

Household meal planning as anticipatory practice: The role of anticipation in managing domestic food consumption and waste

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ABSTRACT

Food waste is a major contributor to various environmental problems and food wasted at the household level makes up a significant proportion of the overall estimated totals. Fundamental questions remain about this waste as an aspect of domestic consumption and the appropriate policy response. Deficiencies in household food planning have been posited as a potential factor related to food waste production in the home, but this has not been developed in a way which connects clearly to existing sociological studies of meal planning. This paper therefore engages with feminist literature on domestic meal planning and material culture approaches to food waste. It moves the concept of anticipatory practice to the domestic space, to address forms of domestic meal planning and other food-related practices as anticipatory practices which are inherently oriented to the future. The paper draws on a number of semi-structured interviews, research diaries, and images completed and submitted by participants to highlight the establish meal planning practices as anticipatory, and to identify other forms of anticipatory practices around food. As part of this, the association of additional food in the home with food waste is also questioned and practices such as batch cooking are reassessed along with related practices. Meal planning is ultimately described as an anticipatory practice, a broader designation of organisational practices involved in food consumption which may be relevant for policy and research concerning food waste reduction.

1. Introduction

Food waste is a major contributor to climate change and other environmental problems, through direct carbon dioxide emissions from decomposition but also through more significant indirect contributions to inefficient resource use and ‘wasted’ emissions in food production and supply chains (WRAP, 2021; Institution of Mechanical Engineers, 2013). A significant proportion of this waste occurs at the household level (Institution of Mechanical Engineers, 2013), and the planning of meals and shopping is acknowledged to have a potentially significant yet complex effect on levels of food waste (Schanes et al., 2018; Hebrok and Boks, 2017; Comber et al, 2013). This aspect of household planning is addressed directly by UK policy and campaign efforts to reduce to food waste (WRAP, 2023). Shopping lists, meal plans, and other organisational structures are all promoted to consumers through campaigning as ways they can voluntarily reduce their own food waste through control and consideration of their everyday routines (Love Food Hate Waste, 2021). This individualistic approach does acknowledge the widespread difficulties which may prevent planning in practice but separate from

these studies and campaigns related to food waste, there is a rich sociological feminist literature that addresses meal planning, eating events in the home and the complex connections between these practices and provisioning (See: DeVault, 1991; Blake et al, 2009; Agrawal et al 2018 among others). This body of work clearly establishes how and why intentional domestic meal planning operates under considerable constraint, highlighting the need to understand meal planning as a practice set within the context of changing patterns of work and life (Schanes et al, 2018. p.988–989).

Environmental research and policy-making focussed on behaviours have also been criticised due to the similar individualised framing of issues surrounding food consumption and the limitations that come along with it (Shove, 2010). An alternative approach informed by Practice Theory has emerged, which treats practices as the core unit for social analysis rather than individual behaviours or attitudes (Warde, 2014. p. 285–286; Southerton and Yates, 2015). This approach captures many of the routinized aspects of everyday life that affect food waste which are otherwise difficult to describe and it has been successful in directing attention to the role of broader systemic issues that structure

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everyday life and thus influence food waste (Schanes et al., 2018, p.988–989). They have also described how opportunities for meal planning and changes in eating patterns could be constrained in a number of ways (Powells et al, 2014; Yates and Warde, 2017; Jackson, 2018).

Despite this, Practice Theory approaches are only beginning to address the complexities of meal planning directly (Questaed et al, 2013). Lazell (2021, p182-194) for example argues at length that food planning should be considered as a mental process dispersed across different moments of consumption, shaped by wider practices. An illustrative example of why this is important can be found in Hebrok and Boks (2017, p.385) where meal planning is treated as a driver of household food waste and thus a possible site for design-based intervention. In a following section the authors (ibid.) link a failure to plan with a failure to use leftovers successfully, without explicitly acknowledging the shared anticipatory teleology of the intentions motivating meal planning and the practices of storing and using up leftovers. This paper therefore aims to build on the work of Lazell (2021) by proposing anticipatory practices as a way of capturing the less intentional and more routine aspects of domestic food practices alongside formal meal and provisioning planning methods.

This paper aims to develop theorizations of the role of meal planning as a factor in the production and reduction of household food waste by proposing anticipatory practices as a way to describe a broader form of consumer engagement with food that shares an orientation to both current and future needs. It does so by returning to some of the feminist literature that addresses meal planning in the home and by responding to other further issues in sociological approaches to food stored for future use in the home which foregrounds the role of anticipation and intention. The paper also draws on the work of Midgley (2019) to establish this wider set of practices as anticipatory. These elements of the paper will follow this section, in this order, in a three-part conceptual section followed by a methodology section. An empirical section will continue to develop the points made in the conceptual section, drawing from the findings of research relating to food and packaging waste practices in UK households. This empirical section addresses example of formal meal planning and draws out how these share elements with and sit alongside less formal anticipatory practices. It also addresses the role of meal displacement as a form of anticipatory practice connected to meal planning. The paper will conclude with a comment on the wider significance of this approach for understanding domestic food wasting practices. Please also note that throughout this article, I refer to the social unit that does meal planning or anticipatory practices as the household unless a participant or author specifies this differently. This is due to the diversity of household types included in the sample.

2. Conceptualizing household meal planning as an anticipatory practice

2.1. Domestic meal planning

Within households, organising meals is both a challenge of domestic logistics and an important symbolic event and as such planning ‘the family meal’ is loaded with meanings around healthy food and appropriate parenthood (Parsons, 2016). DeVault (1991) has firmly established the time consuming demands of aspirational middle-class notions of ‘feeding the family’, and how commitments to this ideal form part of socially appropriate gendered enactments of family life and health. A number of authors have subsequently focussed on the heavily gendered nature of the work involved in feeding a family, and the part that it plays in performances of appropriate motherhood and family life (Parsons, 2016; Harman and Cappellini, 2015), and more recently the differentially gendered mental work of organising a household (Daminger, 2018). Generally the preparation of meals for a family within a household is routinized to make decisions less taxing, but even when

routinized it appears to be a complex holistic task requiring constant monitoring of eating, adjustment for tastes and negotiation between people on an iterative basis (DeVault, 1991, p.73–74; Blake et al, 2008). The semi-conscious, holistic aspects of meal planning appear to contrast with the aspects that require concerted effort and consideration.

This contrast appears to be key to understanding the practice of meal planning. Blake et al (2009) comments on how mealtimes, arranged iteratively within and around many other activities, address both existential and material aspects of time. The repetition of meal events is a result of the structuring of everyday life, but repetition allows the formation of tradition, ritual and meaning in eating practices (Blake et al, 2009). The repetitive, iterative nature of meals also reflects how planning activities take shape in and around other activities informally, without specific conceptual forms or prescriptive organisational tools. Agrawal et al (2018) identify a range of practices that low-income mothers use to manage child feeding within unpredictable work and family schedules that mostly involve displacing aspects of the work of feeding, either on to other people or on to other time-periods through forms of storage. Planning ahead is raised as a key practice, with households often producing additional food to eat on subsequent days when there is little time to cook, in order to preserve the joint meal as a sociable family event (Agrawal et al, 2018, p.60–61). This demonstrates how anticipation is involved in displacement in the household.

How households fit meals and eating around difficult work schedules and other work commitments is an important question beyond particular low-income groups. The alteration of flexible traditional recipe forms to fit health goals within limited and arrhythmic work schedules among Mexican-Americans reflects another form of adaptation for example (Dean et al, 2010, p.589). In the UK, the growth of arrhythmic working patterns has led to concerns about the decline of social eating but adaptation and the availability of convenience options appear to allow commensal eating to happen in other forms (Yates and Warde, 2017). There is also evidence that families are using convenience options to free up time elsewhere in schedules, and to make family meals possible to begin with in some cases (Jackson, 2018). Broad economic changes, including a growth in economic insecurity and food price inflation also make meal planning a timely issue to consider, as budgeting measures employed by households have a significant impact on the nature of meal events (Dowler, 1997; Parsons et al., 2021). Within these approaches to meal planning, the potential consequences of these forms of displacement for food waste opportunities are not addressed directly, but there is some promotion of similar practices as part of the *Love Food Hate Waste* campaign (2021; WRAP, 2023). The following section addresses similar instances in which additional food is prepared in advance, in order to make a case for thinking about a broader set of anticipatory practices in relation to food and food waste.

2.2. Learning from food on the ‘Surplus’ boundary

In studies of food waste informed by anthropological and material culture studies of value (Appadurai, 1986; Kopytoff, 1986) and geographies of consumption (Hetherington, 2004; Gregson et al., 2007; Bulkeley and Gregson, 2009; Hall, 2011) the changing social and economic value of food is assessed as it moves through the home. Building on this literature, Evans (2011; 2012b) argues that surplus food in the domestic sphere very commonly becomes food waste via a graduated process of disposal in which food items gradually lose value through biological processes of decay or by becoming socially obsolescent based on the pressures and mismatches between household time, appetites and available food. In this way, additional food enters the disposal gap, in which the consumer holds on to an item without a clear use until a settlement can be reached with the residual value (Hetherington, 2004). Evans (2012b) describes situations in which food is surplus to immediate requirements, such as when unintentionally produced leftovers are stored and as such enter the disposal gap inadvertently. This is seemingly because it is difficult for households to realise such value in already

busy routines that have to accommodate unexpected events. Evans (2012b, p.1126–1127) acknowledges empirical instances of successful use in his account but also notes that these were omitted due to the focus on wasting practices. This representation of the possible routes food can take to become food waste inadvertently gives a pessimistic account of food produced in excess of immediate needs, and it raises a question about how and why surplus food in the home is designated as such and what it means for how we understand planning practices.

DeVault (1991), Agrawal et al (2018), and Blake et al (2009) all mention additional food prepared in advance in some capacity, in relation to meal planning. Blake et al (2009) discuss food prepared in advance, to free up time for other activities valued by the family. Agrawal et al (2018) on the other hand discuss how low-income households cook larger meals in advance, on days when they are off work, to enable ‘normal’ meals to take place during busy periods, as noted. In both of these cases, households appear to produce or cook meals in advance, in order to displace the activity of cooking from other parts of the routine. The planned displacement of the work and time of cooking serves to maintain valued events within ‘appropriate’ family routines (Agrawal et al, 2018). In this literature focussing on meal planning, this additional cooked food appears to be relatively unrelated to waste. The preparation of this additional food performs a displacing role which makes up a significant part of the value that the food has to the household. In contrast to the situations depicted by Evans (2012b), the anticipated, intended use of the food prevents the stored food from entering the disposal gap, and from being considered surplus in any meaningful sense. This is also true for situations involving leftovers, with a significant caveat. Parsons (2016) and Cappellini and Parsons (2012) argue that for leftovers to be used successfully, significant competencies and additional forms of practical and cognitive effort and emotional displacement are needed.

Marking forms of additional food that are prepared in advance and stored in similar ways to surplus as inherently connected to waste (Evans, 2012a) due to the presence of the disposal gap (Hetherington, 2004) would be unsatisfactory because there is a clear intended future use for the food. The designation of surplus may be more appropriate for leftovers than for intentionally cooked food like batch cooked meals, but similar forms of value can also be associated with leftovers, as Cappellini and Parsons (2012) establish. Leftovers are not necessarily produced with a specific a future use in mind, but they may be used flexibly and opportunistically in similar ways to batch cooked meals, to enact ideals of thrift and appropriate relations within family life. There may be a wide spectrum of practices of this kind between the storage of unintended leftovers and batch cooking with varying degrees of structured anticipatory intention and salvageable value involved. Lazell (2021) has provided extensive evidence that household meal planning varies widely in terms of specificity and formality, generally changing in form and degree according to proximity to the meal in question. By demonstrating how anticipatory intentions structure a wider range of practices in relation to food we can clarify how meal planning as “a mental process present across different moments of consumption”, (Lazell, 2021, p.194) may play a role in opportunities for household food waste.

2.3. Domestic meal planning as anticipatory practice

The previous section argued that food produced for future consumption, intentionally or otherwise, should not be considered as inherently connected to waste and in the process it established that there is a wider set of planning practices which share a connection through structures of anticipation. The temporal element of meal planning makes it relatively obvious that anticipation should play a role and that there is no specific need for prescriptive structures for planning (Blake et al, 2009). While the literature on household meal planning often mentions anticipation in passing, it does not address it directly. Although it is primarily concerned with surplus food in a different context (the redistribution of unsold food from supermarkets to food aid charities),

the exploration of anticipation offered by Midgley (2019) has much to offer in leading a conceptualization of domestic meal planning as a form of anticipatory practice. Midgley (2019) uses the structure provided by Anderson (2010) for thinking about anticipatory action of various kinds, which comprises styles, practices, and logics. This paper focuses on anticipatory practices, rather than logics or styles, as a way of addressing future oriented aspects of meal planning for a number of reasons. Firstly, the anticipated futures considered by Anderson (2010) are on scales far exceeding the domestic routine. Meal planning involves acting upon the mundane and iterative domestic futures of tomorrow, next week and so on, and this comprises the “anticipatory style” relevant to meal planning, as it clearly defines the future in question and the relation to it (Anderson, 2010). Secondly, Anderson (2010) offers three aspects of anticipatory logics, pre-emption, precaution and preparedness, but with such a tightly defined ‘future’ at play in considerations of meal planning, these three are difficult to differentiate between. This is especially the case for pre-emption and preparedness in a domestic context. More importantly, the anticipatory practices which make ‘futures present’ (Anderson, 2010, p.786) appear to be vastly more important for capturing meal planning within wider anticipatory practices. Forms of improvisation are directly relevant to the cyclic, holistic planning of meal events and these are the particular elements of meal planning that this paper aims to elaborate upon. The following sections of this paper will provide empirical detail of anticipatory practices at work in a range of situations.

3. Methodology

This paper is a product of the ‘Reducing plastic packaging and food waste through product innovation simulation’ project (ref: NE/V010654/1) which was funded as part of the Natural Environmental Research Council (NERC) Smart Sustainable Plastic Packaging Challenge (SSPP). The project aimed to create a new version of the Household Simulation Model that could include plastic packaging in addition to its current food waste simulation functionality (Kandemir et al, 2020). The goal of this new model is to simulate the effect of different packaging and household types, plus new interventions, on the amounts of different kinds of waste generated. Quantitative and qualitative data from a multitude of sources informs the parameters of the model and its internal functioning, and this paper emerged from additional findings from primary qualitative research produced to support the modelling effort. Alongside an interest in how food products move through the household, the modelling team were interested in routine aspects of consumption and how daily and weekly patterns of cooking and provisioning interact. This research therefore approached the issue of packaging and food waste using an approach based on material culture, but it also took key insights from Practice Theory into account, including the conventions and interrelations between different practices that structure routines (Powell et al, 2014). Findings specifically related to household practices in relation to plastic packaging waste are to be included in a forthcoming paper by the author.

For this theoretical approach and subject matter, direct observation as part of ethnographic methods is highly desirable due to the level of detail it can provide about how consumers engage with the materiality of food products and packaging (Heidenström and Hebrok, 2021). However, the data collection took place during a period of high cases and hospitalisations during the COVID-19 pandemic in the UK (November 2021 to January 2022), making such methods inadvisable for practical and ethical reasons. Remote interviews and diary research were planned instead (Isaacs et al., 2021). The remote interviews were semi-structured and the diary research element of the research took place over a period of one week to capture household routines and the passage of particular food and packaging items through the home, from the moment of purchase onwards. Participants were recruited by means of an initial screening questionnaire and informed consent was gained before progression to the interview and diary stages. In total, 81 people

completed the questionnaire and 28 participants progressed through to the interview stage. Ultimately, 25 of these participants completed the research diary and some participants chose to submit photographs, with images of people and identifiable information excluded from the data. The participants were mostly female, white, well educated, and mostly worked in white collar jobs. While the sample was not particularly diverse in these respects, the remote nature of the research led to good geographic diversity across the UK, a wide range of household types, and diverse consumption patterns among participants.

Qualitative analysis of the interview transcripts, diary entries, and photographs was done using the Nvivo software package according to the needs of the project. As noted previously, particular actions, products, materials, and spaces within the home were of interest to the modelling team and as such deductive coding could be used to identify these elements for later reference and analysis. These included themes like freezing/defrosting, and sorting. Inductive coding was also used to provide a foundation for further analysis of the material, informed by the broad theoretical basis of the project in material culture approaches to food and waste. As such, themes were formed around contamination, shopping and provisioning patterns, forms of planning, decay and freshness, and other topics relevant to the situated social value of food in the home. Further analysis involved examining instances where deductive codes and inductive codes overlapped, but for this paper the themes concerning planning and provisioning patterns were of particular interest.

4. Meal planning as anticipatory practice

4.1. Finding formal and informal anticipation through planning objects

Household planning has been identified by some authors as more significant for explaining levels of food waste among some groups of consumers than any intentions regarding food waste (Stefan et al, 2013) but treating planning as a single aspect of behaviour independent of others removes important context. Meal planning can be as much a part of household routines as other household activities, and it is subject to some of the same constraints. As an anticipatory practice, what distinguishes it is the role it plays in choreographing other household practices, and the orientation to the future. A number of devices involved in formal planning activities are useful for highlighting the anticipatory nature of meal planning in particular. Shopping lists have to be written and fitted into the coming working week for example and details of how they are used in practice can demonstrate how this anticipation works in context. Participants in this study reported using a number of different kinds of lists to manage their grocery shopping, and some compiled only one list at the end of the week before shopping, while others preferred to have a running list that they added to through the week. Cathy made one such list, and would eventually take it shopping with her.

“So we’ve a notebook in the kitchen drawer, we jot things down, if we use the last one of something, we jot it down there so it doesn’t get forgotten. And then it’ll get to thursday, my first non-working day, so then I’ll add to that all the things that are in my head, rather than having that list to add it to. So there’s both things going on really. And then that list comes shopping with me”.

[Cathy].

Cathy explained elsewhere in the interview that this practice developed as a way to avoid under-provisioning and to avoid additional mid-week shopping trips. Both her and her partner were nearing retirement and were working reduced hours but often had visits from children and grandchildren and so Cathy felt she had to keep the house stocked up for them, in case they visited. Rather than being a fully intentional exercise in stock-taking and allocation for future provisioning, the list enables a form of routine anticipation to sit easily alongside other practices like cooking as they happen, rather than during an intentional act of stock-taking. The practice is habitual, and just as the

object that enables it has its own place in the kitchen drawer, so the practice has its own situation within the wider weekly routine on Thursday. While this kind of practice may result in over-provisioning and wasted food, it demonstrates how such situations involving potentially higher-waste practices also involve anticipation to some extent, due to the different underlying intentions. Planning for food availability involves a different set of practices than those that would be involved in planning to increase food usage.

A limited number of participants were able to find particular times when they could sit down and systematically plan, but others like Michelle, (who had two children of primary school age with her husband) were not able to plan with as much success. Instead they used particular objects to give some structure and persistence to ongoing improvisation and to allow perceptions of past eating habits to inform plans for future cooking and shopping plans.

“[We make a shopping list on] probably monday in a slightly panicked point in the afternoon when we suddenly remember we haven’t made the shopping list and [husband] does need to go shopping, sometimes we’re more organised than that and we do have a conversation normally sunday teatime, about things that we haven’t eaten for a while or things that they’re fancying eating. It sounds like we’re obsessed with food but the girls are quite food driven so they do tend to be like, ooh we haven’t had that for a while, kind of moments, and we’re like no we haven’t. [...] so yeah monday is slightly more panicked and it’s like what days have we got and I think that’s why it’s helpful to almost have the structure of the week, as like we know we’ve got two birthday parties on saturday there’s no point planning some nice fancy casserole, cause we’re not gonna have time to cook it and enjoy it, [...] and then sunday, you know when nothings spoiling, we might say oh you know, make a fancy dahl or a fakeaway as the girls call it”.

[Michelle].Fig. 1

Michelle also described how weekly planning happens on a blackboard wall in their kitchen that was used for noting down what people wanted to eat, and for keeping track of upcoming weekly events. The often rushed shopping list for the weekly trip was based on this blackboard wall. Michelle explained throughout the interview how important meal variety was important to the family, and how it was negotiated through the communal and frequent use of the blackboard wall. These concerns for meal variety were discussed in reference to the difficulty and busy-ness of everyday life, and as Michelle described, this negotiation ran alongside and as part of discussions of preferences, conflicting priorities, passing cravings, and energy levels. These examples of co-existing pressures strongly resonate with the work of many others on meal planning (Agrawal et al, 2018; Blake et al, 2009; Parsons, 2016), but I would like to highlight how these discussions of planning objects can draw attention to the distribution of anticipatory practices through the weekly routine (Lazell, 2021). DeVault (1991, p.47–48) describes meal planning using a puzzle solving metaphor, and these objects arguably allow the process of finding a solution to these puzzles to be dispersed more easily. Conceptual and physical tools like shopping lists are deployed in anticipatory practices, along with the structures and temporal rhythms of weeks and weekends themselves to bring future and present together when necessary. Such practices can either be well or poorly integrated with other household practices and routines but this also depends on household norms and values around food, and wider patterns of work and leisure.Fig. 2

Another participant Siobhan was busy with a very young child, and used particularly a formal system of organisation embodied by an object

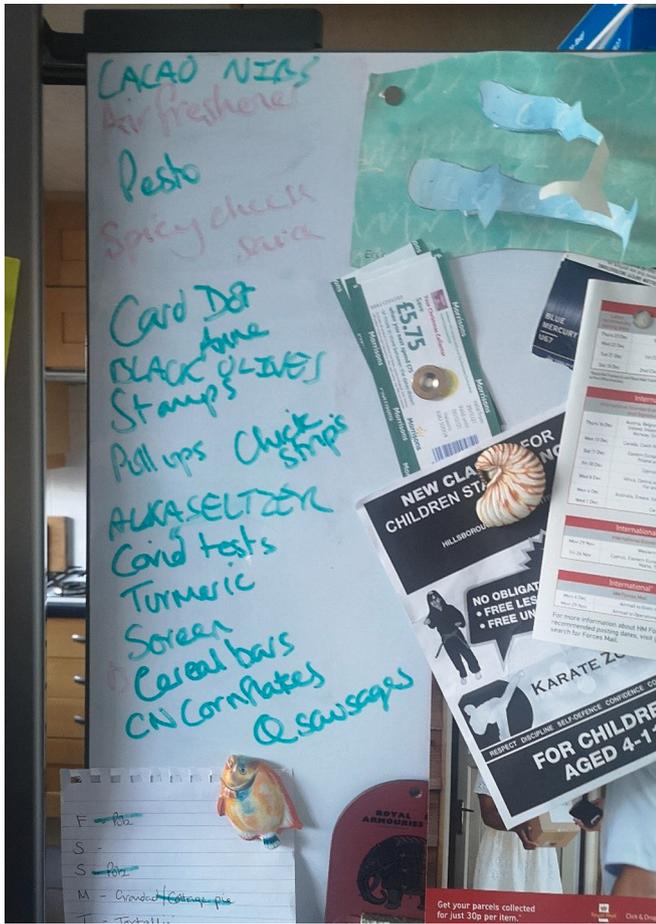


Fig. 1. An example of similar, multiple forms of listing to Michelle's blackboard wall, on Pam's fridge, including a brief day-to-day meal plan and a shopping list.

to help with this planning. She had found that either her or her partner frequently forgot to buy items during shopping trips and so opportunistically purchased a meal planner to use when gifted some amazon vouchers. This planner came with a shopping list section which could be detached, representing a formalisation and juxtaposition of the two practices described by Michelle (a blackboard wall) and Cathy (a running shopping list kept in a notebook). Pre-arranged meal planners¹ provide templates for the practical business of organising cooking, shopping and eating in a household and provide formalised examples of how anticipatory practices make associations between cooking and provisioning, as well as present and future frames of action. These objects help households to place potential future meal events and provisioning work within the possible futures of an oncoming week and they are significant because they make future iterations of routine practices relevant to present contexts, while also being part of routines themselves.

4.2. Failed anticipation

While meal planning is not necessarily practised and normatively regulated in the same way as particular kinds of food choices it is still

¹ Meal planning templates are widely available for sale online, and food bloggers and influencers also regularly discuss meal planning as a particular activity. The growth and multi-faceted nature of this practice and its connections with batch cooking are not within the scope of this paper but would be a highly interesting subject for further exploration.

regulated in collective terms often related to the social value of the family meal. Aside from the norms associated with the family meal, participants expressed disappointment and shame at not being able to plan at all, identifying intentional planning and competent organisation as inherently desirable goals. These normative understandings of organisation would be very interesting to analyse further for what they say about current cultural ideals of self-mastery, self-actualisation and intentionality as well as the gendered expectations around cooking and household management in households with and without children, spouses or partners. This is particularly notable when participants felt unable to plan.

Katie for instance, was in her twenties with a busy office job. She had just bought and moved into a house with her partner and they were in the middle of renovating it. Her partner was often working nights and she described their eating and shopping patterns as chaotic, with limited 'headspace' for planning or even cooking meals. The problem with the night shifts was that her partner was often waking up when she was finishing work or he returned home very late with an unpredictable appetite, which made planning meals difficult. If she did cook, he often rejected the food or wanted something different. Katie assumed responsibility for cooking and shopping in the home, but she and her partner lacked a shared pattern of time and appetite to organise their meals around. Coherent and intentional anticipation was therefore largely inconceivable. Katie was rather distressed about what she framed as her 'choices' when I asked about batch cooking.

"No, I have to actively make an effort, to be on top of it, and my headspace has just been so stressed and busy at work, and with the house move as well, there's just so much to think about, and yeah, I've let it slip, and I make better choices when I've got the headspace".

[Katie].

Katie includes preparing meals in advance (batch cooking) as a form of household organisation she has been failing to stay on top of. She framed her choices in terms of individual failings but it is easy to see how difficult the anticipatory practice of batch cooking would be in her situation. The additional work of anticipation on top of everything else was too much, but she still felt the pressure to 'make better choices', seemingly in relation to aspirational goals of healthy eating, which were unattainable due to the lack of organisation. It is particularly interesting to note how she frames the lack of batch cooking as a failure of intention. Coherent intentional practices would anticipate future needs, fulfilling an unspoken expectation that as the one responsible for cooking and eating in the household she should have some degree of intentional control over it. This is also an example of the heavily gendered pressures detailed extensively in the meal planning literature (DeVault, 1991) and it reinforces the findings of Daminger (2018) on the gendered division of cognitive work across household tasks. Questions emerge from this around the gendering of anticipation and anticipatory practices in the household, and the notion of intention that is at play in policies involving meal planning. It also introduces the idea that practices like batch cooking are inherently anticipatory, which the following section will explore in more detail.

5. Meal displacement as anticipatory practice

5.1. Anticipation in the Disposal Gap

In the process of asking about how participants stored cooked food and what sort of things they might have stored as 'leftovers', the term leftovers seemed to be an objectionable and inadequate term which they often took issue with. It referred to redundant food that would have no place in their meal planning systems. To the contrary, much of the additional food they prepared had a clearly delineated future use already attached to it, or would have one in principle which maintained the value of the food, revealing a form of anticipation similar to but separate from the form associated with batch cooking. This presents a

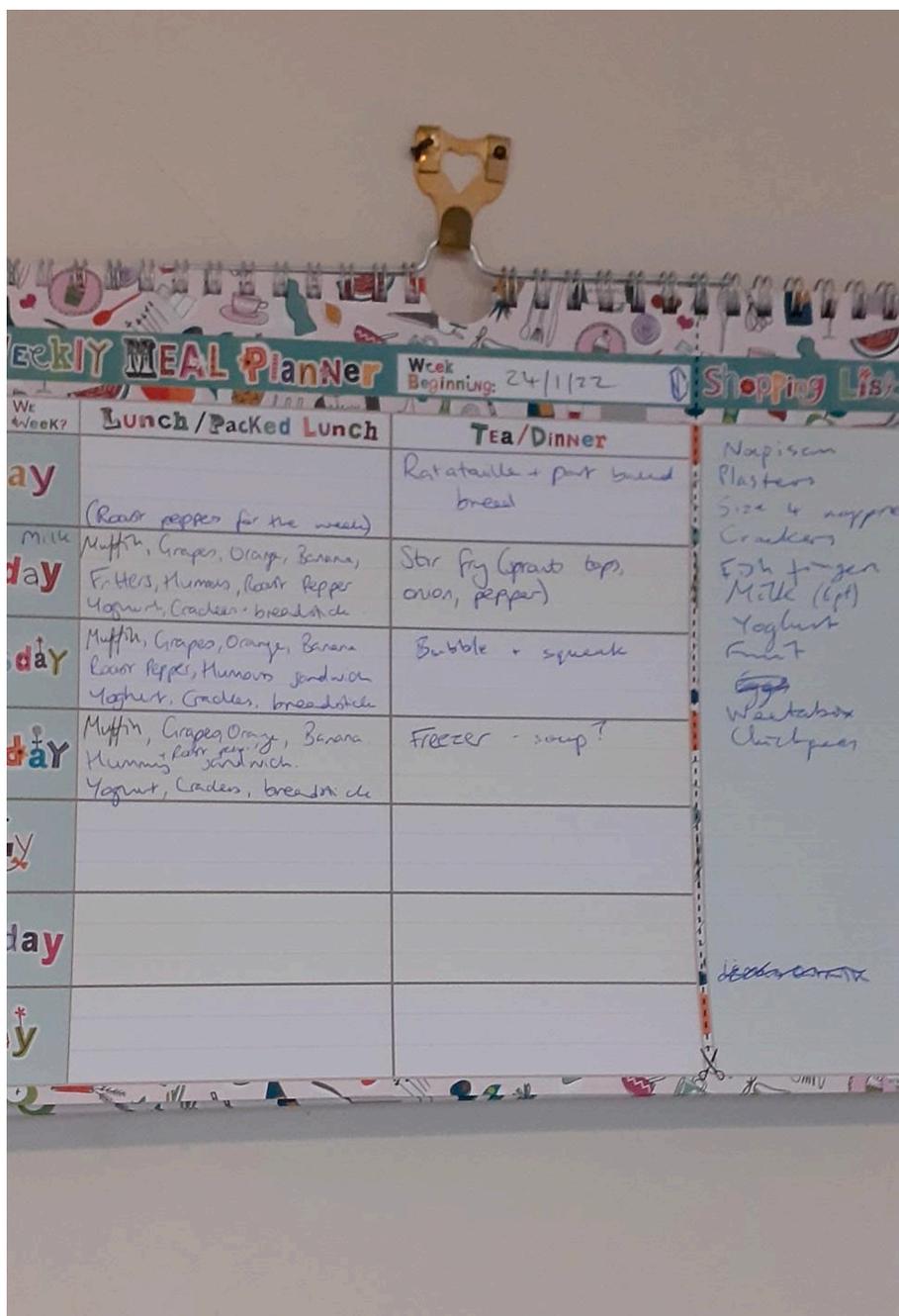


Fig. 2. Siobhan’s meal planner. Note the meal planning and shopping list sections together.

different account of this type of additional food from the one presented by Evans (2012b). There may be multiple forms of food prepared in advance which should not be labelled as surplus, or confused with leftovers, although the latter is never inherently doomed to wastage. This section outlines how anticipation is involved in the organisation of different kinds of food produced in advance and how this affects the contextual value of this food. Evans (2012b) discusses this kind of ambiguous food, designated as surplus in his account, as placed in a gap in the disposal process where it can still be assigned value (Hetherington, 2004) despite social obsolescence. For forms of food which could conceivably be successfully utilised, anticipation can successfully block the disposal gap, preventing the food from becoming waste.

The participants of this study also drew distinctions between different types of additional food, and in the process they drew attention to how anticipation is involved in the construction of the value in each

case. They insisted that smaller amounts of stored cooked food generally had some future meal or use in mind, even in cases where these amounts of additional cooked food were not the result of batch cooking. While this may be wishful thinking or a reluctance to admit to wasting food, distinctions between these practices demonstrate the importance of anticipation in domestic meal planning. For example, participants often claimed not to batch-cook very often, while still regularly cooking more than they needed. This practice was distinct from batch cooking, and I refer to it as “meal bulging”, since it involves expanding certain recipes in size, rather than producing a much larger quantity of portions for storage and consumption at a later date, which is generally described as batch or bulk cooking. Evans (2012a) discusses batch cooking as a way to circumvent conflicting time demands, although participants also seemed to perform batch cooking in response to anticipated busy periods in a way which resonated more with the findings of Agrawal et al

(2018). Antonia for instance, worked in a professional role and lived alone but had a busy social life and voluntary commitments that meant she was rarely in the house. She associated the practice of batch cooking with an aspirational understanding of intentional organisation in a similar way to Katie in the last section, and used batch cooking as a way to prepare for the future in a general way, at times she felt able to commit to cooking and preparing food.

“Yeah batch cooking, so last weekend, I did, I kind of roasted a load of vegetables, which I then had with different things for a few nights and stuff so sometimes I’ll make some dahl, and when I get my act together[,] it’s usually at the weekend, I’ll make something that I can then batch cook and then eat for a few days in the week”.

[Antonia].

The weekend seemed to be an important time for batch cooking in many cases, as the additional free time allowed people to ‘get their act together’ and cook large quantities of food, which in the week they might not wish to make time for. This seems like an archetypal example of the displacement of anticipated cooking time discussed by Agrawal et al (2018) and others (Dean et al, 2010), and it raises the issue of intentionality in anticipatory practices. While Antonia intends to displace the time spent cooking by concentrating it at the weekend, the practice of batch cooking for her is not linked to a specific meal plan. The value of batch cooking is based on how it can flexibly respond to multiple future demands. Antonia also cooks foods which can be combined with a variety of others, bringing variety to the weekly meal plan, potentially increasing the chance it would be successfully used. It is not linked to a particularly rigid future meal plan, but the anticipatory practice fits flexibly into the weekly routine, in part because of how the specific recipe chosen can be combined with others, but more strictly because of how the practice of batch cooking assumes and displaces an amount of cooking time.

Meal bulging in contrast appeared to be shorter-term than batch cooking and involving smaller amounts of food being cooked in addition to immediate requirements. Liz was another participant that was living alone in a similar professional job to Antonia. In a diary entry she discussed what happens in her household when there are leftovers, clarifying the distinction between the practices of batch cooking and meal bulging.

“There were no leftovers. When I do have leftovers I will usually put them in the fridge and try to eat them in a day or two, unless I am batch cooking in which case I separate into individual portions and freeze [...] I was just cooking for myself tonight, plus I am the only one in my household. No leftovers - I try mainly to only cook what I know will get eaten unless I am batch cooking”.

[Liz].

Producing leftovers, or meal bulging, is not always intentional and Liz tries to avoid it. Clearly there is still a risk that they will become waste as discussed by Evans (2012b), but Liz has a standing anticipatory assumption that they will be eaten in the following day, or frozen for later consumption. The lack of clear intentionality provides a contrast between meal bulging and batch cooking, but meal bulging may still provide an amount of pre-prepared food that is available to address future needs, albeit less flexibly. Batch cooking is strongly associated with freezing, and food can theoretically be withdrawn from a freezer and defrosted at any time. Any formal meal plans or anticipated meals may have to be adjusted to accommodate a bulged meal in the near-term, but a number of participants noted how useful and common bulged meals were as a form of quick lunch or breakfast. Between batch cooking and bulge cooking, there is a shift in the location of the flexibility which enables the value of the food to be recovered. Antonia for example chooses meal components (roasted vegetables) which can be eaten with a range of other items. Here flexibility is located in recipe choice. Flexibility in portion size allows for meal bulging but the realization of the value needed to prevent this food from becoming waste in

the disposal gap would require flexibility and improvisation in how a weekly meal plan operates. It may be possible to speculate further on which of these scenarios may be more likely to result in waste.

This flexibility in recipe choice, and flexibility in the arrangement of meals planning relates directly to intentionality. It should be noted that many of the proposals made by Love Food Hate Waste (2023) are either intentional planning strategies, or small changes in practices which could correct perceptions of food quantities. Food waste is thus framed as a problem originating in a lack of consumer knowledge or organisation around their own practices, and a lack of consumer intention is also framed as a problem to be solved with corrections and improved planning techniques. The account of batch cooking and meal bulging suggests something to the contrary. The successful use of additional food or bulged meals in some cases may be less dependent on skilled and equipped intentional consideration and planning and more on the features of these anticipatory practices that enable flexibility, improvisation and re-interpretation. This echoes the findings of Lazell (2021) and Hebrok and Heidenström (2019) that forms of flexibility and situated knowledge are as important for successful food use and avoiding food waste as forms of intentional planning.

5.2. Displaced meals, recipes, and anticipatory practices

So far, this paper has only considered forms of cooked food. In a previous example, Liz described effectively choosing to portion control in some situations rather than meal bulging. This would result in uncooked produce remaining in storage. This raw produce is not ‘leftover’ or surplus in any meaningful sense, as it retains value until it shows signs of advanced degradation or will not fit into anticipated meals, but it makes an illuminating contrast. The food being considered, and the recipes it is being used for appears to affect the anticipatory practices being considered in different households, and this section will further address how the flexibility of recipes and meals interacts with and changes anticipatory practices. According to Peter, partly used vegetables in his household were unlikely to become waste even a week after their initial partial use.

“In terms of veg, if you’ve got a cauliflower or broccoli head or something like that, it’s too much to go in one meal, but we’ll have something planned for the next week or so, it’ll go in the next meal, we’ll use it the following week”.

[Peter].

Peter lived with his wife and two children, and worked in a relatively senior professional role. He was also solely responsible for the cooking in the household. Peter felt that cooking food from scratch each night was important and made time for it, meaning that the focus of the anticipation shifted onto raw vegetables, rather than cooked items. This represents a displacement of another sort. In this case, Peter was able and willing to commit a particular amount of energy to cooking each night and so there was little need to displace cooking activity. Other participants who portion controlled in similar ways used particular containers for bits of raw vegetables or cling film to protect and preserve them to some degree. A sharp distinction seemed to emerge between unintentional meal bulging and this idea of portion control, which was more closely associated with good organisational skills and the ability to cook healthy, appropriate meals with competence.

On the other hand, food items that could be easily incorporated into a range of meals or things that take significant time to cook seemed like prime candidates for meal bulging. Antonia combined roast vegetables with different elements all throughout the week to make a range of loose meals, as noted in the previous section. Another example of this comes from another participant with a family. Pam worked in an administrative job, had two children and was often busy taking them to clubs in the evening. She speculated in a similar way that she’d be more likely to use roast potatoes than raw ones, and so would cook them rather than leaving them raw if preparation had started already.

"I suppose if I'm doing roast potatoes, you know I'll be there peeling potatoes and I'll go ooh there's a right pile there, but I'd be more likely to cook them off, to cook too much and have leftovers, things that are ready rather than random peeled potatoes sat there".

[Pam].

Here, Pam is demonstrating a tendency that [Evans \(2012b\)](#) has also noted, for households to prefer to have pre-prepared food on hand. In this case the additional potatoes may have represented a form of fortuitously displaced labour that Pam may take advantage of later in the week. As stored raw potatoes, they would require more time to cook at a later date. Considering how and why different food items like these hold their value in cooked and prepared states, is likely to relate to recipes and the time available to cook, but it also seems to be related in part to what each household considers a viable recipe. For instance, Pam and her children may accept roast potatoes reheated or combined with something else for another meal for example, but Simon might feel this would be an unacceptable meal. A number of authors have similarly emphasized the difficulty, skill and sacrifice involved in making use of leftovers successfully ([Cappellini, 2009](#); [Cappellini and Parsons, 2012](#); [Hebrok and Heidenstrøm, 2019](#)). The connection between anticipation and specific recipes is visible when storage practices relating to the foods on the border of entering the disposal gap are studied, and the considering such foods as part of continuous attempts to anticipate meals makes this connection more obvious.

Recipes and household understandings of recipes have not been directly addressed with regards to sociological engagement with Food Waste despite their potentially critical role in anticipatory practices relating to food, but [Borghini \(2015\)](#) has written about the social construction of recipes, and their open-ended ontology. In this open ended ontology, recipes are considered as the idea behind each cooked dish, which follow common guidelines in locally distinct ways ([Borghini, 2015](#)). Further work may be needed from geographers and sociologists concerned with food to incorporate the role of recipes into understandings of the practical organisation of households, as the prescriptiveness of recipes as ideas is critical for understanding how households anticipate, evaluate, and address future and current needs.

6. Discussion

The goal of this paper has been to establish a wider term of reference than planning for the food-related practices involving forethought and anticipation which often result in or relate to food waste. Such practices have been thoroughly addressed through policy, such as in the Love Food Hate Waste (LFHW) campaign, ([WRAP, 2023](#); [Love Food Hate Waste, 2021](#)) but practice theory approaches have begun to focus on domestic planning aiming to correct individualistic approaches to behaviour change adopted by such policy and campaigns. The fact that intentionality is a key part of individualistic approaches to behaviour change and a key part of formal planning practices has perhaps obscured the wider presence of anticipatory practices throughout domestic food routines. As the examples from participants have demonstrated, formal practices of meal and food planning are integrated with the flow of everyday life and broader anticipatory practices. Shopping lists are assembled over the course of a week of cooking, and desires and impulses to eat certain foods are tracked on blackboard walls and later matched up to weekly meals. Consumers recognise that practices of formal planning which could in theory shape routines and eating practices are in practice deeply affected by other sets of practices and routines in their lives, and evaluate themselves on their ability to maintain an organised household. This confirms and expands on the findings of [Lazell \(2021\)](#) and [Hebrok and Heidenstrøm \(2019\)](#) by emphasizing the links between the temporal stages of the food consumption process, but it also has significance for policy and campaigns around food waste. As the consumer is trying to negotiate and manage changes and alterations within the anticipated constraints of daily life, tools and conceptual

schema which allow for flexibility and improvisation in the successful use of food would seem to be particularly valuable. There is some evidence that behaviour change campaigns such as [Love Food Hate Waste \(2021\)](#) already acknowledge this from the proposals made, but there is more to do to reframe food waste prevention policy and research efforts around practices which have variable levels of intentionality.

Adopting a wider frame of reference and considering less intentional actions within anticipatory practices also means thinking through the production of additional food for future use. This practice is widely discussed within the feminist literature on meal planning (e.g. [DeVault, 1991](#); [Blake et al, 2009](#); [Parsons, 2016](#); [Agrawal et al, 2018](#)) and it also forms part of food waste prevention campaigns ([Love Food Hate Waste, 2021](#)). Stepping back from framings of this practice as inherently committing food to wastage ([Evans, 2012b](#)), this paper has attempted to position it as an anticipatory practice alongside meal planning. Anticipation often sits in the disposal gap identified by [Hetherington \(2004\)](#), blocking the route to disposal by preserving the value of the food through displacement. This process of displacing value is noted by a number of authors ([Blake et al, 2008](#); [Dean et al, 2010](#); [Agrawal et al 2018](#)) as an ever-present aspect of the anticipation involved in making household meal planning work. Including non-intentional cooking practices like meal bulging which may produce additional food opens out the discussion of how value is maintained and preserved, introducing further questions about the constitution of specific recipes and household understandings of particular meals. Anticipation leads to successful accumulation and utilization of food, and addressing this link should be significant for policy-making and campaigning efforts, but more academic attention is needed to understand how anticipatory practices interact with provisioning practices, ideals of thrift and standards of organisation as aspirational goals.

7. Conclusion

This paper argues that a wider approach to planning and provisioning practices is necessary to include important non-intentional and routine aspects of food planning practices which relate to waste. Anticipatory practices is thus proposed as a concept or term to capture this set of practices, adjusting and building on the contributions made by [Lazell \(2021\)](#), with a framework used by [Midgley \(2019\)](#), translated into the domestic sphere. This proposition is developed through examination of feminist literature addressing meal planning, and the associated practice of producing additional food for later consumption. Conceptual points made concerning the material culture approach to additional food are essential in developing this argument and are also significant for the empirical section. Anticipatory practices were located in the household routines of UK households, and the production of additional food was identified as a form of anticipatory practice with instances of broader and less formal examples included throughout the empirical material. Through the empirical and theoretical material presented here, anticipatory practice is proposed as a concept to support and advance recent work on planning practices ([Lazell, 2021](#); [Hebrok and Heidenstrøm, 2019](#)) offering a way to include insights from feminist literatures on domestic meal planning ([DeVault, 1991](#); [Blake et al, 2009](#); [Parsons, 2016](#); [Agrawal et al, 2018](#)) in policy and campaign efforts to reduce food waste.

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Jack Pickering: Conceptualization, Methodology, Data curation, Formal analysis, Investigation, Writing – original draft, Writing – review & editing.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data will be made available on request.

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