 1989, they work with the entertainment industry to promote environmentally friendly productions and raise public awareness of environmental issues (EMA, 2020). The Group awards a "Green Seal" to productions that reduce their environmental footprint. Winners include films and documentaries about sustainability and climate change, but also a list of TV programmes that are fairly unknown. In theory there are TV shows with sustainable content, but the fact of their unknown existence only highlights the gap of sustainability in popular TV shows.

According to Schiffmann (2011) it is not possible that a medium as pervasive as television, and so exquisitely tuned to market a consumer culture, can itself become a medium leading the audience to sustainability. But he also maintains that a concept like sustainability might emerge and survive if it questions the consumer process of a medium dedicated to consumerism, because if you use the visual engagement of the medium itself. With this concept the representation takes a step back from brainwashing and greenwashing and relies instead on the use of story to support authentic changes within individual lifestyles. "Facts remain a component of the environmental message, but facts alone will not engage us", according to Schiffmann (2011). Furthermore, Sachs and Finkelpearl (2010) indicate that for producers to play a role in the transition from consumerism to sustainability, they will need to draw on the

main lesson learned by consumer marketing in the 1950s: facts alone do not sell behaviour change. Instead, people working to foster sustainable behaviour must use storytelling to reach audiences on a human, personal scale.

One particular aspect of sustainability seems to have recently entered the consciousness of creators and viewers: the way in which television entertainment is produced. The question of how many plastic cups stand around the set or which actors, directors, presenters, etc. arrived by plane, car or train is becoming increasingly attractive to activists, but also to people in the industry, such as directors and producers (Ehrenberg, 2019). That's mainly because TV and film productions also lead to massive pollutants. The productions alone, which are shot in the city of London every year, cause as much CO<sub>2</sub> emissions as 24,000 households: around 125,000 tons (Ehrenberg, 2019). According to the British film organisation BAFTA, a single hour of television produced in the UK - whether feature film or non-fiction show - generates 13 tonnes of carbon dioxide. That is almost as much CO<sub>2</sub> as an average American produces in a year. A UCLA study in 2006 found out that the California film and television industry produced 8.4 million tons of carbon dioxide; the figure for the American film and television industry as a whole was 15 million tons (Fitzpatrick, 2019).

### **3.2 Food on media**

When it comes to sustainability and mass media, the focus also lays on food television and especially cooking shows. Phillipov and Kirkwood (2018), say that food television programs make an immense contribution to the mainstreaming of discourses on food sustainability around the world. Food waste is a pressing issue that has long been politicised in big nations like the USA, UK, Germany and Australia (Patel, 2007). According to Phillipov and Kirkwood, beyond producer, retailer and consumer practices, media institutions play a powerful role in the construction of discourses of food waste. In fact, food media production practices also have an impact on the environment, through the type and quantity of food procured for production, the organisation of competitions and the way surplus food is handled (Van Ryn, 2018). Studies on television as a medium for food sustainability have shown that viewers can cook and eat better when they watch explicit educational food programmes (De Baker and Hudders, 2016, p.500).

Phillipov and Kirkwood (2018) analysed the importance of food sustainability as an approach to food policy and emphasized the design of food systems as part of broader debates on sustainable development. Often 'invisible' food waste is a growing domain for food sustainability research, policy and activism (Evans, Welch and Swaffield, 2017, p.6). Research in the US and Germany suggests that most developed nations excessively produce food in comparison to the domestic consumption requirements and a lot of the food is wasted in the production, distribution and consumption chain (van Ryn, 2018). When it comes to sustainability in food television, media science research has focused on the textual representation of food. It argued that the current visibility of food media is both proof and cause of alienation from the food issue itself (Phillipov and Kirkwood, 2018). Other studies have looked at the use of new media to communicate food risks and to build alternative food networks (Steven et al., 2016). Food sustainability issues are sometimes addressed in the genre of "lifestyle television", which encourages viewers to enjoy seasonal, local and sustainable food and combines hedonism with ethical consumption (Phillipov and Kirkwood, 2018). TV cooking shows seek to engage viewers with the topic of food and have had a demonstrated impact on purchasing habits, food production techniques and policy settings (Bell, Hollows and Jones 2017).

In the specific case of cooking shows, the programmes focus on the practical skills of cooking, which allows aspects from the series to manifest itself into the real world, by inviting audiences to connect these skills to everyday life. Cooking shows use the concept of storytelling to reflect on and engage with food culture, exploring healthy eating, self-identity and professional work ethics. Because of that Hill (2018) claims, reality formats can play a role by inviting the audience to critically examine the demands of sustainability and the moral and social boundary issues of life. According to Kirkwood and Phillipov (2015), cooking shows have had a notable impact on the eating, cooking and shopping habits of the viewers. It has encouraged the viewers to try new ingredients and new techniques and to buy more kitchen gadgets. They also described the skills and cultural knowledge that audiences learn from television cooking shows, as "culinary cultural capital" – the ability to read and understand the cultural codes surrounding food. Because of that TV cooking shows aim to inspire consumers about cooking healthy meals. Hundreds of cooking websites, books, special TV shows, cooking competitions, advertisements on billboards, public transport, print and digital media can be a

big part in the change of sustainable food. They not only shape USA's and German culture but also flawlessly serve the purpose to engage and create loyal consumers.

In both countries, Germany and the United States of America cooking shows play a big part of the entertainment in TV programmes. According to Giesen & Simon (2018), the wave of cooking shows in America is a curious contemporary paradox. Cable cooking programs have proliferated at the very moment that Americans cook less at home and eat out more often. In the 1950's homemakers spent on average 20 hours a week cooking. By 2010, that number had dropped to 5.5 hours a week. In 1970, Americans ate about 15 percent of their meals from outside sources. As of 2018 that number has almost doubled. Half of Americans watch cooking shows occasionally or more. Just one on five U.S. adults (21%) say they never watch TV shows about cooking while three in 10 (29%) do so rarely, one-third (34%) do so occasionally and 15% watch cooking shows very often (Harris Poll, 2010). Through an increasing number of cooking shows, more awareness has been raised on food waste and sustainable cooking. Cooking shows are not only a big trend in the US, but also in Germany as they commonly found on German TV. Not even two months after the official start of a regular TV programme, the first TV chef went on air. The first German cooking show was produced in 1953, the TV show had a strong influence on the eating and cooking habits of the Germans through his programme (Rüschoff, 2016). If he presented a dish, it was actually re-cooked, and the necessary food was requested accordingly. Today you can find a wide variety of cooking shows on all channels. But the nature of the show has changed over the years. First the service receded in favour of entertainment, then informative cooking became a competition (Rüschoff, 2016).

### 3.3. Research Gap

While the impact of cooking shows on consumers has already been described by Kirkwood and Phillipov (2018), the literature has not yet examined whether these cooking shows could also make an environmentally friendly contribution by presenting the issue of sustainability in their shows. Also, the possible impact of this implementation on the purchasing habits of viewers has not been investigated yet, which is why it is especially interesting to find out first how sustainability is presented in the cooking shows and secondly, in a possible further research to find out if this presence of the topic leads to a rethinking of the viewers. In addition, previous research, such as that conducted by Schiffmann (2011), found that the film and television industry contributes a large share of pollution, which also highlights the importance of this research, as it raises the question of what private broadcasters can do to counteract this, e.g. by clearly positioning themselves on the topic and recommending action to viewers. The producers of food TV formats go through a variety of different political, economic and cultural processes to adapt their story lines and elements to the respective countries. They do this in the hope of creating a successful, localized version of the original TV show. This is also applicable to the MasterChef program, which originated in England and now has worldwide spin-offs. In order to understand how these processes of integrating sustainability affect the general understanding of sustainability in the respective countries, this analysis compares two countries. In the background, it is already discovered that there are some cultural differences between Germany and the US. Despite the growing interest in sustainability issues, the US still lies far behind Germany which unfortunately supports the general cliché of the "carefree American". Therefore it is interesting to find out if these cultural differences are also reflected in the Show MasterChef. This thesis aims to gain a better understanding of the decisions made by food format producers and industry experts and to examine how culinary shows integrate sustainability into their agenda. The motivation for this research is based on the increasing demand for culinary show formats (Clarke, 2014). There is a wide range of scientific literature supporting the perception that these TV formats are in high demand in the TV industry (Chalaby, 2011; Esser, 2010; Hill, 2002, 2005, 2006; Moran, 1998; 2004; 2005; 2006; 2008; 2009a; 2009b etc.). Existing research on television formats has been widely studied in several areas. Scientists with a broader scope of food television have analysed certain programmes, such as MasterChef Australia on Network Ten (since 2009) and its impact on media production practices and health issues (Van Ryan, 2014; Phillipov, 2013). Other areas of research have

focused on the impact of food television programmes on gender and race issues (Brunsdon, 2005; Inness, 2001). However, as outlined in the literature review, the scientific literature is limited when it comes to sustainability. In order to fill the gap in the literature, this research includes a qualitative content analysis, based on the framing theory to discuss the representation of sustainability in the well-known show MasterChef and also to examine whether there is a clear difference between the two formats in the respective countries because of the cultural differences between Germany and America. The presentation of environmental and sustainability aspects in a television series is rare. However, it is essential to show the impact of such images and discussions on modern society. To analyse how influential the modern media are in establishing stereotypes about sustainable options in cooking. The analysis of the MasterChef programme will highlight the intersections of sustainability and representational power. It is important to determine whether the MasterChef's actions and tactics are sufficient or whether they should be criticized for not addressing the issue adequately. For this reason, I present a study with the following focus: What is the presentation of sustainability in television programmes - are the sustainable strategies and measures implemented and are they clearly perceptible to viewers? Does the issue of sustainability take place in the dialogues of the programmes or is it explicitly emphasised? And lastly the comparison between the countries US and Germany to find out what are the differences in representation between the two shows and what could be a possible reason for differences.

## 4. Theoretical framework

For this study, the Framing theory will be used as a concept to understand how the media shape reality and why they make certain choices. The framing approach, which is considered one of the most important areas of research in the media, is used in various research disciplines, such as sociology, psychology, political science and communication science (Bonfadelli 2009, Scheufele 2006, Entman 1993). The following chapter explains why the framing theory is a useful tool to analyse the content of TV shows.

### 4.1. Framing Theory

The research in this thesis is based on the framing theory to understand how cooking shows present sustainability. This theory is used as a foundation for the research puzzle and is because of that, not to be used for the analyzing of the empirical data but rather how I will approach the analysis process of and the interpretation of the results. In his work "Framing: Toward Clarification of a fractured paradigm" Entman defines two important distinctions: selection and salience (Entman 1993: 52). Here salience means emphasis and is given a significant role in Entman's concept because increasing the salience of a particular aspect of a message also increases the probability that the more emphasized aspect will be noticed and understood. How, where and how often a certain aspect is placed in a text influences the salience (Entman 1993: 53). Typical frames according to Entman therefore contain:

- Problem definition: The problem, the sub-area or framework of a topic to be reported on and the actors involved are clarified here. A so-called problem is constructed beforehand through a selection, which does not have to be implied in the overarching theme.
  - Cause description: The cause description or attribution assigns responsibility for failure and success. The origin can be personal or situational.
  - Proposed solutions: The attribution of solutions can also be of a personal or situational nature. In most cases, another person is assigned the competence to solve the problem.
  - Moral and explicit evaluations: They explain the problem in a simplified way.
- (Entman 1993: 53).

The basis of framing theory is that the media focuses attention on certain events and then places them within a field of meaning. In essence, framing theory suggests that how something is presented to the audience (called “the frame”) influences the choices people make about how to process that information (Entman, 1993). The theory is the process of embedding events and themes in interpretative grids. Complex information is thereby selected and structured so that a certain demonstration of the problem, attribution of causes, moral evaluation and/or recommended action in the respective topic is emphasized. Framing, as a theory of mass communication, refers to how the media packages and presents information to the public (Entman, 2004). Current research has already started to apply framing theory to the field of mass communication. The basic idea here is that the media shows us a reality that has been “framed”. In other words, it only shows us certain things and hides others. Erving Goffman (1974) said that reality itself wasn’t the most important thing, but instead the way we interpret it. He established the idea that we always understand information on how it’s presented to us. For example, if you make a list of people practicing sustainable lifestyle, anyone you list in it (whether or not they really belong on the list or not), will seem like a person who’s caring about climate change and sustainability. If you put a person on the list who has never thought about environmentally friendly options, someone who doesn’t know much about that topic will probably assume that they’re living a sustainable life. The frame determines the interpretation.

This study explores the question of how cooking shows, as part of the entertainment sector, include the presentation of sustainability aspects in their programme, there are three particularly interesting aspects to consider: simple presentation of sustainable options, dealing with sustainable topics and the resulting social impacts. In other words, the analysis is based on the theoretical concept of frame theory to classify the presentation of sustainability in cooking shows and to analyse how this sustainability is presented in TV shows. The theory argues that content is organized to reflect key themes or frames that are relevant to its target audience.

In his book "Frame Analysis" Goffman (1986) describes frames as a conceptualization of verbal and non-verbal communication in meanings that are collectively understood by a culture. Researchers who have studied the framing of sustainability in articles, television programmes, films and commercials have made similar assumptions. Content that is framed and then delivered to an audience is effective and impactful. It is therefore crucial for researchers to analyse the delivery of content that has the potential to support the progress of a society towards

a more sustainable way of life. MasterChef is a TV series that focuses on food that are prepared by everyday people. MasterChef's frame is unique in the sense that it makes high level cooking available to everyone. To implement frames successfully, researchers need to tap into the cognitive process of their audience. Deeply embedded ideas, assumptions and stereotypes taught or experienced through a person's life can be triggered by framed advertisements, television broadcasts or political campaigns. Political campaigns are often used as an example of how ads are created to directly trigger emotions and behaviour. Communicators use stereotypes and prejudices to their advantage when framing content.

When deconstructing sustainability in a television series, it is useful to use tools such as the framing theory. Framing messages as a synonym for an audience's views helps to formulate tribal thinking. It can be argued that viewers find comfort in watching news and television programs that seem to share their views. Framing is a concept which is commonly used to understand the media effects. It is regarded as the extension of agenda setting theory which prioritize an issue and makes the audience think about its effects. The process is based on the idea of how media base an event or an issue within a particular field of meaning which plays an important role in people's decision-making procedure. I consider framing as an especially important notion within this research. By showing and talking about sustainability cooking show producers set a clear frame about how they want the topic to be conceived by the public. Within my research project framing thus help me to understand how MasterChef present Sustainability, how they cover that topic in their programme and conversations and in how far they are influenced by cultural stereotypes in the countries. To summarise, in showing and talking about sustainability, the media can make sure that the public considers the topic to be worth talking about and by setting a specific frame, the television producers can guide the public in how to evaluate the topic. By framing the topic in a certain way, producers can shape the discourse about it.

## **4.2. Framing Sustainability**

Since framework theory is used as the basis of this analysis, we need to better understand how the media frames sustainability. The rapid increase in the importance of environmental protection is seen as the result of perceived public opinion, political factors and the media public. The success in attracting public attention is attributed to the fact that the media framed

environmental issues in a way that established new values. The successful framing of environmental issues was generally recognised as a major challenge for communicators. The relatively recent origins of environmental issues make it difficult for them to find resonance in the framing cycle, which is based on a deeply rooted system of values with little or no environmental ideas. Previous research in various fields has addressed the phenomenon of framing as a way in which information is organized, presented and interpreted by people across cultures. However, the strategic use of framing must be seen as one of the ways to initiate greater social and civic engagement, creating new meanings around sustainability. When people think about sustainability the first things that comes to their mind is the colour green, recycling, solar panels, eco-friendly, polar bears, tree hugging, nature and stuff made out of paper (Acaroglu, 2016). This pre-framed and overwhelmingly common interpretation of what sustainability means, is based on a very narrow media-generated and business-serving perspective of the term. To find out how MasterChef US and Germany are framing sustainability we need to understand how framing works after the model of Entman (1993). This analysis uses the main types of framing from Entman (1993). In this case, the problem definition contains the overall problem of environmental issues worldwide. The next phase is the description of the causes. It is known that the media have a great influence on what people think about. The lack of integration of sustainability means that not enough attention is paid to the issue. By integrating sustainability issues, broadcasters can contribute to successful framing of sustainability. The next step in the four-place model is the proposed solution. This is that television producers, explicitly cooking shows, need to take more action to make the issue of sustainability visible to all. If the cooking shows set an example of sustainability, they appeal to the moral and explicit evaluations and can disseminate the problem in a simplified way. This is the final step of the Entmans model (Entman, 1993)

In order to see how MasterChef US and MasterChef Germany are framing sustainability, the analysis is using different frames such as direct and indirect sustainable incidents but also verbal and non-verbal incidents of sustainability. I will come back to my own framing theory and classifications more explicitly in the discussion, for instance the findings will be sorted by the four frames divisions by Entman mentioned above.

## 5. Methodology

This section of the thesis gives a thorough description of the methodology that is used, including information on how I collected the data and how the codebook was created. This dissertation aims to find out what the representation of sustainability in cooking shows is like in the US and Germany and why there might be differences in these two countries. Given the research objective, a qualitative approach is used to capture not only the presentation, but also the conversations and interpretations that occur in the show.

This approach aims to provide evidence-based engagement on sustainability in culinary TV shows. The research examines the elements used to implement sustainability issues in German and USA food TV. For this purpose, the following research questions are answered in this paper:

1. How is sustainability portrayed in the television cooking shows MasterChef US and Germany?
2. What are the differences of implementing sustainability as a topic in the MasterChef shows US and Germany?

To find out how cooking shows deal with the topic of sustainability, the study will conduct a content analysis, in order to understand how often the jury and contestants talk about sustainability and how often a sustainable options are shown when it comes to food and products and divide these incidents into different categories; non-verbal, verbal, direct and indirect incidents and related findings that can't be put in one of the mentioned categories.

The purpose of the content analysis is to organize and elicit meaning from the data collected and to draw realistic conclusions from it. Analysing two of the same cooking show formats help to see the development of the implementation of sustainability in German and American TV shows. In total 41 episodes from the latest available seasons of the show MasterChef Germany and MasterChef US will be coded for sustainability incidents, including showing of sustainable options and verbal remark. The MasterChef Germany was filmed and produced in 2019 and MasterChef US was filmed and produced in 2018, both were accessed via the online service Sky. The analysis also conducts the number of conversations of the contestants and jury that

address the issue of sustainability. I will compare the results with the mentioned theory and comprehend the frequency of sustainable alternatives, as well as the presence of sustainable topics in the shows' conversation. To compare the difference, both shows will be coded in the same way. The reason why a content analysis was chosen over other methods is the closeness to the data, which can vary between specific categories, relationships and the statistical analysis of the coded form of the content.

The research design is carried out with the method of qualitative content analysis, associated combination of deductive and inductive investigation logics on the basis of an interpretivism paradigm, which is further investigated in chapter 5.1.

## **5.1. Research paradigms**

According to Blaikie & Priest (2017), researchers cannot completely free themselves from bringing their subjective influences into the research. For them there is only one alternative and that is that every researcher must approach his work from a certain point of view. This viewpoint must be made clear in the form of research paradigms. Paradigms consist of views on the nature of reality the so-called ontological assumptions of concepts, theories and techniques of inquiry that are considered appropriate which is described as epistemology (Blaikie & Priest, 2017).

Having decided to analyse moving images, the interpretative approach is helpful for my research; "the view that truth is constructed by understanding the meanings that individuals apply to phenomena in a socially constructed world. This view collects qualitatively and uses an inductive theory approach" (Collins, 2017). Interpretivism is also described as an 'anti-positivist' approach, which means that it is not about uncovering a particular truth but aims to give us an understanding of the social world in which people operate by seeing individuals as active participants in the construction of meaning. Therefore, interpretivism is a fitting paradigm for my research, as it allows for a continuous examination of concepts and symbols. Interpretivism is not designed to generalize anything, but it is the context in which phenomena occur that shows the reality relevant to each specific situation (Collins, 2017). By collecting qualitative samples of sequences from global TV shows, this study is not intended to provide an accurate and truthful picture of everyday cooking life in America and Germany, but rather

aims to examine each sequence for references to sustainability and related issues and symbols, with the aim of comparing Germany and USA.

In this particular case, hypotheses will be formulated based on a previous theory of the given social environment. The hypotheses will then be compared with the data of the analysis and tested.

## 5.2. Qualitative Analysis

The purpose of this research is to analyse the global TV show to filter out and summarise relevant aspects of the media presentation of sustainability reporting on the basis of singular, clearly structured thematic blocks. In order to achieve this goal and to answer the research questions, a systematic evaluation method is required. Therefore, the episodes were also evaluated according to the method of qualitative content analysis described by Mayring (2000). This procedure is comprehensible for others, intersubjectively verifiable and thus transferable due to its rule-guided procedure as well as the decomposition into individual analysis steps. Therefore, a scientific foundation was achieved. The specifics of qualitative content analysis relevant to the study will be discussed in detail before the procedure for sample selection and data evaluation.

In the context of Qualitative Content Analysis (Mayring, 2000), two procedures are described thoroughly here, which supports the process of categorization. The inductive category development enables the process model of the selection criterion and the stepwise material processing and revision of the newly developed categories. By means of deductive category application, precise assignment rules are formulated in relation to a theoretically developed category set (coding guideline). This determines under which conditions the assignment of a category to a text passage is permissible. In both cases, a number of evaluation aspects and categories and a number of assigned text passages are reached. When working systematically with categories in this way, these assignments should be considered as data in order to process. Here, for example, there is the possibility to sort the categories according to the frequency of their appearance in the material, to calculate percentage and to compare such frequency lists between different parts of the material to frame how sustainability is framed different in the US and Germany MasterChef TV show.

In addition to the content analysis, the findings will also be compared in a case-oriented comparative method, which is a research approach that investigates a problem in one or two

countries with many variables (Ragin 1987, p.34). This comparative analysis helps to better understand the differences between MasterChef Germany and the US and what the background and implications may be.

### **5.3. Data collection and data analysis**

For a content analysis it is essential to clarify in advance which material is to be analysed. This research refers to television programmes and thus includes both visual and audio material. In order to narrow down the object of research, the most recent season of the global cooking show MasterChef from 2019 and 2018 are used. As archetype of culinary globalization, MasterChef series has been produced and localized in different part of the world. Analysing both the German and the American version of MasterChef will provide overview on sustainability frames in Germany and United States. According to Mayring (2000), a category system should be created by classifying the material. These categories were created prior to the analysis and precisely defined which components of the content fall into which categories.

The process of developing categories and individual items for the coding tool begins with the examination of other types of television and print content analysis projects to gain a better understanding of what information should be collected and where the gaps in previous research existed. The codebook explains in detail what each coding item intends to capture and how to appropriately code each instance. For example, an on-screen incident was coded as a positive integration of sustainable options if it "concerned the presentation or naming of sustainable/organic food (e.g. regional, seasonal, no plastic)" and as a sustainable conversation if it "addresses the issue of sustainability but not a specific product. (e.g. less meat, reduce water consumption, use all food to prevent food waste)". These incidents were then put into frames, which are developed upon the Entman's four-place-model. Every incident was classified as verbal or nonverbal and direct or indirect and therefore build their own frame.

A multiple rounds approach was used to collect data for each episode. In the first pass, the characters involved in the episode were determined and all content relevant to this analysis. In the second pass, all identified episodes dealing with sustainability aspects were coded. A final pass was performed to ensure that all relevant information was captured and appropriately coded, which has also contributed to ensuring inter-coded reliability. To guarantee that the content analysis is both valid and reliable, it is important that the results are valid and that the research can be reproduced. Once the data collection was complete, the data was manually

entered into a spreadsheet and then compiled into a final database. For research to be academically relevant, the produced thesis must be credible and reliable. This can be verified by the validity and reliability of a study. However, since qualitative research is based on different assumptions and views than, quantitative research, different evaluation criteria must be applied. Common criteria are those of Lincoln and Guba (1985) which are used in this work to ensure validity and reliability.

According to Merriam (2009, p. 229), there are several strategies that assist in ensuring a qualitative study is credible and transferable, so that research findings are linked to reality and can be transferred to a different context. It is also important that the work is reliable, which means that the results are consistent with the data collected. To ensure the validity and reliability of the present study: the method, the strategy for data collection and the analysis as well as limitations were described in detail. Furthermore, the work aims to provide a comprehensive and well-structured analysis and discussion in order to enable future researchers "to determine to what extent their situation corresponds to the research context and whether the results can be transferred" (p. 229). As a final point, the work is critically reflected upon the researcher's position in terms of assumptions, prejudices and theoretical orientation.

One dataset was created to address this study's research questions. The first part of the dataset includes all indirect verbal incidents (e.g. the locations of the challenge, the presentation of ingredients). The second part of the dataset contains all verbal incidents (e.g. comments about food waste or sustainability). Overall the presentation of plastic and food is watched closely. Apart from the direct and indirect incidents, further related findings are also coded, which includes all sustainable related topic that might come up during the show. The data analysis is carried out manually using an Excel file as a codebook, which is attached in the appendix.

## **5.4. Limitations**

The time and space limitations mentioned by Blaikie and Priest (2017), as well as the fact that only a certain part of the content could be covered, were the main limitations of this work. This is due to the fact that the analysis is only limited to the last seasons that were legally available on the internet. Other, earlier, seasons of the show were not considered. The analysis refers only to the presentation of sustainability at the MasterChef show, neither the views of the audience, how they perceive the portrayal of sustainability nor those of participants outside the

competition were included in the analysis. Surveys and interviews should have been conducted to gain a better understanding of how the viewers or participants in the show view the issue of sustainability in the MasterChef production.

The most important part of data analysis is to ensure the reliability and validity of the data generated (Riffe et al., 2005). In order to prove the trustworthiness of the data, an inter-coded reliability would have to be carried out; however, a further test with a third person was not carried out due to time constraints. The inter-coded reliability was ensured by watching the episodes several times in order to better detect small incidents and not to overlook important aspects. After the first review, several episodes were selected that had a strong reference to sustainability. These were then re-coded and analysed in depth.

According to Blaikie and Priest (2017), the data collected also depends on the experience of the researcher involved in the process. Although I have tried to be as self-reflective as possible, I cannot disregard the possibility that my interpretations are not unduly biased by my personal interest in sustainability. The sustainable use of food is a personal concern of mine, which means that the qualitative analysis also has a personal interpretation that could influence the results. Finally, I would like to say that this research is primarily focused on the environmentally hostile aspects, such as regionality, seasonality and the plastic-free use of food in the TV show. The use of animal food is not discussed further in this work, although factory farming contributes a large part to environmental pollution. The ethical background of the use of animal products is also not further discussed in this thesis but could play an important role for future researchers.

With only MasterChef US and Germany, both being quality popular in each country this research is relatively limited. Therefore, there is room for plenty additional research. First, it would be interesting to expand the time frame of the research, to see if there was a difference 10 years ago and how sustainability was portrayed back then. Additionally, it would be interesting to compare even more MasterChef spin-offs in different countries to see how they handle the topic of sustainability. Furthermore, MasterChef was the only cooking show that was taken into account for this research, in order to get a border view on how sustainability is portrayed in cooking shows in general different shows need to be observed, to see if they have the same standards as MasterChef.

## 6. Ethical Considerations

Even if this thesis does not involve direct contact with the participants through interviews, surveys or focus groups, certain ethical considerations must be taken into account.

In the competitive and rapidly changing world of mass media communication, media professionals can easily lose sight of the ethical implications of their work. Especially cooking shows can have an enormous impact on the buying and cooking habits of the audience, which is why producers must see themselves as responsible for addressing issues such as food waste and recycling. Many producers are intimidated to put serious issues like sustainability on their agenda. TV shows should be fun and not create a sense of judgment or a sense of obligation. For this reason, the issue of sustainability is subliminally neglected on television, as many are afraid of actively using the issue of climate change and the environment as a tool. As food has been proven to have one of the highest CO<sub>2</sub> rates, it would be an easy step to bring the issue of sustainability to television and thus to the masses without having to conduct entire dialogues about climate change. According to Sherri Burr, a specialist in entertainment law, "Because network television is an audio-visual medium that is piped free into ninety-nine percent of American homes, it is one of the most important vehicles for depicting cultural images to our population." (Burr, 2001, p. 159). Television plays a major role in accelerating the social, economic, cultural and political aspects of a country. This is particularly noticeable in this analysis because the attitude of Americans is not very sustainable, which is also reflected in the production of MasterChef US. On the other hand, the awareness of sustainability in Germany is being raised more and more and MasterChef Germany is also making a contribution to this. Television as a mass medium has an impact on all these aspects if it does not act ethically. The best example of this is, for example, the American mass media, where the white man's perspective is still presented as standard, stereotypes about those who are different - i.e. women, ethnic minorities, members of the LGBT+ community - are an ethical problem. Television shows have the responsibility to clear up these grievances and not to amplify people's stereotypical thinking. Although sustainability may not seem to be one of the most important issues in the media world at first glance, I think it is important that productions around the world realize how much they can influence the daily lives of viewers and thus contribute to a more sustainable way of life.

Lastly, since this thesis is based on the work of others, it is important that all ideas coming from another source are correctly accredited via the use of quotations in the text and a detailed bibliography. Wherever a direct quotation is taken directly from someone else's work, quotation marks, in text quotes and references are used. Where an idea has been paraphrased from someone else's work, quotations and references are given in the text.

## 7. Analysis and Findings

In the following, the evaluation results from selected episodes will be presented. The presentation of the results is based on the central research question: how do German and American cooking shows represent sustainability and is there a difference between the countries? This question also forms the basis when defining the main content categories of the TV show. Thus, the focus is on the actors and topics related to sustainability. Furthermore, evaluations and tendencies of the articles are taken into account. Additionally, sub-categories inductively derived from the material were added. Following the presentation of the results, the extent to which the theoretical principles and research findings on the topic described above are reflected, and to what extent they may need to be extended by the results of the study. The sustainability will be framed as mentioned in the theoretical framework chapter in verbal and non-verbal and direct and indirect frames. Apart from them other frames were developed during the analysis, as they are the mentioning of an own Initiation and other related findings that did not fit into the normal frames.

### 7.1. Sustainability in MasterChef Germany

#### 7.1.1. Indirect Incidents

In the analysis of the episodes of MasterChef Germany, there were a number of non-verbal incidents about sustainability. This analysis will split them into direct and indirect incidents. First, there are two direct non-verbal incidents about the ingredients. All the food in the pantry are stored without plastic and all ingredients are stored the right way to avoid food waste. Which means that all the ingredients that need to be cooled down are in the fridge and all the liquor, such as oil, cream, water etc. are also stored in glass jars instead of plastic containers. Moreover, ingredients such as butter don't have any packaging. These incidents are representative for sustainability, as they do not show any kinds of plastic or packaging that needs to be thrown away after usage. It demonstrates that a plastic free kitchen is possible and that they do not have to store or buy any kind of plastic wrappings. These incidents will influence the viewers at home to consider how much plastic is used in their own kitchens and also provide alternative ways. With these indirect incidents, MasterChef Germany builds a typical framework for Entman's four-place model of proposed solutions. Without talking about the problems or causes

of these incidents, MasterChef creates a framework that demonstrates the importance of reducing single-use plastic. Another positive frame of sustainability that can be connected to that is the presentation of reusable water bottles to all contestants, which can be specifically seen in episode 13, where the contestants are at the beach. To provide these bottles a big impact can be seen by avoiding plastic bottles on the set.

One negative aspect of the pantry is that it is stocked with fruit and vegetable that can't be grown in Europe. These ingredients have long delivery routes, which end in a higher pollution rate than using regional food and therefore cannot be classified and framed as sustainable.

MasterChef Germany has 12 incidents of indirect non-verbal indication on food waste. In Episode 1 to 8, it is not displayed what happens with the remaining foods or how the food waste is handled. However, in episode 9, the organic waste is separated from the normal rubbish. Even though it is not explicitly addressed, the audience is exposed to the sustainable handling with compostable food. Instead of indirect verbal representation, there are few episodes in which food waste is verbally addressed directly. This will be discussed in direct verbal incidents.

Unlike other episodes, episode 13 was shot entirely on a cruise ship. Despite that entire production is supposed to be sustainable, this does not meet the standards of a green production. Whilst commercial shipping has always been at the centre of environmental concerns, the issues surrounding cruise ships are being increasingly called out in the port cities in which they dock (Forbes, 2019) due to the pollution caused by cruise ships. Studies by British environmental groups show that a single cruise ship can emit as many pollutants as 700 trucks and the same amount of particulate matter as one million cars (Forbes, 2019). The show clarified that the cruise ship was in port all the time and made no voyages. The non-verbal incident from the beginning becomes a direct incident with the following statement of the jury: "We are a green production and cruise ships are known as not very sustainable. They consume 12 tons of oil in a trip, but the ship Rotterdam is in port and not used at the moment" (MasterChef, 2019). In this sense, the show has created a bridge with the topic of the next episode: "We really have to think about what we are doing to the environment and also the oceans". The production of MasterChef Season 3 tries hard to be as environmentally friendly as possible, but in the end, it is just a drop in the ocean and definitely not enough" (MasterChef, 2019). Hence the

announcement of the challenge in the next episode which takes another step towards sustainability, which is analysed further in Chapter 6.1.3. This episode also applies to the framing model, as it takes up the issue of cruise ships not being sustainable. They clearly talk about the problem definition and causes that comes with cruise ships. With that statement episode the production is creating a frame against cruise ships and their impact on the environment.

### 7.1.2. Direct incidents

MasterChef Germany has demonstrated direct verbal incidents throughout the show. Season 3 of MasterChef Germany specifically engages with regional products and ingredients. Episode 6 is paradigmatic in this situation, as the rainbow trout that they used for the competition is a well-known local delicacy in Thuringia, a state in Germany. Confining travel within Germany for the respective challenges causes less environmental damage. The same thing applies to regional and seasonal food, as they do not have a long journey. The same applies to regional and seasonal food, as they do not have a long journey. With this presented incident, they are indirectly supporting the environment by implementing a local and regional themed challenge. This challenge and the regional products used are also supported by the contestants. One contestant stated "regional cuisine is always good" which frames the sustainable aspect of regional food and outlines the importance and beauty of regional food. This incident is found in Episode 16. The contestants travel to Italy, where they are only allowed to cook with locally produced ingredients from Trentino area. MasterChef claims to use only regional products, this is also reflected in their episodes. They have a clear framework for the proposed solutions, which goes hand in hand with showing only regional and seasonal food and also shooting in these places instead of travelling far. With this frame, MasterChef Germany creates awareness of the importance of paying attention to the origin of the food we buy in the supermarket.

Another incident that shows the sustainability with the relation of reducing any type of waste can be found in episode 8, where the episode was about *Cooking in the wilderness*. That means all the exposed food and dishes have been cooked on fire instead of using an oven or stove. In this challenge, a primitive method of cooking is demonstrated to the candidates and viewers that it is possible to cook a professional dish without electricity. Furthermore, no additional resources for electricity and water are used, this step indirectly implies superfluous usage in the kitchen.

In the same episode, one of the challenged groups has cooked rabbits in their dish. The leader of the group explains to the audience that they "try to process the whole animal (rabbit) so that nothing is left over and wasted". Such verbal incident also draws attention to food waste, as it shows that any part of the animal can be used to avoid food waste. Complementing the importance of framing on food waste in MasterChef Germany, the main focus in episode 11 is on food waste. Before the challenge starts, the jury introduced a composting machine, which all the leftover food is put in the machine, making hummus out of it within 24 hours. The direct presentation of sustainable machine for composting, educates people how to recycle and throw away food waste properly. Food waste often goes unnoticed by the average consumer. Implementing a compost device provides alternative ways to handle food waste. It also proves that MasterChef Germany, handles its food waste carefully and in the most sustainable way. It is clearly mentioned that the machine has been used for all food waste produced during the show, which also contribute to the solution framework as they provide a good solution for biodegradable food, which can then be adopted by viewers.

Besides the introduction of the composting machine, the food challenge in episode 11 also focusses on food waste. Without knowing what task would be, the participants are given with the instructions to collect the unused parts of the provided ingredients. By doing so, the contestants should carefully think about how much food they need for their dish. Even the judges make the clear statement to the contestants, saying "pay attention to how you handle your ingredients" (MasterChef, 2019). This comment expounds the sustainability by raising awareness for the usage and handling of food. The food waste frame is expressed by the contestants with their awareness of how important it is to reduce food waste as a professional chef. This is underlined by the judges, "when cooking, it is also important to add the leftovers correctly and to produce a dish with as little leftovers as possible" (MasterChef, 2019). The leftover challenge is a good approach to show viewers that cooking with leftover food can be a good tool to reduce food waste and contribute to more sustainable cooking. Another contestant also says, "the recycling of food waste is a very prominent topic at the moment", which highlights the fact that more people are paying attention to what they throw away in the kitchen and that it is important to show that leftovers can also be used to create a professional dish. Food waste and recycling are already very important in Germany. It is therefore self-explanatory that MasterChef Deutschland is using this already existing framework to create even stronger awareness of the topic and to educate viewers about the correct handling of their

waste in the kitchen. According to Entman's theory, the frameworks of problem definition, cause description and proposed solutions are used to create a framework around the importance of food waste and recycling.

In the final episode it is again explicitly pointed out that the third season is a green production, and this is the first time this project is being implemented. One big achievement of the season is that the production in front of and behind the camera completely dispenses with plastic and saves CO<sub>2</sub> to support environmental protection. In order to contribute to a more sustainable planet, the production has wanted to develop new cooking methods as well as make MasterChef a model for a green production. In this finale they also lay down concrete numbers: 30% less CO<sub>2</sub> was consumed compared to the previous year, 80% less paper was used, 90% less plastic, 100% composting of all organic waste. These numbers make MasterChef to one of the most sustainable productions in Europe and the most sustainable cooking show. Following the framework theory of Entmans (1993), MasterChef illustrates here that positive efforts are being made to make sustainability more accessible to the general public.

### **7.1.3. Initiation of the show: Sky Ocean Rescue program**

Episode 13 is dedicated to the Sky Ocean Rescue program, which is described more in Chapter 3.3. The episode contains information about plastic in the ocean that “every second 350 kg of plastic ends up in the sea” and that MasterChef and the Sky Ocean Rescue Program “declared war on this litter”. With this episode MasterChef Germany clearly frames its position towards sustainability. It contains all the typical frames by Entman’s four-place model including a clarification of the problem and which actors are involved, a cause description to assign responsibilities to actors, proposed solutions and moral evaluations. The frames will be explained in more detail in the following paragraph.

This episode includes an emotional statement from one candidate, that “as a father I wish for my daughter to have a sea without plastic”, and he describes negative prospect for the future, if the situation would carry on, which highly applies to the morality frame. What is special about this episode is that the first 20 minutes only contains information about plastic waste and their impact on the ocean. Despite the cooking, it shows that the matter of plastic waste is crucial to the production. An information trailer on marine pollution presents that the world's oceans have become a global dumping ground and the burden is enormous not only for humans but also for birds and marine life. Apart from the plastic waste, the show also makes a

clear statement about overfishing, that “in the long run it will lead to the loss of this habitat (the ocean)” (MasterChef, 2019). It means for home and professional cooks, that “fish dishes can only be admired in old recipe books and no longer on our plates” (MasterChef, 2019). In this episode, MasterChef Deutschland builds a framework for sustainability that is easy for viewers to understand. It looks at the problem and also at who is responsible for it, but also at what can lead to the failure or success of the problem.

Ocean Rescue Program is a program designed to address the problem of plastic waste in the ocean and also offer alternatives to limit the littering. In episode 13 the judges also point out that the film and television industry are big polluters, as stated in Chapter 4.1. It is important that productions start to do something about it. To briefly explain again, Sky commits itself to removing all disposable plastic from its own productions by 2020 and to enter into a partnership with the WWF to protect the oceans. Also, the Sky Ocean Rescue program inspires other productions like MasterChef Germany to deal with these topics and in cooperation with one of them. Statements from the judges and candidates in episode 13 emphasize the importance of the topic: "We must change! Less plastic, that's our goal" or "if we want to continue eat fish, we need to change our behaviour, so I think it's great that this program exists." This part of the episode especially addresses sustainable matters and inspire the audience, that it is on everyone to take part in this movement. Another member of the jury says, "if nothing happens quickly by 2050, there will be more plastic parts than fish swimming in our seas", which again emphasizes the urgency of the topic.

Another cause aspect, which can be related to the four-place method, is framed by an explanation of how important short distances are in any nature conservation project, for example where the cooks and guests come from and of course where the ingredients come from. To present the frame a bit further, a judge goes to a local market to buy ingredients for the competition. A fresh fish is bought together with a marine biologist from WWF, which explains what to look for when buying fish. She explains in order to get a good sustainable fish that the fishing gear and the country of origin should always be checked. In order to do so, she presents an app in which you can check if the fish is endangered or overfished, where it comes from and if its environmentally accepted to buy that species. As a result, it is beneficial to buy a regionally caught fish, where also the fishing is regulated so that overfishing can be avoided. One negative aspect of buying fish on the market is that it is not possible to buy it completely without plastic, because the cold chain has to be kept and it is the only possibility to pack the fish hygienically.

Furthermore, in the same episode, the candidates collect rubbish on the beach in Holland with the organization called TreasureHunters. The aim of this action is to make viewers more aware of the environment. They collect rubbish and turn it into art or clothing, which are then exhibited to show not only the extent of the pollution, but also that rubbish can be recycled. All the candidates in MasterChef Germany agree that they have gained a better awareness of garbage in the environment through this action. This will also have an impact on the audience, if these problems are actively pointed out in cooking shows. The planet cannot be saved through one singular change but if everyone would follow this line of thinking, it will lead to brighter future. Episode 14 continues with the topic of marine animals. In one challenge the participants have to prepare mussels. The breeding of these mussels is explained in detail and in order to prevent overfishing and destroying the habitat of mussels, the mussels used in the show are from a breeding farm outside the ocean. Here, MasterChef Germany remains transparent to itself and promotes only regional and sustainably produced products. This whole episode builds up frames in order to understand the problems of sustainability better. That the reason for this is too much plastic and we all have to take care of our garbage is clearly stated. The next typical frame by Entman contains the proposed solutions, which are shown in how to buy fish sustainable and also what everyone can do to support the marine life. This episode also highly emphasises with the moral of not being able to swim or eat fish anymore in the future, as it applies to the morality of the viewers in order to be more conscious about these topics.

#### **7.1.4. Related Findings**

One interesting finding from the analysis is the consumption and presentation of meat in cooking shows. It is mentioned that meat production and processing are one of the biggest world-wide pollutants. The first challenge on the MasterChef Germany shows is a dinner for a first date and the contestants are allowed to choose their own dish. All contestants choose a meal with meat for their first dinner date. The narrator confirms that frame that “Everyone seems to try to impress their date with a meat dish.” This incident contributes to the image that a dish containing meat is deemed a requirement for special occasions. It underlines the food culture of Germany, where meat still is a big part and hardly anyone questions the consumption of animal products. One of the candidates tells the others in his group that "We need meat", which creates the allusion that a dish without meat is not a real dish. The understanding on

vegetarian cuisine of some contestants has been bigoted. The other group members say sentences like "Nobody wants to serve vegetarian" and "The most difficult thing will be for Mark, because it is vegetarian - the variety will be lost there a little bit" – which gives the viewer a wrong framing about vegetarian food – it is framed as boring, not tasty, nothing special. In episode 4, conversely, the challenge is to cook a complete vegetarian meal. Statements like "quite good for a vegetarian burger", implies that only burgers with meat becomes standard for the taste. All these incidents again underline the big part meat takes in German eating habits and culture. However, on a positive note, it shows that professional chefs can also cook without meat to create a professional good dish, which encourages others to try vegetarian cuisine. Moving onto other episodes, the vegetarian concepts also play a big role. In episode 10 the home cooks need to host a wedding- the challenge was to serve two vegetarian dishes. This incident shows the importance of vegetarian dishes nowadays, as it shows that one always need an option without meat for bigger occasions. According to Statista 83.9 % of the respondents of a questionnaire in October 2019 said that they choose the vegan lifestyle to save the environment, it was the biggest reason after animal welfare with 93% of the respondents (Statista 2019). Such representation elicits social change in the culture, that the number of people becoming vegetarian is rising and one reason is the environment. As a television programme that frames culinary culture, it is essential to imply this change and to create a framework that contains not only the moral of the subject, but also the problem, its causes and how easy solutions can be.

Sustainability incidents also can be found outside of the contest content. In one of the interviews, a contestant describes her dream of a small restaurant with seasonal and regional cuisine after the MasterChef show. Even if this is a personal goal of the candidate, it shows that sustainable aspects are already implemented in the thinking of some home cooks.

## **7.2. Sustainability in MasterChef USA**

### **7.2.1. Indirect incidents**

One non-verbal incident can see when one judge is throwing food on the floor, because it didn't live up to his standards. This incident happened three times throughout the whole season. This

behaviour not only portrays disrespectful towards chefs and the dish itself, but also contributes to food waste as it becomes inedible. Such behaviour from the jury is not compatible with the standards and the fame of the show. In other occasion he smashes a plate. This may make the show compelling, but it results also with unnecessary waste. Continuing with the notion of food waste, in episode 5 all the food waste just goes into one general bin, instead of being systematically and organically separated: food waste, plastic and processed food. Overall it can be seen that MasterChef US is neither framing the problem of waste neither the possibility of recycling. This also shows that these topics are not framed at all and therefore not addressed to the viewers. The producers thus evade their responsibility to educate and also do not frame any problems or give proposed solutions.

Plastic packaging still plays a big role in the MasterChef US. In the Fast Food Challenge and the Churros and Cupcake challenge, all dishes are served in plastic boxes and containers even though it is only for presentation and won't be eaten by anyone. Instead of using plastic the show could have used reusable plates to make a statement towards plastic reduce. A similar procedure can be seen in Episode 9, where a Frozen Food challenge was portrayed. All of the exposed food were excessively wrapped up in plastic. In episode 22, the jury visits their final contestants' houses. At one contestant's place, the food was also served in plastic plates and drinks in plastic bottles, so even at home the food was presented on plastic. Another thing that does not include sustainability is the MasterChef Stable Box, which is full of plastic wrapping. Despite all the exposure to plastic packaging, there was one non-verbal incident where a reusable baking paper was used, instead of a single used. Another point is that even though it is never mentioned how good local food can be for the environment, it can be seen that in a lot of episodes the judges is referring to "typical food from that state". In addition to characteristics of certain locations, also it is framed as regional, local and thus sustainable.

Another non-verbal incident can be found in the use of ingredients. Liquids like cream, oil, milk etc. are always in a glass jars instead of plastic containers. But some ingredients like butter, salt container, herbs and also most of the sauces are in plastic containers. In relation to the framing theory none of the step of the four-place model by Entman can be identified in a positive way. On the contrary the producers create a frame that implies handling waste in a responsible way is not necessary.

### **7.2.2. Direct incidents**

The biggest verbal incident is the Food Waste Challenge was in episode 17. The challenge was to cook with ingredients that are mostly neglected by home cooks and chef alike. For example, certain parts of meat that are rarely used and also the stem of broccoli and cauliflower, were provided as ingredients for the challenge. Most households just throw these parts of the ingredients away instead of using them. The jury says that “this is the first time in history of MasterChef USA that a challenge is completely dedicated to food waste” (MasterChef, 2018). Food and Agriculture Center says the US 1.3 billion tons of food lands in the trash every year, which shows the importance of sensitize the audience to topics like that. In this episode the framing of sustainability is presented in a good way, as the chefs and home cooks can make professional dishes out of leftover ingredients. Also, Gordon Ramsey made three dishes out of scratch and nobody would even think it is only from food waste. These incidents can also be applied to the framing theory. First the problem, that food waste is a big part of cooking and causes problems is defined, but when it comes to proposed solutions MasterChef US fails in framing these problems in a right way. On one hand they are talking about food waste but on another episode the judges don’t handle food with respect and throw usable food on the floor. Nevertheless, MasterChef US is trying to build a frame that contains the problem definition and proposed solutions, typical frames according to Entman (1993), but fails in also talking about the cause description in addressing the problem of food waste and what the viewer can do to avoid it.

### **7.2.3. Related Findings**

One related aspect to analyse, is the use of living animals on the show and the relation to food ethics. In two episodes, crab fish played a role in the cooking challenge. Both times the fish were still alive and needed to be boiled alive before processing. Also, it does not mention the origin of the fish, which shows clear contrast with MasterChef Germany. It raises the ethical question if animals should be killed on TV, for entertainment purpose. Another aspect in the domain of seafood, was the idea of using a fishing net. According to the FAO, there are roughly 640 000 tons of these nets currently in the ocean, accounting for 10 percent of the total plastic waste in the sea (FAO, 2018). Especially cooking alive animals can be applied to the morality part of Entman’s four-place model (1993). Not only MasterChef implies that cooking alive

animals is a “normal” thing to do and do not educate the viewer about how to properly cook alive animals, but also the ethical and morality aspects of that are not considered. It is highly questionable if it is really necessary to boil alive animals for an entertainment show. However, with these scenes MasterChef build up a frame that is misleading animal welfare.

The American MasterChef also uses a large amount of meat. Most of the dishes contain meat. When a contestant wanted to cook a vegetarian dish, the judges made jokes about how a vegetarian dish cannot compete with a meat dish. Some minor incidents were shown in the finale, where a big amount of confetti was shown and also campaign was wasted.

### **7.3. Germany vs. US**

Before going into the specific differences between MasterChef US and Germany cooking show. It is important to mentioned, why it is interesting to compare these countries and also what culture differences occur. The biggest differences between the two countries is that in Germany and Europe, governments are doing more to protect the environment, they are intervening more strongly, setting positive incentives for sustainable business or creating regulations that better protect the environment. In the USA, there is a fundamentally more sceptical attitude towards strong state intervention. They are more likely to rely on companies coming up with ideas to protect the environment. Unfortunately, this does not happen, or only much too slowly. Non-governmental organisations and consumers are trying to increase the pressure on US companies, but overall there is still too little happening in this area. For these reasons, it seems to be easier to live more sustainably in Germany: people recycle and collect compost, Germans drive more environmentally friendly cars, have solar panels on their roofs and better public transport. Many Americans still do not think enough about their energy consumption.

Nevertheless, it should not be forgotten that in many states, environmental protection organizations use social media and online tools to draw attention to grievances and put pressure on companies. Campaigns can be launched very quickly on the Internet and attract global attention. Companies are attacked on all fronts: it is about working conditions in developing countries, the protection of natural resources, energy consumption, food safety etc. For companies, these actions are associated with a considerable image loss. This in turn leads to companies trying to anticipate such campaigns and to make greater efforts to protect the environment and create fair working conditions. The same can also be found in Germany, but less progressively than in the US, which could be mainly due to the fact that Germans trust their

government more and see that measures are taken in the direction of environmental friendliness. As it seems that sustainability is rather low on the agenda of the US government, organisations are trying to put the necessary pressure on companies. There is a general image that Germans are genuinely paying more attention to environmental awareness. In the US it is not uncommon to see large trucks parked in the parking lots in front of Walmart and Co. with their engines running to make sure the air conditioning continues to work. Many Americans don't have much to do with waste separation either, it is more or less non-existent. However, it has to be said that California is a pioneer in the field of environmental protection in America. It has its own paper garbage cans, recycling stations for bottles and cans and strict guidelines regarding garbage on highways or beaches – but even though MasterChef US is filmed in Los Angeles, these efforts cannot be found in the show.

However, it is not only the cultural differences in terms of environmental awareness that differ remarkably between the two countries. The eating habits also differ significantly. It is always said that Americans eat only fast food, hardly move and have no problem with size XXXL. However, this image is changing more and more. Especially when you look at the Western states, health consciousness is developing more and more. Supermarkets offer organically grown products, fitness studios have more and more tenants and also fast food restaurants offer healthier alternatives than just burgers and fries. Especially the American eating habits portrayed in the media often underline culinary stereotypes, those of the overweight American. The findings show that these stereotypes are definitely being served in the Master Chef US. The challenges contain a lot of frying and preparing fast food, whereas fast food and frying is completely avoided in the German MasterChef show. But against the clichés there is not only fast food, fatty and sweet dishes in America. Different cultures have left their traces in the American kitchen. In many countries, Mexican, Asian and Creole cuisine is often combined with their own. This diversity and fusion are also very evident in the MasterChef Show US, where a lot is cooked with seafood and special products from different states. However, not only the US is focussing on fast, simple food, Germany can also demonstrate a trend towards ready-made meals. Quickly prepared, healthy and tasty, these are the demands Germans make on their food. In the yearly nutrition report of the Federal Ministry of Food and Agriculture (2019), nine out of ten Germans said that their health is important to them when they eat. Nevertheless, according to the Federal Minister of Food, ready-to-eat meals are right on trend. Therefore, the ministry wants to work together with the food industry

to reduce the amount of sugar, fat and salt in ready-to-eat products. Which again proves that the German government is addressing the issue of healthy eating and taking active measures. The same study also shows that organic food is becoming more popular. Every second person stated in the survey that they were looking for appropriate seals. This also applies to the question of whether a food product was produced under fair or particularly animal-friendly conditions. The interviewees are also interested in information on ingredients and additives (84 percent), origin (80 percent) and best before date (79 percent). However, the survey did not reveal how many of them actually choose the often more expensive organic products and thus use the sustainable option.

Although it is difficult to compare countries such as Germany and the USA, as they differ significantly both in size and culture, research on the management of sustainability in both countries has shown that the concepts are similar. But this claim to sustainability is not reflected in the cooking shows, on the contrary the stereotypical differences and clichés are confirmed in the comparison. A clear difference between the countries can also be seen in the home cooking. While Germans take it for granted to prepare most of their meals in their own kitchen, Americans like to have food delivered, go to restaurants or fast food outlets. This point could also have a big impact on the framing of the cooking shows. Even if Master Chef US includes more sustainability in its program, it is questionable whether the masses will therefore cook more at home and bring these aspects into the program or return to using ready-made meals. Framing sustainability in MasterChef Germany does, however, show a positive aspect, as it is to be hoped that the sustainable ideas will be adopted in the home kitchen.

The codebook alone shows at a glance that the German format has far more entries on the topic of sustainability than the American format. Upon closer inspection, it is particularly noticeable that Master Chef Germany very often aims to include important sustainability topics on the side. For example, only local and regional dishes are used for the challenge. Even though many dishes at MasterChef US came from certain American states, there was no explicit reference to the use of local foods, which can make a significant impact to sustainable living in the viewers kitchens. The Food Waste Challenge was shown in both formats. The intention to encourage viewers to not always throw away leftovers and to show that delicious food can be cooked from leftovers is a positive framing of sustainability. However, when comparing both challenges, it is particularly noteworthy that in the US format, leftovers are used at the beginning, which raises the question of what happened to the food before or whether leftovers

were specially created for the production. In the second round of the challenge, the candidates were given a box of the ingredients which they used to cook another dish, but this time they would not have to use the leftovers only. The German format in comparison has approached the challenge the other way around. The first round of the challenge consisted of a box with different ingredients to create a dish, with the advice not to throw the leftovers away but to keep them in a separate box. In the second round the candidates were only allowed to cook a dish from the leftovers of their first round - this plan seems to be more sustainable than the USA format. Furthermore, MasterChef Germany devotes an episode to overfishing and plastic in the seas, an initiative like this is completely missing in the American format. Even though America is trying to get the problem of food waste under control, little is shown in the cooking show about what could make viewers change their attitude. On the contrary, it is shown that food leftovers go into the general garbage and are not composted separately. Which also confirms that there is no universal waste separation system in America and if there is, it is not addressed or implemented in the show.

To conclude, it can be said that Germany integrates the concept of sustainability well into their production, whereas America is more focused on competition rather than food. The findings of the comparative analysis therefore underline the overall reputation of Americans being less environmentally friendly than Europeans, and therefore Germans.

## 8. Discussion

The results of the research have shown that the topic of sustainability has a considerable influence on TV programmes. The findings are based on the four-place model according to Entman (1993), based on four typical frames division which are: problem definition, cause description, proposed solutions and moral and explicit evaluations.

### **Problem Definition**

To build up frames that contain the definition of problems and the actors involved, both shows uses some of their episodes to address different topics. Cooking shows in general are often in the focus of sustainability activists, as they often question what happens to the leftover food, but also in general the presentation of certain foods. Many cooking shows have a strong impact on home cooking and inspire people to recreate dishes or use certain ingredients. Therefore, it is very important that the topic of sustainability also finds its place in these shows. Providing information and education about environmentally friendly consumption can lead to a rethink, encouraging more people to think about what goes in the shopping basket and what is used in the kitchen at home. The inclusion of sustainability issues in cooking shows is incredibly important to encourage these impulses, so that the sustainability frame is embedded into people's minds. MasterChef Germany has two main problems in their season which are addressed. First, is the importance of regional food. They only shoot in local areas and also use the ingredients produced *ibid*. The second problem is the reduce of plastic waste in order to help save the ocean. That problem seems to be a big part of their sustainability strategy, as they are dedicated nearly two episodes fully to that topic. In these episodes, cooking moved into the background and time was taken to draw attention to the problems of plastic.

### **Cause Description**

The second point of Entman's framing model is to describe the cause. By making people aware of the fact that there is too much plastic floating in the oceans and that as a result there will soon be no more fish to buy, cooking shows like MasterChef Germany encourage people to reconsider their buying habits. As people do not want to sacrifice a certain kind of food, they have to change their consumption and consumer behaviour on a large scale in order to drastically reduce plastic consumption and waste worldwide. MasterChef Germany challenges

its viewers to critically deal with the topic, and also informs their viewers about marine animals, which is important for the education of the viewers, since fish is often only a product from the supermarket and is not informed about its origin. With its own innovation Sky Ocean Rescue Program, MasterChef Germany sets a worldwide milestone in supporting sustainable projects. The analysis revealed that a whole episode (60min) was dedicated to this topic to clear up these grievances. However, it is important to note that this is the show's own initiative and the possibility of green marketing or greenwashing cannot be ruled out for the show's own advantage. Greenwashing is the practice of making an unsubstantiated or misleading claim about the environmental benefits of a product, service, technology or company practice. Greenwashing can make a company appear to be more environmentally friendly than it really is. 2019 was the first time that MasterChef Germany did not use any plastic in its production, all this data is from Sky itself and also the fund that supports other environmental organisations will not be described in detail. More research is needed to further illuminate the actual sustainable footprint and intentions of the station. In my estimation Sky cannot be accused of Greenwashing, as they openly communicate about their actions and cooperation's with organisations. Nevertheless, it is important to remember that such actions are good for the image, but they are also a step in the right direction. More research is needed to further illuminate the actual sustainable footprint and intentions of the production.

### **Proposed solutions**

Especially the 'Food Waste Challenge' in both shows contributes to a broad understanding of food waste and gives solutions to home cooks to avoid food waste in the own kitchen. Many chefs don't know what they can do with leftovers and are still encouraged by the show to cook professional dishes only with food leftovers. Another solution is portrayed with the compost machine in the German MasterChef. By addressing the topic of recycling and food waste, they also show how not only MasterChef is fighting the food waste, but also how private households can best deal with food waste. Either cook a tasty dish on it or compost it. With these demonstrations MasterChef Germany framed the importance of waste separation and food waste and gives advise what to do against it.

### **Moral and explicit evaluations**

When it comes to frame morality a point that came up during the analysis is the glorification of meat. It is often said that a dish is only good if it contains meat and vegetarian dishes are always viewed sceptically. This is associated with the fact that every dish must contain meat, even though factory farming makes a significant contribution to the CO2 assumption. Both countries, Germany and the USA, are known for their meat-based dishes. But from a sustainability point of view it would be advisable to implement more vegetarian challenges and also to explicitly state where the meat comes from, so that factory farming is not advertised but critically questioned in cooking shows. Which reflects the last point of Entman's framing theory of moral and explicit evaluations. The framing of meat is enormously large in these shows and should be reconsidered in the long term.

Furthermore, it must be stated that the participants in the show are under enormous pressure because of the competition. Personal preferences or wishes of the chefs will not be considered, even if they would have preferred to use a different ingredient or a more sustainable solution. All food is provided to them by the production team and they themselves have an influence on what they cook with. This makes it even more important that the production itself pays attention to where its ingredients come from and also reduces food waste, as participants rarely think about this topic in the scope of the competition. Additionally, MasterChef only shows the glorious side of cooking. In real life chefs have to deal with the issue of sustainability and above all food waste - since the massive use of food also generates costs, restaurants cannot ignore it. It seems like the show only displays the picture-perfect image of a chef and not the responsibility it comes with.

### **Comparison of Germany and US**

At the beginning it was assumed that both MasterChef Germany and MasterChef US would not sufficiently include the topic of sustainability in their programmes. However, the result shows that both shows include environmentally friendly aspects. Nevertheless, there are also clear differences between the two countries. While MasterChef Germany shows a high level of commitment to make sustainability visible in the show, there are rather few incidents of this in MasterChef USA. In one episode the topic of recycling and food waste was addressed and this not on the same level as in Germany, where only leftovers were used for cooking and a composting machine was presented to show the audience how to recycle organic food waste.

In the research on sustainability it was found that both countries have plans and goals to reduce food waste and to act more sustainably. MasterChef Germany already shows a good sustainable frame and other cooking shows can seek inspiration from this. They only use local and regional products, which are for example presented in thematic areas such as mussels from breeding, fish from Holland and sausages from central Germany. With this simple implementation of certain themes, it was easier to get the sustainable message across. In comparison, MasterChef US scores poorly because the themes do not offer so much variety. This could also be due to the fact that food is not always a priority at MasterChef US. It is more about the challenge and competition than explaining individual products and ingredients in detail. In a direct comparison, it is noticeable that MasterChef Germany places much more emphasis on the education and use of food than MasterChef US. It can rather be observed that the handling of food is not exemplary in the American version. The jury is increasingly throwing 'inedible', and 'bad' food on the floor, which means that the handling of food is not exemplary. Morally and ethically, such actions should not be promoted by a show like MasterChef, but the respectful handling of food should be shown. Lastly, the question that arises is, what can you expect from a cooking show in two countries where public attitudes towards sustainability are so different? My motivation for the topic was that while I am aware that sustainability is treated very differently in the two countries, there is also a huge trend in the US towards a healthy sustainable living. Knowing that a lot of organisations, celebrities, social media stars are more and more addressing these topics, I was wondering if you can see these changes also in a show like MasterChef which is running for more than 10 years. Even though in the Food Waste challenge it is mentioned that this is the first approach MasterChef US does towards the awareness of food waste, it can be hoped that they also imply more sustainability aspects in their future seasons. Also, on the other hand it was interesting to see, that Germany does implement sustainability to such an extensive scope. Growing up in Germany I know that this is not always the case and by watching other cooking shows it was surprising to see that MasterChef Germany is one of the first green productions, which hopefully many more to come. I think MasterChef Germany and Sky is a best practice example for all cooking shows.

This paper only deals with the presentation of sustainability in cooking shows, so no general statement can be made about the influence on the audience in terms of consumer behaviour. Nevertheless, studies show that cooking shows can certainly inspire and shape

modern cooking behaviour. For this reason, it is more important than ever, that shows like MasterChef focus on sustainable topics. In order to examine that further the effect of sustainability in TV shows should be investigated more closely. It would be useful to conduct a further study on the perception and influence on the viewer. This work has provided initial findings on the topic of sustainability at MasterChef. Conducting interviews or surveys would complement the research.

## 9. Conclusion

In order to answer the research question, both cooking shows MasterChef US and MasterChef Germany were analysed in detail with regard to their portrayal and presentation of sustainability. The analysis is based on the framing theory of Entman; who identifies four typical frames that are increasingly found in the cooking shows. In general, the cliché exists that cooking shows are often associated with unsustainable practices such as food waste and plastic waste. The findings have found that the two cooking shows do represent sustainability in their shows. However, how they are framing it is indeed different. In both shows the problem of food waste was addressed and presented. Master Chef Germany, however, is more deeply connected to the topic and presents it in a more concrete way than its American counterpart. While MasterChef US is often about competition, MasterChef Germany focuses on the topic of food and nutrition. Nevertheless, the practices with regard to greenwashing must be viewed critically. The sustainable practices could only be used for self-marketing. But still it can be said that MasterChef Germany has clear frames according to Entman (1993), which on the one hand define the problem, describe the causes, offer suggestions for solutions and also question practices critically and morally, where MasterChef US only has a few sustainable frame regarding the problem definition of food waste. In the end, it can be proven that the biased opinion that Americans are less engaged in sustainability topics than Germans is true, when it comes to the representation of cooking shows.

The findings in this thesis can be interesting not only for film and television production, but also for sustainable organizations. The use of sustainable content in television programmes to promote sustainability and environmental friendliness seems promising (Van Ryn 2018). Future research should concentrate on whether TV portrayals of sustainable options impact overall engagement in changing consumer behaviour or attitudes toward certain activities. This type of information would be useful for gaining a better understanding of whether sustainability content found in TV shows designed for entertainment purposes has the ability to positively influence viewer behaviour. Therefore, efforts to increase understanding of this content and maximise portrayals of sustainable messages in cooking shows could be very helpful for identifying additional avenues for increasing awareness for sustainability or changing attitudes regarding environmentally friendly cooking at home. This paper serves as a critical analysis

and reflection on the research of sustainability in cooking shows, which was carried out to answer the research question of how sustainability is portrayed in cooking shows and if there is a difference between the USA and Germany. The study of this topic and possible further research significantly broadens our understanding of the impact on viewers of the sustainability portrayed in television programmes.

## 10. References

- Abbots, E.-J. (2015). The intimacies of industry: Consumer interactions with the “stuff” of celebrity chefs. *Food, Culture & Society*, 18, 223–243. doi:10.2752/175174415X14180391604323
- Anderson, J. (2012). *Media research methods*. Los Angeles: SAGE Publications.
- Anderson, M. (2017). For Earth Day, here’s how Americans view environmental issues. [online] Pew Research Center. Retrieved from <https://www.pewresearch.org/fact-tank/2017/04/20/for-earth-day-heres-how-americans-view-environmental-issues/> (12.05.2020)
- Altheide, D. (1996). *Qualitative media analysis (Qualitative Research Methods Series Vol. 38)*. Thousand Oaks: Sage.
- ARD (2016). Kochshows. Planet-wissen. [online] Retrieved from [https://www.planet-wissen.de/kultur/medien/geschichte\\_der\\_fernsehshows/pwiekochshows100.html](https://www.planet-wissen.de/kultur/medien/geschichte_der_fernsehshows/pwiekochshows100.html) (12.05.2020)
- Aslama, M. and Pantti, M., (2006). Talking alone: reality TV, emotions and authenticity. *European Journal of Cultural Studies*, 9(2), pp. 167-184.
- Barilla Center for Food & Nutrition, 2016. Food Sustainability Index. [online] Retrieved from: <https://foodsustainability.eiu.com/us/?back=%2Fresources%2F> (10.05.2020)
- Barry, J. (1996). Sustainability, political judgement and citizenship: Connecting green politics and democracy. In B. Doherty & M. de Geus (Eds.), *Democracy and green political thought: Sustainability, rights and citizenship* (pp. 115–131). London: Routledge.
- BBC, 2020. MasterChef Programm. [online] Retrieved from: <https://www.bbc.co.uk/programmes/b006t1k5> (10.05.2020)
- Bell, D., Hollows, J., & Jones, S. (2017). Campaigning culinary documentaries and the responsabilization of food crises. *Geoforum; Journal of Physical, Human, and Regional Geosciences*, 84, 179–187. doi:10.1016/j.geoforum.2015.03.014
- Berger, A. (2011). *Media and communication research methods*. Thousand Oaks: SAGE Publications.
- Bowden, E. (2015). MasterChef finale 2015 ratings show cooking programs are still a success. [online] *The Sydney Morning Herald*. Retrieved from: <http://www.smh.com.au/entertainment/tv-and-radio/masterchef-finale-2015-ratings-show-cooking-programs-are-still-a-success-20150728-gim40b.html>. (18.05.2020)
- Brennen, B. (2017). *Qualitative research methods for media studies*. 2nd ed. New York: Routledge.

Bryman, A. (2006): Integrating quantitative and qualitative research: how is it done? *Qualitative Research*, 6 (1), 97-113.

Chalaby, J. (2011). The making of an entertainment revolution: How the TV format trade became a global industry. *European Journal of Communication*, 26(4), pp. 293-309.

Clarke, S. (2014). Hot food formats - TBI Vision. [online] TBI Vision. Retrieved from: <http://tbivision.com/features/2014/11/hot-food-formats/356641/>. (18.05.2020)

Cohen, S. (2014). The Growing Level of Environmental Awareness. [online] Huffpost. Retrieved from <https://bit.ly/2WZ8SdT> (12.05.2020)

Collins, K. (2009). *Watching What We Eat: The Evolution of Television Cooking Shows*. New York: Continuum.

Collins, K. M. T., A. J. Onwuegbuzie, und Qun G. Jiao. 2006. Prevalence of mixed-methods sampling designs in social science research. *Evaluation and Research in Education* 19:83-101.

Collins, K. and Jay College, J. (2008). TV Cooking Shows: The Evolution of a Genre. [online] *Flow Journal*. Retrieved from: <http://www.flowjournal.org/2008/05/tv-cooking-shows-the-evolution-of-a-genre/>. (18.05.2020)

Ellsmor, J. (2019). Cruise Ship Pollution Is Causing Serious Health And Environmental Problems. [online] *Forbes*. Retrieved from: <https://bit.ly/36sOODY> (12.05.2020)

Endemol Shine Distribution. (2017). Masterchef Junior - Formats - Endemol Shine Distribution. [online] Retrieved from: <http://www.endemolshinedistribution.com/masterchef-junior-formats/>.

Evans, D. (2014). *Food waste: Home consumption, material culture and everyday life*. London: Bloomsbury.

Federal agency for agriculture and nutrition (2019). Too Good for the Bin. An Initiative of the Federal Government to avoid food waste. [online] Retrieved from: <https://www.zugut fuer dietonne.de> (12.05.2020)

Fitzpatrick, R. K. (2019). Behind Every Film Production Is a Mess of Environmental Wreckage. *VICE*. [online] Retrieved from: [https://www.vice.com/en\\_us/article/3kxjvk/behind-every-film-production-is-a-mess-of-environmental-wreckage](https://www.vice.com/en_us/article/3kxjvk/behind-every-film-production-is-a-mess-of-environmental-wreckage) (05.05.2020)

Food Network, (2015). Food Network. [online] Retrieved from: <http://www.foodnetwork.com/site/about-foodnetwork-com.html>. (14.05.2020)

Food and Agriculture Organization of the United Nations. Food and Waste. [online] Retrieved from <http://www.fao.org/food-loss-and-food-waste/en/> (12.05.2020)

Food and Agriculture Organization. GLOBEFISH - Information and Analysis on World Fish Trade. [online] Retrieved from: <http://www.fao.org/in-action/globefish/fishery-information/resource-detail/en/c/388082/> (12.05.2020)

Früh (1998): Inhaltsanalyse. Theorie und Praxis. 4., überarbeitete Auflage. Konstanz: UVK.

Ganslmeier, M. (2018). Positive Klimabilanz trotz Trump. [online] Deutschlandfunk. Received from [https://www.deutschlandfunk.de/usa-positive-klimabilanz-trotz-trump.1766.de.html?dram:article\\_id=414216](https://www.deutschlandfunk.de/usa-positive-klimabilanz-trotz-trump.1766.de.html?dram:article_id=414216)

Giesen, J. C.; Simon, B. (Hg.). *Food and Eating in America: A Documentary Reader*. John Wiley & Sons, 2018.

Hawkins, G. (2006). *The ethics of waste: How we relate to rubbish*. Lanham: Rowman & Littlefield.

Highmore, B. (2002). *Everyday life and cultural theory: An introduction*. London: Routledge.

Hill, A. (2005). *Reality Tv: Audiences and Popular Factual Television*. Routledge.

Hogan, M. (2010). Gregg Wallace and John Torode on the return of MasterChef. [online] Telegraph.co.uk. Retrieved from: <http://www.telegraph.co.uk/culture/tvandradio/7220921/Gregg-Wallace-and-John-Torode-on-the-return-of-MasterChef.html>. (20.05.2020)

Hollows, J., & Jones, S. (2010). "At least he's doing something": Moral entrepreneurship and individual responsibility in Jamie's Ministry of Food. *European Journal of Cultural Studies*, 13, 307–322. doi:10.1177/1367549410363197

Horst, C. (2014). MasterChef Adds Dimension to Gordon Ramsay's TV Image. [online] Variety. Retrieved from: <http://variety.com/2014/tv/spotlight/masterchef-adds-dimension-to-gordon-ramseys-tv-image-1201341873/>. (17.05.2020)

Hussey, W.; Schreier, M; Echterhof, G. (2013). *Forschungsmethoden in Psychologie und Sozialwissenschaften für Bachelor* (2., überarbeitete Auflage). Berlin:Springer

Johnson, R. B.; Onwuegbuzie, A. J.; Turner, L. A. (2007): Toward a definition of mixed methods research. *Journal of Mixed Methods Research*, 1(2), 112-133.

Johnston, J., Rodney, A., & Chong, P. (2014). Making change in the kitchen? A study of celebrity cookbooks, culinary personas, and inequality. *Poetics*, 47, 1–22. doi:10.1016/j.poetic.2014.10.001

Keller, K., Halford, J., Kuilema, L., Lee, N., Yoon, J., Mascaro, B., Combes, A., Deutsch, B. and Sorte, K. (2012). Food branding and childhood eating behavior and obesity. *Physiology & Behavior*, 106, pp. 379-386.

Kemper, Elizabeth A., Sam Stringfield, und Charles Teddlie. 2003. Mixed methods sampling. Strategies in social science research. In Handbook of mixed methods in social and behavioral re-search, Hrsg. Abbas Tashakkorie, und Charles Teddlie, 273-296. Thousand Oaks: Sage.

Ketchum, C. (2005). The Essence of Cooking Shows: How the Food Network Constructs Consumer Fantasies. *Journal of Communication Inquiry*, 29(3), pp. 217- 234.

Knox, D. (2012). MasterChef hits 1million Facebook fans. [online] TV Tonight. Retrieved from: <http://www.tvtonight.com.au/2012/09/masterchef-hits-1million-facebook-fans.html>.

KPMG. (2020). Wie wichtig sind Ihnen die folgenden Kriterien zum Thema Nachhaltigkeit für Ihren Einkauf von Lebensmitteln und Drogeriewaren? [Graph]. Statista. [online] Retrieved from <https://de.statista.com/statistik/daten/studie/1109347/umfrage/bedeutung-nachhaltigkeit-kauf-lebensmittel-drogeriewaren/> (18.05.2020)

Kuckartz, U. (2014). Mixed Methods. Heidelberg: Springer. Roch, S. (2015). Forschendes Lernen an der Europa-Universität Flensburg – Erhebungsmethoden. Universitätsverlag: Flensburg.

Lane, R., & Gorman-Murray, A. (Eds.). (2011). Material geographies of household sustainability. Farnham: Ashgate.

Lewis, Tania. 2008c. “Transforming Citizens? Green Politics and Ethical Consumption on Lifestyle Television.” *Continuum, Journal of Media and Cultural Studies* 22 (2): 227–40.

Lincoln, Y. S. & Guba, E. G., 1985. *Naturalistic Inquiry*. Beverly Hills: Sage.

Macnaghten, P. (2006). Environment and risk. In G. Mythen & S. Walklate (Eds.), *Beyond the risk society: Critical reflections on risk and human security* (pp. 132–146). Maidenhead: Open University Press.

Matwick, K. and Matwick, K. (2015). Inquiry in television cooking shows. *Discourse & Communication*, 9(3), pp. 313-330.

Mayring, P. (1999a). Zum Verhältnis qualitativer und quantitativer Analyse. In Dietmar Bolscho & Gerd Michelsen (Hrsg.), *Methoden der Umweltbildungsforschung*. Opladen: Leske & Budrich.

Mayring, P. (1999b). Einführung in die qualitative Sozialforschung. Eine Anleitung zu qualitativem Denken (4. Auflage). Weinheim: Psychologie Verlags Union.

Mayring, P. (2000a). *Qualitative Inhaltsanalyse. Grundlagen und Techniken* (7.Auflage). Weinheim: Deutscher Studien Verlag.

Mayring, P. (2000b). Qualitative Inhaltsanalyse. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 1(2). <http://www.qualitative-research.net/fqs-texte/2-00/2-00mayring-d.htm> (12.05.2020)

- Mayring, P.(2001). Kombination und Integration qualitativer und quantitativer Analyse [31 Absätze]. *Forum Qualitative Sozialforschung / Forum Qualitative Social Research*, 2(1), Art. 6, <http://nbn-resolving.de/urn:nbn:de:0114-fqs010162>. (12.05.2020)
- Mayring, P. (2015): *Qualitative Inhaltsanalyse. Grundlagen und Techniken* (12., vollständig überarbeitete und aktualisierte Auflage). Weinheim: Beltz.
- McDonnell, E.M. (2016). Food Porn: The Conspicuous Consumption of Food in the Age of Digital Reproduction. In: Bradley P. (eds) *Food, Media and Contemporary Culture*. Palgrave Macmillan, London.
- Mentz, S. (2012). After sustainability. *PMLA*, 127, 586–592.
- Merriam, S. B., 2009. *Qualitative Research: A Guide to Design and Implementation*. San Francisco: Wiley.
- Myers, D. (2014). Is Anybody Watching the Food Network? [online] *The Daily Meal*. Retrieved from: <http://www.thedailymeal.com/anybody-watching-food-network>. (18.05.2020)
- Oren, T. (2013). On the Line: Format, Cooking and Competition as Television Values. *Critical Studies in Television. The International Journal of Television Studies*, 8(2), pp. 20-35.
- Parkins, W., & Craig, G. (2011). Slow living and the temporalities of sustainable consumption. In T. Lewis & E. Potter (Eds.), *Ethical consumption: A critical introduction* (pp. 189–201). London: Routledge.
- Phillipov, M. (2013). Mastering obesity: MasterChef Australia and the resistance to public health nutrition. *Media, Culture & Society*, 35(4), pp. 506-515.
- Ouellette, L., & Hay, J. (2008). Makeover television, governmentality and the good citizen. *Continuum*, 22, 471–484. doi:10.1080/10304310801982930
- Reid, L., Sutton, P., & Hunter, C. (2010). Theorizing the meso level: The household as a crucible of pro-environmental behaviour. *Progress in Human Geography*, 34, 309–327. doi:10.1177/0309132509346994
- Rohm, Brigitte (2019). Foodwaste: Aktuelle Zahlen für Lebensmittelverschwendung ernüchtern. *Öko-Test. Kategorie Essen & Trinken*. [online] Retrieved from [https://www.oekotest.de/essen-trinken/Foodwaste-Aktuelle-Zahlen-fuer-Lebensmittelverschwendung-ernuechtern-\\_10685\\_1.html](https://www.oekotest.de/essen-trinken/Foodwaste-Aktuelle-Zahlen-fuer-Lebensmittelverschwendung-ernuechtern-_10685_1.html) (18.05.2020)
- RTS, 2020. Food Waste in America in 2020. [online] Received from <https://www.rts.com/resources/guides/food-waste-america/> (12.05.2020)
- Schmidt, T., Schneider F., Claupein, E. (2019). Food waste in private households in Germany. Analysis of findings of a representative survey conducted by GfK SE in 2016/2017. Thünen Working Paper 92. Tüne. [online] Received from

<https://www.bmel.de/DE/themen/ernaehrung/lebensmittelverschwendung/gfk-studie.html>  
(12.05.2020)

Seale, K. (2012). MasterChef's Amateur Makeovers. *Media International Australia*, 143(1), pp. 28-35.

Sethna, Z. and Ferguson, W. (2014). "The Origins of the Cooking Show" [online] Nytimes.com. Retrieved from <https://nyti.ms/3efAf9m>

Short, F. (2006) *Kitchen Secrets: The Meaning of Cooking in Everyday Life*. Oxford: Berg.

Soneji, D., Riedel, A. and Martin, B. (2015). How Gordon Ramsay appeals to consumers: Effects of self-concept clarity and celebrity meaning on celebrity endorsements. *Journal of Strategic Marketing*, pp. 1-12.

SpotVault - MasterChef Fox (2018). Spotted Ratings. May 31, 2018. [online] Retrieved from: <http://www.spottedratings.com/2018/05/spotvault-masterchef-fox-summer-2018.html>

Thiele, L. P. (2011). *Indra's Net and the Midas touch: Living sustainably in a connected world*. Cambridge, MA: The MIT Press.

Ting, D. (2019). People still buy food content: What food media is doing right in finding sustainable models. [online] DIGIDAY. Received from <https://digiday.com/media/people-still-buy-food-content-food-media-right-finding-sustainable-models/> (12.05.2020)

UBA (2019). Environmental Awareness Study 2018. [online] Retrieved from: <https://www.umweltbundesamt.de/en/press/pressinformation/environmental-awareness-study-2018> (12.05.2020)

Wagner, P. (2018). Wir verschwenden mehr Essen als wir glauben [online]. Retrieved from <https://de.statista.com/infografik/15127/lebensmittelverschwendung/> (11.05.2020)

Yeap, Emily (ed). (2013). *Sustainable Hospitality Practices and Challenges in the New Millennia*. Issue 1. Taylor's University Sdn. Bhd. (149634-D) Received from: <https://university2.taylors.edu.my/download/taylors-le-%20petit-hotelier-2013-issue-1.pdf>

# APPENDIX

## Comprehensive Summary of the Codebook MasterChef Germany

### MasterChef Germany

Episode	Topic	Direkt Incidents	Indirect Incidents
1	Auditions Round 1	/	All food is shown and stored without plastic
2	Introduction of the MasterChef contestants	Mentioning of the Sky Ocean Rescue Programm	/
3	Topic: First Dates	/	All contestants choose a meal dish
4	Theme: Vegetarian menu for a fashion show	Candidate: "Vegetarian is not my cuisine now" Statements like "quite good for a vegetarian burger" (implies only burgers with meat would be correct)	Supporting the vegetarian cuisine
5	Theme: Relay Cooking (one person starts with a dish and the others need to finish it)	Direkt saying that a vegetarian dish won't win the challenge	/
6	Theme: Thurigan cuisine	Rainbow trout, locally caught from Germany	Utilization of all foodstuffs
7	Theme: Turkish Food	/	/
8	Theme: Cooking in the wilderness	process the whole animal (rabbit) so that nothing is left over and wasted	Cooking on an open fire
9	Theme: Roulade variations	/	Meat themed topic
10	Theme: Wedding	/	Two vegetarian dishes
11	Theme: Food Waste	- When cooking it is also important to add the leftovers correctly and to produce a dish with as few leftovers as possible - All food left over from the show goes into a composting machine and within 24 hours hummus is made from it.	/
12	Theme: Cruise ship	Note at the end to the cruise ship that it is a green production and cruise ships are not very sustainable as they will consume 12 tons of heavy oil - however, the ship on which was filmed is only in port.	Cooking on a cruise ship
13	Theme: Ocean Rescue Programm	Program against waste pollution of the seas is presented. The candidates collect garbage on the beach themselves. Consequences of the plastic in the oceans are presented. The fish used is bought at the market, where a WWF employee gives tips on what to look out for when buying a fish.	Resuable Drinking bottles for all the contestants
14	Theme: Mussels	Sustainable mussels in hanging rearing are used - explanation of why it is important to not fish mussels in the ocean	Resuable Drinking bottles for all the contestants
15	Theme: One ingredient: sweet and savory	/	/
16	Theme: Italy	dishes are all made from regional ingredients from the Italian region of Trentino	/
17	Finale Part 1	/	/
18	Finale Part 2	Reference to Green Production as a premiere at MasterChef Germany. No plastic was used in front and behind the camera and Co2 was saved in order to support environmental protection.	/

## Comprehensive Summary of the Codebook MasterChef USA

Episode	Topic	Direkt Incidents	Indirect Incidents
2	Auditions Round 2	/	Ingrediends are always shown without plastic
3	Auditions Round 3	/	Ingrediends are always shown without plastic
4	Theme: Home State Heroes	- Regional products from different states - Ingredients are presented without plastic	/
5	Theme: Dungeness crab	- All dishes are served in plastic containers - Food goes in normal trash instead of - Jury throws food on the floor (food waste)	- Cooking an alive animal for entertainment purposes - Wrong cooked food just goes done the sink
6	Theme: Brewing	Dishes that have beer as an ingredient	/
7	Theme: World Cup Dishes	Churros were wrapped in plastic, including a sauce next to it in a plastic container: food was only used for presentation	- One Woman is cooking vegetarian - garden makes a joke about it but also agrees on that its a good choice
8	Theme: Wedding	After the weeding the left over food is thrown away - all in one bin not even organic is recycled	Jury throws food on the floor (food waste)
9	Theme: Frozen Food Challenge	Frozen Food is wrapped in plastic	Alive fish are used while cooking, also presented in a fish net (plastic)
10	Theme: Cheese soufflé	/	/
11	Theme: Cupcakes	Cupcakes are presented in a plastic box, for presentation purposes only	/
12	Theme: Deep Fried Challenge	Liquors like oil etc. are in glass	/
13	Theme: Halibut	No mention of the origin of the fish (sustainable fishing)	Showing how to use nearly everything-art of the fish
14	Theme: Black Forest Cake	Juror throws food on the floor (food waste)	/
15	Theme: Classic American Ingredients	Use of local ingredients	/
16	Theme: American Heros ( In Honor of Firefighters)	/	/
17	Theme: Waste Not Want Not	- two-course meal with food scraps - make a dish using the whole ingredients of the same scraps they cooked with earlier - Mentioning of the Food Waste in the USA	
18	Theme: Restaurant Takeover	/	/
19	Theme: Cooking with Heart ( a dish inspired by their loved ones)	/	/
20	Theme: Battle of the Beef	- Butter and sauces in plastic containers	- beef as the main ingredient - Throwing away all the food in one bin, nothing is mentioned about organic food is separated.
21	The Semi Final	- The containers for fruit /herbs are in plastic	/
22	Finale Part 1	- Home visit: One family served dinner on plastic plates and drinks in plastic cups	/
23	Finale Part 2	- The use of reusable baking paper is shown in the finale = no waste - comments that implement that dishes without meat are not MasterChef worthy	- Champagne shower = waste of champaign - Konfetti in the finale = unessasarsy