

## THE DIGITAL VIRTUAL DIMENSION OF THE MEAL

### INTRODUCTION

In a not so distant future 3D food printers are poised to take over the preparation of our meals, lightening the load of meal preparation by taking on ‘the difficult parts of making food that is hard and/or time consuming to make fully by hand’ (Foodini, 2014). Similarly, food photocopiers that reproduce the molecular structure of food hold the promise of repurposing leftovers into brand new meals (Electrolux, 2009). This future may be unpalatable to some because it supposes a corrosion of human knowledge and a brutal displacement and reduction of human competence by ever-increasing automation of domestic practices within the home kitchen (see for example Firat and Dholakia, 1998).

A less extreme, but more present infiltration of technology within the kitchen is that of devices like tablets, smartphones and laptops that are routinely used in preparing meals. Based on a global survey of 7,000 cooks, *Allrecipes.com* (2013) found that nearly half of respondents used smartphones while shopping for food, while almost a third of American and UK cooks surveyed said to routinely use their mobile phones to find recipes. Through these devices home cooks can access an array of food related content including step by step tutorials on *YouTube*, recipes and recipe reviews on specialist foodie websites and blogs, and themed meal ideas on *Pinterest* boards. We refer to these devices as digital virtual (DV) devices in that they open up new spaces and opportunities for the home cook. The integrative ontology of the digital virtual (see Shields 2002; Denegri-Knott and Molesworth, 2010; Molesworth and Denegri-Knott, 2012) that we use here enables us to navigate and consider how consumers’ minds (their imagination, memory and knowledge), the digital virtual spaces located on the screens like *YouTube* and *BBC Good Food* website, as well as

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the device itself – as a physical artefact, interact in practice. For us, this helps overcome some of the essentialism that is inherited by perspectives that create clear demarcations between reality and virtuality (for a critique see Shields, 2002; Denegri-Knott and Molesworth, 2010) which deny the presence of constitutive elements of practice, their various locations and how they come into play, in this case, during, meal preparation.

Whilst popular, the presence of DV devices in the kitchen may raise concerns about the growing digitisation of meal preparations, which sees technology as driving the transformation of human practices. A way of eliding the technology determinist standpoint, where use of DV devices like tablets displace human labour, is by adopting a practice-based language to account for how human and non-human actors come together in configuring practice. Adopting this approach has two key consequences for our understanding of doing the meal. First, it enables us to document in detail the many ways in which meal practices are transformed when knowledges, skills, and competences necessary to carry out practices around meal preparation are not only distributed across enthusiastic home cooks and material artefacts (such as hand mixers, food processors, cookers, freezers, recipe books and instruction manuals) and other people, but also located in digital virtual space. Second, it helps us see the kind of new meal work that is required from the home cook in maintaining the coupling between the cook and their devices.

In this chapter we discuss the intersection between DV devices and food consumption and resultant practices they configure. Drawing on insights gleaned from in depth interviews with 29 cooking enthusiasts living the South of England, we provide an overview of new configurations, placing emphasis on the ways in which various components of practice – knowledge, competence and commitment – are redistributed between our home cooks and their DV devices. While we acknowledge

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the significance of ultimate goals, which are to be substantiated and attained through meal work, for example the expression of caring parent or competent cook (see for example Molander's (2011) work on meal preparation as a meta-practice of love and motherhood here we focus less on the teleoaffective, or goal dimension of practices to deal with specific meal related projects and tasks, like knowing how to decorate a pirate chest birthday cake or make gluten free bread. In this way we can better hone in on the way in which the coming together of technology and home cook produce new forms of doing meal work.

## **THEORETICAL CONTEXT**

Our starting point is that competence is central to carrying out practices, and as Watson and Shove (2008: 77) have noted, competence is best understood as 'distributed between practitioners and the tools and materials they use'. Meal preparation should be approached not only as human achievement but one that is in effect distributed among a range of appliances, utensils and ingredients.

In their study of DIY, Watson and Shove (2008) propose that product development enables amateurs to tackle jobs that would otherwise be left undone or require a tradesperson to complete. Power tools, for instance, make 'lighter' work of physically demanding tasks. In the kitchen a food processor or bread machine provide the same kind of assistance. Other products have more profound effects, modifying the relation between process and result. In their DIY example, Watson and Shove (2008) note that the development of fast-drying non-drip water-based paints means even a first-time painter can produce an acceptable finish on a panelled door, which had previously been a complicated process requiring a certain level of time, skill, knowledge and experience. Today, paint technologies mean fast drying non-drip paints 'know' how to go on to a door.

The bringing together of scattered fragments of knowledge enables this task to be completed by a novice. Knowledge within the human, the instructions on the paint tin, the paint itself and equipment used to apply it come together, such that painting is only achievable in the ‘doing’. From this perspective it is evident that competence is not only a human quality but is redistributed between person and technology, such that they become a human non-human hybrid (Latour, 1993). Put differently, in our case, a cook with his rolling pin or food processor has a different set of capabilities than one without them.

Like the fast drying paint described by Watson and Shove (2008), the role of appliances in the kitchen have more dramatic effects on practice than just reducing the load of physically demanding or time consuming tasks – they reconfigure the way in which the practice of meal preparation takes place and the results that can be achieved (Truninger, 2011). How the practice is carried out is also subject to a practitioner’s commitment to the practice, by that we mean, how competent a practitioner an individual wants to become. More specifically, commitment includes the desire to cultivate even more specialised skills and knowledge and their ambition to embark on more challenging projects. Differing levels of commitment create distinctions between practitioners, from novices and amateurs to professionals and experts (Warde, 2005; Watson and Shove, 2008).

In further considering the various tools and materials used in the practice of food preparation, and in line with the concept of human non-human hybrid (Latour, 1993) enabling individuals to enhance and extend their capabilities, we draw on Clark and Chalmers’ (1998) work on the ‘extended mind’ as a way to account for the cognitive aspects of practice that DV devices enhance.

### **The Extended Mind in Practice**

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Just as tools enable a human to perform activities they otherwise wouldn't be able to, so too can 'external features' enhance cognitive abilities. Clark and Chalmers (1998) account for behaviour (change) based on this very notion - i.e. DV devices extend the mind of the cook (as well as the skill level and actual practices engaged in) in the same way that a microwave or food mixer extends the practice. Thus, in the same spirit as the human non-human hybrid in practice theory, we use Clark and Chalmers' (1998) work on the extended mind as a framework with which to view the use of DV devices enhancing the cognitive aspects involved in practice, which subsequently inform and change that practice.

Clark and Chalmers (1998:8) note that humans have a general tendency to 'lean heavily on environmental supports', that is, humans make use of various external sources as an extension of the mind and this enhances the cognitive abilities of individuals and the practices in which they engage. As Clark and Chalmers (1998:10) state; 'in a very real sense, the re-arrangement of tiles on the tray [in Scrabble] is not part of action; it is part of thought'. We argue that DV devices form part of this general tendency that, by using DV devices individuals delegate some of the cognitive work that goes into their cooking practices, whether it may be learning a new technique from a *YouTube* tutorial, or being able to 'forget' a recipe because it is safely available online at any time. Thus, commitment to some aspects of meal practices would be re-distributed between cooks and their devices.

Similar to Latour's (1993) notion of hybridization, Clark and Chalmers (1998) talk about external entities (objects) and humans as 'coupled systems'. This coupling creates an extended cognitive system just as the hybrid creates an extended human actor. If we remove the external component (i.e. the rolling pin or DV device) 'the system's behavioural competence will drop' (1998:8-9) – the practice can no longer be engaged in as proficiently. Likewise, if external features change, so too will

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behaviour. Indeed, when such components are removed or unavailable, there is a ‘de-coupling’ – in these instances, we might assume that the practice cannot be engaged in at all because the internal cognition alone is not sufficient to enact it. When successful, reliable coupling between an individual and an external feature occurs (i.e. it is always ‘there’ when I need it) they become ‘part of the basic package of cognitive resources that I bring to bear on the everyday world’ (Clark and Chalmers, 1998:11). In the spirit of this, we want to explore just how much DV devices have become part of the package of cognitive resources when it comes to everyday meal preparation.

## **METHODS**

We conducted in-depth interviews with 29 self-described cooking enthusiasts who use DV devices in their cooking practices during a four-month period in 2014. The people we spoke to come from a variety of backgrounds and cultures but all currently live in the South of England. The majority of the people we spoke to were female (see Table 1 for details), this was not by design but was indicative of the response to our call for participation – a message posted on the university staff forum and a local school’s parents’ forum – and a common occurrence in research related to domestic life (Beagan et al, 2008).

Interviews ranged from one to two hours in length and followed a phenomenological approach, focusing on lived experiences (Thompson, Locander and Pollio, 1989) of cooking and uses of DV devices within meal preparation and related practices. We asked about recent experiences, early experiences, as well as memorable experiences of cooking, both good and bad, with and without DV devices. Such an approach enabled us to focus on concrete experience and get a sense of how DV devices have been adopted and used in relation to cooking and the meal. As

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much as possible, interviews were conducted in the participants' homes and photographs of kitchens, appliances, cookbooks and DV devices used in cooking were taken to enhance the interview data. Initially, the authors undertook data analysis separately via a detailed reading of each interview transcript in order to generate an idiographic analysis of each interview. Global themes were then identified across transcripts and between the authors (Thompson et al, 1989; Spiggle 1994).

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## **FINDINGS**

In this section we illustrate and discuss emerging configurations where knowledges, commitment and competences necessary to carry out meal practices are not only distributed between enthusiastic home cooks, material artefacts and other people (e.g. Hand and Shove 2007; Latour, 1993; Watson and Shove, 2008), but now to DV devices. These new configurations make certain meal projects and tasks achievable because DV devices take on or augment our home cooks' knowledge and competence. The devices also absorb some of the commitment in the practice by taking on the role of remembering, storing and producing new ideas for meal projects so that the home cook no longer needs to. However, we also find that the coming together of these configurations is dependant on our home cooks' ability to become competent users of DV devices.

### **New DV Devices and Meal Practice Configurations**

Our home cooks made use of DV devices throughout the 'life' of the meal. They turned to DV devices to get ideas for what to cook, to help them achieve broader goals, such as being a good dinner party host or not being wasteful, as well as specific

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tasks like preparing different components of a themed dinner party menu or finding ways to make use of a glut of apples. Our home cooks also used DV devices as a shopping aid – smart phones were routinely used in the supermarket to locate a specific recipe in order to buy the necessary ingredients. In the kitchen, DV devices facilitate the preparation and cooking process, for instance, locating an instructional video on *YouTube* about how to de-shell scallops. After the meal has been prepared and consumed DV devices are used in a variety ways, from photographing food, sharing it on social media, and as a tool to document the cooking and eating experience for later retrieval and use. Such extensions presuppose that meal preparation is now as much about handling DV devices as it is handling food.

As a new a link in the configuration of meal practices, DV devices also produce displacements and re-alignments amongst other active links in the configuration. Cookbooks, magazines, and clunky space hogging food processors are re-aligned, their role re-purposed. Whilst most of our home cooks disclosed a preference for DV devices, this was not always at the expense of cookbooks, magazines, or other hardcopy forms of recipes and related cooking material – indeed, our home cooks often used DV devices in conjunction with other sources.

Viv is 46 and lives alone. She enjoys cooking and is often looking for healthy meals as she attends a weekly slimming club. Viv described cookbooks as '*a bit like my porn*'; she will happily sit and read them and she enjoys the lovely photography, which gives her ideas and gets her taste buds going. Despite the great amount of pleasure she gets from cookbooks, when actually cooking or planning a meal she prefers to use DV devices, to the extent that she even 'googles' recipes she has in specific cookbooks because it is easier than finding the book and getting it down from the top shelf of the big wardrobe where she keeps them. Here she describes the ease and appeal of the internet over cookbooks:



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*It's a bit more, the books I tend to flick through until I see something I like whereas, perhaps if I'm looking online I'm starting with something specific, I might go off on a tangent but I'm starting with something specific, either the type of event or the type of food that I want to do. So, I don't know, if it's a vegetarian meal or a pasta meal or if it was a birthday cake or something, I have that as much more of a focal point, whereas the books I tend to think 'I'll look at Nigella, Jamie and Gordon', get three or four books down and start flicking through and maybe put those back and find some others, just until something inspires me. But online, everything's so quick, you can bring pictures up so easily you can think 'yes, I'm doing that' and it's a much quicker decision than the books, the books I kind of get a bit waylaid with reading them and thinking 'I like that, I like that, I like that', whereas online is a bit more instant.*

This preference for DV devices as being quicker, easier and offering a wider variety than cookbooks was echoed by most of our home cooks. The notion that these devices offer more exciting options was particularly preferred, especially when cooking for other people and wanting to showcase cooking skills. Often our cooks expressed no desire to memorise recipes or come up with their own ideas for what projects to embark on. This we can see as an example of commitment to the practice being delegated to the device - the device is tasked with 'thinking' for and 'storing information' on behalf of the home cook. However, this didn't detract from their determination to become more competent practitioners, rather they bypassed some of the mental work (e.g. remembering a recipe) to focus on the 'doing'.

When asked to reflect on their usage of DV devices in meal preparation, many of our cooks reported that they had substantially expanded the repertoire of meals they now cooked on an everyday basis as well as how they had increased the

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complexity of the meal projects they took on. A 31 year old expectant mum called Rosanna eagerly showed us photos of the many creations she had saved in her home computer or posted on Facebook (see picture 1). There were colourful children's cakes, infused chilli oils, kale meatballs and Easter treats for friends. She was particularly proud of a pirate chest cake she had baked and decorated for a friend's Pirate themed birthday party. While she had a general idea of what she wanted her cake to look like, she struggled at first to visualise, and then to assemble it:

*Um, there is going to be 40 children, want something spectacular. So I had gone and searched through and found a really good, I suppose it was less of a recipe and more kind of instructions you know, making your chocolate sponges, use like a chocolate fudge so it's quite thick for your icing and then it just had really good ideas of, you know, just carving out the middle, filling it with gold coins and sweets that look like jewels and you can get the sweets that are bracelets and things and I just absolutely filled it with that and made a lid from another sponge and put little hinges on it. Got some gold icing and made brackets and hinges and a lock and it looked like it did in the pictures. I was so pleased and it was a very simple set of instructions just very clear, this is how you do it, this is the process to follow. And I think he was, when we delivered the cake he was speechless, bless him. It went down really well.*

As illustrated in Rosanna's experience, the practice of preparing the cake of course brings together ideas, knowledges, tasks, other people's desires, her appliances, and her level of skill and commitment, which we have seen reported in studies where DV devices are not prominent (e.g. Hand and Shove, 2007; Shove and Watson, 2007), but what is interesting here, is that the very idea of what to cook is delegated to the DV device, not only this, but DV devices are seen as central components of meal work.

[INSERT PICTURE 1]

Rosanna's story is telling of the ways in which these devices are felt as extending ability to generate meal ideas. Rosanna searches for '*something spectacular*' and finds '*really good ideas*' about how to get the carving done and the kind of '*coins and sweets that look like jewels*'. The language that Rosanna and other participants used talking about how *YouTube* or an App gave them ideas of what to cook is indicative of the ways in which the device is perceived as extending the mind. Twenty four year old postgraduate student Maya told us, "*if I don't get an idea by myself I will go the internet and see what kind of recipes were there*". It was also common practice for our home cooks to input the food produce they had available in their cupboards and fridges in the hope that the device would magic up some inspiration – some even had specialist apps like *Jamie Oliver's*, *Nigella's* and the *Hummingbird Bakery*, which "*sort of works out what you want to make*" (Maya, 24).

### **Coupling Work**

We can see DV devices as extending the mind of our cooks, augmenting the cognitive resources mobilized in cooking, but requiring work on the part of the cook to access and sustain. By 'extended' we mean that the device is active in driving the cognitive process that augments or extends the cognitive capability itself (see Clark and Chalmers, 1998; Menary, 2010). This is seen as a form of epistemic action (Kirsh and Maglio, 1994) which demands that links or 'coupling' between mind and device are made to constitute a new cognitive system and in turn, enable or enhance the practice. The process of coupling is useful here, as it helps us bring into focus the kind of efforts that are needed in linking cooks to their DV devices, and then to other appliances and people involved in the configuration of practice. While the notion of

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coupling continues to be at the heart of animated debates within the field of psychology (see Menary, 2010) what we report on here are the ways in which our home cooks expressed experiencing such devices as augmenting their ability to think about and do meal projects. Specifically, we found that most of our home cooks felt ‘as if’ they were linked to their DV devices at all moments of the cooking process – in thinking about what to cook, the prepping, executing and documenting of their results.

One of the home cooks we spent time with was Jim, a young Vietnamese postgraduate student. His kitchen was compact and replete with food and utensils. He had been cooking at a more ‘skilled level’ since his early 20s when he started to look for new ways of cooking, finding new tips and becoming better at using the equipment he had in his kitchen. He noted how with competence came a desire to upgrade his utensils. At the time of our interview, we noticed how his *iPad* was placed in a prominent location next to the chopping board, alongside food produce and in close proximity to the cooker. When he cooked he *iPaded*. He subscribed to a number of *YouTube* channels, like *Gordon Ramsay* and *Food Wishes*, which he routinely checked to find inspiration for his meals (see picture 2). All these preferred resources had been saved in his *iPad*, many of them were held in Apps or ‘cooking utilities’, like *EverNote Food*, *Foodily*, *Knorr*, and *Cookbook*. In telling us about *Evernote Food* he said:

*Here are some apps like EverNote Food... I can write down what I have cooked before and record their recipes, the proportions, my feelings after I ate it so that I can keep it for later, try and learn from my previous try.*

To Jim the writing and learning from past mistakes was important, he often complained of the many times he had wasted a good piece of steak because of his ineptitude. Ruining steak he explained had been “*such a memorable experience for me when I failed making it. So the following times that I tried making it I usually took*

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*note of the things that I need to remember*". When he stated he 'needed to remember,' he was referring to a remembering that is performed in conjunction with his *iPad*, or put differently, when his mind was 'coupled' to his *iPad*. All that he needed to remember – cooking times and food handling tips – were carefully annotated in his *EverNote Food* app, such that the *iPad* becomes part of what Clark and Chalmers (1998) refer to as the cognitive resources that he brings to bear on his everyday cooking practice.

[Insert Picture 2]

Achievement of this redistribution of cognitive capacity hinges on the coupling work demanded first from Jim, to activate the device as a coupling device as described by Clark and Chalmers (1998). *Evernote Food*, a proprietary software designed to aid note-taking and archiving in particular, was the target of extended coupling work. Jim had three bespoke sections where he documented his meals – what he liked and disliked, adding photos of his achievements, and building recipe books and a diary where he annotated his feelings after eating them. For those that didn't recur to such involved curatorial practices, the coupling process was initiated in an ad hoc fashion. Many simply 'bookmarked' recipes, saved them to 'favourites', pinned them to *Pinterest*, uploaded them to *Dropbox* or reported that it was easy enough to find the recipe you found last time, they simply 'googled' key words and recognised the sources they had initially used.

It is important to highlight the fact that if DV devices are to be considered as extending minds, they must as Clark (2003, 2010a, 2010b, with Chalmers, 1998) emphasises in his work, be at all times successfully coupled or linked to the people who use them. Meaning that they must be reliably available when needed, the

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information easily retrieved and endorsed more or less automatically (Clark and Chalmers, 1998). So it follows, if our home cooks are to remain coupled to their devices, they needed to establish the link or couple with the device. Coupling work was made up of a series of tasks that the device operated in the automatic, reliable and seamless way described by Clark and Chalmers (1998) – ‘bookmarking’ content, ‘backing up’ content to *Dropbox*, pinning recipes and ideas on *Pinterest* and use of specialist software like *EverNote Food*.

### **DV Devices and New Cycles of Discovery**

That there is a process through which coupling is made and maintained, shifts our understanding of DV devices not only as the centre of epistemic action (Clark, 1998, 2010a, 2010b) but also as ‘epistemic objects’ (Knorr Cetina, 2001). By that we mean that DV devices as objects to probe with are open ended and complex. Their lack of objectivity and completeness makes them oblique or always partial, which provokes a further cycle of discovery – for instance the search for better, more original recipes, or clearer tutorials.

The search for a recipe opens up the possibility that a new process or ingredient unknown before require the cook’s attention, and thus ignites a whole cycle of discovery. During the interview process it became apparent that once scrutinised, recipes searched and found threw up new projects and tasks; for instance a simple search for gluten free bread led Elizabeth to a discovery of learning about coeliac and specialist ingredients. Elizabeth, Mum of five children and part time worker at a well-known department store has an ample kitchen with a central island, from where she showed us how she used her *iPad* when preparing meals. Elizabeth had recently entertained a group of friends, one of whom was a coeliac sufferer who she was keen to prepare something special for. She spent much of the interview telling us about

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gluten free bread she baked for the occasion. The search for a recipe for gluten free bread initiated episodes of discovery, where new leads about how to prepare a proper loaf triggered an unfolding of related questions and searches. She explains:

*Knowing what I like and what I've heard of, sometimes I'm not always very good at using things I haven't heard of or not knowing what things are. It's like with gluten free cooking, there's a lot of talk of xanthan gum, I haven't got it yet and don't even know where I'd go looking for it but I need to start asking the questions because to make a loaf of bread, because that obviously was done with buttermilk, but to make a loaf of bread with gluten free bread flour and yeast and things like that, a lot of people on the internet have said use this xanthan gum to bind it more, so I thought I have to go and find out what that is.*

Given their potential to unfold and increase the complexity of meal projects and tasks, temporary and relatively stable configurations, where knowledge, competence, related artefacts and available produce, must be found. It is also apparent that DV devices as epistemic objects need to be sufficiently stabilised or made known to the user if they are to retain their role as extending cognitive ability. Elizabeth had learned from previous experiences that *BBC Good Food* was a trustworthy source, there she had recognized the names of celebrity chefs whose books she had and whose recipes she had already trialled. She had also learned how to use rating systems to narrow down choices and then read related reviews (see picture 3). She told us:

*I think what I'd done was, I'd put 'gluten free' and it came up with BBC Good Food and that was one of the things that had come up on BBC Good Food, if you click on that it comes up with about 20 recipes you see, that's where I got the bread from, though it only had a 3 rating but if you read it, if you go down*

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*here, some people have sort of said... I kind of, I read that and I know it sounds silly but when you read a review you look at the language that's used and it gives you an indication, I know it sounds silly and it might sound a bit snobbish, but you kind of get an indicator to who's cooking and I think that, I do take all that into consideration, who's cooking it, how they might've done it. Quite a lot of negative there where everyone around her or him was saying lovely things, nobody was saying anything bad really, I mean yes it says 'soggy, none of us could eat it' but to me that sounds like it hadn't been cooked long enough, it goes like mousey because it's buttermilk, when you mix it looks like a mousse and when you pour it in I was thinking 'oh my God what's it going to be like?', but you can smell it as it's cooking and it's delicious and it was very soft when it came out so I just thought I'd leave it to stand and it is a very soft texture.*

Note how Elizabeth picks a recipe with a general rating of 3, because she attributes this relatively poor rating to ill-informed comments, judged so because she 'gets an indicator of who's cooking' and 'how they might have cooked it', that are out of step with others' comments. Her own cooking knowledge is mobilised to explain how a negative reviewer hadn't baked the bread long enough, noting how the bread goes 'like mousey because it's buttermilk' and therefore a premature bake would produce a soggy result. The chosen recipe was saved in her *iPad* and subsequently revisited when she wanted to bake it again for her family to enjoy. The same procedure was also repeated with tutorials she found and trialled on *YouTube*. This again, was done by way of not having to remember recipes by heart, knowing that they could be retrieved at ease.

## CONCLUSION



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In these emerging configurations, the DV device operates as an ‘extension of’ our cooks’ minds (Clark and Chalmers, 1998), augmenting their capacity to come up with meal ideas and retain meal preparation knowledge (recipes, dinner party ideas) and reducing the cognitive load involved in meal preparation. Devices like laptops, tablets and smartphones extend our cooks’ cognitive processes (imagining and remembering) and rely on the successful coupling between devices and cooks. This, as we found, required substantial investment from our home cooks who had to continuously gauge the value, relevance and trustworthiness of meal preparation knowledge they came across. It is this concept of coupling that we see as instructive to help us account for the complex configurations that result from the integration of DV devices in the practice of cooking. We also note how, in these emerging meal practice configurations, devices absorb or take over tasks previously undertaken by cooks and other material artefacts, causing displacements and re-alignments. While we purposefully did not focus on the teleoaffective dimension of practice or the role of other people in them, we encountered plenty of evidence to indicate they were important links. Future research could bring to the fore this social dimension, highlighting how DV devices make present new social links in the meal practice, for instance providing an audience for successful meal projects that are showcased on social media and sourcing inspiration from other people connected to DV platforms. Interaction with DV devices often presupposes a high level of interaction with others through these devices, which are little known and deserving of attention.

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**Table 1: Participants**

<b>Pseudonym</b>	<b>Age</b>	<b>Gender</b>	<b>Status</b>	<b>Nationality</b>	<b>Type of cook</b>
Katherine	35	Female	Co-habiting, no children	British	Adventurous, experimental
Gina	35	Female	Married, no children	Polish	Likes experimenting, lacks confidence, prefers 'simple' meals
Sophie	24	Female	Co-habiting (with Richard), no children	British	Prioritises cooking, experiments
Richard	28	Male	Co-habiting (with Sophie), no children	British	Prioritises cooking, experiments
Viv	46	Female	Single, no children	British	Good cook, likes to follow recipes
Nicki	41	Female	Married, 2 children	British	Hearty, traditional, competent cook. Lacks finesse.
Rosanna	31	Female	Married, expecting first child	British	'Cowboy Cook' – experimental (cooks based on ingredients in cupboards)
Hannah	41	Female	Married, 2 children	British	Adventurous, competent; loves food and cooking
Elizabeth	47	Female	Married, 5 children	British	Competent cook, 'cheats' when busy
Paula	47	Female	Married, 1 child	British	Good baker, likes to be inventive
John	45	Male	Single	British	Competent cook
Maria	28	Female	Married, one child (baby)	Columbian	Good cook, better baker. Lacks confidence.
Ike	26	Male	Single	Thai	Confident cook, enjoys cooking,
Sara	36	Female	Married (to Gino), no children	Italian	Experienced enthusiast, cooks from scratch every day
Gino		Male	Married (to Sara), no children	Italian	Experienced enthusiast, passionate about cooking
Angela	23	Female	Single, no children	Canadian	Fairly average cook in terms of skills
Maya	24	Female	Single, no children	Canadian	Proficient baker, less proficient cook, likes to follow recipes
Claire	22	Female	Single, no children	British	Keen baker, good cook. More skilled in baking than cooking
Dave		Male	Single, no children	British	Adventurous, wants to develop technical cooking skills
Abby	23	Female	Single, no children	British	Recent enthusiast
Kristin		Female	Single, no children	American	Adventurous, competent, excited about cooking
Kumi		Female	Single, no children	Japanese	Needs to plan cooking, not creative
Jim	24	Male	Single, no children	Vietnamese	Competent cook, loves cooking
Julian		Male	Single, no children	British	Began training as a chef
Ana	25	Female	Single, no children	Russian	Creative cook
Kate	22	Female	Single, no children	Norwegian	Loves baking, likes to put her own twist on recipes
Lucy	29	Female	Co-habiting, engaged	British	Creative cook, makes use of what she has, doesn't like to waste food
Vicki	25	Female	Single, no children	British	Experimental, doesn't like to follow recipes
Lara	26	Female	Married, no children	German	Careful cook, sticks to recipes

Picture 1- A Screen Shot of Rosanna's Facebook entry showing her Pirate Cake



Picture 2 Jim Following a YouTube Video



Picture 3 – Screen Shot of Discussion Board Used by Elizabeth to Learn about Gluten Free Bread

