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Food Movements in Germany: Slow Food, Food Sharing, and Dumpster Diving

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Abstract

The study investigates the motivation to participate in food movements, as well as the activities and knowledge regarding food waste of active food movement members in Germany. The study builds on theories of social movements. A total of 25 in-depth interviews with activists of the Slow Food organization, the Food Sharing organization, and with dumpster divers were recorded, transcribed, and analyzed through qualitative content analysis. Participation in the movements rests upon instrumental, ideological, and identificational motivations. The knowledge of food waste differs between the three movements. Sharing, food waste, and tendencies of anti-consumerism play a strong role in all movements.

Keywords: activism, food waste, in-depth interviews, qualitative content analysis, social movements

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Introduction

In Germany, food waste occurs in agricultural production, post-harvest, processing and private households (Gustavsson et al. 2011). Food waste is estimated at 11 million tons per year; about 65% of which are avoidable and partly avoidable. The term avoidable refers to food waste that is still safe for human consumption at the time of disposal. Partly avoidable relates to consumer habits such as cutting off bread crust or apple peel. The amount of avoidable and partly avoidable food waste results in approximately 21.6 million Euro per year (Kranert et al. 2012). Governmental and political initiatives address food waste through awareness campaigns and targeted projects (Kranert et al. 2012, Lebersorger and Schneider 2014). In addition, individuals and non-governmental groups aim to reduce food waste. Food movements targeting the reduction of food waste include the Slow Food organization, Food Sharing, and dumpster diving.

In 1987, Slow Food was founded as a countermovement against fast food in Italy to preserve local Italian food traditions and regional food products. Over time the local organization developed into an international organization with 100,000 members in about 130 countries around the world. Membership is organized in local sections, which are coordinated at the international headquarter in Italy (Sassatelli and Davolio 2010). In Germany, Slow Food started in 1992 and currently has 12,000 members organized in 80 local sections (Slow Food 2015). In each country, Slow Food advocates the production of sustainable local food and small-scale business. Further goals include the preservation of biodiversity and the reduction of food waste. The organizational mission states that food should be good, clean and fair (Jones et al. 2003, Sassatelli and Davolio 2010). Slow Food is criticized to be affordable only by wealthy members of the society, since it focuses on expensive gastronomic products (Chrzan 2004, Laudan 2004) and presents rurality in a nostalgic and romantic view (Jones et al. 2003).

Food sharing occurs in various forms, for instance in underground restaurants, or within an organization called Food Sharing. In both cases, it involves using a social network or an online platform to distribute food items among registered users (Kera and Sulaiman 2014, Ganglbauer et al. 2014). In Germany, Food Sharing has approximately 28,000 registered members, exchanging food items through a platform without paying fees (Ganglbauer et al. 2014). Shared food items are leftover foods from private households, as well as groceries donated by local retailers or growers (Lubeck 2014). Ganglbauer et al. (2014) explain that the food is collected by volunteers that offer the items on the platform. Exchange with members requesting the items takes place mainly in person. The offering side is free to accept or decline a food request. Retailers and producers have legal agreements with the organization that the consumption of the donated food is the personal risk of the Food Sharing member (Lubeck 2014). In Germany, the organization has been active since 2012. It resulted from two independent initiatives against food waste. The idea of an internet platform to share food was developed by in the context of the movie "Taste the Waste," while at the same time a student group together with a journalist developed a similar idea. Both initiatives collaborated and the Food Sharing organization and platform were realized through crowdfunding (Food Sharing 2015).

Dumpster diving is an activity that occurs in many developed countries, for instance in parts of Europe, in the U.S., and in Australia (Fernandez et al. 2011). Dumpster diving involves opening

commercial garbage containers and collecting food items. Despite considered unmarketable by the owners, dumpster divers perceive many food items as still suitable for human consumption. Dumpster diving is often socially marginalized and a result of poverty. Depending on the country and its legislation, the activity can be a punishable offence. In Germany, dumpster diving is illegal (see German Criminal Code §123, §242, §244, and §303). Nevertheless, the situation is handled differently in practice. Dumpster divers are either not reported, since retailers fear negative media attention or courts treat it as neglectable. Hours of community service were so far the hardest punishment in Germany; the majority of cases were dropped due to pettiness (Noack et al. 2014). Dumpster divers collect food either as individuals or in groups. Dumpster diving can be considered as a form of anti-consumption (Nguyen et al. 2014), and as an act to reduce food waste and to oppose current food systems (Fernandez et al. 2011). The phenomenon of dumpster diving is likely to have been present in developed countries all along, but since the mid-2000s it is receiving public and scientific attention (Eikenberry and Smith 2005, Edward and Mercer 2007).

Food movements are a form of social movements. Social movements are defined by their shared normative orientation, collective identity, orientation toward change of political or cultural conditions, and shared actions related to their change program (James and Van Seeters 2014). One of the common denominators of the three movements analyzed is aiming at the reduction of food waste. The study investigates what motivates members to become active in their respective movement, how active members of each movement perceive their contribution to the reduction of food waste, as well as their knowledge about food waste and about other movements. As food movements and their activities are gaining popularity in Germany, managers in agrifood chains will benefit from understanding the movements, since they are impacting consumer trends relevant to value chains in the agrifood industry, as well as their image in the society. This understanding will be useful in developing strategies and addressing current trends and media critique.

Literature Review

Social movement theories explain that people participate in social movements based on three main motivations, namely instrumental motivation, identificational motivation, and ideological motivation (Klandermans 2004). Motivation refers to the accomplishment of goals. It includes an impetus or an inspiration to extend efforts to reach that goal. Motivation theory distinguishes the level of motivation and the orientation of motivation. The orientation of motivation refers to the underlying attitudes and goals, which explains how people are driven to act (Ryan and Deci 2000).

Social movements and, in particular, activities being organized through the movements, depend on member commitment. Commitment theory distinguishes between three types of commitment, namely continuance commitment, affective commitment, and normative commitment. Affective commitment is based on emotional attachment to an organization or movement. It implies a member's wish to be a part of the movement. Identification with the goals and values is likely. Continuance commitment implies a fear of loss, and considers advantages and disadvantages of being part of a movement. The fear of loss can relate to monetary, as well as social aspects.

Normative commitment relates to an obligation to be part of a movement. The three types of commitment affect participation, and are not mutually exclusive (Allen and Meyer 1990).

The existing body of literature on the three food movements analyzed concentrates on political and organizational aspects. Only a small number of studies focus on members, their interests, motivations, and activities (see Figure 1). Germov and Williams (2008) researched visitors' experience with Slow Food during an annual Slow Food festival in Melbourne (Australia). They conducted in-depth interviews with 33 Slow Food members, which they analyzed through qualitative content analysis. Interviewees associated Slow Food with good, healthy, local, and fresh produce, and hand-made production processes. All interviewees considered the Slow Food mission as very important, and some even incorporated components in their daily routines. Interviewees engaged in food production highlighted the Slow Food network as main motivation to join the organization. In addition, they mentioned economic and social benefits.

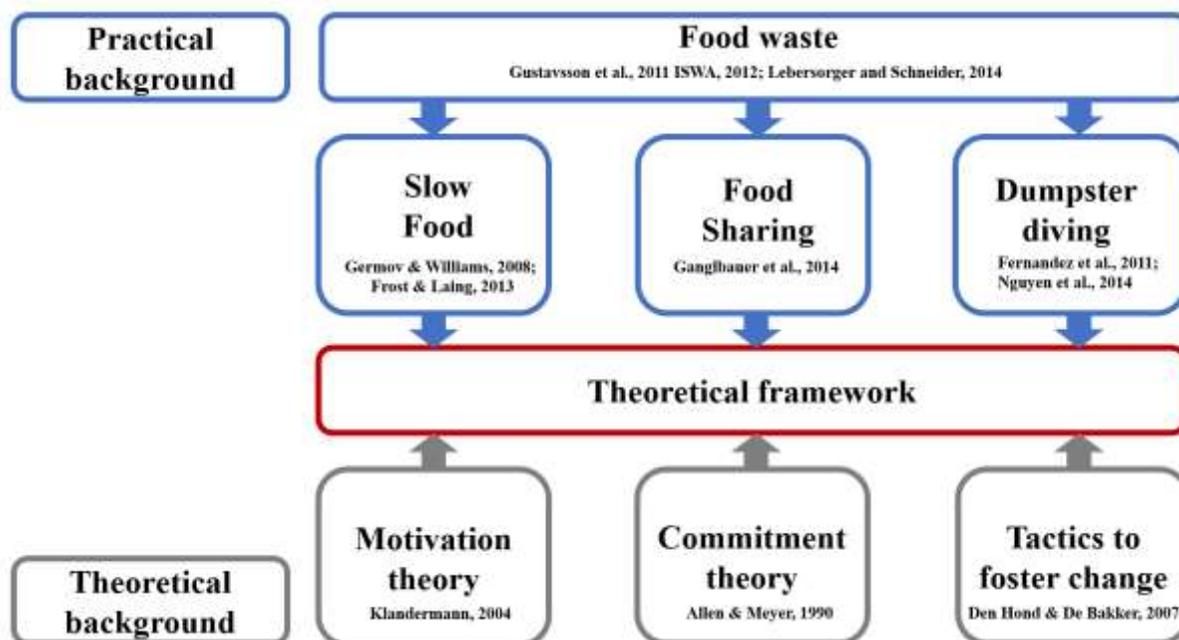


Figure 1. Theoretical Framework of the Study

With respect to the benefits, the Slow Food network plays an important role since it facilitates consumer-producer interaction and members feel valued and belonging to the community. For Italy, Leitch (2003) emphasized the Slow Food network, since it unites consumers and producers due to its unique principles of consumption, environmentalism, and social activism. However, Germov and Williams (2008) showed that the Australian interviewees had little interest in social and political activism, even if part of their interests was to change the prevailing consumption practices. These findings confirm a study by Gaytan (2003) who found a lack of interest in political activism among Slow Food members in Northern California.

Frost and Laing (2013) investigated the nature of Slow Food events in Italy, Australia, and New Zealand. Their multiple case study focused on five Slow Food events, namely Salon del Gusto, Terra Madre, Barossa Slow, Festa della Vendemmia, and Marchfest. The websites of the events were analyzed through a discourse analysis approach. The events showed characteristics of activities performed in social movements. The movement character is highlighted through the use of political or evocative language to promote the link between politics, food, and their regional identity. Also, the use of political imagery, for instance, people associated with uprising, such as Che Guevara, indicates the desire to promote change. Further evidence of the movement character is provided through the promotion of the events by Carlo Petrini, the founder of Slow Food, or well-known locals. The champions are meant to have an exemplary function and represent the change. The use of a champion is common practice within social movements. Considering food waste, the Slow Food website (2015) states that the organization is particularly concerned about food waste. Up to now, this claim has not been substantiated by scientific papers. Food waste related activities of Slow Food, including the members' perception of those, as well as the knowledge of food waste, and of other food movements addressing the issue are so far unexplored.

Ganglbauer et al. (2014) researched the online interaction of Food Sharing members. Their media analysis covered 3,242 comments from members active on Facebook and on the Food Sharing homepage. The qualitative content analysis brought up frequently discussed topics, such as dumpster diving, agriculture, gardening, food sharing experiences, food, and food waste. The researchers identified social, ecological, and economic motivations to participate in Food Sharing. The social and ecological motivations are mainly related to responsibility, for instance supporting people in need or preventing food from being wasted. Members perceive their actions, e.g., sharing of food and avoiding food waste, as a contribution to society and the environment. Few members admitted to economic motivations, stating that Food Sharing is needed to sustain their living. Olson (1965) argued that people will participate in a social movement, if they know their contribution is valuable for the movement or if they can benefit from the efforts of others (free riding). In contrast to other organizations or movements, free riding is not perceived as negative among Food Sharing members (Ganglbauer et al. 2014). They accept the use of the network to access food without contributing. In this context, Ganglbauer et al. (2014) underlined the social motivations of Food Sharing participants.

The topics discussed by Food Sharing members, e.g., dumpster diving, indicate knowledge of other food movements. The organization's motto "Food sharing instead of wasting" implies that members are knowledgeable with respect to food waste. Due to the absence of classical free riding, the organizational activities show the underlying characteristics of a social movement, fostering change. Ganglbauer et al. (2014) do not provide explicit information on activities, knowledge of food waste, and other food movements, since their paper focused solely on online interactions.

Fernandez et al. (2011) researched dumpster diving as a part of an anti-consumption movement in New Zealand, and found strong economic motivations. The study was based on 14 in-depth interviews and two participatory observations of dumpster diving activities. The participating divers were recruited via online communities. Fernandez et al. (2011) found the following main

motivations to dumpster dive. Survival and earning or saving money were presented as economic motivations. Ideological motivations included a hero identity, since participants believed their activity is a beneficial contribution to the society, because it reduces food waste. Further ideological motivations were resistance to the market system, the avoidance of employment, and not contributing to the market. Psychological motivations were participation in the community, enjoyment, and surprise. The economic motivations are in line with previous findings by Eikenberry and Smith (2005) who researched dumpster diving by low income groups and homeless people. Differently, Fernandez et al. (2011) included participants from various social status groups.

Also, Nguyen et al. (2014) investigated activities of dumpster diving groups in the U.S. The study was based on a mixed method approach. Methods of investigation included participatory observation of dumpster diving activities, interviews, and text analysis. Besides dumpster diving as an activity, the study also analyzed diving dinners. Diving dinners are meals prepared with food collected from dumpsters. The study identified themes of anti-consumption, the estheticization of trash, resource reversal, and the importance of sharing. The estheticization of trash includes the cleaning and processing of food coming from dumpsters, in order to let it appear as regularly purchased food. The underlying reasons are either shame or pride. Some divers want to present their activities since they are proud that they can prepare full meals from collected food items; other divers want to hide their activities, since they fear negative reactions and stigma from their social environment (Nguyen et al. 2014). Resource reversal had a deep meaning for dumpster divers who participated in the study. The society regards food items coming from dumpsters as not valuable. In contrast, dumpster divers consider this food as means of living that still provides pleasure and nutrition. Therefore, they reuse the items as an act against waste and unnecessary disposal. The aspect of sharing is closely connected. Since dumpster divers perceive the items as still good for consumption, they share the “reclaimed” groceries with friends and family, or donate them to soup kitchens (Nguyen et al. 2014). In general, sharing represents an act of solidarity (Belk 2014, Kera and Sulaiman 2014, Nguyen et al. 2014).

Judging from the previous studies discussed, motivations to participate in food movements reflect the categorization made by Klandermans (2004), differentiating instrumental, identificational, and ideological motivations. Psychological and economical motivations of dumpster divers (Fernandez et al. 2011) can be summarized as instrumental motivation, since individuals have pragmatic interests to be part of the movement. With respect to Food Sharing members, motivations are similar, but the context is different (Ganglbauer et al. 2014). Intrinsic motivation represents a form of ideological motivation, since members wish to comply with social values. The need to sustain a living is an instrumental motivation. In addition, evidence is presented that Slow Food, Food Sharing, and dumpster diving are food movements and related activities are in line with activities in social movements fostering change. Since this evidence is not sufficient to evaluate whether members engage in the activities to fulfill their individual needs, or as a form of social activism, a typology of interaction tactics, developed by Den Hond and De Bakker (2007), is applied in order to identify the nature of activities.

As activities in social movements are meant to foster change (James and Van Seeters 2014), action tactics can be based on damage or gain as the intended outcomes. Damage and gain refer to the disturbance or support of the operations of decision makers, e.g., governmental authorities or firms. Further distinctions are symbolic versus material damage or gain. Material damage and gain refer to resources or technologies, whereas symbolic damage and gain refer to dominant meanings, ideologies, and discourses. Symbolic damage includes writing protest letters, rallies, petitions, and negative publicity. Symbolic gain refers to voluntary action and positive publicity. Examples of material damage are sabotage, lawsuits, and boycott. Intended purchase in one shop over another (so called “buycott”) and cooperation are examples of material gain (Den Hond and De Bakker 2007).

Methods

The study follows a qualitative research approach and is of an explorative nature. Qualitative research approaches allow an in-depth exploration of new research topics, and to develop theory and propositions for later studies (Bitsch 2005). Up to now there is a very limited number of studies on German food movements. Although there are several studies on the amount and composition of food waste, food waste and food movements have not been put in context, yet.

In line with the qualitative approach, in-depth interviews allow the exploration of a phenomenon from the point of view of the research participants. In-depth interviews are often used if the perception and experience of individuals are researched. In addition, in-depth interviews are considered useful if a sensitive topic is discussed (Hsieh and Shannon 2005). Since the study focuses on the experience and opinions of food movement members, in-depth interviews are suitable. For illegal activities, such as dumpster diving, few other data collection methods are available. In addition, the method allows interviewees to freely express themselves based on their own perspective (Neves et al. 2013). Using a quantitative tool, e.g., a survey questionnaire, participants must choose from a pool of prepared answers, which would be a drawback in this context. According to Bitsch and Yakura (2007) in-depth interviews as a qualitative research tool, allow to provide rich and detailed information, which are a requirement for a study being framed in social realities and cultural context.

In 2014, twenty-five in-depth interviews were conducted in Germany. Of the ten Slow Food members interviewed, five were actively involved in leading roles, up to the board of directors. The interviewees with leading roles were between 30 and 50 years old and came from different professions, including the computer industry, film industry, finance, education, and gastronomy. Another five interviewees were part of the Slow Food Youth movement and between 20 and 40 years old. Three interviewees were students; two came from education and gastronomy. Slow Food Youth members lived in larger cities in Germany. Of the fifteen dumpster divers interviewed, five also were active volunteers at Food Sharing. They participated in dumpster diving on a regular basis, as individuals or in groups. The dumpster divers interviewed came from urban, as well as rural areas. They were between 20 and 30 years old. Among the interviewees were students, professionals, as well as unemployed and homeless people. The dumpster divers who were also Food Sharing volunteers were predominantly skilled workers or from lower social classes.

Interviewees were recruited through social networks on the internet, and through the personal networks of the researchers. All interviewees of the Slow Food and Food Sharing organizations were recruited through social networks, such as Facebook. As both the Slow Food and Food Sharing organizations rely heavily on social networks and on their online presence, this type of recruiting seems appropriate. Since dumpster diving is considered illegal in Germany, interviewees were recruited through the researchers' networks and subsequent snowball sampling. Alternative ways of sampling would not have been possible, since the total number and composition of German dumpster divers and active Food Sharing participants remains unknown.

Each interview lasted 45 to 90 minutes, and took place face-to-face or over the phone, depending on the interviewees' preferences. Fifteen face-to-face interviews took place in neutral quiet locations, such as offices or the university library, or in private rooms of the interviewees. The other ten interviews were held over the phone. A semi-structured interview guide, outlining the topics of discussion, was used in each interview. As an example, the set of questions used for Food Sharing members is provided in the Appendix. Topics were addressed through open-ended questions, and were discussed following the conversational flow of the interviews. The questions asked were adjusted to the individual case during each interview. The first author, as well as two trained students conducted the interviews.

Interviews were audio-recorded, transcribed verbatim, and analyzed through qualitative content analysis. Qualitative content analysis can be seen as a process that allows transforming and pooling raw text into categories and themes based on inference and interpretation. The analysis is based on inductive reasoning, where ultimately themes arise from the data through constant comparison. Steps of the analysis included open coding and establishment of categories, and finally, the identification of motivations and action patterns for individual interviewees. Furthermore, within movements and between movements results were compared and contrasted.

During the process of open coding, labels that describe the key thought of a statement have been assigned to text fragments. Therefore, the transcripts were carefully read word by word several times. Afterwards, the codes were reconsidered and renamed, in a manner that they represent also the underlying meaning, and not only the key thought. In the next step, the codes were grouped together in categories with respect to their meaning, links, and relationships. For both steps, the software package Atlas.ti was used. Atlas.ti allows analyzing the raw text in a systematic and structured manner since it provides tools to code, annotate, and retrieve text. Each code and category was defined, and supported with original statements coming from the raw data. Categories and statements served for further interpretation. Table 1 shows three examples of categories, including their definition, and an interview excerpt as an example.

Table 1. Examples of Coding for Motivations to Participate in Food Movements

Category	Definition	Statement
Instrumental motivations	Motivations of members to participate in their respective movement are in line with economic and psychological benefits. These benefits are of a pragmatic nature for the individual members.	<i>“As a student, of course you are not blessed with a high budget. So, it is lucrative if you eat well, but you pay nothing [...]” (Dumpster diver, Munich, male, 20-30 years old, student).</i>
Ideological motivations	Motivations of members are in accordance or in contrast to social norms and values; includes political and social viewpoints with respect to the market system, consumption, and food waste.	<i>“I eat every day (laughs). So that's an existential human thing that you just have to eat something. And, somehow, nobody wants that one's means of satisfaction bring harm to others. And that is otherwise unfortunately often the case” (Slow Food Youth member, Düsseldorf, female, 20-30 years old, student).</i>
Identificational motivations	Intrinsic motivations of members are in line with the goals and principles of their respective movement.	<i>“But this is such a big amount of food. We need to distribute everything. In shared flats, to my friends, acquaintances, on the road sometimes directly to the citizens or to the homeless, to the beggars. I walk around and really distribute it directly to the people, to make them aware. That is an impressive experience [...]” (Food Sharing member, Stuttgart, male, 20-30 years old, actor).</i>

Results and Discussion

The result section consists of four parts. The first part discusses motivations to participate in food movements. The findings are compared to and contrasted with prior studies, and presented according to the classification into instrumental, ideological, and identificational motivations. The second part focuses on members' knowledge of food waste and other food movements, which addresses a research gap. The third part presents activities to reduce food waste. The last part analyzes the nature of activities carried out by members of food movements in the context of social movements, and fostering change.

Motivations to Participate in Food Movements

Slow Food members highlight health, pleasure, good food, and concerns about agricultural production practices and animal welfare as motivations to participate in Slow Food. In addition, they have an interest in the organization's activities, seek for social activism, and have a strong

interest in reducing food waste. Further motivations are to promote local food, to change the value of food within the German society, to reduce over-consumption, and get away from a “hectic” lifestyle. These findings are in line with the existing body of literature, and with the organization’s goals and principles (Leitch, 2003, Sassatelli and Davolio 2010, Germov et al. 2011, Frost and Laign 2013). Different from Germov and Williams (2008), interviewees show high interest in activism. The statements below exemplify the motivations of interviewees to be actively engaged in Slow Food, and in particular, involved in activities to reduce food waste.

“I would like that more people are aware of this issue. The fact that we have to act, that we do not face the situation, where I have the option to say, I cannot do anything. This is perhaps a bad situation, but retreat is not a solution. It is also not an excuse to say politics takes time to do something. I think food is a political act everyone does several times a day, and so I get involved politically. So, I can do something” (Slow Food Youth member, female, Regensburg, 20-30 years old, teacher).

“In order to make people more aware of what is thrown away. I think food waste actually arrived in many people’s minds. So many people know this, but if you look at the aspect of appearance. It still tastes good and you can feed quite a few people if you simply consider this mountain of vegetables that would have been otherwise just thrown away. This picture provides another connection to the people” (Slow Food Youth member, Essen, female, 20-30 years old, student).

The study included members of Slow Food Youth, which were intensively involved in activism with regard to food waste and food commensality. These interviewees were young adults with occupations that allowed for time to participate in the movement, e.g., students. Other members had a professional background that provided them the opportunity to integrate their activities regarding food waste in their professional activities. For example, teachers organized class trips and meetings with experts, where students had an opportunity to gain direct insights into the food waste problem. Participants in the study by Germov and Williams (2008) were mature agricultural producers that were running their own businesses. Compared to agricultural producers, teachers and students are more likely to have leisure time for Slow Food activities. The occupational background of interviewees can be seen as an explanation for the differences between the two studies. Also, when comparing within the movement, Slow Food Youth members have higher interest and involvement in contributing to public awareness and related activism, e.g., demonstrations and events that attract public attention, than members in leading roles. Interviewees with leading positions were more interested in activities related to high quality food. This result is surprising, since members in leading roles have committed to representative, organizational, and administrative duties, which would be expected to coincide with a strong interest in publicity.

German Food Sharing members have similar motivations as Slow Food members. Their motivations are to reduce food waste, to act against overconsumption, and to promote the value of food and food commensality within Germany. In contrast to Ganglbauer et al. (2014), instrumental motivation was not found. The interviewed members state that instrumental motivations are also undesired by the organization. Saving money or material gain are exclusion

criteria from the organization. The difference can be explained by the fact that this study interviewed volunteers who collect items from markets, retailers, and growers. The volunteers are required to follow the organizational philosophy since they have a representing role. Ganglbauer et al. (2014) analyzed posts from all members registered on the Food Sharing website. Accordingly, their study included members that do not volunteer, but use the network for their benefit. These ordinary members do not need to follow the code of conduct. Volunteering at Food Sharing requires identification with the organization, ideological motivation, and commitment. It requires an integration of these activities in the individuals' weekly routines. In addition, members must show efforts to obtain the status of volunteers who collect the food items, the so-called food savers. Volunteers representing the organization in public are known as a food ambassadors.

“To me it is very clear that each Wednesday and Saturday I am at the market to collect the items. This is part of my appointment book. Well, this is standard” (Food Sharing member, Munich, female, 20-30 years old, student).

“All food savers are trained. You are required to sign a waiver, so the whole thing is legal. You need to pass a quiz to show that you understand what you are doing. Yes, and then you will be verified. You must have done three test collections with an ambassador or a more experienced food saver” (Food Sharing member, Ulm, male, 20-30 years old, actor).

Both statements emphasize the importance of commitment in food movements. As discussed by Allen and Meyer (1990), organizational commitment, in this case commitment to Food Sharing, relates to the affinity of Food Sharing members towards their organization. The wish to belong, and the efforts made by interviewees to attain volunteer status are not based on moral obligation or normative pressure. Members' affective commitment is a sign of a strong identification with the movement.

Dumpster divers want to save money, believe they contribute to the common good through saving food from going to waste, and want to take a stand against the market economy. Some enjoy the stimulation from performing illegal activities. Among the dumpster divers interviewed instrumental and ideological motivations are dominant.

“Due to being in need. If you have almost no money or no money, then you have to stop thinking. You just try it because you are hungry” (Dumpster diver, Munich, male, 20-30 years old, student).

Some dumpster divers reported as their motivation to sustain their living as a student. Others underlined their unwillingness to work, and regarded dumpster diving as an opportunity to access free food (see also Fernandez et al. 2011). Other interviewees stated not to be in need themselves, but being in contact with homeless people or retirees who improve their living through dumpster diving. These findings confirm the study by Eikenberry and Smith (2005) who identified dumpster diving as a common practice among low-income groups. Our study adds that also retirees are among low-income groups that rely on dumpster diving to improve their living.

Considering the ideological motivation, some dumpster divers outlined that they dislike the market system and the prevalence of consumption within the society. They blame “mindless consumers” and retailers for food waste. They consider dumpster diving as acting against the system and advocate the reduction of consumption (see also Nguyen et al. 2014). Another group is mostly concerned about food waste and wants to actively act against it, as well as raise awareness in the society.

“But now I’m no longer excited when I go to the dumpster. This became a routine for me. Moreover, I do this on public garbage cans, right on the roadside. That is nothing to me, even if ten people pass by. In addition, I want to do it in public, so people know, okay, there is somebody who is not in need but still does it. I used to work, for example, in the municipality, I am a relatively well-known face, and many people know me. I want to send a signal. People, there is so much inside, food, that is incredible” (Dumpster diver and Food Sharing member, Stuttgart, male, 20-30 years old, actor).

Divers with strong ideological motivations to act against food waste, turned out to also be active members of Food Sharing, and in addition, some were closely connected to Slow Food. These interviewees were dumpster divers first, but through reflecting on their motivation, they joined other organizations, which they perceive as more committed to political activism. Other divers are interested in community aspects, such as diving dinners or group diving. According to Nguyen et al. (2014), social motives, such as sharing and companionship, play an important role. The current study confirms these findings only in parts, since the motivation to join group activities also has an instrumental nature, as shown by the following statements of two dumpster divers.

“I have not done it in a larger group. I usually go alone or with my roommate. Since I miss the contact with a larger group, which has actually been one reason why I made this Facebook page, so I will get in touch with such a group. Of course, I cannot say in public, come here, we go dumpster diving” (Dumpster diver, Munich, male, 20-30 years old, student).

“I think that within the group, you know better which food people want. And you can even better search for it. In addition, of course, the success rate that you get what you need is probably higher, eight eyes see more than two eyes” (Dumpster diver, Munich, male, 20-30 years old, student).

In all food movements, the motivations presented by Klandermans (2004) could be found. Table 2 presents the motivations of food movement members categorized into instrumental, ideological, and identificational motivations. Among Slow Food and Food Sharing members, ideological motivations, for instance, the reduction of food waste for the good of the society, and identificational motivations were prominent. The motivations of dumpster divers were of instrumental and ideological nature. The dumpster divers interviewed, stated economic motivations, such as saving money, and ideological motivation, e.g., acting against consumption and waste. Identificational motivations were not found. In contrast to Slow Food and Food Sharing members, dumpster divers have no organizational background. The organizational background, and the contact with other members throughout the organization might have had an

influence on members' motivations. Instrumental motivations of Slow Food and Food Sharing members were rather of psychological nature, and did not include economic benefits.

Table 2. Motivations to participate in food movements

Food Movement	Instrumental motivations	Ideological motivations	Identificational motivations
Slow Food	<ul style="list-style-type: none"> ▪ Health ▪ Pleasure 	<ul style="list-style-type: none"> ▪ Act against food waste ▪ Concerns about agricultural practice 	<ul style="list-style-type: none"> ▪ Promote food value and commensality ▪ Be a part of Slow Food activities
Food Sharing	Not found	<ul style="list-style-type: none"> ▪ Act against food waste 	<ul style="list-style-type: none"> ▪ Promote food commensality ▪ Be part of Food Sharing activities
Dumpster diving	<ul style="list-style-type: none"> ▪ Save money ▪ Fulfilling a need ▪ Enjoyment ▪ Stimulation 	<ul style="list-style-type: none"> ▪ Act against the market system ▪ Consumption and waste 	Not found

Knowledge of Food Waste and Other Food Movements

Knowledge related to food waste differs widely among members of the three movements. Slow Food and Food Sharing members explain the various causes of food waste within the supply chain. They mention the problem of standards and norms within food production, and discuss the usefulness of the best-before date in retail. Further, they perceive the expectations of German consumers with regard to the availability of every product at any time as too high. They wish that supermarkets offered only seasonal and regional products. The aspect of product availability reveals anti-consumption tendencies (Nguyen et al. 2014). The desire for seasonal and regional products, reflects the goals of their organizations. The interviewees correctly identified that a substantial amount of food waste occurs on the household level, and furthermore a considerable amount of produce gets sorted out due to EU-norms on the agricultural production level. A German study estimates that 59% of the food waste occur on the household level, 7% are attributed to retail, 17% to processing, and 17% to hospitals and other large scale consumers (Kranert et al. 2012, 184). This estimate excluded the production level.

The amount of food waste occurring in German agriculture is yet to be determined. A Swedish study aiming to quantify the amount of waste occurring in agricultural production identified the difficulties involved. One reason for the lack of data on the production level is that produce intended for the food industry can be affected by diseases and then will not be defined as food. In addition, produce remains in the field if the cost of harvest and other processing cannot be recovered (Eriksson 2012). The interviewees might have addressed the level of production, since they are familiar with agricultural production through their activities within the movement. In addition, interviewees provided detailed suggestions for the reduction of food waste on the household level and for the gastronomy sector. They suggested decreased sizes of meals, and a system that requires consumers to pay additional money for what they waste. Furthermore, they highlighted the importance of food knowledge and cooking skills. Interviewees believe that food

is wasted on the household level, since people do not know how to cook fresh produce, or do not have time for cooking.

Slow Food and Food Sharing members are aware of each other as food movements, since they collaborate for certain events. Examples of other organizations that interviewees know are the German Farmers' Association and food banks. Both movements appreciate governmental campaigns with regard to food waste, but criticize that awareness is not enough; they ask for changes in policies. The knowledge of regular dumpster divers who are not also members of other food movements is mostly limited to the retail and the household level. They are neither aware of governmental campaigns nor of other food movements, such as Slow Food or Food Sharing. Only four of the five dumpster divers who are active members in Food Sharing and in contact with Slow Food have comprehensive knowledge on the topic. Since dumpster divers do not lack education, as many of them are students, the organizational background of Slow Food and Food Sharing may explain part of the knowledge gap.

Activities to Reduce Food Waste

Interviewees participate in and organize activities to reduce food waste within their movements. Slow Food members believe that their movement contributes to the reduction of food waste through public events. The events have both an educational and a social character. Particularly, Slow Food Youth members underline their activities to reduce food waste. Examples are "Eat ins", "Disco soup," and a yearly demonstration against food waste and current agricultural practices in Berlin, the German capital. The demonstration is organized during a well-known agricultural trade fair, the International Green Week, and therefore reaches many people and garners media attention. For "Disco soup", Slow Food Youth members collect vegetables from local growers that do not meet EU standards, in terms of their appearance. Slow Food Youth members and other people who join the event prepare and cook the vegetables together. The event is accompanied by disco music. With the event, Slow Food Youth members want to raise awareness that too much food is wasted in Germany, and that the produce that does not comply with standards is still a pleasant tasting meal. An "Eat-in" is a common dinner, where each member prepares food, and all dishes are shared among the participants. In addition, parts of the Eat-in can come from dumpsters or Food Sharing. This example shows that Slow Food Youth members are connected with other food movements.

Further Slow Food events are food markets, as well as, cooking with children, students, or adults. During these events, Slow Food members teach how to plan grocery shopping and meals, how to prepare fresh fruits and vegetables, and promote local food. Interviewees emphasize that they enjoy cooking and eating together, but that these events should prevent food waste. Slow Food members believe that if they pass on the knowledge how to plan shopping and teach cooking, less food will be wasted. In addition, Slow Food members consider their campaigns as an inspiration to society, and perceive them as a contribution to increased awareness of food waste.

Food Sharing members collect unmarketable food items, daily or weekly from markets or shops and offer them on online platforms. The platforms also serve as discussion forums. Interviewees emphasize further activities, for instance the installment of local spots. Spots are rooms or refrigerators, where shared food is open to the public. Their activities include cooking events,

where volunteers and guests prepare meals with the collected items. Interviewees note that part of the goals of the activities is to demonstrate the importance of food. Food Sharing members want to underline that the value of food cannot be reduced to its retail price. Part of the Food Sharing philosophy is to consider food as means of living.

“No, it is free. That is give or take. Therefore, there is no exchange, everything works without any money. In addition, of course, and there is not a direct swap. This is also an important factor in food sharing, that we want to exclude food from all exchange factors, especially money. We just want to bring back the ideological value of food. And that’s it. For example, if you throw away an apple, you do throw away only the value of the good, 60 or 80 cents. However, you throw away this apple, with all its resources, with labor, with transportation costs, and so on. The apple was watered and fertilized and automatically all this goes to the bin. Moreover, this we want to put into the spotlight, food is a mean of living. And this is actually one of the most important tasks of Food Sharing. That is why, even if you take from somewhere, you need not give back. It is for the cause that food is saved” (Food Sharing member, Stuttgart, male, 20-30 years old, actor).

Some dumpster divers emphasize the benefits and disadvantages of the activity itself, and underline the communal aspects of the activity. Other divers see their activity as a contribution to reduce food waste, and as a measure, which increases awareness within the society. Group divers report on joint cooking afterwards. Furthermore, divers share surplus items through social networks and the Food Sharing website. Similar as reported by Nguyen et al. (2014), dumpster divers clean food in order to wash away the stigma of their activities, or simply for hygienic reasons. Some interviewees report to fear diseases or the reaction of their closest social environment. The divers stated that they would not offer food coming from a dumpster to anyone without telling them. While motivations to dumpster dive are generally of an instrumental nature, which implies self-centered motivations, divers act social among each other. Interviewees reported that they let people in need take the food items from the dumpster before they help themselves.

Considering the activities of the three movements, they raise public awareness and contribute to the reduction of food waste on a small scale. Still, the effectiveness needs to be questioned, considering the extent of the problem. Besides the activities to reduce food waste, an important activity in all movements is the sharing of food.

Food Movement Activities in the Context of Fostering Change

As outlined by James and Van Seeters (2014), the desire for change is a defining characteristic of a social movement, and activities aim to foster change. Therefore, the typology of Den Hond and De Bakker (2007) is applied to activities of Slow Food, Food Sharing, and dumpster diving (see Figure 2).

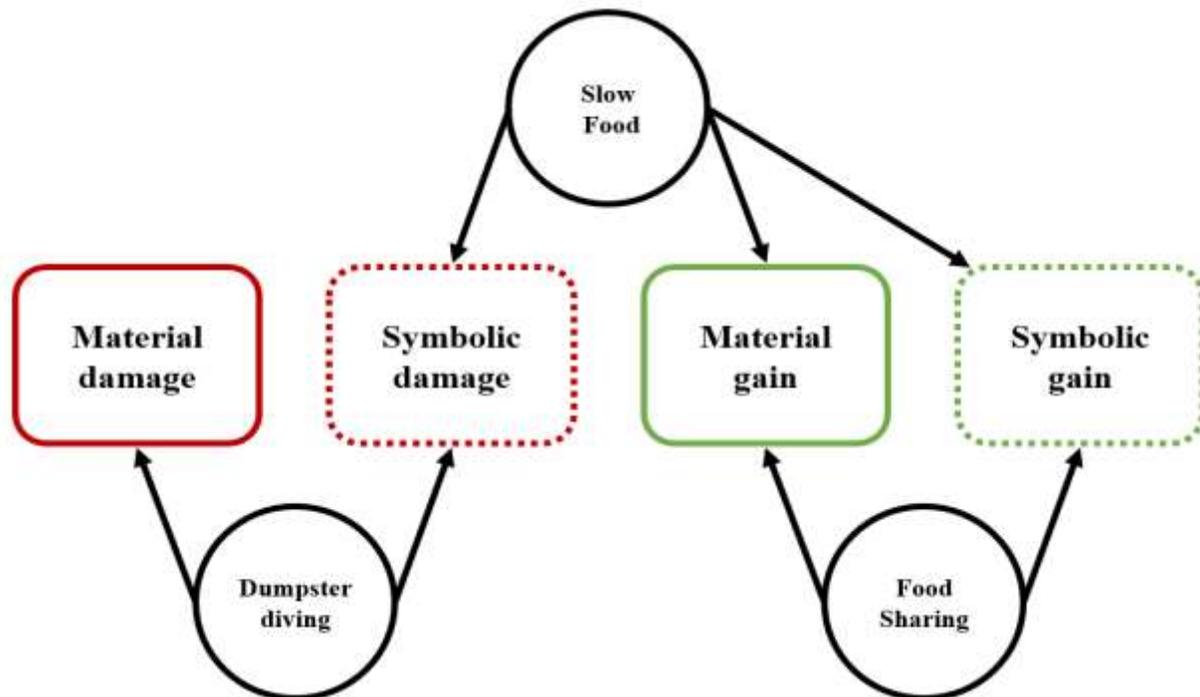


Figure 2. Tactics to Foster Change in German Food Movements

Slow Food members use material gain as tactics to foster change in the society. Interviewees prefer small-scale, local food providers over others, which is a form of “buycott.” Slow Food relies on collaboration with other food movements, e.g., Food Sharing, as well as cooperation with governmental authorities. Furthermore, Slow Food members volunteer at events or other organizational activities, which is a form of symbolic gain. Symbolic damage may occur as a side effect of their public campaigns, and is one of the goals of the annual demonstrations in Berlin.

Similarly, Food Sharing members prefer local food and avoid global food retail chains. In that regard members even note that the activities within their organization strongly influence their actions in a private context. Members identify themselves with the organization and value it. Accordingly, they adjust their behavior and values towards the organization’s philosophy.

“I try to buy in small shops. In small health food stores or where I know that they produce locally. If I need a loaf of bread, then I go to the bakery” (Food Sharing member, Munich, female, 20-30 years old, student).

“I told my friends not to give me anything material for my birthday or for Christmas. Just something to eat or drink” (Food Sharing member, Hamburg, female, 20-30 years old, nurse).

Moreover, Food Sharing as an organization collaborates with Slow Food, which also represents material gain. Both organizations have similar goals, and partly support each other’s activities. For example, Food Sharing members help to collect food from farmers and retailers for events such as “Disco soup”. As outlined by Den Hond and De Bakker (2007) volunteering belongs to

the tactics of symbolic gain. With respect to Food Sharing, this is a very dominant tactic of the movement. Since Food Sharing strives to be independent from financial means, members volunteer for the organization and are involved in events and activities without financial compensation. Food Sharing does not use symbolic or material damage as tactics to foster change.

In contrast, dumpster divers cause symbolic damage and, at the same time, material damage. This is due to the nature of the activity and can be explained by the individuals' motivations to dumpster dive. Since the motivations of regular dumpster divers who are not also members of Food Sharing are more self-centered, and of an instrumental nature, dumpster divers have little interest in collaboration with other food movements. This could explain the absence of any forms of gain as tactics. In addition, the lack of an organizational background might be another explanation why forms of gain were not found. By taking food items from dumpsters, the divers believe to move outside the market economy. Their actions can also be framed as a boycott of regular shops. In this interpretation, dumpster diving is not only a practical activity to reduce food waste. According to Nguyen et al. (2014), dumpster divers view the current society as too strongly focused on consumption. Therefore, their activities have to be conceived as form of protest against a consumer society.

Comparing the activities of the three movements, it is noticeable that different from the dumpster diving movement, Slow Food and Food Sharing do not use material damage as a tactic to foster change. Since Slow Food and Food Sharing are movements that are still growing, and desire to increase membership numbers and acceptance within the society, material damage does not appear as an appropriate tactic, since it would reduce the reputation of the organizations. With respect to symbolic damage, it must be considered that Food Sharing is a rather young movement. It is still establishing membership and structure, and fully relies on volunteers. The organization does not have the financial background and capacities to organize campaigns and demonstrations to use symbolic damage as a tactic.

Material gain in the context of Slow Food and Food Sharing refers to the activities of the organizations. Since interests and activities of both organizations are overlapping, a collaboration is of value for both organizations. "Boycott", as a further tactic of material gain, is rather related to individual members' choice than to the entire organization. However, since the organizations' philosophy might influence this choice, it is present for both Slow Food and Food Sharing members interviewed. With respect to the adaption of symbolic gain as a tactic, both, Slow Food and Food Sharing members volunteer for their organization. By considering the organizational model and the organizational philosophy of Food Sharing, it becomes obvious why members volunteer, because Food Sharing aims to become an organization independent of financial inputs. Therefore, they have adopted symbolic gain as a tactic. The Slow Food philosophy is rather the opposite. The valuation of Slow Food products and services is reflected in prices. Consequently, members are asked to pay membership dues. However, members also volunteer. This activity reflects the importance of the organizational goals and the members' desire to accomplish change.

Conclusions

Results underline a strong social component in the activities of German food movements. All movements strive to raise awareness of food waste and aim to reduce it. Their activities are a form of social happenings, which fulfill the needs of the members. At the same time, the activities are a form of activism that fosters change in accordance with the movements' goals. All movements show tendencies of anti-consumption. This also indicates that alternative consumption groups are gaining influence in Germany.

Marketing managers should not ignore food movement members as consumer target groups. Slow Food and Food Sharing members seem to be highly educated consumers who do not wish to share mainstream trends. In order to address these consumers' wishes, marketing strategies that positively emphasize the unique appearance of fruits and vegetables could be a solution. Austrian and Swiss marketing campaigns, such as "Weirdo" and "Unique" (ZEIT 2015; COOP 2015, REWE 2015) can provide an orientation. In both cases, retail chains included misshaped produce in their assortment, and the shelves with those products found acceptance among consumers. In 2015, the Swiss retail chain COOP extended this part of their assortment (COOP 2015). A similar strategy might be promising to retailers in other countries, since it could contribute to a more positive image. An indication of the acceptance of this kind of produce, as an additional food segment in German food retail, are successful startups, such as "Ugly Fruits – the shop for special fruits," which exclusively sells misshaped produce (Federal Ministry of Food and Agriculture 2015).

Alternatively, growers could sell their fresh produce not meeting EU standards as processed products via farm sales. For example, drinks and jams can depict the appearance of the misshaped produce on the packaging. In this way, the products might attract consumers favoring local produce and also children. Alternatively, growers could market the product with a marketing strategy, emphasizing that the ingredients are products that would have been wasted since they do not comply with norms.

Furthermore, politicians might consider adjusting laws and regulations with respect to food waste. Regulations that encourage the donation of unmarketable food items to social organizations would support people in need and spare them from having to rely on practices such as dumpster diving. In an effort to reduce food waste, the government could focus on providing unequivocal information to food retailers that donating unmarketable food items to charitable organization does not constitute an act of unfair hindrance (see the Act against Restraints of Competition §20(4), German Federal Law Gazette), since this is still misunderstood by some retailers.

In addition, the best-before-date requires critical reflection. In order to avoid food waste, consumers must understand that the best-before-date is not an expiration date. For retailers, the best-before-date is a critical point, since offering food items passed the best-before-date might not be in line with the quality expectations of consumers. A further aspect concerning the Act against Restraints of Competition §20(4) requires evaluation. §20(4) prohibits discrimination and unfair hindrance among German food retailers. The sale of food products below the price of purchase (see §2(2) of the German Food and Feed Code) is sanctioned. Similar to other

European countries, such as Switzerland and Norway, German retailer could be allowed to offer food products near to the best-before-date at a reduced price. This might be a reasonable strategy for retailers to reduce food waste, and to avoid drastic changes in regulation, as have currently been enacted in France. In May 2015, the French parliament implemented an amendment regarding food waste in the French food retail sector. Retailers are not permitted to discard food items. They have to provide the products for further utilization, for instance animal feed and other agricultural purposes. Stores with a size of 400 square meters and above, must support educational or charitable institutions with the food items that could not be sold (New York Times 2015).

With respect to the alternative use of food waste, Food Sharing could consider a more intensive exchange with food banks. As found in this study, as well as by Eikenberry and Smith (2005), low-income groups, such as homeless people, rely on dumpster diving in order to sustain their living. Cooperation between both organizations could help to prevent food waste and to support people in need.

Considering the movements' strategies to contribute to the reduction of food waste, a change in the focus of actions could be beneficial. The majority of activities are small scale, while the bigger picture of the problem remains untouched. Accordingly, Slow Food and Food Sharing, as food movements with an organizational background, could cooperate even more actively. Both organizations share common goals, and apparently, their members share motivations and interests. Joint events with a focus on prevention of food waste and education could take place. Since Food Sharing members already support events such as "Disco soup", they could also be part of events, where students and children learn how to cook and avoid food waste. Food Sharing members would enrich these activities with their practical knowledge and experience.

Through cooperation, both movements would reach larger audiences. Moreover, a collaboration between Slow Food, Food Sharing, and the Federal Ministry of Food and Agriculture could increase the awareness of food waste in Germany. The bundled skills of both movements to reach people and to raise awareness could be an asset to official campaigns and other measures to reach the public. The activities of the movements and using members' experiences could help develop authentic media and awareness campaigns.

Further research will investigate the process of change in food movements more deeply. A focus can be set on how individual members in food movements contribute to change within the movement and vice versa, how the organization contributes to change of the individual members. A comparison between Slow Food and Food Sharing seems promising, since both movements share an organizational background and there are some similarities with respect to their activities and concerns.

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Appendix. Interview Guide for Food Sharing Members

Icebreaker

Please introduce yourself.

Are you member in a community or in a club? Please tell me something about this community or club. Please describe your role in that community or club.

Food waste

What do you know about food waste? Please tell me about food waste in Germany.

Please share your opinion, on the causes of food waste in Germany.

What do you think, what kind of measures must be applied to reduce food waste in Germany?

Please explain to me, who should carry out the suggested measures and why?

What do you do personally to reduce food waste? Please think about different situations in your daily routines.

How about food waste, if you eat outside home?

What do you think about governmental campaigns?

Food Sharing

How did you get to know Food Sharing?

What was on your mind, when you started becoming active in the organization?

What are your duties within the organization?

Please explain the situation, including your feelings when you saved food for the very first time.

Please explain the situation, including your feelings when you save food today.

Please share an experience regarding your activities that influenced you the most?

What happens to the food? Please explain us the entire process of food saving. If you reflect your activities in food saving today, compared to the beginning, what is the outcome?

Do you know other reasons why people save food?

What do you think, what are barriers, why other people do not join Food Sharing?

Other food movements

Do you know other organizations or actors concerned about food waste?

Can you tell me something about (actor/organization being mentioned)? What do you think about their activities?

How does Food Sharing interact with (actor/organization being mentioned)?

Change

Please reflect, how did your activity within Food Sharing affect your attitude towards food waste? Please reflect, did you also notice any change in your behavior with respect to food waste?

With respect to food waste, where do you see room for improvement?

Where do you see further potential for Food Sharing and their collaboration with other actors?

Wrap up

Is there anything that we have not discussed, that you would like to address?

Is there anything that you would like to ask me?

