Sit, Eat, Drink, Talk, Laugh
Dining and Mixed Media

Edda Kristín Sigurjónsdóttir

Supervisor: Erling Bjarki Björgvinsson
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Thanks!

The essence of this work has in some sense been a tribute to my family, a platform to communicate everyday family stories, memories, traditions, and manifest thoughts I have gradually come to realize, some of which I have carried for quite some time and others I came to realize during the course of this study. I hope others can use this work in some way, or work further with the results of this study of qualities in everyday life.

So first and foremost thanks to all generations of my own family!
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Background

While most people were at work I wondered down to my local café and decided to spend my workday there. Though I did not know anyone it felt social as there was a lot of people chatting, eating, having coffee and doing some working. Music played and I could feel the traffic outside. But it did not bother me, it was nice background noises that kept me focused. The coffee was nothing special but cheap and felt quite homely. The back of my chair kept falling off, reminding of the story of this one chair. I wondered how many people had sat on it. What they had talked about. How many times I had sat on it. A girl came with a backpack and a laptop in her hand and wondered around looking for a plug in. From previous experience I knew those were only at few spots and invited her to join at my table and share the power plug next to it. Soon my heart starting beating faster, I started sweating and had a hard time focusing. The table shook from the harsh typing of the girl who systematically took a few seconds break from typing but never took her eyes off the screen. Especially when she corrected her typing, she hit the erase button really hard, causing extra shaking. The girl who was aggressively chewing on nicotine gum and had stuffed her ears with neon green earplugs contaminated the air with her stress. I lost all sense of concentration and the chewing and shaking dominated what had been subtle and inspirational background noises.

The same day I saw in the news that a one year old girl had died in the back of her family’s car as her dad had forgotten to drop her off at the day-care and left the car with the baby outside his workplace. She died slowly from the summer heat and dehydration. I wondered about all the stress people suffer from and at what point it starts to take over your life or become dangerous as in the accident with the poor little girl whom I get reminded of each time I have a glass of water. The scary part being that the father apparently is a super normal middle class guy who I imagine was simply way too stressed out. And the girl was just like me.

This thesis is a study of mundane moments and how everyday life can be enjoyed a little more. It relates to my interest in the idea of ‘the Good Life’, that has had my interest since I worked on a tiny project related to the subject some years ago. It made me start thinking about life from a new perspective. The question whether there is such a thing and if it can be mapped or if it is totally individual. What is it? I want it? Am I already living it? After much consideration of what the good life could consist of I came to the conclusion that the few but remarkably big decisions we make throughout our lives have stolen the scene and overshadow the qualities of daily life. I found a little animated video later that visualized these thoughts. Now please take a moment to see the video, it is just over 2 minutes (Music and Life, based on speeches by Alan Watts: http://www.theworldinstituteofslowness.com/page4/page4.html ).

Three minutes later...
We are always aiming at making these decisions, preparing us for the few but BIG events that happen throughout our lives. In many ways our society is very authority centered. The individual is expected to live in a certain way. The day a baby is born, a lifelong planning starts. As we get older life gets more complicated and the idea of disregarding time or rules becomes highly inappropriate. We learn to live by rules that are centered around efficiency and planning. Planning that always aims at preparing the individual for the next step in life. It demands us always to think ahead instead of enjoying the moment, plan instead of being spontaneous, act systematically instead of intuitively. Being sincere, playful or letting the imagination go wild is no longer appropriate and contradicts expected behaviors. It is not expected to sing on the bus, dance in a public square, laugh when somebody farts, scream like a lion, run for no reason, talk to strangers, eat food that is passed the “best before” date, love the rain, hug only when you feel like it, BUT to use the time efficiently and prepare for the future. A child naturally follows its intuition and in many ways lives and thinks in a way that I consider to represent elements of gift-fully living the good life. As an adult, childish equals foolish, naïve or possibly artistic or hippie. We are all born with the ability to enjoy everyday qualities but we gradually unlearn in blindness according to society’s demand and we do so uncritically.

I wondered how on a tiny scale people’s mindset could be twisted round and attention brought to the qualities of everyday life. The essence and quality of our lives ultimately depends on being aware of and appreciating those. Thoughts about some daily qualities from friends, family and myself included:

Enjoying the warm shower a little longer, the gloomy sky just before it rains, spotting a melody in the cry of your tired children as they each hang onto your legs – one with a snotty nose – the other with porridge in his hair, a quiet moment reading, a new day’s first cup of coffee, the rain banging on the roof as you sit inside warm and comfortable, your kids cold feet as they come in after playing – happy as ever, friendly chat with the cashier in the supermarket, a glimpse in a partner’s eye, familiar voices on the radio, looking up instead of down when running, having leftovers from the night before, the smell and feel of the morning paper, fresh and ironed linen on your bed, the smell of hot chocolate and the tingle that runs through your body as you take the first sip, the feel of soft moss and a cat’s fur or your partner’s bearded cheek.

What I am most interested in is to train the mind in absorbing these valuable details in the environment.

These little moments are what Karen Lise Mynster, a Danish actress, discusses in a radio interview on the Danish national radio (Vita, P1 22.07.09, http://www.dr.dk/P1/Vita/Udsendelser/2009/07/05162512_1.htm), as poetry in daily life, and are the essence of this little study. “Poetry reminds us of things we should not miss, otherwise we cheat ourselves”. She refers to the legendary opening scene in American Beauty, (feature film directed by Sam Mendes 1999), where the main character watches and videotapes a plastic bag moving in the wind, a scene that defined the main character and categorised him as a weirdo. Mynster says that:

*poetry constantly surrounds us if we only can be bothered to open our eyes.*
She names an example of her passing by a public square in Copenhagen where a boy circled round on his one wheel cycle and how beautiful it was how he moved. She reminds the audience that

_poetry in life does not have to beautiful, rawness, sadness and even flirting on the edge of grotesque contain poetic elements and reflect life as it is. What we need is tools to find those._

_We can use our ears and eyes to start with._

She refers to morning singing in primary school and how sentences from certain songs still pop up in her head because of their beauty and that noticing for example nuances and individual sentences in the spoken and written word enriches life and can work as balsam for the soul (Mynster 2009).

It always seems as if people either have to go through a dramatic experience such as an accident or loss, practice yoga or some form for meditation to fully appreciate life and enjoy it to the fullest. The rest of us seem to let time pass and precious moments go by unnoticed. Having lived a rather simple and problem and pain-free life I am interested in exploring how appreciation for daily life can be encouraged by other means than the previously mentioned. It may well be that I am stuck in these thoughts because of fear of something happening so that this study is a form for self-therapy of some sort, but these ideas and in fact worries have haunted me for a long time now and I feel plain sadness when I think about all the good things that people allow to pass them by.

_During cultural night in Reykjavik (August 2009), a group of people in the main street offered hugs to people. They spread their arms towards people that approached and with a few words and a print on their t-shirt, “u want a hug?” they invited to share their warmth to passer byes. Gladly I accepted the offer and found myself hugging a woman I had never met before._

I thought this was a nice experience, quite intimate and unexpected but nice. Afterwards, I noticed that most people either walked past without saying a word, not even “no thanks”, or walked in a big loop around the hugging people. Hugging a stranger in bright daylight, even though it could be nice and you wanted to, seemed to cross most people’s limits. I am sure that whether people accepted a hug or not, this intervention in their walk down a street, encouraged some reflections. What I observed that day concerned what showed to mirror some of the interesting findings of this study.

Emphasising qualities as opposed to solving problems is one approach to improving life and fits with what Mynster discusses as the importance of paying attention to qualities in our daily life as a way to live better. This relates to central issues in interaction design in the way that it focuses on improving life, squeezing the best out of a situation, building on existing practices and qualities and enhance those. What is unusual is that instead of correcting or solving a problem, focus is on celebrating what already is good. This study is an alternative to timetravel. I want to challenge people to slow down for a moment. Enjoy this moment, appreciate its subtle qualities and bring greater focus to the little moments that constantly happen.
This study focuses on celebrating the mundane, the average, the routine. My thoughts started developing around how everyday moments could be enhanced and enjoyed a little more and as they happen rather than only romanticised afterwards as fond memories. Routines are a great part of our everyday lives. During those routines, potentially enjoyable moments pass us by, many completely unnoticed. I will look at how intervening a mundane act related to food and dining in a social setting can contribute to increased awareness of those daily moments and how a reference to online social networks can support these.

This study is aimed at those who have some interest in food or food related situations and takes a starting point in food in families. My research statement evolves around the use of digital media in a dining situation as a way to enhance a moment and bring attention to the enjoyable, comic, ambiguous, spooky, seductive, soothing, refreshing and many other subtle qualities in mundane activities. Ultimately the aim is to train the senses in becoming more aware of the present, enjoying the moment, living a little better, loving a little more, living a little slower, laughing a bit more often; a kind of an “enjoyism” as if it were a philosophy, a movement or a practice.

Dining is a multi-sensory experience
Food related situations require multiple senses being active simultaneously, especially during cooking and dining, that are multi-sensory experiences. Eating with the fingers (like for example children, Indians), with the eyes closed (like the blind or in darkened restaurants) or in silence (such as the deaf or prisoners in Guantanamo) or with load music (like during a music festival) all affect the experience of eating. I will not go into cultural differences of consuming food in this paper but bear in mind that in increasingly multicultural societies of modern times we each and all borrow from each other, creating a broader spectrum of food related experiences.

As I started the journey of this work I thought that it would be about cooking as much as dining. It showed though that the last that was needed was yet another medium to share recipes. The social aspect of food evoke much more interest and showed to be enormously rich and open up for many design directions. I was interested in exploring food and dining as a richly embodied social situation that both is a sensory experience and a fragile composition where the qualities and limits of digital media could be tested.

Food and dining in interaction design
The area of food that has been explored in interaction design is very limited. Most of the projects and
research I have come across evolve around helping people adapt healthier lifestyle, choosing from the overflow of online recipes, creating awareness around sustainability or something along those lines. These have a primary focus on correcting human behaviour and deal with functional, environmental and instrumental problems. Very little has been done in the field that relates to more positive aspects of food and dining, in particular in the domestic environment. What I am interested in studying are qualities related to food and dining and how digital technology can be incorporated in complex social situations. My goal was to conduct some experiments where possibilities of digital technology were explored in an attempt to enhance a moment in a dining situation, and invite to shared social experiences. I was curious to explore hearing as one of the peripheral senses in dining and looked at sonic studies about homes that similarly hinted at an unoccupied design space in the domestic environment.

When interaction design enters the domestic environment, whether in the field of food and dining or some other field, developments in ambient computing become valuable. Those allow digital technologies to fade into the background and keep the focus on the aesthetic qualities in a home and in daily communication. Most dominant issues in ambient computing have been personal and concerned privacy issues, while others have related to functional aspects such as lack of fluency between the ambient interface and the existing activities. What I will look into is how ambient computing can be integrated in a dining situation as a peripheral channel that challenges the ongoing social situation. I will explore dynamic use of an augmented mundane artefact and potential interruption it may cause when introduced into a fragile context like dining.

*Why food?*

Because it is everywhere, unavoidable and sensual. I love food, and not only for the sensual experience, but also the social experience. I love making it, thinking about it, deciding what to make, standing in the store with a big selection of products, chatting to my local grocer, to my mum about what to make for that dinner, and grandmother about the secrets of the family dishes. The scent of food spreading around the apartment while I cook or bake, tasting food, serving food, setting the table, sharing it, giving it, talking about it and finally eating it!

An enormous amount of knowledge related to food and traditions, cooking methods, ways of preparing meals, a party, birthday, monday meal and so forth, is embedded in generations in families. This knowledge is built on years of experimenting, reflections in the kitchen, readings, sharing of thoughts, testing different ingredients and hours of consuming food in all forms while discussing it, before, during and after meals. I have always been aware of the big role that food, and what is related to it, plays in my life and my endless need to communicate it. And with all this come memories.

Food is one of the elements that is intertwined in daily routines. Eating is a non negotiable activity and is for some a necessity while to others it is pleasurable, even luscious. Food can be a creative and symbolic medium but it can also be demanding or frustrating. It has a tremendous cultural value, is a great medium for expression and is a carrier of meaning between people, places and generations. Many families live through food and mine is one of them. Recipes and knowledge are passed on
between generations and countless memories are attached to food experiences. Food and food related situations connect people and can be like music, (or dogs or smoking), a medium to cultivate social relations. It is dining, as this social space around food that I am particularly interested in.

**Research Question**

I realize that I pose an awful lot of questions and of various scales. Some so broad that a discussion around them would fill a library, or a thousand kitchens. Given that the project evolves around positive aspects of food in everyday life, I did not want the proposal to address consumerism, environmentalism, health and nutrition or any other debatable “-ism” but focus on what could be called for “enjoy-ism”.

What creates and affects a food situation is a rather large number of factors. Apart from the food itself and the history behind it, the social setting, the interiors, the table setting, cutlery and soundscape all play an important role. I will look into these and create a proposal with the broad perspective in mind. It is not all about talking though, but trying is the most important which is what I intend to do and try to propose an answer to whether common social situations can be enriched by intervening a mundane act we normally perform without much consideration. My key question is therefor in line with

> how ambient media and social media can be integrated to social settings to bring greater awareness to the moment, and in particular how interactive sounds can enhance everyday situations and make people more aware of their qualities.

I decided to use sound for my experiments and link short soundclips to the act of pouring liquid from a pot. In addition to this I invite to peripheral communication by referring to status updates in the online social network Facebook, as a familiar act where people reflect upon their current moment and translate those to a physical interface. The two works are closely related but could be regarded as two independent works that only exist at the same time.

Ultimately the work is about training the senses in absorbing subtle qualities in mundane activities in order to enjoy daily life more. Moments are countless, happen constantly and overlap each other. It is about where my consciousness is during this time, if the senses are truly turned on or if they need to be awakened and tuned as if tuning into a radio channel. A superior question would therefor be in line with

> How people’s senses can be trained through interventions in food related situations to more actively and consciously engage in the present, where I have primarily focused on how short soundclips can be used to bring closer awareness to a simple given act

**Thematic limitations**

The field study is focused around family situations but experiments related to the design proposal were
conducted in two different settings, a public and a private setting. Three families from my personal network participated in the field study in addition to my own that I turned to for material and inspiration. A number of other friends, colleagues and family members contributed with material via e-mail in response to a call I sent out in my personal network. Friends, and guests at a creative design and business conference in Malmö, From Business to Buttons, participated in two interventions where a pair of works were tested in form of interventions.

The focus is on urban living and domestic situations where food in families was the starting point. The essence is homemade food and activities that evolve around it. The scope is personal and partly is this study a documentation of food and food related activities and situations in my own family. Food and dining has an enormous value in my family and I was curious to explore this in other families as I felt there had to be hidden treasures in those as well, that remained embedded in people’s memories, performances and word of mouth. This is why I turned to those closest to myself and have in this miniscule study explored some of the enormously rich material that I gathered in the field study.

Readers guide

Research approach explains my methodological standpoint, and explains a patchwork of methods that I lean towards and has shaped the process of this work. A designer has to step into various roles which is why I draw in inspiration from various fields such as ethnography and sociology.

Related work is centred around mapping the area of food and dining in interaction design. Projects from other fields that were related to social aspects but did not relate to food are introduced as limited has been done in interaction design that concerns the social aspect of food.

Field study - treasure hunting introduces the field study and is one of the central chapters of this work. There I aim at painting a rich picture of the gathered material.

Early concepts maps a few early concepts that are introduced as to show the broad spectrum of design directions there are to explore within the relatively unoccupied field of food and dining in interaction design.

Two interventions, in a private and a public setting leads the reader through the two interventions that I conducted, first in a public setting during a conference coffee break, and secondly during a private dinner party and a discussion on the results of those.

Discussion is where I discuss central findings and results and conclude the work.
Research approach

A design process is complex and requires the designer to step into multiple roles in each phase in an attempt to reach the goal of successfully intertwining design in existing activities, creating dynamics in the use of it. An important first step is to thoroughly explore the design situation, look for qualities to work with and keep an eye on potential design openings. The essence of such explorations is ultimately always to have the totality of a situation in mind, as one element does not exist or function independent of the others.

This study has to a large extent evolved around complex social situations and how new media and Information and Communication Technologies (ICT) can be integrated in domestic environments which explains the width of approaches discussed. I will in this chapter draft the methods I leaned towards, and will try and do so in a chronological order, starting with the gathering of material for the study, leaning towards ethnographically inspired methods, moving towards the explorative phase and the bridge between ethnographically inspired field work and design. From there I move towards implementation of developed design proposal and close the discussion with words on assessing the results and briefly reflecting on the work process. I will introduce key sources of inspiration that together have been the matters of my methodological composition. First, I wish to introduce how Stolterman and Löwgren define these steps in a design process as five headings.

The design process in steps

Stolterman and Löwgren (2005) divide their discussion of methods and techniques into five headings, each one applying to a step in the design process. They emphasise that steps need to be taken back and forth sometimes. Inquiry focuses on gathering material and becoming knowledgeable about a situation and explores the play between existence and potentiality in relation to the temporary and the timeless, the space where design takes place. Exploration deals with working with the found material and how it and potential directions can be explored. Generating multiple solutions that build on different principles and cover a large part of the source material is desirable according to Stolterman and Löwgren. They stress that exploration is a whole range of tasks, where diverse techniques to choose from are introduced to the designer, adapted to each situation and “skillfully” applied. Composition is about focusing on and becoming more specific in composing the different elements of the design, Assessment is about critically reflecting on and testing the work and finally, Coordination is concerned with managing and organising the design process.

In their discussion on methods, Löwgren and Stolterman (2005) describe methods as carriers of
history and competence. Schön describes these as the designer`s repertoire, a collection of methods that he has tried and successfully used (1987). I looked into my repertoire of what I felt were successful projects and work-processes and used from those what I thought had been successful methods that had returned rich material and creative design proposals. When looking back at my process and looking closer at the methods I had had in the back of my head, I see a patchwork, created by pieces of methods, each piece selected for a specific situation, some more successful than others, but all chosen for a reason, some intuitive, others built on previous experience.

A Personal Approach
This project and its process has by no means been objective but indeed very subjective. The content of this thesis is highly personal. I chose to turn to those closest to myself, family and friends, when gathering material for the study. The fact that I personally know all of the people who have contributed to this study, in one way or the other, did that issues of trust or ethics never arose. All who contributed were confident with contributing to the study and gladly participated. I made it clear that if any of the material was to be used directly outside the frames of this study, they would be informed. This has not been needed yet.

I, as a part of this personal network, became an active participator in the situations, as that was my familiar state in the social situations that were to take place. Through the whole process I strive to step in and out (participate and observe) of the context to maintain an overview of the setting at the same time as I was deeply involved in the ongoing activities. Being self participating meant that I did not have to establish myself in a new context, get to know the people or gain their trust which is fundamental to understanding the social context the design is to address. Taking a personal standpoint and work within own personal network meant that the gathered and produced material was very personal. People in the field study shared fond memories, memories of awkward moments, favourites and so forth and gave me a valuable insight into their daily life. I know a part of their personal network, creating that we had a shared understanding of various things we talked about. I aimed at keeping a focus on asking about the obvious at some occasions, where I felt something was to reveal, as well as question the unexpected. The conversations invited to an insight from new perspectives, as we now were formally discussing certain elements that often are not part of the daily discussion. Reaching this stage in a relationship where such a personal discussion can be taken up and comfortably shared demands a great deal of work when introduced to a new setting. It showed nevertheless that we had enough to learn about each other, and that is equally true for conversations with members of my own family.

I conducted interviews with three women, who all are mothers with young children. They were also asked to document a daily dining situation. We had a follow up talk after I had looked through the images. I conducted one interview with three generations of my own family and looked through my personal family album as well as memories and everyday activities in my own home. The third and last part that shaped the material in this study were replies to an e-mail I sent to 55 people, all of which I know and are either members of what I define as my family (which is beyond blood relations and evolves around people I have known for a long time and have a special personal connection), friends or acquaintances or
colleagues. The mail called for stories that related to food in some way. The gathering of the material stretched over a two month period. The field work and the implementation of the design happened in separate contexts, that is, the design was not implemented in the homes of people from my field study.

**Facts about participants**

In response to the e-mail I sent out, I received nine replies from people, (hereafter referred to as “respondents”), living in Sweden, Iceland, Denmark and Scotland and of three nationalities, Swedish, Icelandic and American. All are members of middle class families with average incomes, aged 26 – 70 years old. The e-mail asked for stories related to food and explored people’s notion of food as a meaning carrier and returned a very rich body of work. By using e-mail, people were given time to reflect upon the field and share if they wanted to contribute. A further e-mail correspondence developed in some of the cases were food related matters were discussed and deeper insights shared.

The interviews with the three mothers, (hereafter referred to as “interviewees”), were conducted in their homes in Copenhagen and Reykjavik in march 2009. Age ranged between 28 and 38. All had two small children, (aged 6 months to 6 years old), at the time the interviews took place. All are Icelandic (one has a Danish step father) and share the experience of having lived in more than one country, all of which have spent more than 5 years in Denmark and Iceland. One has moved to Reykjavik, Iceland where the interview took place while the two others live in central Copenhagen. All have partners, where two are married. Two have a higher educational degree while the third is finishing a higher degree within the next year. I visited during a quiet period of the day / evening. Each interview lasted around 40 – 60 minutes. I took notes during the interview and wrote down more detailed descriptions right after the meetings.

The interviews were primarily centred around daily dining, which nevertheless drifted back in time. I was interested in getting a good and rich insight into a mundane dining situation to evaluate what the core values of the situation were. The women were asked to document the preparation of a daily meal and the dining situation itself, which they all gladly did. It evolved so that one of them documented both a morning and an evening situation as she felt that the morning situation was much richer and the family’s quality time. Already there it showed that the social aspect is of high value in a family context and often more important than the food itself. The images gave an interesting look into what they considered as part of the dining situation and showed to be very helpful in the development of this work.

The three generation interview (hereafter referred to as “three generation interview”) took place in Reykjavik in march 2009, in my grandparents kitchen where the family has shared endless moments ever since I was born. It lasted around two hours. It was arranged so that my grandmother (born in 1929) and grandfather (born in 1930) were present at first, while my mother (born in 1952) and sister (born in 1985) joined at a later point. We shared lunch while we talked, a familiar and casual setting in their lovely kitchen. My grandmother went to a household school in 1950 (I attended the same educational program at the same school 50 years later) and educated from the school of life, my mother is a nurse and my sister a student at an arts college. All share a great interest in food in all forms although a clear generational difference can be seen in how that interest is practised. The three generation interview consisted of ele-
ments of discussions around daily situations and memories from the past. Talking about food and dining brought to daylight numerous stories and bits of knowledge. A pattern of development was discovered where some traditions and tendencies continue generation after generation while others consciously are compromised to fit changed needs and wishes.

Early mapping of personal food experiences

As I started this journey I made maps of what I feel are important elements of food and food related situations, as a step in analyzing my experience and values. One part was with single words and the other with images and text where each image represented a valuable element. The two maps visualize values and ideals in relation to food and dining that are central to me. In one way it is part of creating my self identity as well as a personal documentation on the role of food and dining for me and my family. I continued to create maps throughout the work process as a way to keep an overview of the material I was working with, potential design openings, qualities, themes, where I was at, and so forth. The early maps of my personal food experiences helped shape questions and topics for the interviews. Elements from it also shaped the e-mail that I sent out.

Ethnographically inspired research

An central part of any design process is to gather material that paints a rich picture of the context in focus. Central to my inquiry were ethnographically inspired field studies, that gradually have gained an acknowledgment in design as a fruitful approach to explore the multiple layers a design situation constitutes. Ethnographers are concerned with understanding human behaviour in communities while designers are interested in supporting or correcting activities in these communities with their designs. How the gap between ethnographic field studies and design should be bridged has been debated. Blomberg (1993) proposed designers and ethnographers collaborating in understanding a particular situation, thus avoiding language and perspective differences. As I was not privileged enough to have an ethnographer by my side, I conducted ethnographically inspired field work and leaned upon Blomberg’s four main principles as a guide, natural settings, holism, descriptive understanding and member’s point of view (1993, p 125-129).

IDEO, a design and innovation company (www.ideo.com), has similarly worked towards engaging the two disciplines in design processes, but from the opposite end – the designer’s perspective. Their aim has been to move the tendency of design as a late stage add-on to wrap an existing idea in a nice aesthetic packaging, to develop thorough understanding of a situation as a key to innovative design products and services (Brown 2008). Brown emphasises personal characteristics that are useful in an innovative process as being empathetic, use integrative thinking, be optimistic, be experimental and seek collaboration.

Contextual interviewing

Getting access to the field is often an obstacle in field work. The people I interviewed were all from my
personal network, and this was therefore no problem as complete trust was already established between me and my interviewees who were all happy to contribute. The interviews were relaxed and informal and we enjoyed a cup of coffee or tea and some goodies as we talked, adding to the cosy atmosphere. It was important that the circumstances were familiar and the atmosphere relaxed in an everyday setting as the topics discussed were personal and included a family dining situation, memories and family stories. This made it easy to refer to certain spaces in the flat and use objects of value to connect to a story or evoke memories (Blomberg 1993). Being there, in the same room, drinking the same coffee was part of the interviews and contributed to the work as the moments became intimate and rich conversations unfolded. Their homes were therefore the ideal place to meet where artefacts, photographs and cookbooks that may relate to our talk were at hand (Blomberg 1993). All of the interviews took place during quiet moments between some of the busiest hours of the day in a family. All turned out to have a personal cookbook they gathered recipes in and memories related to those were discussed. All the interviews unfolded nicely while the talk unavoidably drifted between the present and the past, returning countless and priceless stories and material that this study builds upon.

**Documenting the field work**

Borrowing from ethnography and using various ways to document a situation, I aimed at catching a rich image of each situation, both during the field study and the interventions that followed. Blomberg (1993) discusses various methods of documenting and ways of gathering material in her study about the relationship between ethnographic work and design and how the two disciplines could benefit from each other.

**Digital images:** Taking still images sometimes reveals something unexpected or adds to the knowledge-base as well as pictures remind of certain situations and experiences. I asked the three mothers I interviewed to take images of a dining situation which revealed different, and in fact more interesting, moments than those they had described, (examples would be a father scratching one of the kid’s back in the middle of a meal, the kid pausing and listening to music while waiting for the food or the father scratching his head with his fork after the meal and everyone had left the table but him).

**Video documentation:** Background sounds and verbal communication, action and reaction, physical movements etc. can be further studied and repeatedly watched. The disadvantage though is that the possibility to ask people into a certain act or move is slim as the person may have forgotten or not be available to contact as well as the touch, smell and feel of a situation is lost on the screen, but can encounter for a great deal of people’s behaviour. Video documenting requires attention and may distract the observer and absorb all her attention without really absorbing what is happening in front of the lens. Though video documentation did not occupy a great deal of my work I decided in my study to use this medium in short format using my digital camera as a supplement to observing and taking digital images during the experiments. The situations only lasted for a limited amount of time and the material did therefore not become overwhelming when working with it. By contrast I would have liked to have a little
more, especially from the first experiment as the videos turned out to add to the observation.

Taking notes: occupied a great part of the field study, as an important link between what was happening in each situation, to later working with the material, describing it in detail, reflecting upon it and later analysing the material. Note taking can both be in form of written word or phrases, sentences but also in form of little sketches or icons that later remind of a conversation or a situation previously experienced. During the interviews I took notes in form of stickwords and short sentences that I soon after described in more detail. At that point the notes were very valuable as reminders of thoughts and issues discussed and stories that came up. During the experiments I documented only with digital images and video as note-taking was inappropriate and would have disturbed the situation. Again I used the images shortly after to describe the situation.

Exploration
Brainstorming was a central method in the explorative phase of this work. An endless amount of ideas was developed through a dynamic process of short brainstorming sessions (Kelly 2001), that were followed up with sorting in the ideas produced, spotting themes and qualities to build upon. Iterations of selected ones ultimately developed into several different ideas that dealt with different qualities of food and dining. One of those was developed further and implemented at two occasions for testing. Though teams are central to Kelly’s ideas, much of the brainstorming was a solo activity. Instead I had creative sessions with friends and family members where ideas were discussed, developed and some new saw daylight.

I aimed for “thick descriptions” of the material produced by the field study as well as when working with material from the two interventions I conducted. Crabtree (in Björgvinsson 2007 p 115) describes these as descriptions of behaviours that are beyond what can literally be seen and as a contextualization of the action recognisable to the participants. The difference between thin and thick descriptions can be in characteristics of an action, nuances, hidden meaning or use of language (verbal and bodily) that has a different meaning in different contexts. An example from the field study would be parents who sent their daughter a frozen piece of meat cross country. This could be considered a gift of caring parents and a way of manifesting family identity in the daughter’s new place. The temporal aspect hints at gained knowledge from previous family experiences the parents use in form of for example calculations on the meat being ready for the oven upon arrival. This could also be one element contributing to the daughter’s manifestation of her self identity in the new place. Serving a family delicacy in a new context became a reinterpretation of a family tradition. These thoughts are only examples of contextualisations of this finding, as a simple insight often unfolded when looked at closer or from different perspectives.

This was important as the work concerned different spatial and temporal elements, people of three generations, a public and a private setting and different timeframes, where different rules and norms created the setting. One key to create thick descriptions is looking at interaction (in fact everything) as embodied. On embodied interaction, Dourish (2004) discusses how things are embedded in the world and how their reality depends on being embedded. He stresses that interaction is intimately connected with the
settings in which it occurs and

*embodied interaction is the creation, manipulation and sharing of meaning through engaged interaction with artefacts* (p 126).

Understanding the different layers and contextualising them opens up for new directions to explore, which from a designer’s point of view makes the work much richer as unexpected design openings may appear. These (hopefully deeper or thicker to some extent) insights to the gathered material, pointed towards interesting directions and issues to brainstorm on.

There were moments I felt lost in my thoughts and processes, mainly in the journey between the field work and the explorative phase. When looking back at my repertoire from previous projects I realised it was because I lacked an overview so I could keep track of what I had and what was missing. I actively created maps of words, themes, images, interconnections and used these as a visual reference to work my way out of such labyrinths. Together with the maps, small scribbly notes that were easy to move around were part of keeping the material visual and not least to give it a physical presence.

**Composing and implementing**

For me this phase was about putting together pieces of threads I had picked up along the way, and shape them into a piece of work, an intervention, and implement it in two situations. This part of the process unfolded quite naturally, things simply felt right.

Björgvinsson and Hillgren (2004) introduced On the Spot Experiments that are based on ethno-graphically inspired methods. On the spot experiments are like ethnographic field work, conducted in the natural setting of the subject explored where technical equipment is of the shelf and focus is on content in form of “ethnography of content and technology in-use”. Such experiments can be used to evaluate how meaningful content is to the participants, and how qualities spotted can be further worked with and supported. Usefulness is central to on the spot experiments (rather than usability that deals with more functional aspects), evaluating if the system is appropriate and adds value to the situation (2004).

The two experiments / interventions required me to step back to the inquiry phase, as I observed and documented in both cases and was an active participant in the latter. Material was both collaboratively produced by the participants and from my insight, again forming a rich body of material for assessment and future work.

**Assessment**

Assessing the material concerned two phases, assessment of material from the field study, and material from the interventions. In line with Schön’s ideas of a reflective practitioner, I questioned the obvious as well as what rarely comes up. This actually revealed family stories and new perspectives to previous conflicts that never had been discussed in this way before. Löwgren and Stolterman (2005, p64) and Schön
(1987) discuss the importance of having the ability to act as well as reflect both during and after an act. (These roles are between participate and observe in Blomberg’s vocabulary 1993). I find a metaphor of looking at a swimming pool from above compared to being in the water, and all the levels that are in between, helpful in providing insights from different perspectives. This is the role of the reflective practitioner (me!) (Schön 1987, Löwgren and Stolterman 2005). As with material from the field study I aimed for thick descriptions (to the level of my competence).

In working with the results of the interventions and the material produced, I used feed back from the participants as well as my own observations and visual material gathered during the experiments, digital images and video. As the situation during the first intervention involved a self service station in a coffee break at a conference, things happened rather quick and little space was to discuss with guests after they left which was unfortunate. Most of the personal feedback is from the later dinner party.

Goffman studied social behaviours and used a common metaphor of theatre to describe different stages of it, as if the whole world was a stage. In The Presentation of Self in Everyday Life (1959) he is concerned with everyday ordinary people in daily situations. So is the actor (the participant/guest in my study) influenced by the props, the costumes, being watched by the audience, as well as watching the audience himself – what happens backstage concerns him as well. He can choose costumes and props according to the situation he finds himself in. Goffman further argues that in a social setting, a shared definition of the stage is created, where the aim is to keep the interaction coherent (1959). This could be considered social rules, or social frames around expected behaviour and will in this paper be the terms that I use and relate to Goffman’s ideas. Acting outside of these may be inappropriate and threaten the coherence of the ongoing social situation. He states that if the situation is challenged (for example if a guest burps in a dinner party, someone laughs when not appropriate or breaks a glass) the other actors (guests) assist the person in keeping face by disregarding the interruption, as to keep the agreement of the definition and coherence of the interaction stable (1959). What happens when this is deliberate or out of the actors’ control is one element that I looked into in the interventions, where parallel situations formed, consisting of two sets of behavioural agreements.

I tried to look behind the actual words and behaviours that I observed, shift between roles of participating and observing and later to abstract from those, in an attempt to gain an understanding of what the various elements really meant or signalled. Goffman’s idea of a stage with a backstage and a frontstage where different things happen, that influence the individual’s behaviour was helpful when assessing and analysing the material created. Challenging the social rules (the notion of a mutual agreement that in each situation determines appropriate behaviours), played a big role in the two interventions I conducted, where spatial and temporal elements and appearance were central.

**Reflecting upon the process**

Managing and organising the design process is not always easy for an inexperienced designer. I would be lying if I said that the process of this work had all been smooth and every moment of it had been carefully organised and effective. The process has nevertheless been most enjoyable the whole way through and it is
a privilege to have the possibility to plunge so deep into a subject so close to one’s heart.

I had a hard time finding projects in interaction design that had anything to do with food or food related situations and those I came across had limited relevance to what I was curious to explore, the more personal side of cooking and dining. I looked into various journals, open to explore both cooking and dining (including ACM) and searched using various terms but the search returned disappointingly few results.

Another problem that took me a while to go about was that I did not have a problem. It felt strange to create a problem when my wish was to emphasise what already is good. Design is most of the time focused around solving problems and make everyday life simpler or more effective. These are often related to accelerating pace in urban living which is indeed one of the reasons for me doing this study, but approaching it from the opposite end in an attempt to encourage appreciation and awareness of the positive.

A tentative framework of categorising positive experiences with food and dining was introduced by Grimes and Harper recently (2008) as new directions for food research (in HCI but applicable to interaction design, and in fact to a broader field than food and dining, for example music and knitting). A design space many designers have dealt with was roughly mapped, characterised with Celebratory Technologies as a potential medium, to celebrate and enhance positive aspects of human behaviour related to food and food related situations. They present seven categories;

creativity, pleasure and nostalgia, gifting, family connectedness, trend-seeking
behaviours and relaxation

as positive aspects of human – food interaction, and potential design spaces that have gained little attention. Engaging solely in corrective technologies, that they define as the opposite, means that we are neglecting an opportunity to host new interactions that are built on positive behaviours, creating a holistic (HCI) research agenda (2008). Together with steps in the design process as described by Blomberg (1993), Löwgren and Stolterman (2005), Brown (2008) and Kelly (2001), these categories helped manage and organise the material I had gathered.

The field study showed to be enormously rich, providing me with material for a lifetime study. Conversations unfolded nicely and few questions needed to be asked and I let the interviewees control the direction we took to a large extent, delivering a journey back and forth in time and space. The interventions were two and returned very different bodies of results. These were good to compare as various elements contrasted each other and pointed towards the various elements that shape interactions.

Further testing using the same equipment but different content would be interesting but remains a material for another study. Such a study could evolve around interaction in daily life, in a family for example, and in a longer timeframe. This would be an optimal way to further explore the connection between temporal elements, such as repetition and routine in relation to value and meaning creation in a personal context.
Summary

Exploring familiar situations with people that I know, family and friends, from the perspective of a reflective practitioner, field worker and designer was particularly interesting. It felt surprising how much new I discovered even about my own family by changing scope, zooming in and out and looking at things from new perspectives. Few methods I came across describe how to go about in a design context in a personal situation. Following your intuition is not mentioned in any of them and is in line with the authority ruled modern day community. Stolterman and Löwgren discuss applying methods “skillfully” which scares me in some way and indicates that there is one right way of applying a method or technique and refers to the users’ intelligence. This framing may still be what comes closest to flirting with the encouragement of following one’s intuition though I suspect that was not the authors’ intentions.

The methods I leaned against in this study are mostly in form of series of acts where the process is complete when all steps have been taken in some form or another. I borrowed bits from these and created a puzzle of different methods, built on previous experience (Löwgren and Stolterman 2005, Schön 1987) and sometimes on intuition (I did not find any method about following own intuition, hence no reference). The first phase of the work, the inquiry (that was in some sense repeated during the interventions) was ethnographically inspired (Blomberg 1993, Brown 2008 (IDEO)) and showed to be fruitful and suitable for the personal approach I decided to take. This is also the phase that fills the largest part of my repertoire, so I refer to Schön’s term. Though I have used certain methods as guidelines in my work, it feels as if it has been much more impulsive and less controlled than what is recommended in most theories of methods.

The knowledge constructed in this study is as previously discussed highly personal, where it sometimes showed to be hard to define and explain the meaning of a certain story or context. This is were I have aimed for thick descriptions as a way to push the work forward and reveal qualities and hidden meanings.

The social aspect of food, pleasurable moments, fond memories and collaboratively created meaning showed to be the most valuable part of the material and ultimately became the centre of this work. A great deal of this study is therefor centred around human behaviour and feelings which is were ethnographically and sociologically inspired perspectives became particularly important as a way of considering the holism of a situation.

Much of the work around food and food related situations in interaction design has namely disregarded those, resulting in the largest body of work evolving around functional and instrumental aspects of food and dining. There are exceptions from this though, and I will in the next chapter try to roughly map this area and discuss unoccupied design spaces that I will make a miniscule effort to challenge.
Related work

In this chapter I aim at providing an overview of work that is related to this study; those will be discussed in two parts. The first part of the chapter discusses projects concerned with food and dining that focus on functional and instrumental issues and account for the largest part of work within the field of interaction design. One body of work has focused on how social navigation can aid people during grocery shopping, another body of research has focused on how ICT can support people to adopt healthier eating habits, and another body of work has looked into how sustainable food production and consumption can be supported by ICT. The focus then shifts from cooking to dining which is were the inspiration for this study is mainly from. One body of work is focused around communication between distant parties, another one deals with the aesthetics of dining and domestic environments and a third centres around cooking and dining as a sensual act.

Celebratory Technologies as introduced by Grimes and Harper (2008) is the perspective that comes closest to my approach. The authors create an intentional frame around human – food interactions with social and cultural aspects of food and dining in mind. The opposite were named Corrective Technologies under which most of the ideas in the first part of this chapter fall. Along the lines of Celebratory Technologies is the notion of “Wonderment” (Paulos et. al 2008), a recently introduced design concept in response to that research and design do not reflect the “important life balance...of everyday life(’s) wide range of emotions and experiences”. The authors argue that

we owe it to ourselves to rethink the impact we desire to have on the historic moment in computing culture.

I believe that by putting greater emphasis on what already is good, the qualities in daily life and the wide range of emotions and experiences, designers contribute to improving everyday life.

Cooking and dining are complicated compositions. A designer needs to be aware of all materials in a design situation where elements and processes have to work in harmony and may be sensitive to change. Each element has to give space to the others, all influence each other and together a unity is created that can be described as the embedded situation and what shapes the cooking and dining experience. This could be described as a mixed media interface. The various projects discussed in this chapter deal with different parts of the food and dining composition.

Food and dining are therefor inseparable parts. Traditions, cultural differences and heritage, trends in society, fast food, slow food, family food, meaning in food, the physical, mental and social aspect of food are some of the areas that have to be taken into consideration and often overlap with interaction design projects though they are not direct results of it (such as foodblogs).

Food and dining is an area within our daily life where a lot of positive dialogue goes on. A general
interest in food is obvious when browsing the internet where web 2.0 has lifted it to another level, with endless websites, blogs and wikis evolving around food. Various issues are big within the area of food, such as health and environmental issues and these have dominated the field of interaction design projects.

I will in this chapter strive to provide an overview of the field. I will discuss related work in two parts, starting with the one dealing with the more conventional side of food and dining that dominates the discourse, following with the more sensual approach to food and dining as an alternative way of going about the subject where the scope shifts from the plate to the broader view of dining. The central focus of this study is communication in social contexts, personal networks, in particular in domestic environments, sensual experiences and ambient computing. As limited has been done in interaction design, I have had to look beyond the field of food and draw in examples from interaction designs that centre around other aspects related to this study, such as distant communication. For the same reason I discuss works about food from other fields than interaction design, such as literature and theatre that shed a light on elements in this study, such as those relating to sensual experiences. I will start with a discussion about food in the media and online which dominates the public discourse of food and dining.

I. The Corrective Focused Food Lens

Food in the Media

Media programs and the dominant discourse around food is very focused on cooking and rarely moves beyond the scope of the plate. Sharing recipes and documenting personal experiences is the central focus of most of these channels with an ocean of websites, foodblogs and cooking programs spreading endless recipes, restaurant reviews and pictures of dishes in all directions, painting a rather monotone picture. Published material within the area of food and dining is best known in form of recipe books where individual recipes are shared following systematic themes, such as fish, salads, Italian, festive, appetizers etc. The same type of categorisation is also true for most food related websites and foodblogs where the themes are of various nature, such as retro dining that plays with nostalgic food (http://www.retrofoodrecipes.com/), inspiration from Nordic history (http://kokkepigen.natmus.dk/), or food communities that have become popular on many food websites and allow tagging and searching by interests (http://www.epicurious.com/community, http://www.nigella.com/club-room/, http://www.deliaonline.com/community).

Social media such as Facebook and Twitter relate to the mundane and are used to express thoughts about daily life, including food. The ribbon that appears on the top of each profile on the online social network Facebook serves the purpose of a free space for expression. Sharing of recipes and discussions about food happen in communities or interest based groups or between friends where people can sign up, become fans and share with others in their network. People are readily available to share, with many posting short insights into their lives many times a day, which probably would otherwise not be shared (such as through e-mail). This points towards people’s wish to publicly share mundane experiences and a need for a backchannel. Facebook / Twitter (and other online social networks) become a platform to host these miniscule celebrations. A popular way to use this space has been to make a comment about what the person is eating, cooking, just ate or feels like having, often triggering a line of comments. A recent
example is a line of comments that developed in response to one of my own postings about cooking lasagna for dinner. Numerous people shared their personal tricks and one got inspired and wrote she had to make a lasagna now to try all the tricks (see image 1). Some rules apply to these social networks, as it is not appropriate to publicly post thoughts around issues that may be too personal in terms of intimacy or embarrassment for example. This may hint at a need for a channel were more secretive messages can be shared were Post Secret, a community art project, where people can anonymously share secrets is an excellent example (http://postsecret.blogspot.com/).

In contrast to Facebook where people create a network of people they know, Social Navigation of Food Recipes / Kalas (Svensson, Höök, Laaksolahti 2001) is focused on helping people selecting recipes and shop food online based on social navigation. Social navigation (source-crowding) was introduced by Dourish and Chalmers (1994) as a way of following in other people’s food steps or moving towards already established groups or trends (in digital as well as physical world), that today is widely used online (Amazon being the best known example: “those who bought this book, also bought this book” etc). Svensson et al. aim at adding the missing social dimension to shopping food online in response to the problem of uncertainty in choosing a recipe. Svensson’s approach is a classic example of a project that tries to make an overflow of information easier to choose between and thus more efficient. Instead of introducing new elements to the sharing of recipes, how to choose between those becomes the issue, proposing solutions like source crowding like in Svensson’s example.

Nikolaj Kirk (http://www.kirkplusmaarbjerg.dk/) is a Danish chef and one - half in the chef duo Kirk plus Maarbjerg. Kirk goes beyond the traditional way of being a chef and focuses on a broader perspective. Apart from large emphasis on quality and seasonal products, healthy eating habits and tasty meals, Kirk includes social, cultural as well as political issues in his cooking philosophy. Like many tv cooks, Kirk actively uses social media to spread his word. Kirk is active on the social network Facebook (http://www.facebook.com/nikolaj.kirk#/profile.php?id=665938134) and has for example run campaigns like Mad kamp (Food Fight) and I Danmark spiser vi (In Denmark We Eat) where readers were encouraged to take pictures of their daily dishes and leave comments and tips to others that Kirk would post on his Facebook profile as an attempt to spread inspiration between everyday households in Denmark. Most recently he introduced a hand-sign that now spreads rapidly in Kirk’s fight for what he calls handmade food and against bad food products and food habits. People are encouraged to take photos of themselves doing the handsign and send it to him as a manifest of supporting the fight for good raw-materials and
handmade food (see image 2). Additionally, he actively posts videos and short articles with tips, tricks and knowledge on food and food related experiences around the globe.

Thematic websites, Facebook, food wikis, communities on food related websites are examples that show how social media are already actively used for sharing ideas and inspiration, but fail to a large extent to add a dimension that really makes them stand out if that is possible at all in our world that already is overloaded with recipes, leaving cooks more confused than ever. Kirk’s input is an excellent example of an ongoing project that aims at awakening the senses and people’s awareness around food and is undoubtedly one of the more experimental I have come across. It hints nevertheless at an unoccupied designspace, awaiting eager designers’ explorations.

I will stay in the media environment in the next chapter and discuss documentation of food in personal and collaborative networks as different ways of gaining and transferring knowledge, bringing in elements of temporality and intimacy.

**Documenting Food – a Personal or Collaborative approach**

I feel overloaded with recipes from all directions which often results in me simply returning to the same book or my family for inspiration. Mothers, and others who primarily are responsible for the cooking in a home often have their own cookbooks that in time get filled up with favourite recipes, tips, tricks and ideas. The opposite to such personal cook books are Food Wikis (for example http://www.foodista.com/, http://recipes.wikia.com/) with thousands of recipes where anyone can add their own, make a comment about someone else’s or add their own version of it. In between are endless Foodblogs that have added for example restaurant reviews and culinary news to the discussion around food and have existed as long as blog itself, but focus mainly on the same issues; that is the sharing of recipes.

A quite fun website is Taste Book, (http://www.tastebook.com/ ), a service where you can create a personal cookbook by uploading recipes and images and as a member of a community of numerous foodwebs you can add their recipes to the book that gets printed and posted to your door. In a nice way this idea combines the less personal of online sharing with your family recipes and personal nuances where you can add the pictures and stories that you like along with the more practical elements. In one way combines Tastebook a personal cookbook as you can over a period of time gather recipes from online networks, and add your own and as you receive the book itself at your door, it will start to wear and tear as well as you can continue to add recipes to it by adding pages to the spiral binding or notes and cut outs to envelopes it comes with.

The Living Cookbook (Terrenghi, Hilliges, Butz, 2006a,b,c) is another variation of a cookbook and is set up in a domestic kitchen, with a camera, display on a cupboard and possibilities to record and share cooking experiences. The Living Cookbook is a part of work Terrenghi et al name Kitchen Stories
(2006a) and aims at fostering social relations and enhance intimacy, communication, education, fun and creativity while cooking and “preserve cultural and social roots (...) and generational fertilization” (2006a). Focus is on cooking as an experience and the holistic situation as a combination of physical and social elements. The Living Cookbook invites to documenting a cooking process as if you were making your personal cooking program. The recordings are categorised by author and ingredients and has scales for adapting recipe sizes. At the same time as The Living Cookbook adds a new dimension to the documentation and sharing of recipes in a family, it is presented like yet another kitchen appliance, and is bound to the cooking situation.

Drew Lazer, a foodblogger, (in Theme magazine issue 18, 2008), discusses a documentarian fetish in foodblogging as the need to document own life through a food focused lens and one of his interviewees connotes it with having an obsessive gene, that is fundamental to food blogging. Adrienne AndrewsMitchell is one of those who documents a lot of her gastronomic experiences, takes pictures of her food and surroundings and is gradually building up a food focused diary on her blog Gastroanthropology (http://gastroanthropology.com/). As a master of food policy and as the name indicates this blog aims at discussing food in the broadest context, from discussing the piece of land a seed was planted to why and how and who consumed it miles away. So far the blog has not shown much sign of such discussion which was disappointing as it was close to what I was looking for – namely food in a broader perspective.

One foodblog that I have come cross is the sincere and super personal blog of a girl named Molly (Molly’s Madeleine, http://mollysmadeleine.blogspot.com/) where she shares experiences, memories and engages readers in her recovery from an accident that included her loosing the sense of smell that changed her life. She intertwines each recipe with a story explaining its existence adding a whole new personal and social dimension that influences other people’s recreations of the dishes.

With a sharper focus, Burnt Lumpia - finding identity through food (http://burntlumpia.typepad.com/) is the food blog of a young Philippine guy who expresses a wish to preserve his family’s tradition and pass on recipes to pass on his family’s culture to the next generations. Marvin blogs from a personal, documentative perspective where he shares family recipes, tips and tricks and occasionally the stories behind those. With his personal and documentative perspective he manages to lift the traditional foodblog to a broader social and cultural level.

In relation to a recipes of a sauce that goes with lumpias (Philippino spring roles), he adds a little story about how to apply the sauce using a spoon rather than dipping the roles in. The sauce is made for sharing and apparently it frustrated his dad when pieces of meat from the rolls had fallen into the sauce.

*I don’t want to see your meat floating in my sauce! It’s unacceptable and it’s gross and it’s something I refer to as LSP (Lumpia Sauce Pollution). It’s a serious problem, folks.*

Marvin’s little story and tip on how to share adds a personal dimension to the recipe of the legendary Philippino lumpias. The name of the blog “burnt lumpia” hints at a development and experimentation in the kitchen in mastering the craft of grannies kitchen, encouraging readers to take on the challenge and carry on the tradition, including making mistakes along the way.
A second example from Burnt Lumpia is where Marvin makes the home made lumpias. Carefully describing with tips and tricks, suggestive reading and demonstrative video the reader is lead through the wonders of making traditional Philipino lumpia. Marvin adds a second version

*Turon, a favourite Filipino snack, is lumpia filled with banana and brown sugar. Once fried, the banana softens and the brown sugar caramelizes. My mother usually uses saba bananas or plantains in her turon, but regular bananas work well also.*

Comparing his version (http://burntlumpia.typepad.com/burnt_lumpia/2009/09/homemade-lumpia-wrap-pers.html#more) to a lumpia recipe from a wiki (http://recipes.wikia.com/wiki/Lumpia) clearly shows the different poles of recipe sharing found online, where on the one end there is a personal approach and the other a monotone systematical approach. A wiki serves in that way the role of a pure database of recipes with some general knowledge where a blog has a potential of adding personal touches to each one. A wiki documents cultural trends while foodblogs (potentially) document nuances of cultures, as stories of individual families.

Comparing foodblogs to foodwikis brings a temporal and an intimate element to the table. A recipe on a wiki changes in the course of time according to people´s contributions like a recipe does in generations in families, the time frame is obviously different though. Mr. Dorfman who is behind the wiki Foodista explains in an interview with the NY Times that contributors collaboratively create a recipe that represents “a culturally shared idea of it” (Severson, 2009). Marvin’s aim with Burned Lumpia is by contrast to introduce his family’s traditional dishes to next generations, documenting recipes that have developed over a long time in his family only. Molly´s Madeleine foodblog does a similar thing and combines a diary with sharing of recipes and memories.

I have yet failed to find a foodblog that actively discusses dining in some form, and moves outside the scope of a single dish and to social, sensual or aesthetic elements. I like to argue that a database like a food wiki can be a useful tool and serve like an encyclopaedia but that it flattens out cultural nuances and thereby withdraws a central part from a recipe. The wiki version collapses many family versions into one but at the same time invites to new and perhaps more general sharing of cultural heritage in food. (Founded in 2005, the recipe section on wikia is according to the New York Times (Severson, 22/09/09) one of the fastest growing with over a 40.000 recipes already shared and traffic that has increased over 60% since January 2009.)

**Health, environment and sustainability**

A central topic in the food media and IT landscape are health related issues. Food Information Network : Informed Shopping for Healthier Living (Brown et al 2006) is a project that evolves around inspiring badly informed consumers to make healthier choices while in the supermarket, encourage home cooking and the sharing of recipes with those that have similar tastes. The central aspect of the design is an informative website, tailor made to be accessed from smaller devices such as mobiles and palms. It allows access
to a database of recipes, a shopping list to be typed or selected from, comparing products’ prices and nutrition facts, location in the supermarket and hooking up to interest groups. The concept appears to be at an early stage though it is already documented to having been successfully tested. It fails to discuss even central aspects presented, such as how the educational part of it is to work and on what it should be based (e.g. what do they define as “healthy”?), how people would be encouraged to use it or where the health information should come from and on what values it should be built on.

Frilandshaven (www.dr.dk/dr2/frilandshaven) is a tv cooking program on the Danish National Television (DR2) and offers viewers / visitors to the website to send an sms to get the ingredients list of a chosen recipe sent to their mobile phone. This is in fact a simplified version of the shopping list that Food Information Network aims at and does not require any typing or selecting. Balance Pass : Service Design for a Healthy College Lifestyle is a much more focused study on how feedback can be given to college female freshmen on their eating habits based on purchases with their ID card on campus. The system has some flaws that are taken into consideration such as the system being limited to purchases with the ID card, but it incorporates a broader perspective by discussing body image of young females and the problems associated with living away from home for the first time as well as the danger of unhealthy eating habits living on to post-campus life creating a bad cycle. In contrast to Food Information Network, Balance Pass is based on the USDA food pyramid (United States Department of Agriculture / food and nutrition) and established USDA dietary guidelines as the determining nutritional sources.

At the same time as ideas of encouraging people to cook more frequently at home are a great part of Food Information Network and what relates to this thesis, it does not incorporate or even discuss the potential qualities of home cooking and therefore decreases the chances of meeting its goal, of getting people with small resources and limited experience in the kitchen to spend more time on it and see the benefits of it. Balance Pass is solely focused on counting calories and giving feedback and does not aim at incorporating sharing or enjoying meals more greatly. This is indeed what my study aims at, to increase the awareness about those qualities to get people to relax and enjoy a little more home cooking and dining.

The Slow Food movement (outside interaction design, www.slowfood.com) is concerned with issues around health, environment and sustainability. Though it is centred around encouraging people to be more considerate of production and consumption, I like to mention it as an ideology that is built on slowing down and enjoying daily meals. To a large extent it disregards the process that continues after the meal is ready, the social element, and has as a primary goal to link enjoyment of “excellent food and drink” with an awakening about its origin. I have sought inspiration to Slow Food that in their mission statement (http://slowfood.com/about_us/eng/mission.lasso) emphasise that

*reawakening and training their senses, helps people rediscover the joys of eating and understand the importance of caring where their food comes from, who makes it and how it’s made.*

The primary focus is on taste and what is discussed as the sensual experience is presented as the awareness on the food itself and its production. It represents thoughts that are relevant for this study in the way that it encourages people to slow down and pay attention to details related to food on their plate and where it
comes from, but in line with the dominant discourse around food it is centred around raw materials and cooking. What Slow Food brings new to the table and is gradually becoming more spread is increased awareness around ethical and environmental issues and supporting local production. The Slow food movement focuses on the complete picture of man and environment. Its philosophy evolves around everyone having the right to pleasurable food experiences and the associated responsibility that accommodates this pleasure, including local and clean productions, animal, environment and people friendly productions and fair trade. The movement has its origin in Italy where it was founded as a protest to a McDonalds fast food and hamburger restaurant that was to open near the Spanish steps in Rome in 1986. The movement became the first part of what developed to become the Slow Movement, a response in multiple fields to the fast moving society.

In two ways the movement is rather far from my ideas, namely in its great request for commitment of its practitioner and in the main focus on the taste as a result of carefully produced, selected and crafted course that disregards other elements in a dining situation. This leans too much towards capitalistic views and those who are privileged in terms of time and financial resources where I would argue that despite its appealing philosophy is too far from the reality of the everyday family. I would even go as far as saying that the slow food movement flirts with the boundaries of what could be called gastronomic pornography. Slow Food is still a good reminder of the importance of eating well and being considerate of the environment. Though I am certainly a follower of a great deal of their ideology and embrace good raw materials and careful preparation of those, I prefer to expand this picture and bring closer awareness to the moment when the meal is enjoyed and look beyond the food itself and think about the setting and how the other senses can enhance the experience and absorb the subtle qualities of the situation.

Other projects have focused on the environmental side of food, such as Meet the Food you Eat (Little, Dickson and Muthyala, 2009) that measures a food product’s environmental impact based on distance it has travelled to the consumer and metaphors of scale and trees used as tangible interface, and The Toaster Project (Thwaites 2009) which is a critical approach to consumerism and sustainability and evolves around a guy who likes his toast but finds it controversial and tries to build from scratch a copy of his toaster he bought at a discount price in a lowcost store. These shall not be discussed further here as beyond the scope of my study. I shall instead move towards the second theme of this chapter and shift the focus of my food lens towards positive aspects of food and dining.

II. The Celebratory focused food lens - From cooking to dining
When entering the area of celebratory technologies, a sensual approach to food and dining takes over the practical and functional. Value of the social aspect of dining, dining as a sensual activity, intimacy, memory, symbolic meaning of food are some elements that writers, directors, artists, theoreticians, poets, sexologists, politicians and designers have dealt with. Several projects have dealt with intimacy, others with ambiguity, routine, distant communication and yet others with dreaming or playfulness. Most challenge our way of thinking and challenge existing social rules and some lean towards enhancing what
Paulos and partners defined as wonderment (Paulos, Jenkins, Joki, Vora 2008).

I will discuss various projects that have in common an attempt to use food as a communicative medium where focus shifts towards social and sensual aspects of cooking and in particular dining. Development in ambient computing becomes central where wireless communication, microchips, nanotechnology become some of the primary tools. I will briefly introduce semiology and examples where certain types of food have symbolic meaning as one aspect of the broad field that food and design can cover. This later showed to have a stronger relation to this work than I had expected.

**Celebratory Technologies and Designing for Wonderment**

Andrea Grimes (Georgia Institute of Technology) and Richard Harper (Microsoft Research 2008) introduced a tentative framework for new directions for food research in HCI. It centers around what they define as *celebratory technology*, where previous studies within interaction design and HCI, that aim at proposing a solution to undesirable behaviors and feelings; uncertainty, distraction, inefficiency, inexperience and lack of nutrition knowledge, are categorized as corrective technologies. They propose categories that celebrate existing behaviors and practices and enhance the positive sides of daily life. These are categorized as:

- creativity
- pleasure and nostalgia
- gifting
- family connectedness
- trend-seeking
- and relaxation

and evolve around creating applications that embrace the pleasurable and delightful aspects of food and dining. Gaver and colleagues (Gaver, Bowers, Boucher, Law, Pennington, and Villar 2006) argue that inviting to ludic activities challenges the notion of domestic appliances only being utilitarian and that activities like daydreaming, play, curiosity and reflecting are undervalued in domestic life and wish to move beyond practical function in their designs in an attempt to enrich life.

Oleksik and colleagues (Oleksik, Frohlich, Brown, and Sellen 2008) studied specifically the domestic soundscape (as comprising of all sounds in a home) and conclude that there is an unpopulated designspace of novel audio devices in the domestic environment. Their study pointed towards the role of technology in homes to enhance the domestic soundscape and associated behaviors, helping families to better manage or capture sounds in their homes. Along the same lines and inspired partly by Gaver and colleagues are recent studies about what Eric Paulos and colleagues choose to name “Wonderment” and the notion of “designing objects of wonderment” (Paulos, Jenkins, Joki, Vora 2008). The word, wonderment is explained (adapted from Random House Unabridged Dictionary) as having a reference to many daily experiences they define as important,

*to think or speculate curiously, to be filled with admiration, amazement, astonishment, or awe, to doubt something strange and surprising, producing puzzlement or curiosity, the reverse of what might be expected* (Paulos et al., 2008).
Designing around wonderment aims at supporting daily qualities by designing technological systems. Elements of their definition reflect cornerstones of Critical Design, such as producing puzzlement or curiosity and reflect the often controversial critical designs approach. All three ultimately share the same agenda, celebratory technologies approaching it by creating clearer frames and pointing out potential design areas, designing objects of wonderment by supporting already practiced daily acts and critical design by disturbance.

The new directions proposed as celebratory technologies and designing for wonderment disregard the small daily problems of everyday life and I like to call luxury problems. I see those as part of the wonderments in life as they pose no actual problems but cause annoyances on a daily basis such as rainy days, too much laundry in the basket, the neighbor does not water the plants, kids leave bread-crumbs on the floor, heavy traffic, the supermarket is out of toothpaste, the pasta overcooked a little etc. These are minor problems that sometimes tend to get blown up and can develop into larger problems. If looked at from the perspective of wonderments they gain a new status as luxury problems. Though these are considered negative in our daily lives, I like to picture them as darker nuances of daily life without the lighter ones can not exist, thus belonging with wonderments.

**Meaning in Food**

Some theoreticians have thought about food in more unconventional contexts, bringing food and dining into a cultural perspective and working with the symbolic meaning of food. One respondent described how she felt that food and feelings were inseparable elements, where food can become symbolic for a feeling, atmosphere or a thought. The scope of this study is dining rather than cooking but a couple of food products became increasingly important as the work developed. I will therefor quickly tap into some aspects related to meaning of food and dining and mention examples from popular culture.

Roland Barthes writes about different fluids such as milk and wine having different qualities in his semiologic study about mythologies published in 1957 (Barthes, 1996). The work which is a collection of essays where Barthes tried to disassemble myths in popular culture was inspired by Saussure (often considered the father of 20th century linguistics) and as he describes in the foreword from the 1970 edition, he uses a system of symbols (semiology) to analyse popular concepts and “change the bourgeois culture to universal nature” (p. 22). Barthes describes milk as “the true anti-wine” as of its position in the bigger context is opposite to fire and its fluffy consistency like a cream. Barthes talks about milk as cosmetic, binding and healing and containing qualities that can be associated with the innocence of a child, calm, strong and much like reality itself. Barthes’ thoughts connote well with my interest in meaning in food and relate to some findings of the field study though the aim here was to put focus on the subtle qualities we are surrounded with at each time, whether in the milk itself or the environment. Wine, he describes is “surgical, invades, changes and releases” (p. 101). According to him wine is a substance that converts situations and mental conditions.

Qualities ascribed to food products and certain dishes have been used in popular culture on the white screen and in literature, in form of stories about intimacy where food carries feelings. In the Mexi-
can feature film Like Water for Chocolate (1993, directed by Alfonso Arau) the youngest of three daughters mediates her feelings through food. As for the tradition she was not to get married and when she falls in love with a young man who deeply returns her love she discovers the magical powers of her cooking which she uses to spread her passion and misery. The power of making and enjoying food with someone is according to many so sensual and closely connected to sex that celebrity sexologist Tracy Cox (2004) encourages people to choose a partner by the way he/she eats.

Some say that every move in the process of cooking and dining is filled with meaning, a symbolic ritual like writing, where letters and words are replaced with raw materials and whole texts with meals, reading with dining. In Aphrodite, a memoir of the senses, Chilean Isabel Allende writes about the love of food and the food of love and intertwines it with stories of memorable moments, folklore and historic characters (Allende, 1997). The book is a personal ode that celebrates the sensual life of food and sex and is based on her mother’s cuisine.

Various artists have communicated through food and I will name one example where the artist, Japanese Yamamoto solely uses salt in his works. Deriving from dealing with own feelings, Yamamoto’s use of salt in his works has developed into creative processes that bring back memories. As part of the process of grieving his sister’s death, Yamamoto sought inspiration to Japanese death rituals where salt plays a central role. He says that a universal history of both life and death is embedded and whispered through each crystal. In an interview he explains that “salt is the common thread into a shared narrative of the living” (Yuan, 2008). Yamamoto combines in his work elements of his cultural heritage and personal experiences where he has worked his way through the process of grieving with a symbolic element, the salt. Salt is about as inseparable from cooking as it is from the Japanese death rituals, a background substance that Yamamoto used to explore his grieving and managed to lift it to a higher level, ultimately exploring the circle of life.

These examples give an idea of the symbolic (a combination of biological or psychological in some cases) meaning in food, cooking and dining and are brought forward to emphasise the importance of food, cooking and dining as a rich process that is unique in each context because of its multiple layers and how many its substances are. The level of meaning can then be exaggerated or downplayed according to the awareness around the creation and consumption of it.

**Enhancing food situations**

Celebratory approaches to IT can to some degree be found within the field of ambient computing. An example is Gaver’s et al (2006) previously mentioned wish to design for daydreaming, play, curiosity and reflection in an attempt to enrich domestic life.

_Sal awakens:_ she smells coffee. A few minutes ago her alarm clock, alerted by her restless rolling before waking, had quietly asked “coffee?”, and she had mumbled “yes.” “Yes” and “no” are the only words it knows. (Weiser 1991)
This approach is interesting because of advances in ambient computing that enable integration of digital
technology in everyday environments. Ambient computing (also referred to as pervasive computing or
ubiquitous computing), originally (this is debated though) introduced by Mark Weiser in the late eighties
(1991), is the movement of computers of the future towards computing that is embedded in our everyday
lives. A movement away from the desktop and mouse and towards integrated technology and the possibil-
ity of wireless communication and programming of everyday things and environments. Weiser suggested
hundreds of computers per room, embedded in daily artefacts would become a natural part of daily life.
Weiser described ambient computing as technologies that:

*weave themselves into the fabric of everyday life until they are indistinguishable from it....People will
simply use them unconsciously to accomplish everyday tasks.* (Weiser 1991)

Though Weiser’s definition may have taken it a step too far in the aim for invisibility and complete
integration, ambient computing allows artefacts and environments to be given digital qualities and thereby
creating new ways of interacting and experiencing but without the technology to dominate the social
situation. Ishii and Ullmer (1997) equally discusses a vision of “tangible bits” as an attempt to bridge the
gap between digital technology and physical environments by making digital information (bits) tangible.
Ishii and Ullmer start to map the area of tangible bits; a) interactive surfaces as transformation of existing
spatial surfaces (windows, ceilings, walls and so fort), b) coupling of bits and atoms - everyday objects
with digital information, c) ambient media such as use of sound, light and water flow to subtly communi-
cate background information (such as weather), where user’s seamless transition between foreground and
background is central.

Several big issues have been part of the debate around ambient computing, some of which relate
to this work. Privacy issues regarding surveillance in many forms are some of the other central issues, as
concerns related to biometrics, tagging and tracking, face recognition, public surveillance etc. A fear of our
own devices constantly watching us and quiet time and space to gradually be left to none.

Multitasking in everyday life with more gadgets and technical applications than we are fit to
manage is one of the objections to ambient computing. The fear of bad designs and unreliability of gadgets
crashing explains some of the objections towards ambient computing, with the home (dining spaces) as
one of the last fortes, relatively untouched by technology. Ishii warns against a development where:

*we must not fill our environment with computational things that disrupt, distract, or violate human aesth-
thetic and ethical sensibilities.* (Ishii et al Things That Think vision statement, 1995)

Dining is a complex composition that requires sensitivity when implementing digital technologies. Some
might ask what will be left when family dining has been invaded. A decade later Löwgren (2007) stresses
the importance of respecting the rhythms of complex social situations for smoother transitions between
digitally enhanced designs and conventional activities. Löwgren’s suggested use of pliability, as an
experiential quality (originally introduced as “use qualities” for assessment in interaction design) in
interaction design, involving, malleable, and tightly coupled interaction...conducive to exploration and serendipitous discovery in the genre of interactive visualizations” (Löwgren, 2007). I find this suggestion of use quite problematic, vague and focusing on the actual design rather than the social aspect that is the central issue.

Gaver discusses intimate communication being about the dynamics of using the design rather than being focused at the output of the device (Gaver, 2002). By slightly adapting Löwgren’s notion of pliability, to Gaver’s framing feels most appropriate for this study. Such a combination could be in the direction of

designing around the rhythms of social situations where the design subtly blends in with existing activities and becomes conducive to exploration

and centres around sensibly approaching a social situation but encourages a new type of interaction around existing activities. Like a feather that falls lightly on the table and quietly awaits inclusion in the conversation. Alternatively this could be a brick thrown on a table that with its bold invasion breaks all boundaries and triggers the setting of new social rules – I guess that would apply to critical design approaches, but they can be as successful. This might alternatively be dependent on the existing social rules at each time and place.

Sokoler (2004) describes the world as a “noisy place” where interaction between human and digital technology can not disregard this noise. He discusses digital technology as a supplementary resource that can take its place side by side with human resources. He presents “the attitude” partly as

a move away from the design of “thinking machines” towards the design of digital technology that brings advantage to, and rely on, rather than attempts to take over, the human ability to make decisions and take appropriate action in the physical and social settings that embeds interaction with the technology designed (Sokoler 2004).

He further discusses a notion of building constructive relationships between digital technology, human skills and the numerous other resources present. This is in line with Dourish’s (2004) ideas of holism and shifting focus from interface to experience as “embodied interaction is the creation, manipulation and sharing of meaning through engaged interaction with artefacts” (p 126). Sokoler names an example from a dinner party were a mobile phone rings and requires the attention of the owner, interrupting the dinner conversation as it can not be put on hold while attending to the call. This is in other words about the complex interplay that humans find themselves in when interacting with digital technology, out of which we can not draw a single element, as all are dependent and influence the others.

Aesthetic nuances in domestic environments
The History Tablecloth (developed by Bill Gaver and colleagues at Equator as part of the furniture series
based on load sensing – the others being the Drift Table and the Key Table 2006) is an augmented tablecloth, that simply responds to things left on it, by illuminating – creating a halo that in time expands and then disappears quickly as the thing is removed. Based on an ethnographic study on how surfaces are used for coordination in a home, The History Tablecloth in all its simplicity provides a new dimension to how things move around in a home creating a space for interpretation. The aim with the Weight Furniture was to challenge the notion of domestic appliances only supposing to be utilitarian and introducing a new perspective of those inviting to ludic activities like daydreaming, play, curiosity and reflection.

Related to these but set in a public setting, is Jeppe Hein’s Illusion for a Second is a bar table in a popular restaurant / bar in Copenhagen, Karrierbar (http://www.karrierebar.com/ ). In contrast to the History tablecloth which has a personal tone, Illusion for a Second is set in a busy public place. It is whole 12 m long, sleek and silvery and moves subtly to each side. Hein’s aim with the table plays with the ambiguous, and was (it is still there) intended to explore the boundaries between the viewer and a piece of artwork but more interestingly the boundaries between people. The table moves and glasses, handbags and other things placed on it, move along. The guest is taken by surprise and confusion is created, whether someone has taken your glass or you have maybe had too much to drink (already) (PKE, 2007).

These works touch upon the element of familiarity and repetition as well as they invite to playful explorations in their use. Repetition leads to familiarity and routine as situations and acts we repeat on a daily basis and become an inseparable part of our everyday lives but malleable to change. As participants in Oleksik et al (2008) research of domestic soundscapes showed to find common sounds in their domestic environments valuable, they concluded by proposing familiar sounds in a home and mundane acts being enhanced, with the possibility of for example recording and repeating pleasurable sounds in a different context. The illuminated History Tablecloth emphasizes the quality of routine and activity in the home in a most gentle way and could in time develop into a personal peripheral communication channel. The two studies, of the weight furniture and domestic soundscapes ultimately aim at adding meaning to subtle qualities in everyday life; those little things we often do not pay so much attention to.

Like the name suggests, Illusion for a Second, there is a temporal element central to the work. The first impression of the work is surprise though it must have a form of a learning quality, as the nature of a bar is such that people stay for some time and are likely to return if they like the experience. How that influences the surprise element and ambiguity is unknown to me at this point as well as how it influences peoples’s actions and reactions. The design taps in some sense into the negative sides of wonderments, as it is likely to cause confusions, frustrations or annoyances.

A Sensual approach
A few projects I came across are directly related to the senses. The previously mentioned Slow Food movement embraces the sensual qualities of food and encourages training of the senses to fully absorb the enjoyment of cooking and dining. Molly’s Madeleine foodblog deals with the importance of smell in cooking and dining where readers are invited to follow her in her journey of recovering from an accident where she lost the sense of smell. Her loss of smell greatly reduced her sense of taste and pleasure in cook-
ing and dining, but as she gradually regains it, the longing and pleasure of cooking and dining return to
her. The concept of dining in the dark, deals with blocking one of the senses, the sight as the name indi-
cates. The concept is said to have first appeared in the 19th century but first experimented with systemati-
cally by researchers like Andreas Heineke in Germany and Michel Reilhac in France around Europe in the
1990’s. (http://www.danslenoir.com/london/faq.php#toc_21 ). The guests who have full sight are invited
to enjoy a meal in circumstances unfamiliar to them, pitch black restaurants, and be served by blind
waiters. Guests are given some preparatory tips on how it is best to behave in the darkness. The idea
behind the restaurant concept that was born in Europe is to focus on the sensory experience of dining
rather than the social and is gradually spreading around the globe. The first restaurant to open was in
Zurich, Switzerland in 1999 (Blindekuh - http://www.blindekuh.ch/ ) and others followed, Unsicht Bar in
Berlin(http://www.unsicht-bar.com/ ), Dans Le Noir (http://www.danslenoir.com/ ) in London is the largest
of dark dining restaurants in the world and more recently the concept has spread to the USA with the open-

DinnerWare (Coelho, 2005) uses elements of light to explore how the senses can be stimulated
and the potential of dining experiences increased with food and cutlery as conductive medium for sensory
explorations. Focus is on playfulness and experimentation when dining where the eating behavior and the
physical qualities of the food determine the aesthetic response of the plate. DinnerWare augments dining
and is based on already known and natural gestures and ordinary rituals surrounding collective dining.
While DinneWare encourages playing with the food, The Cloud Project is adventurous  (Papadopoulou
and Kramer 2009) and plays with dreams in an attempt to create new sensory experiences. The Cloud
Project is the design effort of two students at The Royal College of Art who try to fulfill the dream of
making clouds snow ice cream. They take advantage of development in nanotechnology and experiment
with altering the composition of clouds as a response to any child´s dream. With the project they speculate
over scientific developments and their consequences and the uncertainty of the future.

Madeleines food theater in Copenhagen is yet another example that plays with the senses and is a
combination of food- and theater laboratorium that explores human contact and the space that defines the
meal. KROPumulig (season 2008 – 09 / Danielsen 2008-09 ) is a poetic food performance at the
Madeleine´s and an example of a performance where food is used as a medium to explore the boundary
between physical and mental hunger and the space between hunger and satisfaction. KROPumulig might
be the opposite to dining in the dark as all senses are actively stimulated as part of the theatrical perform-
ance. KROPumulig plays with intimacy and dining as almost sexual (or cannibalistic in physically con-
suming a feeling) in transferring from being two elements, food and consumer, to becoming unified, and
explores the time space between the transformation and the question of whether you become what you eat
or what you eat becomes you.

One example that plays with the senses and public environments (but has nothing to do with food
and dining) is Hullabaloo, and is developed by Paulos and colleagues (2008), who developed the design
concept of wonderments. While pre-studies of Hullabaloo centered around emotions and memory triggers
and their relation to public urban sounds, Hullabaloo is an urban object that promotes wonderment by
generating urban sonic experiences that reflect people who pass by. The system links a unique sound to each person by attaching it to the person’s mobile phone bluetooth ID, that is scanned and the name of the phone displayed. This creates a “public audio mash-up”, where each passer by becomes a temporary participator in its creation. After passing by numerous times, people will recognize their audio signature and testing showed that Hullabaloo evoke curiosity and speculations about the owners of the other sounds. Hullabaloo is in a temporal sense related to Oleksik’s et al study on domestic soundscapes, though it is set in a public setting. With people and daily routes in mind, where passing by Hullabaloo becomes a part of the everyday routine, it invites to new experiences in urban space, bringing the focus from looking down to the pavement, to actively absorbing and enjoying the environment.

**Distant communication**

One body of work is centered around communication between distant parties which often is centered around intimacy. Café Pantopia (Petersen, Johannesen and Lovind 2009) is a transatlantic Café that is being tested as these words are written (2009) and aims at enriching the communication between parties on each side of the Atlantic Ocean by establishing cafés in three cities (the study includes Iceland, Denmark and Greenland) where people can meet and communicate with the aid of ICT. Like Café Pantopia, Lover’s Cups (Chung, Chia-Hsun and Selker 2006) is centred around the social aspect of drinking and aims at enhancing emotional bonds in a more quiet and indirect way and is intended for remote communication. Lover’s Cups is in that way a pair of cups that glow when the other person drinks. Drinking is here chosen as an important factor in enhancing the social interaction between two people and to add an emotional channel to traditional distant communication mediums. Like in Lover’s Cups, the idea of a peripheral communication channel is dealt with in a few projects and relates to what developed to be one of two central parts of this work.

Feather is simple one way communication channel between two individuals where moving a picture frame (presumably with an image of the other person in it, or the two together) is connected to a plastic cone that the other person has and a small motor blows air to the cone, gently moving a feather around in it. The lightness of thought is here transferred with a simple act. Hazed Windows works within the same ideology as Feather but here the focus is on a child communicating with a grandparent via drawing with a finger on a digital interface that instantly is transferred to the grandparent’s mirrored device (Freiesleben, Knapek and Moberg 2001). The appearance of the drawing is temporary and gradually fades away referring to a drawing on a Hazed windows. Neither of these are related to dining in any sense but deal with an awareness of the subtle qualities in life and how a notion of presence can be enhanced with ambient computing. Both are based on metaphors, adding a valuable quality to the projects and pointing towards the importance of choosing an appropriate interface. This study will partly look into how familiar tools can be used as interfaces when exploring enhanced domestic environments. The temporal element introduced in the two studies is also valuable in these examples as it enhances a moment, but only temporally. Rather than following trends around documenting with digital media, this element appears to be carefully adapted from real life situations where things possibly pass us by without
noticing, adding to their subtle poetic qualities when we do notice them.

Text messaging on mobile phones is often used to express a spontaneous thought and is probably the most popular medium distant parties use to stay connected. Stitching Together (Lindstrom and Staahl 2007 – 2009) is a project that invites people to share meaningful text messages from their mobile phones. The design duo a+k who is behind the project wishes to invite contributors
to make these intimate, digital treasures longer lasting and stitch together different techniques, different speeds, people of different ages and different usage of communication channels.

The messages are transferred from their digital existence to a tangible and long lasting embroidery. What appeared to be a quick thought about someone, “12 oranges in my bag, and I think of you” (Barkeman 2007), now has the potential to become part of a patchwork of meaningful text messages. Qualities of Stitching Together are several but those central to this study evolve around manifesting a spontaneous thought, the temporal element of a message that is quickly manifested in digital matter on one hand and transferred to a tangible interface that contrasts the digital one. The interplay between the different generations is also an element that relates to this study as food and stories in families could be considered to be the result of handcraft that develops through generations and is passed on.

Summary
I have in this chapter drawn an intended food landscape of interaction design in relation to the non-digital side of food and dining and discussed it in relation to this study. Grimes and Harper as the first to build an incentive framework, named celebratory technologies, around designing for positive aspects of food and dining have pushed research and design within the area to new heights, opening up for a more constructive dialogue around food related situations in interaction design.

Designing with a celebratory mindset is relatively different from designing to solve a problem and within what Grimes and Harper name corrective technologies. The complex situation around food and dining can as discussed be considered a composition of multiple elements that together create a mixed media interface. The composition is built of spatial, social, sensual and aesthetic elements and spiced with notions of expectations, social rules and appearances, all of which become potential elements for the designer to work with.

The sensual part of dining has been the centre of a relatively large body of work (dining in the dark, Dinnerware, KROPumulig) that challenge a new way of using the senses either by withdrawing one or by a multisensory experience. These are normally unique experiences that serve as eye openers and flirt on the boundary of being overwhelming. What these disregard is the social quality of dining as they are purely focused on the food itself as a communicative medium, while this study is centred around stimulating one of the senses that is less directly connected with taste but central to socialising, namely hearing. In that way I aim at enhancing one of the senses when dining in a domestic social setting, playing with memory, nostalgia and collaboratively unfolding and experiencing. Oleksik and colleagues concluded their
study of domestic soundscapes with stating that a large designspace in the area of domestic soundscapes was unoccupied. Together with findings around dining in this study, the area showed to be excellent to explore mundane settings and daily routines as wonderments as Paulos and colleagues named everyday qualities.

While Lover’s Cups, DinnerWare and The History Tablecloth are very aesthetically beautiful designs and remain good examples of how ambient computing can be used in a domestic setting to bring new dimensions into the dining / drinking situation, the response of the design has little diversity because of the single light output, while I experiment with how sound can be used in what could be similar situations but with numerous outputs. DinnerWare encourages playing with the food while The History Tablecloth has almost a life of its own. Elements of temporality are seen in these two but have different appearances, which I will study in my work with a different and more diverse output.

Many of the projects presented in this chapter evolved around sharing (Molly’s Madeleine, Burnt Lumpia, Social Navigation, Foodista). Some were about sharing via social navigation, wikis or foodblogs. I would like to argue that development of recipes and knowledge that is built in individual families is hard to compete with. The personal nuances and stories that follow each dish and influence how it is made and consumed are hard to translate to large networks of people. A need for documenting these nuances explains the existence of many foodblogs but their meaning always seems to fade to the background in the digital translation, leaving behind an ocean of recipes and only occasional additional material. These remain nevertheless good ways to create a personal documentation of food in the family for example though the meaning does not transfer easily to readers outside the personal network.

A lot of the projects that deal with distant communication propose a peripheral communication channel (Lover’s cups, Feather, Hazed windows). These are designed for two parties apart and aim at adding an emotional channel between them, increasing a feeling for presence. One part of this work seeks inspiration in the verbal communication channels (post secret, Facebook status updates). Post Secret introduces a public channel for anonymously sharing secrets while Facebook status question has created a space for personal expression. These are in the first place about sharing intimacy and secondly about sharing publicly or anonymously. What these do not invite to is anonymous sharing of luxury problems or thoughts that fit outside the ongoing conversation in co-location that this work looks into. The social element is also secondary to these designs where they differ from this study in the way that it is focused around unfolding and experiencing as a participative exploration.
Field study – Treasure Hunting

Food is an inseparable part of our lives and nurtures our bodies and souls. Preparing it and consuming it is for some a matter of necessity while to others it is a sensual experience. Either way, people often gather around dining, that for many becomes part of the daily routine. It creates moments where thoughts are shared and traditions carried on. Conducting the field study felt like going treasure hunting and I was eager to explore various sides of food and dining in other families. I was curious to explore the various roles that food can play; how people engage in activities related to food and how meaning links to such an act.

I will in this chapter present an overview of the material I gathered. It will by no means be complete as it turned out to be unusually rich in content and provide material to a series of studies. The material, that I had gathered in the interviews and through the e-mail replies, showed to belong to themes in line with what Grimes and Harper (2008) propose for celebratory technologies, family connectedness, pleasure and nostalgia, gifting, creativity, trend-seeking behaviours and relaxation, where the first three were dominant. The discussion in this chapter will be centred around these themes, where I will present examples from the material in an attempt to provide a good insight into the research.

I have divided this chapter into several parts. The first section, What shapes a dining experience, concerns the complexity of a dining situation and the numerous factors that influence it. Because of food’s sensual- and dining’s social qualities a strong relation is often formed between past and the present where food and dining evoke memories, eating certain things remind of something or someone. Memory and food are therefore closely related and is the subject of the following section. Performing and scripting family food traditions centers around food in families, traditions that are kept alive and negotiated as new generations take them on. It is about knowledge that is created in families and passed on between generations. Distant connection is about food as a connective medium for parts of families or loved ones that live apart. The dining situation interrupted deals with notions of embarrassment and frustrations as elements where people feel uncomfortable and reactions no longer fit within the expected social frames. Gift giving is about food as gifts, both as direct conventional gifts as well as sharing or showing feelings with food in some way. Intimacy deals with food as a carrier of feelings on a deeper level than gift giving. It takes the notion of gift giving a step further and reaches a point where it starts to challenge social rules and boundaries in modern day society. Before heading to these themes I will quickly introduce my personal visual summary of food and dining.

Food in my family

The two food maps, that I created as part of an early phase of this study (see images p 42 and p 43), were part of an early exploration, mapping my personal food experiences and frame what I consider some of the most important aspects of food and dining and what shapes a dining experience. Food is probably my family’s greatest passion. We always have and hopefully always will spend a generous amount of time
in the kitchen, cooking, eating, drinking and socialising. My grandfather has always reminded us family members of enjoying simple daily moments in life and together these are some of the main explanations of the existence of this study, as documentation and speculations about food in families. Food connects to so many different aspects in our lives, it can be everything from a necessity to a sensual experience, personal, experimental and explorative. Personal mapping of food experiences helped me identify interesting areas and questions to ask the participants. So were the questions in the e-mail based on findings from these maps and called for stories that related to food, favorites and value and meaning in food and food related activities.

In the following chapter I will discuss some of the central themes that developed as a result of the field study and touch upon various aspects of food and dining. This study will continue exploring my personal paths that relate to food and intertwine those with the material from my treasure hunting.

**What shapes a dining experience?**

The dining situation can as a complex composition be a fragile state. In most cases is dining a social activity, a situation that brings people together. Dining is composed of complex relations that consist of human relations, food, tableware, lighting and so forth. Timing is also an integral part of the dining situation. At what time during the year, week, day, hour we dine. Timing relates to the dining situation itself and in many cases relates to what is being served, hot/cold, number of courses etc. Other factors such as the per-
sonal appearance, social rules, temporal elements, expectations and awareness are important but are often
less thought of. Some of those are more central than others and some remain in the background, but all
together create the dining experience. From a designer’s point of view they have to be taken into consid-
eration as a number of factors that together create a unity - the embodied situation, as if it were an ecologic
system. This could be considered a mixed media situation where the complete situation becomes subject
to the design. Interrupting one of these factors may effect the whole situation and shape its continuation,
change its direction or even destroy the atmosphere and the ongoing social situation.

My grandmother’s cuisine has a special place in my heart. Me and my sisters and cousins have
always spent much time with our grandparents. Their home was our second home and I was as likely to
go to their home after school as I would be to go home. We never had so many things to play with in their
house, nor were they very active in playing with us. But we have spent countless hours in their kitchen and
enjoyed endless products of grandmother’s carefully crafted food. It has never been exotic but always full
of love. I do not know anyone else that cuts a slice of an onion and then cuts each circle of it into small
pieces with a little knife. Everything in my grandmother’s cuisine is that needly taken care of and may ex-
plain some of the long hours spent in the kitchen. And it can be tasted when enjoying the food. Nicely set
table and a calm atmosphere have always contributed to the long hours dedicated to dining. Somehow this
tender, love and care always shine through. When I look back, I see that our time together has always been
much about having long discussions, playing cards, hanging around the kitchen, snacking, drinking and
eating. Serving foods or snacks creates a reason to gather around a table and share thoughts and has in my
family become an inseparable part of being together. It is like a glue or a magnet, it brings people together.
Sometimes I even think we eat to talk (see images p 44).

Food related situations were almost in every case a social situation and it showed that great emphasis in families was put on dining as a shared experience. One of my respondent’s described how

*food in a social setting, sets the mood and tone for the evening...it is a character in the evening’s events as important (although less permanent) as those attending.*

It is the combination of the food, the atmosphere and the social qualities created that could be considered the core of many families. The kitchen becomes in that way a central meeting space in many families, where not only cooking and dining take place, but also kid’s homework, casual meetings and other daily activities. Another of my respondent’s told me how she always tries to catch her grandmother in the kitchen.

*She is much more fun in the kitchen. When in the living room she changes to guest-mode.*

This example shows how contextual atmosphere can be created in a home in the different rooms. The kitchen becomes a social space where different behavior is allowed. It becomes a relaxed and sincere and personal space where mundane experiences are shared, people gather and things are discussed. An experience is shaped by the totality of a situation, it is holistic, situated and constructed. Personal interests and ideologies are part of what Dewey describes as self (in Wright et al 2003), and is engaged in every situation. The relationship between the self and object (food, kitchen table, cookbook etc.) is what constitutes experience. The grandmother behaved differently in the kitchen compared to the living room, relating to Dewey’s theory where activities and artifacts in the kitchen created a relaxed and homely atmosphere where the granddaughter could relax. In his philosophy, Dewey describes an experience as an emotional unity that gives it aesthetic quality, and that experience is a complex irreducible composition of people acting, sensing, thinking, feeling and collaboratively creating meaning (Dewey in Wright et al 2003). Bakhtin (in Wright 2003) talks about personal qualities as influencing experience such as trust, identification, loyalty and commitment. My respondent describes her grandmother as “more fun in the kitchen”, hinting at the grandmother to be more relaxed herself in the kitchen. That was the space in the house were she was in charge, a part of her personal identity, and were she shared a bigger part of herself, while the living room demanded a more formal appearance.

Some of the obvious elements that influence the dining experience and the taste of the food are the occasion, spatial setting, visual appearance of the food and with whom and how it is enjoyed (tablesetting, cutlery, fingers, sharing, chopsticks etc). Beyond those are peripheral elements such as background media, social rules, personal appearances and expectations that play a large role in creating the experience and it often showed to be those that recalled memories of food from the past and shaped the dining to a large extent. As an example smell can influence and provide a first indication of what to expect, this can be both before the meal is enjoyed, as the scent of cooking, that prepares the senses for the meal, and while the meal is enjoyed that together with the visual appearance adds to the taste. At a later point, even years after,
the smell of something can in itself be enough to evoke memories.

*When my mother was growing up, they would only have fruit for Christmas, apples and oranges in wooden boxes. The scent of fruit filling the house was a sign of Christmas. Smelling apples still reminds her of Christmas.*

Wright, McCarthy and Meekison (2003) describe four threads of experience they think of as intertwined and inseparable threads in a braid,

- the *compositional thread*, that is about the narrative structure, almost like a script for what has happened and what will happen,
- the *sensual thread*, that is about the look and feel
- the *emotional thread*, that deals with the whole scale of emotions, from subtle feelings (such as satisfaction) to extreme feelings (such as desperation)
- the *spatio temporal thread*, that is about how actions and events unfold in time and place.

Food setting the mood and tone for an evening, as in the previously mentioned example could be an element of the compositional thread as part of what shapes the script for the evening. Dining as a sensual activity is subject to the sensual thread. Dining is a rich and embodied experience of all four threads and where all senses are active. The scent that spreads around the house as a result of cooking can in some

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**Domestic Dining Soundscapes**

- *media*
  - music
  - television
  - newspapers
  - radio
  - mobile phone
  - telephone
  - computer

- *human*
  - family phrases
  - talking
  - singing
  - walking
  - humming
  - breathing
  - fart
  - burp
  - knock
  - drinking
  - slurping
  - chewing
  - running
  - whisper
  - applaud
  - stepping
  - snapping fingers
  - kids playing

- *environmental*
  - wind
  - rain
  - thunder
  - storm
  - birds
  - people outside

- *intraspatial*
  - cutting tools
  - kitchen sounds
  - utensils
  - music
  - TV
  - newspaper
  - radio
  - telephone
  - computer

- *spatial*
  - cutting tools
  - kitchen sounds
  - utensils
  - music
  - TV
  - newspaper
  - radio
  - telephone
  - computer

- *temporal*
  - cutting tools
  - kitchen sounds
  - utensils
  - music
  - TV
  - newspaper
  - radio
  - telephone
  - computer

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cases be the first step of a dining experience. Hearing, feeling, seeing and tasting of course, influencing the experience on multiple levels, and can recall memories at a later point like in the story of the christmas apples. Sounds play a more complicated role and often less central than other sensual inputs, but nevertheless as important (see word map p 46, domestic dining soundscapes). The sizzling of food on the frying pan, running water or the wine cork that pops, the sound of cutlery while dining, chewing, slurping and of course talking and laughing. Other sounds that equally build up the situation remain in the background, such as music, radio, environmental sounds (trains or traffic outside, birds singing, wind, rain etc) but all are elements in the composition of the experience.

Feelings related to memories of hours spent in my grandparent´s kitchen are subject to the emotional thread, as they represented trust, comfort, enjoyment and social engagement. The spatio temporal thread deals with pace and in combination with for example the emotional thread, we can feel if time flies if we are having fun, or a space feels claustrophobic. The spatio temporal thread created in that way the frames around experiences in the kitchen, as repeated meetings, always set in the same kitchen over a long period of time. The element of time and space have therefor an ability of opening up and closing down. Boundaries between present and future are thus elements of the spatio temporal thread and relate to what I will discuss in the next section, where the relationship between food and memory will be drafted.

**Food and memory**

Food and memory are closely related. The complexity of dining situations and the multiple sensual stimulation does that food and dining is enjoyed through multiple channels, making it more likely to be remembered than an experience that only requires use of one or two of the senses. Waffles and mango juice reminded of the period when one of my respondent´s fell in love with her husband. Baking muffins reminded her of her pregnancy as a period where a lot of baking, consuming and sharing of muffins took place, but she had not been making them since, and

> homemade (not so good) bread and cabbage of times when (she) was young and broke. (She) had read that cabbage was rich in C-vitamin, and it was cheap.

These examples point towards food and dining as part of daily routines, that often were recalled during the field study. Food becomes in these examples symbolic of a period where the whole experience of preparing and consuming it becomes part of the memory. Homemade bread to save money during student years and muffins during pregnancy could still have different meanings. Baking bread derived from necessity but may have had social elements – baking with mum or flatmate, or share with schoolmates, and be a part of creating a social identity as being independent, responsible and standing on own feet. Baking during pregnancy becomes a symbol of having time to enjoy, treat yourself and others. The muffins baking has more connotations with the role of a housewife, a symbol of starting a family and settling down. Another respondent told:

> how she loved to prepare cutlets for her family that she would decorate with thinly sliced lemons, to make
them more appealing, the way her grandmother had always done it.

Talking about food and dining led to memories and past experiences, and showed in my study to lead particularly to memories from childhood. Fond memories and stories that related to grandparents dominated, creating a large body of work that relates to nostalgia. In this story, a young mother prepares dinner for her children as she remembers the dish from her childhood. This story points towards a family tradition, where dishes, habits in the kitchen and little details are passed on between generations, here decorating cutlets with lemons. This is certainly familiar from my childhood as well, and I always serve cutlets with lemons in my little family. It makes them a little nicer and feels like a temporary remote connection is established.

Some said that being asked about food experiences reminded them of things in their past they had forgotten about. So told me one of my respondent’s a story from when he was young:

*I did not like onions. I hated them! ...One evening, when I was around six years old, my mother was preparing dinner and I spotted a peeled onion on the counter top. “No onions!” I cried in alarm. My mother, who was busy juggling several pots at once, casually said, “It’s ok. It’s a sweet onion”. I remember wondering if it tasted like candy, so I picked it up and bit into it like an apple. Oh, the betrayal! It wasn’t sweet at all...it was....well, an onion. I screamed. I cried. And my mother, holding back laughter, consoled me and gave me a trusty carrot.*

During conversations with the people that contributed to this study I could feel warmth in people’s stories
when their mind drifted back in time, emotional additives were used and small atmospheric descriptions added (homemade bread being “not so good”, “busy juggling several pots at once”). One of my respondents mentioned particularly that she found it cozy and heartwarming to reflect upon food related stories.

During the interviews it showed to be difficult to keep the focus on the present. The primary focus was mundane dining but our talks always seemed to drift back in time. It showed to be first when the talk moved to the past, that a glimpse in the eyes and a warm smile appeared, and more poetic descriptions dominated. In fact those described similar daily activities to the daily dining that was the core of our talks but had in time become romanticised. The interviews compared to the images the families took revealed this to some extent (See images p 48). A father scratching the kids back in the middle of the dining, a son sitting on the table waiting for the water to boil, a daughter helping setting the table, a father scratching his head with a fork while watching tv and dining, colorful plates and toys brought to the family dinner, were some of the moments captured in images and picture little quality moments that contrasted the tone my interviewees used when describing their dining patterns. A memory of a sweet onion or eating cabbage is in that way similar to memories the moments in the images can become. Mundane activities related to food and dining thus showed to be of great value but first romanticised years after they had taken place, and then gaining a special and warm spot in the memory of the person.

**Dressing up a situation**

My grandmother has always put great emphasis on setting the table nicely (see images below), even if it is only her and my grandfather and they are only having tea, bread and cheese. Her mother (Abba, born in 1889 died in 1973) would always set the table with a tablecloth, in the kitchen for lunch and in the living room for evening- and weekend dining. Though she probably was not consciously celebrating daily mundane dining, I see this as her way of dressing up a situation.

**Abba baked a lot. She had certain days she did laundry and others when she baked. She always had cakes and something to go with the coffee. She wore certain dresses in the morning, the most worn dresses while doing the laundry and always changed to the Icelandic national costume after lunch.**

She was organised and signalled the recent activity with her appearance. Those had practical as well as cultural and personal explanations. During this time this may have been a sign of different classes in society but if translated to dressing up a mundane dining situation, I like to see this as a quality that tends to get lost in mod-
ern day society.

For years my grandfather has had a habit of taking a picture of a nicely set table (see images p 50). This is before anyone sits down and quite often, as him and my grandmother put an effort into making the table setting nice and appealing. When we are half way through the meal and actually often out of the blue, he breaks the conversation with “hvad har vi gjort for at vi har det så godt!”, and others at the table quietly agree or make a short comment, and momentarily return to the previous conversation or use this as a platform to change the conversation to something optimistic if needed. With a glimpse in his eyes and a humble tone of voice he often uses this phrase as an expression of something he has no words for, enjoys and greatly appreciates. Despite an enormously busy life he has always maintained the ability to pause and reflect, and in a humble manner enjoy a little moment to the fullest, dining and nicely set tables framing many of these moments. The comment and the pictures of the set tables that now have gained a nostalgic place in my mind serve as a subtle reminders to pay attention to qualities in the environment, the poetry in daily life that Karen-Lise Mynster discussed (2009, and p 8-9) about “life (not being) a highway from cradle to grave, but a rest in the sun”.

Adding a little extra – everyday TLC

Closely connected to dressing up a situation is the notion of adding a little extra to daily dining. I quite like to propose a toast to a good Monday, put on a dress to enjoy the Tuesday fish, add some fireworks and festive music to the Thursday Bolognese, create a simple 3 course meal on a Friday and start with dessert, decorate the food or set a bit of money aside to have a bottle of champagne without having a formal occasion. (See images to left).

As I entered the door of one of my interviewees on a winter evening, her husband was making lunch packs for their kids. I took a closer look and saw that he neatly folded the paper around each slice of bread he had cut in triangles, 4 different toppings for each kid. He had cut vegetables into nice little chunks and roasted nuts that he put in small boxes as a little desert. Having just finished my dinner I almost got hungry again by looking at the appealing gourmet pack he was making. It was not because it was so fancy in content though the variety was certainly good, but rather how he did it, how he presented it. This observation brought to mind that just by adding a little tender love and care to a simple meal, it is made much more appealing and enjoyable. By putting an extra effort into preparing their lunch packs he signalled his love and care that the kids brought with them to school. It was as a little reminder of the good, stable and loving home they have as well as a sign of engagement to
the school. My sister talked about how she likes to treat kids fancy drinks served on a tray or set the kids’
table nicely with decorated plates, nice napkins in a ring etc. She meant that by treating kids with small
luxuries, that grown ups often are exclusively treated to, they gradually learned to appreciate, notice and
enjoy nuances in dining situations.

Food and media melt together
Dining as a routine in a family is a safe and stable place in the existence of many children. It is the mo-
ment where family members gather and share thoughts about their day. Many of my interviewees had
memories from daily dining in their childhood where media played a role. The TV news or the radio
would be a background channel that even shaped rules around the table. One interviewee told me that if
the family dining happened to clash with the evening news on the television, it was forbidden to talk as her
father would be listening. As soon as he had finished his dish, he would go watch and the remaining family
members would turn the quiet situation to a social one. Though media becomes a central element here dur-
ing periods of the dining it reminded my interviewee of the importance of the dining as a social situation
as family members had always looked forward to dad leaving the table. This was a routine they adapted
their behavior to although the social potential was interrupted and this created frustrations. In her family
today they decided to make a rule about not having the television on but like to play some music. It is as if
having a sound in the background has grown to be an inseparable part of their dining, where they reinter-
preted a past tradition with a background channel that allows social communication to exist alongside it.

Another of my interviewees shared a story that was a routine when she came home for lunch in
primary school.

Her mom would have come home and prepared her a simple toasted flatbread with butter that melted on
top of it. The kitchen radio that almost all households in Iceland have was always on and the same people
would always read the news, weather report and death obituaries. Their legendary voices were a fixed
part of this little routine and still echo in her head whenever she has a flatbread.

The other way round she also gets reminded of these moments when she hears these voices. In
these examples a daily routine becomes a symbol of family TLC, a place for the child that always knows
what to expect when coming home from school or sit down to the evening dining. Food and media melt
into each other and become an inseparable part of each other. Media is here thought of as one of the com-
positional threads in a dining situation, and one of the matters that influences the atmosphere and therefor
the dining experience. These moments today could therefor consist of something else than the kitchen
radio that here is used as an example of what could be other types of media, such as a music playlist. A
peripheral factor makes the situation more memorable and can later be pulled out to restage the moment.
Performing and scripting family food traditions

This category is primarily concerned with traditions and knowledge that is passed on from one generation to the next, like an ongoing script that is open for personal interpretations. These are malleable to change as part of adapting them to new families, new generations. Everyday negotiations of traditions, family dishes, rituals and habits in families, are part of what keeps them alive through many generations.

Food often showed to remind of past experiences and serve as a connective medium between the past and the present, such as in the example of the cutlets and lemons. The making of food is very personal. It can take a lifetime to develop a recipe, some of which are passed on between generations, adapted and further developed by the next in line. Word of mouth, recipes in personal cookbooks (see images p 54), familiar performances, such as listening to the radio, and artifacts that travel between generations are some of the elements that constitute an ongoing weaving of food in families. This is a development and concerns reinterpretations and changes of recipes, habits, rituals and traditions in families. My grandmother has for example many things in her kitchen that she inherited from her mother (image on right) and I know that many of her recipes derive from her as well, many of which she has adapted and passed on to us. We have adapted them to our lives and identities and added our personal nuances to them. Grandmother has given some personal things from the kitchen to my mother, who again has given me and my sisters various things from her own kitchen, both recipes and for example her precious pancake pan that now is frequently used in my kitchen. An atmosphere from the past can therefore be recreated by preparing a meal, such as pancakes, in a new context with elements from the past as a way of reinterpretation.

Traditions and habits change and we gradually, generation by generation, mould them to fit our lives. The knowledge possessed by the elder generations is enormous and it often feels like going treasure hunting when having a conversation about past times with granny and grandpa. One of the stories I collected was about a grandmother who always counted potatoes to the pot, “you eat two, grandpa three....”, and even if guests were expected she would estimate how many potatoes each person would eat. When guests had filled their dishes with her delicacies she would say

“My darlings, please have more, there is pleeenty in the kitchen!”,

creating stomachache for my storyteller as she knew there was no more left. But it was never needed. This phrase is indeed very familiar from my own family and one of many that I have grown up hearing. I have listened to my mother adapt it and use in a slightly different way and I must admit that I have grown to use it more and more, again with a little different meaning. It is this flexibility that keeps traditions alive. While my grandmother’s meaning has always concerned the food tasting good, and making sure that everyone eats well, I use it more as a reference to the warmth of her and my mother’s cuisines. In that way, I bring an element of comfort and enjoyment into new settings.
This relates to how my sister described it so that we hold on to traditions to keep the family thread going. She argued that we did so as part of balancing ourselves in modern day fast moving society. What she is saying with this concerns how traditions are parts of our self identity. Unlike clothes or hairstyle, that can change drastically between generations, traditions that are related to food and dining change much slower. Each family thus creates their own version of a dish that becomes one element in the family identity. This reminds me of my mother who is an extraordinary cook. She has always cooked differently from my grandmother and chosen not to continue some things at the same time as she constantly experiments with new things, both in terms of the food itself and the elements around it such as table setting.

Variations in families represent nuances in countries and cultures. I like to call these variations family trademarks as they are like the clans and tartans in Scotland, each family has their own pattern. In this context the pattern can consist of numerous family dishes and habits in the kitchen, traditions, dining habits, performances and for example how certain occasions are celebrated and how these are negotiated. The phrase, “My darlings, please have more, there is pleeenty in the kitchen!” is in that way one family trademark, that is part of creating a family’s self identity. These soft nuances that unfold in time and place are negotiations between generations and can develop in decades, even centuries.

One of my interviewees told me how her mother in law invited her to dinner. She wanted to treat her with one of her favorite dishes, traditional lamb in curry sauce, a dish that is as common in Iceland, and has as many variations as meatballs in Sweden, ratatouille in France or pasta bolognese in Italy.

Taking the first bite my interviewee got enormously disappointed as this was far away from what this dish was in her mind supposed to taste like. It was a combination of the taste, the consistency, how it was served. Everything was wrong and nothing like her grandmother’s curry.

I told her how this dish was prepared in my family and with the way she wrinkled her forehead she could not hide her surprise. She had expected a certain taste and thought it was unthinkable that the taste could be different. She went as far as saying “this was not lamb in curry at all”. These variations have developed through centuries of home cooking and picture subtle nuances in traditional cooking.

One of my respondents, is a Mexican – American guy that lives in Scotland as the only member of his family. Him and his wife are absolute gourmets and carried with them numerous recipes and traditions from the homelands. One of those was “tamales”, a Mexican version of dumplings. What was unusual with him preparing the tamales, that are made in batches for sharing, was that as his family is matriarchal, the men have never made them. He wanted to carry on the tradition and so he contacted his grandmother for the recipe. As he is vegetarian and lives in a different country, where supplies of raw materials vary to some extent compared to his childhood home, he adapted the recipe by changing some of the ingredients which again is a negotiation between generations. He felt it was important to learn how to make the tamales, and he enjoyed adapting and adding his personal twist to the making of them. He described how he had made tamales for the first time in a new context:
No one, besides myself had had them before, so they were greeted with curiosity and anticipation. It was a lot of fun for me to watch people puzzle out how to eat the corn husk-wrapped tamales. After a minute or so I had gave in and showed them how to eat them. The great thing about tamales, is that they are wrapped, so it is like unwrapping a little present that you get to eat.

The now Mexican – American – Scottish tamales are an example of a development of a family dish that in time gets reinterpreted through an ongoing weaving of negotiations, development and journey between generations and places. Tamales are here introduced to a group of friends in the new place, expanding the tradition to new networks of people and cultures. And so are pancakes in many Icelandic families, that almost earned a chapter of their own. They could in fact have been the center of this study. But I’ll suffice with two small stories from the field study.

**Pancakes**

Pancakes like other old recipes have gained a status in many families where each family has through the generations developed their own special flavor. My mother gave me her pancake pan and I got the recipe from my grandmother who got it from her mother (image on right). In our three generation talk, my grandfather refreshed a story from times when they had just met. This was soon after second world war ended and my grandmother invited my grandfather’s mother to afternoon coffee. I do not think it was a coincidence or a random decision that she served her delightful pancakes with rhubarb jam and cream. My grandfather remembered how his mother had talked about the pancakes long after. She had been fascinated with how thin she had managed to make them, and how delicious they were.

Serving her pancakes became a way of welcoming her to the family as well as a it gave an insight into the family. My grandmother made some changes and serves them with rasberry géle, cream and bananas or rolled with sugar for more casual occasions and that version is what I remember from I was little and she still serves. The rolled pancakes remain the same, even now as the fourth generation is using the same recipe. I have added various toppings to the folded pancakes, and like to have each person at the table to experiment with the toppings and make their own favorite combination, mine is with chocolate spread, coconut and bananas but sometimes with sugar and freshly squeezed lemon juice. These are examples of negotiations that influence the dining, for example with the move from one person preparing the pancakes for the guests, compared to my version where a table is set with a stack of pancakes and toppings for sharing and experimenting with which influences the social situation.

In a funny way it pleases me and brings me some inner joy that my kids love pancakes and they have become a family treat that we also love to share with friends. In my mind there is a poetic quality in recipes that have undergone such a journey. It may in some way have to do with the fear of loosing and some relief embedded in the appreciated continuation of those recipes. In my mind there is something
festive about having pancakes. Even though it is for no occasion and the pancakes are rolled with sugar, it adds a little twist and something special to the day. One of my respondent’s told me how she had been in a Christmas party once.

_She was in the middle of a conversation and in the background she heard someone saying that his grandmother baked the best pancakes. She interrupted the conversation by yelling across the dining room, that it was HER grandmother who made the best pancakes. As she turned around she saw it was her brother she was yelling at._

Her grandmother apparently never went anywhere without pancakes, always unasked, rolled with sugar if it was casual, with whipped cream and jam if it was for a festive occasion and both if it was a birthday or a confirmation. Pancakes have here gained a measuring element where it becomes a matter of status to have a grandmother who makes the best pancakes. The pancakes became a part of the grandmother’s self identity and an element she used to show her love and contribute with when people were meeting. The kids interpret it so that it is a quality to be able to make good pancakes that in time grew to be an inseparable part of their communication with the grandmother.

.Expectations

The story of the daughter in law who got so disappointed with her mother in law’s lamb in curry shows one side of these complicated situations that do not fit into the expected social frames. A host and the guests have some expectations that can call for challenging reactions if they are not met. Me and my partner were invited to lunch at one of my friends.

_She cut us a big slice of her spinach and cheese quiche and I loved it. A bit later I discovered that my partner had been quiet for a while. When I looked at him I saw that he was fighting with chewing a bite, all getting red in his face._

The taste and consistency of it disgusted him because of all the cheese and a moment later he stood up, spit the bite in the bin and cleared his plate and excused himself for not liking it. The moment was very embarrassing and interrupted both my appetite and influenced the atmosphere. The host had put an effort into making a quiche for our visit, one of her specialties, and this was even worse as it was just the three of us. I felt that I had to add extra compliments to the quiche to make up for him not liking it and the balance of the atmosphere was disturbed. While most of us are likely to have eaten or drunk something at some point without liking it, my partner could by no means swallow a single bite and was physically forced to express his dislike.

I remember an incident from a big dinner party I had for my friends. We were probably twelve young women and I served a number of small courses. A conversation was created around the food and one of the guests was asked if she did not like a course she had left untouched. Without hesitation and with
a determined voice she said “no, it did not get along with my taste buds”. I was so impressed with how well she framed this as it created no sense of discomfort for anyone and was very honest at the same time, and I actually memorized this phrase for future use which has come in handy a few times. The careful phrasing pointed out that people have different taste preferences, rather than the chef failing to live up to the guests expectations. The two stories deal with the frames that a guest has to move in and are centered around keeping face in a dining situation. Breaking those can be insulting, making the chef nervous, sad or disappointed or be uncomfortable for the guest.

**Commitment**

A different side of food in relation to expectations is commitment that is expected in certain contexts. After 45 years my grandmother made a confession about times when she forbid my mother to continue to join the girl scouts.

Together with her best friend and sister, they experienced many scout adventures until one day grandmother forbid her to continue being a member of the scouts. She had always told my mother that it was because the rules were too loose and contradicted her values. All of a sudden she mentions that she did not like all the baking she was expected to do. All the parents were supposed to bake for all kinds of events and she did not like being expected to bake, and certainly not for people she did not know.

Coaches and other leaders of social groups commit themselves to the group’s joint progression and the parents are expected to keep a complex balance between allowing the coach to lead but respond to his/her requirements about engagement when needed. This is often in combination with raising money for a certain purpose, such as having a bazaar. Unwritten rules and expectations vary between groups but often, such as in the above named example, evolves around homemade cakes. The parents become the fundraising tool, bringing the focus to social status and self identity. In my grandmother’s case she disliked that a person she did not know expected her to bake whenever they needed it, so that all was on their premises. She considered baking a personal matter that could only be done when you wanted to and for someone you self chose.

A second side to the story is how a home-made cake reflects a certain status in this context. A tasty cake even more as a symbol of a mother and wife that allows time and effort to her child’s activities and a mother that is a good housewife and good cook. Sending ones child with a bought cake would hint to a different status of either not being skilled in the kitchen or to live a life too busy to engage in the child’s activities.

**Distant connection**

This section deals with food as a form for distant connection and taps into some of the issues previously discussed where traditions move to a different context as part of determining your social status and
identity in the new place and maintaining a connection to home. With increased supply level and variety of food products available the number of dishes made in an average family has risen. Increased traveling and immigration also play a big role in introducing new dishes. Together with trends in society and health campaigns these shape the variety in cooking, flora of restaurants and can by no means be compared to cooking in the first half of last century. Nevertheless it showed in my field study that despite some dishes being jumped over by one generation (my mother not making some of the dishes my grandmother makes but that I make), the tradition is carried on in some form. A piece of meat for example can in that way be transported between countries like this piece of lamb that my family received from Iceland (image on left).

As one of my interviewees was moving away from home she borrowed her mother’s and grandmother’s cook books to copy from and make one of her own. We went through some of the recipes in it and she shared stories, some of which had roots in the early 19th century. Whether in written or spoken word, engraved in stone, a home cook book or simply in our minds these are kept alive to continue their travel from one generation to the next.

The need to draw certain things from the past can be a part of establishing a person’s self identity and place in society when resettling in a new place. A form for remediating traditions by carrying on traditions and holding on to fond memories can be part of the resettling and can be found in the example of Mexican tamales being brought to Scotland where a male prepares them for the first time, where he adapts the recipe to the local ingredients and his food habits and shares it with a new group of friends.

My parents once posted a frozen reindeer filet from Stockholm to Malmö for a new year dinner I was having. We figured out it would defrost during the way and be perfect for the oven when it arrived. It worked.

This story was told by one of my respondents. The reindeer had been shot by a member of the family and was a family delicacy she wanted to introduce to the new group of friends. Preparing the filet in a new context with different people and far away from home may have been a way of maintaining a connection to home. Fond memories can be awakened by reconstructing a ritual and sharing with new people, thereby passing on traditions and introducing them to others, thereby strengthening ones’s existence in the new place.

One story reflected back to years when the respondent lived abroad as a kid. Her grandmother always sent her coconut cake by airmail on her birthday. That was her favorite cake and her favorite grandmother. It must have taken days from the moment the cake came out of the oven and until it reached her mouth, bearing in mind that this is airmail between Iceland and Denmark in the early eighties. At least some days I presume, which must have affected the freshness and taste of the cake. Yet this was the best cake she had ever tasted. Not that I would doubt that the cake was still good, this little story tells how a
feeling can be worked into food and a strong connection maintained through the giving and consumption of it despite the physical distance. Here the cake travels through multiple channels (post office, post car, airport, airplane etc.) from the grandmother to the birthday girl as a gift and is a literal example of food as a distant connection. Listening to the midday radio news online might in relation to previously mentioned food and media discussion be another way of maintaining a connection to home that embodies the presence of the distant person.

Gift giving - A form for expression

It showed that awareness about the meaning and use of food is limited but often intuitive. When asked if food could be used to express feelings, many of the respondent’s were unsure but recalled stories and situations later were that was indeed done, for example in form of comfort food, to show compassion, care or love.

Food as a gift is personal. For certain occasions it is known to use food to express certain feelings, such as cakes for celebrating birthdays, champagne for weddings, goose to celebrate Christmas, lamb Easter or candy when you are feeling blue. Some of these traditions have cultural or religious roots but all apply to certain special occasions that happen rarely. Conscious use of food as a meaning carrier is less common on daily basis or to express feelings such as consolation, flirting or frustrations.

Whether something homemade or bought in the store, the act of thinking of giving someone food/cake/wine etc., then choosing, buying / making and giving can be considered a part of the gift giving process. Gift giving can be in many forms and not necessarily in common understanding as something that is bought, made, wrapped and given. The reindeer that was sent frozen from Stockholm to Malmö is in my mind a nice example of a meaningful gift at the same time as it serves as a distant connection to home. In this case it was a filet of meat that is either expensive or hard to get in stores. As it finally was served it was filled with meaning. It had been shot by a member of the family, who worked it and shared with other members of the family. The parents had a frozen a piece they wanted to give and now calculated to be fit for the oven as it would arrive. They packed it, brought it to the post office and in that way it went through many hands to finally be prepared according to the family tradition and served to people the daughter had formed a relationship with in the new home. In that way it is both a gift from the parents who are giving a helping hand to their daughter and to the guests who the host is sharing a personal dish with. The givers and receivers therefore become two, where one is a receiver that passes his gift on. I sent pancakes to my daughter’s kindergarden as a way of introducing our little thing; it felt like giving a piece of ourselves in a good way and was a part of marking our identity in a new context.

My mother and grandmother always make an effort to pay attention to special wishes family
members have and make sure they have something to suit every taste in the fridge (images p 60 and to right). In that way they express their care and often remember something we tasted at some point and liked which they later buy, though we may even have forgotten all about it. That is giving on a different level and a symbol for everyday care that takes on a form of paying attention to preferences of the different family members.

The grandmothers phrase, “Darlings, please have more, there is pleeenty in the kitchen” could be considered a gift in a similar way. With the guests in mind, which dish to prepare has been decided, the table set according to that and the carefully prepared meal takes a form of a group gift.

Other and more concrete examples of food as a gift appeared in the field study. The coconut cake that the grandmother had always sent her granddaughter cross country for her birthday remains an example of a connection home like the reindeer, but it was first and foremost intended as a gift. Another story from a respondent was about how she made coconut cookies and brought to work a couple of times as she had felt like surprising her colleagues. She felt that they had appreciated them even more as they were unexpected.

The element of surprise is here introduced as valuable. Compared to the previous coconut cake story, failing to send the cake one year could have resulted in disappointment. A tradition of sending a birthday cake had been created and breaking it would have failed her expectations, while giving the cakes in the work environment moved beyond people’s expectations.

**Symbolic gifting**

Flowers have a worldwide status as a symbol of various feelings and are widely used to express those. The different types, colors, number and smells are some of the symbolic elements.

A grandfather was told to have lost his father to the seas when he was 7 or 8 years old. The grandfather later recalled memories about having the washing room filled with flowers at the same time as they had no money to buy food.

Food has yet not gained this position of acknowledgment though times certainly have changed since the great grandfather passed away. The respondent who shared this story wondered why food was not more actively used to express feelings. She told how her mother always made her a special soup (traditional Icelandic soup with lamb) when she came home from the hospital after giving birth (she has 4 children). That was her way of celebrating the newborn and awarding her for her achievement. A new family member is in that way welcomed with one of the family trademarks, a symbol of carrying on the tradition.

Bringing someone who “is sick or having a cold” a bag with daily groceries, “just everyday stuff”
was suggested as a nice gift, especially if that person lived alone. I first noticed that the focus was on someone who suffers from no more than having a cold. Bringing daily things can be a lot more meaningful in certain situations rather than an artifact, flowers for example like in the story with the grieving family. This can ease the daily life and provide strength in getting past the illness / grief. Food remains quite far from being acknowledged as such and interpreted as a form for help or even pity which puts the receiver on a lower level than the giver. Giving something that is useful or practical seems to be of a different level than for example what is more like a treat, like chocolate or flowers.

**Intimacy**

Thoughts on using food as a meaning carrier occurred numerous times during the field work. Here it is taken a step further than in the discussion around gift giving, moving to an intimate level.

A respondent once brought her mother fresh coriander in a pot to a dinner she had invited her to. What makes that story interesting is that the mother hated coriander more than anything and knowingly the daughter brought it as a bit of a statement of how she felt. Food can in that way be used to express various feelings, and not only love and compassion. In the Mexican feature film Like Water for Chocolate (1993, directed by Alfonso Arau) the youngest of three daughters mediates her feelings through food. As for the tradition she was not to get married and when she falls in love with a young man who deeply returns her love she discovers the magical powers of her cooking which she uses to spread her passion and misery.

My sister once baked a cake for a friend who lost a child at birth. There was never a doubt in her mind that she would bake a cake nor which cake she would bake. In fact, baking was the only form for expression she could think of when she heard about the tragedy. Beyond serving nutritional needs, food contains delicate qualities and can carry valuable meaning, not only in semiological understanding but with the awareness of the giver and receiver. One of my respondents said he used food consciously to show his feelings and that it was a form for expression him and his wife used to add small adventures to their lives. Another one said you could use food to say anything, “come, go, I love you, I care for you, I comfort you” and that she always cooked according to how people in the family felt.

One respondent used food to express some of these feelings as she and her boyfriend she had recently started dating decided to invite each other for dinner at home. She was quite nervous and wanted everything to be perfect. Using experience from a yearlong stay in Italy and a recipe from the lady she had lived with at the time,

*she made Spaghetti Carbonara, a simple dish that with the tricks she had learned “tastes divine” as she put it. She wanted to share that divinity with the guy as she “truly believed that the road to a man’s heart lay through his stomach”.*

They had just recently met and made this deal about cooking for each other. This hinted at a form for a challenge or testing the potential of the relationship. Food became a scale they used to measure each other.
Apparently they still make this dish quite often which she felt confirmed her belief of the road to the heart being through the stomach. There is a sensual element in this story that evolves around using food as a form for expression in the early phase of dating. Having it later may remind of the original intention of making it, and as the years went it has become a natural part of their family life. The original meaning of it has therefor been built on with each year passed and now represents the family as a unity of strong relations built on the love they found and confirmed with their cooking challenge. Relating to this story is one a respondent told about a friend who met a guy.

*The day after meeting for the first time he showed up on her doorstep with a home made bread. This was 20 years ago and they are still a couple. He still makes bread.*

Compared to the agreement made between the two parties, on inviting each other home for dinner, the guy who baked the bread takes an initiative to become intimate and surprises the woman with his home made bread. This creates a completely different meaning and questions around social rules and appropriation. There is a fine line between what is socially accepted and what breaks the unwritten social rules of society. The situation would have been different had he brought flowers as they are more common to communicate a feeling than food and therefor more socially accepted.

The process of baking requires more accuracy than cooking as the result can only first be tasted afterwards and no ingredients can be added at that point. Bread making requires a close physical contact with the ingredients as the dough has to be worked and shaped. Bringing it to the recipient who physically consumes the feelings that have been put into the bread becomes the last step in the process that started with getting the idea of baking her a bread. The process of making the bread and later eating it is therefor full of emotions as each step is a constant reminder of the other person.

Bringing someone a personal gift as a manifest of feelings so soon in a dating process breaks the expected behavioral social frame in society. Such an intimate act could be considered to be inappropriate at this stage. By doing this, these boundaries are challenged and a few steps in the process of building up a relationship between two people are jumped over, the giver appears to be daring and sincere and possibly particularly sensitive to the circumstances. This may indeed have been the act that kicked of the later development, hinting at an interruption sometimes adding new perspectives to a relationship or a social situation.

**The dining situation interrupted**

A few of the stories told in the course of this field study, evolved around frustrations, embarrassing moments or other uncomfortable or disturbing incidents when dining. A dining situation is a complicated puzzle of various elements, spatial, functional, sensual and aesthetic. Interrupting one of these can have an influence on the ongoing social situation.

A group of people sitting at a table, whether family, friends or other normally behave within a frame of social rules and expected behaviors. These rules are often complicated and vary from context to
context and the boundaries from one person to the other as people have different values, backgrounds or interpret things in their environment differently. Eating too fast, engaging too soon in a private conversation, breaking something, bringing up sensitive issues that may not be appropriate, remain silent or talk constantly, talking on the phone, or even farting or burping can all influence how the continuation will be. Moving outside these frames thus can both lower the boundaries between people or ruin the rest of the dining. If a group of people collaboratively manage to move past an interruption, a space can be created for a new type of communication that is more open, relaxing and even more sincere.

In two cases in the field study it showed that any form of media (radio, television or internet) was turned of during dining. Having the television on was considered disturbing for the social potential of the setting as it absorbed all family member’s attention and thereby concentration on the ongoing conversation. Listening to the radio or having the television on during the preparation of the meal obeyed other rules as family members were more focused on doing their own thing in different parts of the apartment. The actual dinner was a moment where the family gathered and the central focus was on being together during this moment as part of a daily ritual. Two out of the three families described how the late afternoon dining often was noisy and hectic as the kids were tired, impatient and agitated. One of my interviewees took a picture she said was describing for the preparation of the dining and pictures one of her kids hanging onto her legs and the other her partner that lays flat on the bed, face down as a way to rest for a moment after his day at work.

Another of my interviewees handed me images she had taken around the family’s breakfast. Excitement was seen in the morning pictures while exhaustion was more dominant in the evenings, creating an unbalanced atmosphere. She told me the morning dining sessions were much more quiet and enjoyable, where the kids were fresh after a good night’s sleep and more interested in taking part in the preparation. They valued the mornings as the family’s quality time of the day. In the images from that same family I discovered that when the dining was interrupted, a quality moment was created. A father scratching the kid’s back or the kids stepping away from the table and giving each other a big hug or jumping on the sofa showed a pattern of conventional dining activities melting together with moments of interruptions that created air and enjoyment. One of the families claimed sometimes to have the television on if the kids were in the midst of watching something or it was time for the evening news as a response to this type of agitated atmosphere. The social aspect of being together was despite this considered an important part of the daily routine, even though family members were not communicating, but watching television. This also hints at a situation that reflects a social context that is so contextually rich, as all family members know their role and what is expected of them in the dining, so that words are not needed for being together.

The daily dining in a family may develop and change as kids get older. All of the families thought it was important to hold on to that the family gathered around eating as a part of learning and sense of belonging for the kids. This was a daily gathering point where family members should have a chance to share thoughts about their daily lives that they carried with them from their childhood and had consciously chosen to continue when they formed their families. Simply being together was as important, although not many words were shared. Certain compromises were made for example regarding formality and rules.
compared to the parent’s childhood. A temporal element is central here and how parents take with them traditions they find important for the raising of their children and negotiate those to fit their family patterns. Though the dining situation will not be particularly calm or big conversations created the next few years, they are looking ahead and gradually introducing their kids to this form of being together as an important part of social life in a family, whether with or without digital media.

**Summary**

Food related activities are shaped by a constellation of multiple threads that shape the dining experience and were meaning is collaboratively created in time and space. When designing for complex contexts, a sensitivity towards all elements has to be shown. A single factor can interrupt and destroy the ongoing social situation. At the same time does the complexity of it make it interesting to explore from a designer’s point of view. Every element of it becomes a potential interface, where elements both central to the dining and background elements have potential design openings.

It showed that memory was closely related to food and dining and temporal and spatial elements play a central role in negotiation and reinterpretation of food in families. Traditions, rituals, habits and family dishes are in that way flexible to change and are adapted to new places, families and groups of friends, which is central to their survival.

I have in this chapter aimed at giving an insight into themes that developed during the field study. I have pointed out issues to be aware of, and qualities to build on as potential design openings. Dining is a multisensory experience where I have tried to provide an insight from many perspectives. Choosing a design direction can thus be based on the different approaches and components that shape the situation. In the next chapter I will present early concepts that developed from the themes presented in this chapter, and then move towards how I explored peripheral elements as part of what shapes a dining situation.
Early Concepts

In this chapter I will discuss some of the themes that developed from the field study and the concepts and ideas that evolved from those. The spectrum is broad as the material was rich in content and opened up for different design directions. Three broad themes in the field study showed to be particularly promising and were later split up for further development. The three were Nostalgia in Food that dealt with warmth in people’s storytelling and sentimental value, the five senses and how memories related to those. Every-day TLC framed the notion of adding a little extra to the everyday life and communicating through food as a form for communication that is fully embodied and does not focus on the spoken word. Granny Tales were characterized with the warmth in people’s stories like Nostalgia in Food and dealt with knowledge that is passed on through generations and housed stories that related to food in generations and traditions and how we hold on to these in order to balance ourselves in the fast moving society. These categories created a rough overview of the material and as a result of an in depth dialogue with the material, endless ideas saw daylight, six of which will shortly be introduced here as to give an idea of the broadness of the field and potential areas to work with digital technologies in relation to food and dining, and where limited design explorations have been done within interaction design. The ideas that developed connected more or less with the themes with some overlapping and others being a mixture of more than one. A short background story of previous design explorations will be presented as a lead in what has shown to be an ongoing development in my design studies. Thoughts about the Good Life have been the undertone in numerous projects I have worked on. Some have evolved around dining while others have used food as a metaphor and I shall here name two examples that relate best to this study.

Previous studies

A group of people was invited to have soup. The table was set with nice homemade soup and forks. The setting was casual and the guests creatively managed to enjoy the goodies while thoughts on what we take for granted and are so familiar to us that we do not even think about them were shared (Denmark’s Design School, 2004). Another version of this was performed at K3, Malmö University in 2007 where students were invited to have soup and bread during a lunch break. Under the plates were strong magnets and the glasses were equipped with a rfid tag invisible to the guests and a receiver and subwoofer underneath the table. The metal cutlery that obviously was attracted to the magnet, demanded the guest to be more aware of her eating behavior while placing the glass back on the table after taking a sip triggered a deep and rather load eruption like sound. Interesting patterns of movements and communication developed as the experiment was conducted twice with different people. A third example was a cake that I collaboratively made with colleagues at the Danish Design School and was a sponge cake with multiple layers and various different toppings, some more appropriate for a cake than others. In that way it was topped with mustard, chocolate, caramel, strawberries, herring, whipped cream, berry sauce, maltesers, carrots and salad and much else, strategically spread to make some bites very sweet and tasty while others had more unexpected
tastes or combinations.

The cake that looked intriguing and fun was offered to a large group of people that at first were hesitant to try but as soon as one did, the others were tempted to as well. In the three interventions food was used as a metaphor for elements in life and how we as humans choose to live our lives in challenging ourselves and being aware of our environment and rituals and if those should be taken for granted or more attention paid to. The soup and the fork were thought of as a metaphor of missing out on things in life how we choose to try and catch the goodies that pass our way or whether we let live pass us buy effortlessly. The cake symbolized the many and diverse layers and qualities of life and the nuances of it and whether we dear taking changes to fully explore and get the most out of life. It highlighted that life is full of surprises and that sometimes we have fantastic experiences and other times less pleasurable ones.

The Multimedia Family Foodbook

The Multimedia Family Foodbook centers around collaboratively building and documenting family recipes, traditions and the various elements in a setting that influence dining experiences. It has a reference to personal cookbooks and knowledge that is passed on between generations and is a highly personal composition (see images p 54). The idea is to create an online platform for families or small closed networks of people where family recipes, fond memories that relate to them and traditions are collaboratively gathered and shared in one place. Media snippets, songs, readings from the radio, private recordings with memories, images, videos etc. could be added and linked to each recipe as if it had its own playlist that could be streamed as the meal was enjoyed (image ro right). Suggestions on how to add a little extra to the meal, such as with the table setting, adding a twist to the recipe or suggesting special wines would refer to what I like to call family trademarks and occurred multiple times in my field study as habits or tips in families. It would then be possible to download a ready to print .pdf and media files for burning and you have published your own book with a multimedia disk. Numerous cookbooks therefore coexist at each time, constantly developing.

Food and memory are closely related. Fond memories that related to food occupied a relatively large part of my field study, family stories were told and favorite recipes shared. Food and dining evoke memories from childhood and showed to serve primarily social values in families where the total dining experience was often more important than the food itself. The interface therefore is on multiple levels in this complex situation ranging from the food itself, to the physical space that frames it to peripheral elements such as the radio heard in the background while having lunch. Memories and the knowledge that travels between generations is mostly bound separately in numerous cookbooks and photo-albums in each
family, or in our minds. One of my interviewees told me how she had gone through her mother’s and grandmother’s cookbooks as she was to move away from home and told me stories that related to some of the recipes as we browsed through her book. The Multimedia Family Foodbook therefore combines elements of all three themes from the field study in one idea and deals with countless numbers of it. Family stories would in that way gain a place to be documented and shared and added to by other family members, traditions could be carried on and tips and knowledge related to certain recipes or occasions could be gathered in one place. The Multimedia Family Food-book could therefore gradually build up to become the history of food and dining in a family that expands the boundaries of personal cookbooks to collaborative family books about food and dining. The next idea to be presented evolves around media and how it melts into daily food experiences and centers around radio listening in the kitchen as one of the multiple layers that effects a dining situation. Rather than documenting the focus shifts towards members of different families mixing sounds relating to their memories to shape new media dining environments.

**FM Kitchen memory remix**

FM Kitchen memory remix is developed around the notion of background channels in dining situations, and is an installation where a classical kitchen radio is set in a homie kitchen setting. Nostalgic sound snippets from the media play and guests are invited to add their sounds or beat, and remix mine and thereby mixing old and new and creating new kitchen atmospheres and new memories. The guests share in that way their memories from the kitchen, collaboratively creating pieces of mixed memories (image below). Multiple layers of memories are thereby created.

The idea developed in relation to a story one of my interviewees told me from her childhood tapping into dining as a holistic experience where the totality of the setting is central. She would always come home for lunch after school finished and as she entered she could hear the familiar voices in the kitchen radio, reading the news. Always the same voices. Her mother toasted a flatbread (Icelandic thin rye bread) which she smeared butter on that melted. Today when she has a flatbread or hears the 12 o’clock news she gets reminded of this making the voices echo in her head.

The story gives an example of how media as a background channel in a daily ritual melts into food and becomes a symbol of a secure place, a post to rely on. Sound, which in this case is the radio becomes one of many elements that are part of setting the table and creating the atmosphere that later reminds of the experience. In a dining situation all the senses are active and here hearing becomes central. Pulling out sounds from repetitive dining experiences in the past can be enough to recreate the scene and evoke memories. The story brings to mind what this background channels could be in modern day dining and the role of media in that context. The notion of performative memory is therefore a central quality here where
multiple performances are added and mixed to the original. The remix opens up for sharing of different cultural and social backgrounds, inviting guests to get a sneak peak into each others nostalgia at the same time as they create potential background media channels for new times.

**Performative Dining Event Score**

The Performative Dining Event Score is a board game to use during everyday dining and aims at spicing up this mundane situation. A tablecloth is the board and comes with event score cards of different categories to choose from and a mediabox. Family members (friends or those at the table) pick a category based on the atmosphere, (for example party, cozy, nostalgic) or let a spinning wheel decide for them. They draw a card from the chosen category and are now ready to start performing. The card could contain a single or a series of event scores. As an example it could be lighting 10 candles and use instead of artificial lighting during your meal, die your potatoes, rice and water blue, make a small desert and enjoy it before the meal, introduce manners from different cultures, singing everything you want to say, object to everything the person on your right says, eat with your left hand, feed the person next to you, bless the meal, sing a tribute to the person opposite you (image to right), decorate the table with things from your bedroom or tell a story about each of the ingredients on your plate. Today’s event score is available online in addition to those on the cards. The mediabox is used to listen to soundfiles for each category, to record sounds of your dining or tell the story of your performance and share it online if wanted. You can hear other people’s stories and charge your box with a new sound library for each category.

The idea has its roots in my grandparent’s habit of always making an effort to set the dining table nicely to create a slightly more enjoyable moment, even though it is only bread, cheese and jam and no guests are expected. She puts the butter on a plate, the tuna-salad in a nice little flowery bowl, placemat for each person and a folded napkin and knife at each dish (see images p 49-50). These little things always make the meal a little more enjoyable, even though what is being enjoyed is very simple. During more festive occasions it has always been my grandfather that sets the table. He folds the napkins in all kinds of shapes and patterns, knives, forks, plates and glasses are nicely lined up on the carefully selected tablecloth and my grandmother (or we) adds some decorations in form of candleholders from the living room or small statues of birds or little figures as a finishing touch.

I have carried this tradition with me but often twisted it a little. This idea is in some sense taking it a step further and challenges the somewhat holistic idea of the ideal sophisticated dining. As my family is likely amongst the least playful on the globe, the Performative Dining Event Score expresses a wish to
loosen up the traditional dining and challenge some of the social rules that dominate dining situations. The event score cards thus determine what is appropriate during the dining and blur or even break the conventional boundaries of manners and rules around the table.

**Fxxxxxx Food**

Fxxxxxx Food is an idea that deals with frustrations that are connected with commitment and food. Fxxxxxx Food offers frustrated parents that have baked for a children’s arrangement at their kids’ school to anonymously sms their frustrations that get printed on disposable plates and cups / napkins that the kids and parents eat of during the arrangement. This could be stickers as a simpler, quicker and cheaper version. Each guest therefor has a written statement, thought, or words printed on their glass where the frustration is visualized and which invites to a new type of dialogue about this issue or creates a parallel communicative channel. The notion of who is eating and drinking who’s frustration adds a twist to the setting (image to left).

The idea has its roots in my grandmother’s confessions after 45 years during our three generation talk. My mother had been in the girl scouts when she was younger until her mother forbid her to continue. She had said the reason was that she felt some of the rules were too loose, such as when the girls went camping and when activities were in the evenings, that they ended too late for young girls that should be at home at such late hour. We all know my grandmother is strict and stubborn and always has been, but now she told that the reasons was in fact that she had always hated that she was required to bake and bring food and cakes to all kinds of bazaars, gatherings and fundraising. She had never liked that somebody else was ordering her to bake and share such a personal thing as a cake with someone she did not know at all.

The core of the idea is commitment that is expected by parents and creating a secretive channel where frustrations regarding it can be expressed. Physically or visually manifesting frustrations is in society almost only practiced by young rebels or activists fighting the authorities. Here the visualization has a reference to graffiti and brings to the surface thoughts of groups of parents that at least in this context fall outside the group of people that is known for visually expressing their feelings and thoughts. The context, the composition of the group of parents and the complex balance between those who are in charge and the parents creates an environment where such frustrations are a taboo and fall outside the expected social behavior.

**Augmenting familiar objects related to food and dining**

This concept was about exploring potential interfaces in a cooking and dining situation rather than being focused around an issue. By using existing equipment the aim was to twist a daily act and two variations
were developed. The first is in a single home where a mundane act is interrupted with a short output. A learning quality is central here as the added feature puts the act into a different light. A sound or ambient light could be potential outputs while the front of the fridge, kettle, microwave or oven, the twist and turn of the buttons on the stove or the salt and pepper, different artifacts such as cutlery and plates or the furniture are potential interfaces, inviting to various ways of interacting and developing different patterns of action and reaction.

The other variation would be to create a connection between two homes, so that a certain act triggers an output in the other home and vice-versa. These could be a sound, phrase, a radio snippet, a piece of music or a bodily sound only to name a few examples while a kitchen light could intensify as for example more burners are on in the responding home, creating an insight into what is happening in the other home. An activity is visualized and remotely seen, giving a little insight into each others daily lives and creating an atmospheric bond. This could for example be between young families and grandparents that live in separate countries. The idea could in that way create an additive channel to strengthen the bond between two homes and give a sense of presence between loved ones.

The aim was to use a mundane act and add a second dimension to it by using existing artifacts in our homes that we use on a daily basis, even unconsciously. The idea has its roots in primarily two elements in the field study, the comparing of images taken by my interviewees and our corresponding conversations (see images p 48) and the notion of their nomadic life, as not living in their home country but not yet fully belonging in the country of residence. All three interviewees and their families have lived (or still do) away from families and friends and use various methods to hold on to their roots and maintain the connection “home”, but often feel that the everyday contact is missing. While the conversations were almost bland and the dining described in a dry and monotone way, the images revealed hidden qualities. The nostalgic stories we talked about during the same interviews typically evolved around mundane situations, much like the daily dining, except for in time they had gained a romantic spotlight. By contrast I think that my grandfather has always been very aware of such little moments as he has through the years taken pictures of the table setting for example (before anyone sits down! see images p 50) and frequently sais “hvad har vi gjort for at vi har det sa godt!”, a phrase I grew up hearing and reminds of the goodies of everyday life.
I need to, I need to, I need to
I need to make you see,
Oh, what you mean to me.
Until I do I’m hoping you will
Know what I mean.

Intimacy with food occupies a category close to my heart. Consuming a feeling therefor became the core idea. Though Michelle originally was a party song and not at all written to any Michelle, it is all about the limits of words. Only if Paul, who formally wrote the song in 1965, (and it later appeared on the Beatles album Rubber Soul) had thought about using food to get his message across. The field study showed numerous ways people used food as a medium to express feelings. These ranged from daily care, to compassion, frustrations and passion.

The idea is a short film where a man is followed in the process of baking and giving bread to a woman he has just met (image on left). It is based on numerous stories from the field study. The short film deals with how breaking certain social rules regarding intimacy can be interpreted. The film starts with him thinking about what to bake, moves on to the supermarket, from there to his home where he prepares, bakes and waits for the bread to bake and cool down. Then he carefully wraps it and goes to the woman’s home, rings her bell and gives her the bread, goes home and the final scene is just after she has finished eating the bread. Two soundtracks are associated with the short film, one soft and corny consisting of caring words, sweet and poetic while the other is hot and intensive consisting of dirty, orgasmic and even cannibalistic words. The viewer can then tune between the two soundtracks each inviting to a completely different interpretation of the visual material.

In one of the e-mail replies, cooking was said to be used consciously in expressing feelings and adding adventures to their lives. Another of my respondents said she cooked according to how people in the family felt and that you could say anything with food, “come, go, I want you, I love you, I care for you...”. I thought about the boundaries between care and love and lust and if you could in fact say more with food than you can with words. Now I am not going to state that food in itself could replace a whole language but it clearly showed in the field study that food is actively used to express feelings and can often say more than many words and be very sensual. One of my respondents shared a story about how she and her husband, early in their series of dating had decided to invite each other to dinner. She made him Spaghetti Carbonara using a recipe from a lady she lived with in Italy earlier where a great deal of the stay was focused around food experiences. She made every effort to make this simple course perfect, with the tricks she had learned in Italy, as she truly believed that the road to a man’s heart lay mainly through his stomach. He loved it and she told me that they still make this dish.

As a symbol of care my mother and grandmother pay attention when family members like something particular, and always make sure to have something to suit every taste in the fridge. One of my
respondents gave her mother coriander in a pot when she was going to hers for dinner, knowing that she hated it as a bit of a sarcastic manifestation of conflicts they had had. My sister once baked a cake for a friend who had lost a baby at birth. She said that she had had no words and baking a certain cake was all she had to express herself with. A third respondent told a story about a friend who met a guy one night whom she had a great night with. The day after he showed up at her door with a homemade bread. The details of the story are unknown to me but I know that they are married today and have been together now for almost 20 years. Apparently he still makes bread. The feelings were in that way embedded in the bread / cake that later got consumed by the receiver.

I thought about the deep feelings that can be expressed with food. Baking for somebody is undeniably personal where the whole process from choosing what to bake, buying the ingredients, going home to prepare the baking, touching the ingredients and working them, the waiting, wrapping and giving and consuming can be considered a part of the gift process. What is appropriate and what eventually breaks the social rules of our society is a different aspect of this story. Can the notion of such physical contact with the ingredients and literally consuming a feeling even be grotesque or have cannibalistic references? The guy who baked the bread possibly heads too quickly into a personal expression and is either extremely sensitive in terms of reading her character and the situation or he is taking a big change in creating a relationship between them by jumping over a few steps in the more expected or conventional process of dating.

Without me going into gender studies the story of the guy and the bread becomes even more powerful because he is a man and bakes for her which has to be less common than the opposite. Baking for someone at such early stage, even before the two enter a relationship taps into breaking social rules on two levels. On one hand he moves to an intimate level too early in the process and shows up uninvited at her doorstep on the other hand. The boundaries of social rules are the central focus in the idea of the short film where viewer can explore own meanings by tuning between the soundtracks in the short film, ultimately testing own boundaries.

**Zooming into dining and sound**

In the ideas presented I dealt with issues such as intimacy, frustrations, distant ambient communication, playfulness and collaborative documentation of family food and dining. These were some of the central issues of the field study that I chose to explore. Great potentials and numerous design directions opened though only a short insight has been given here and most remain at early stages on my desk as these words are written, awaiting further exploration. In next chapter I will discuss two interventions I conducted as a result of further development of augmenting objects related to dining. What I found most interesting about this concept was how artefacts we know from daily life can get a second life. A new dimension can be added to mundane acts that we often perform without much consideration and take for granted. Having explored different contexts I narrowed down to sound as the main interface and dining situations rather than cooking as it embodies a complex social dimension. I was eager to explore whether embedded digital technologies used in a certain way could stand under the name of ambient computing and shape a subtle
backchannel to a fragile situation and add qualities to it without interrupting or even destroy it. Elements from other ideas melted into it to some extent during iteration of the concept. Central qualities from those thus helped defining the direction the final concept was to take. FM Kitchen Memory Remix became part of the concept with sound as the primary reference and its relation to dining in past and the present. The idea of parallel communication in form of a backchannel was adapted from Fxxxxxx Food where anonymous messaging is possible and peripheral awareness from augmenting familiar objects that here was brought into a closed one place setting. Some comic elements from the Performative Event Dining Score were borrowed as well as the warmth in people’s sharing of nostalgic memories that has been like a red thread through the whole of this process. The two interventions were eventually installed in a public and a private setting, each consisting of two pieces of work that existed simultaneously.
Two sound interventions
- in a private and a public setting

As a result of further development of early design explorations I conducted two major interventions that each consisted of two works that co-existed rather than being part of the same work. The central focus became dining and the quality of mundane acts and a persons awareness of a moment. The works that I developed were based on the idea of using an existing interface and incorporated findings and central qualities from the various themes that were discovered in the field study and the early design explorations. I chose to work with dining situations rather than cooking because of their central social quality. The two parts of the work were closely related and based on familiar and unfamiliar sounds that were linked with pouring on one hand, and on the other anonymously sharing thoughts referring to digital status updates on the social online network Facebook (http://www.facebook.com/). The field study showed that the most important part of cooking and dining is the social side that holds great value in a family context. Dining was considered a moment to pause and reflect, share and communicate and of particular importance in a family context as this was the moment the family gathered as part of a daily routine. The two interventions were conducted in a public and a private setting, a conference coffee break and a dinner party at a friends house, and various elements were compared and discovered.

Aim
I wanted to challenge people to think of daily acts that we repeat every day, some times many times a day, in a different way by adding something to it, twist it in some way. My aim was to explore whether ambient computing could be embedded in mundane acts without disrupting the ongoing social situation but yet by evoking reactions. The aim was therefor to build a working prototype of an artifact that already is part of daily dining situations and test it. I wanted to set the intervention up in two types of settings to test various sides of it. Numerous reasons lay behind my decision in testing in such different settings and I expected quite different results from the two, which indeed turned out to be the case.

One intervention took place during a coffee break at a conference in Malmö (http://www.businessto-buttons.com/) and the other a private dinner party at friends house in Copenhagen. One of the primary differences between the two situations is the timeframe. The conference only invited to a short one time experience while a private dinner allows an ongoing engagement of the guests. A coffee break is the time during a conference where a break is taken from the traditional conference activities, people gather, socialise and network. Three high tables were set with coffee, milk and sandwiches as self service and people then moved to enjoy it (see illustration 24, p 76). I wanted to challenge values relating to social rules in a conference setting and observe how much reaction people would show. I had in mind that this was a creative and business conference so the crowd consisted largely of creative individuals that are used to unexpected and alternative designs crossing their way, being tested etc. I therefor hoped that they would use the coffee break
to loosen up and even share some of their creativity given that they had been quietly listening all morning, absorbing inspiration. In terms of choosing content it was important to have an idea of people’s backgrounds. In a conference setting groups of people who know each other mix with other groups and individuals. I presumed some aspects of the conference guests’ background was shared such as educational level, employment and social status as well as parts of their cultural background but these all remain on a rather general level.

A private setting contains different qualities where a personal atmosphere dominates, people know each other better, it is set in a home and is therefore more likely to be relaxed. Guests sit around a table and an ongoing social situation is created. A dinner party is normally set in the evening as it was in this case and during the guests’ spear time where all are off duty which does that the state of mind of the participants here was different from the conference setting as obligations and possible stress from work was left at home. Dinner guests all knew each other and had to some extent a shared background like the conference guests but here in a different context. Nationality, some interests, being close in age, having children and living in Copenhagen and sharing cultural heritage was common ground at the same time as some had shared friends from childhood while some of us had only met a couple of years ago. Being Icelandic like all of the dinner guests I had the advantage of using some of these elements to a greater extent which shaped the content to some extent in form of for example using references to the shared cultural heritage. Duration played a great role as the first intervention lasted only around 20 minutes while the dinner party lasted in total about 8 hours. These differences created an ideal platform to test the work and compare reactions to it.

What are the two parts of the interventions?
Quite naturally, the first intervention was named Moment. Two works were created that co-exist. In that way the two are independent of each other and can exist (and were tested) on their own. For the two interventions I felt that they complimented each other and created a unity that was suitable for these particular situations. A milk / sangria pot is enhanced with digital technology that reads the tilting of the pot. Each time a guest pours from it, a short soundclip of 2-4 seconds is triggered and plays through a set of connected speakers. During the conference the sounds, which played randomly when triggered, were 6 and increased to 15 for the dinner. Those played randomly. I printed a strip from the social online network Facebook on white napkins and an associated “share” button that was mounted on a white box that just fitted the napkins. The strip that appears at the top of each profile page on Facebook reads “What are you doing?” or “What’s on your mind?” (while I was working on this Facebook changed the question, explaining why I used both) and is a free space
for anyone to express a feeling, share a thought, joke, idea, statement or whatever comes to people´s minds. People can both write their own status that gets posted on their profiles or on other peoples’ where it is then posted on their wall, in both cases others can comment on a status. Pens were provided as well as some explanations about the work. The idea was therefor that people shared a thought on a napkin and shared by physically lifting the lid of the box and placing their thought in the box as opposed to clicking the button with the mouse. Commenting thus happened in a similar physical manner.

**Sounds in a pot**

The sounds became six for the conference coffee break where some referred directly to the milk, such as the act of pouring; moohh of a cow, running water and waterfall. Two were other animal sounds, a rooster and dogs barking bringing in animals from the environment of the cow but inviting to other interpretations as well. A fifth sound was a car approaching and quickly driving past as a reference to speed in society and how life tends to pass us by. Contrastingly to that one, there was a dreamy and beautiful calm melody of a xylophone. (hear all sounds on accompanied cd). Each soundclip lasted from 2-4 seconds, around the average time it takes to pick up a milk pot and pour (images on right).

Other sounds were than added when the intervention was moved to the dinner party. The sounds for the dinner party were in the same way carefully chosen with a larger number and broader variation of sounds considering the duration and context of the intervention. I decided that I could go a bit further in challenging the social rules and added more controversial soundclips. A group of friends was meeting were not yet all knew each other so well, resulting in some social barriers still being unmoulded.

The sounds were 15 and were all chosen with a certain element in mind. Some related to the substance being a liquid as before, running water (easily mistaken for piss), ice-water that was poured to a glass and waterfall. I kept two of the animal sounds though the content of the pot had changed from milk to wine, so the cow and the rooster became a part of the evening as well as the dreamy xylophone melody from the previous setting. I decided to bring in a second sound from nature (the other being the waterfall) which the sound of heavy winds, laughter, fart and applaud represented the category of bodily sounds and others had a nostalgic, controversial or a comic relation. A voice saying “abbababbababb” was recorded at home and refers to someone reminding you to slow down, breaking glass was the reverse to successful pouring, the phrase “Darlings, please have some more, there is plenty in the kitchen!” is one of my grandmothers and is from the field study. One of my e-mail respondents told a similar story of phrases from her grandmother were the same phrase was one of them. A reference to one of the other ideas that developed earlier in the phase of this work was a riff from the Icelandic national radio and has remained the same for decades and has a nostalgic connotation to cultural heritage for many Icelanders, as in the story told earlier of the flatcakes and lunch breaks of one of my interviewees. A second sound with a similar connotation was a snippet from a
recording from the Icelandic national radio again, were a legendary voice is heard guiding people in doing home gymnastics. This soundclip was slightly longer than the others but as the sounds played randomly it somehow occurred that this one did not play even once during the whole evening. The last soundclip was a snippet from a story from my husband’s childhood. A danish guy in his neighborhood in Iceland would always bully the younger guys and even threaten with a knife. He spoke with a strong accent and one of his threats was here presented in the work in a short version as “Shall I kill you, shall I kill your dad!”, recorded at home with a very strong and scrolling accent. Again all sounds lasted from 2 – 4 seconds, apart from the one exception mentioned above and played randomly as before. All sounds can be heard on the accompanied cd.

**Technology**

The milk / sangria pot was equipped with a small unit housing the technical elements required for a certain movement to be registered triggering without delay a random sound. An accelerometer was used as a tilt sensor and read the tilting of the pot, an Xbee transmitter sent a wireless message to the Xbee receiver that was linked to an arduino board that ran on a laptop and processed the input and triggered the output through a connected set of speakers. The sensor, wireless transmitter and a battery were needly mounted under the milk / sangria pot that as a result got around 5 cm taller than the others. Coding was done in Processing as well as the application was run on the same program during the intervention.

**Napkins as a second interface**

Print on napkins was created with a reference to the online social network Facebook and showed the grey / blue status update strip displayed at the top of every Facebook front page. The napkin, as something temporary, created an ideal interface for the interventions. The napkins were white and their plain appearance invited to writing on them. I created two associated “Share” boxes that referred to the blue “Share” button from Facebook, intended for sharing of napkins or thoughts, or yet both. The boxes were soft and white with a homie feel and a lid that was easy to open and close. Guests were thereby provided with the possibility to share a thought by writing on a napkin and instead of sharing digitally by pressing a button with the mouse, sharing physically by lifting the lid and placing it in the box, for others to retrieve and possibly add comments in similar fashion as on Facebook, pass on, keep or simply use and dispose.

The napkin was chosen partly because of its disposable but yet rare quality with a reference to the myth of grand ideas being drafted on a napkin as well as a reference to my personal collection of napkins, as a way to preserve a moment and tell a story. As a youngster I collected napkins like many girls did at the time, and I have continued to add to my collection ever since. My mother gave me her collection from when she was young, and a napkin from a recent dinner at hers has in my mind become an icon for this work. It pictures a hand-drawn image of nice and what looks like rather old cutlery. It instantly reminded me of my grandmother’s silver cutlery and framed some of the core elements of this study, dining, generations and traditions. The handwriting became to me a symbol of a link between the past and the ongoing present as well as it blurs the boundaries between fine and casual dining by mixing elements of both in an artifact that is an inseparable part of all dining.
Most of the napkins in my collection are not at all used, nor has anything been written or drawn on them, by contrast I always picked an impeccable one to take with me. I still feel that they tell a story of a time passed, maybe partly because trends in society can easily be seen through what type of napkins were popular at each time. Napkins thus give an insight into changing trends over time.

Facebook is the world’s largest social online network with over 65 million active users worldwide (http://www.facebook.com/press/info.php?statistics), including most people I know and almost all who participated in this study (my grandmother is the exception to the rule). Status updates have become a big feature on Facebook and are actively used to share a thought, a statement, joke, a mission, achievement, inspiration or yet something else the users come to think of. The shift from “What are you doing?” to “What’s on your mind?” happened indeed during the development of this concept. The nature of the two questions was well fitted for the intervention where one focused on the act and the other on the state of mind, both central elements to the work.

Through Facebook and other online social networks, people have got used to reflect on their status and share it in digital space. These questions have therefor become known to a large proportion of people in society though they are not necessarily directly answered but the space used for personal expression. My aim was to translate this interface to a physical one and test if people could and would transfer this learning and mindset to physical reality. Rather than using pen and paper or something else I chose napkins as an existing part of dining. The disposable quality referred to the temporal element and the focus on the present as well as I felt the myth of sketching great ideas on napkins added yet another quality but on a less obvious level. Finally, in contrast to typing on the keyboard, writing on napkins feels very different and is in a sense much softer and warmer when compared to writing in digital space.

**Preparatory explorations of napkins and sounds**

As a preliminary study I tested the two parts separately, the printed napkins and sharing in my local café in Copenhagen and the sounds with a quick workshop at home. The two parts were then set up and tested in the conference setting with a primary focus on spatial elements. The aim was to prepare for the interventions and do some changes if needed.

With permission from the café owners I set a pile of napkins, a share box and pens at the counter of a rather busy café in central Copenhagen (image below). The café has many regulars and attracts many kinds of people, primarily in their 20’s and 30’s and from the local area that in recent years has developed from blue collar neighborhood to become one of the creative and trendy parts of Copenhagen. I wanted to see if people shared messages on the napkins, how they went about and what they shared. I stayed for a couple of hours observing how people interacted. People did not know that it was my work, except for those that saw me installing it. One girl asked the waitress what it was and came over to me and asked what the work was about and stayed for a while chatting. I observed a few people asking as well but they
did not seek further information. A few napkins were shared, two of which responded to each other and I observed a girl placing a napkin in the box and then carefully closing it afterwards, later to discover that the message was quite personal (“does he love me?”), which resulted in me changing the box to a more accessible box, as the other one had been rather hard to open and close which may invite to sharing of more personal or even secretive issues. For the occasion at From Business to Buttons, I felt that it had to be more easily accessible, allowing for quicker and more casual sharing.

As for the sounds they needed to be carefully selected to fit each intervention. It was particularly important that they were not (too) disturbing and contributed to a comfortable atmosphere, remaining a subtle back channel as at the conference they were intended to contribute as a nice surprise. The dinner party was because of its personal nature a good platform to explore reactions to more controversial sounds in a longer time frame. I conducted a quick workshop accompanied with conversations with numerous people that listened to the sounds and speculated. One felt that only the moooh of the cow should be used as a simple and straight forward connection to the milk in the pot. I wondered if that would not become boring when you had heard it a few times as people would possibly stand in line or close to the coffee setting. Another colleague suggested using only animal sounds from the environment of the cow. That was a step in expanding the idea inviting to various interpretations. The notion of where the boundary of the cow’s environment lies became problematic and I did not want to create a feeling of a work that had too much to do with animals in general nor remind of a zoo, or be representative of environmentalist or nutritional views. One was in favor of using solely sounds of water, of running water, dripping water, waterfall etc. as a way of exaggerating (waterfall as a large amount of liquid flowing) or withdrawing (dripping water as a limited amount of liquid flowing) from the act of pouring, one for using only abstract sounds to make the situation more dreamy, and yet someone else suggested mixing all of those kinds of sounds together as all sounds create different connotations for people and have different meaning depending on the context, state of mind, the character etc. As various as people’s meanings were they provided a good insight into how different people’s perception and interpretation is. Some sounds were left out as a result of the testing such as a balloon flying away (that sounded a lot like farting) and laughter that was connotated with potential awkwardness rather than the feel good or humorous atmosphere I was searching for.

The context becomes particularly important and I used the results together with my intuition and research and personal experience from conference situations to determine which sounds to include. I installed the two parts of the intervention in the canteen where it was to take place. Very few people were present but this gave a good picture of the spatial side. Content as well as spatial, technical and social elements where in that way tested which shaped the final outcome of the concept which later was adapted to suit the dinner party.

Some may argue that what later happens to each contribution after the intervention is finished needs to be clear. During testing at my local café, it showed that people contributed even though they had no idea what would happen to their comments. During the conference, a small note explained that the napkins would be kept to become a part of a traveling public napkin collection. The collection is intended to travel informally between places as it has till this date, gradually developing to a collection of memories, thoughts or places, attaining new meaning in each place. In that way a napkin that started its life with a little thought
during an intervention at a local café in Copenhagen may get reused and commented on in other places, gradually creating an ongoing story.

**The conference setting**

From Business To Buttons is an annual conference with up to 300 guests and lasts two days each time. Participating businesses as well as individuals create relationships with each other, network and advertise and promote themselves, get inspired by various workshops and numerous speakers that come from all over the world. Malmö University is an annual collaborator and host of the conference. Catering was organized by café Nordenskjöld and served in Malmö University’s canteen at Orkanen who together with the organizers of the conference were willing to give space to my intervention and were particularly co-operative.

The intervention was setup for a morning coffee break on the second day of the conference. The coffee break was familiar to conference guests from the day before where self service was provided on three red high tables where coffee and food were served and enjoyed either on the dining tables in the canteen or while socializing or browsing the many business stands in the hall. Thermo coffee containers were located on each of the three high tables, accompanied with milk pots and trays with sandwiches. I exchanged one of the milk pots and all the napkins with my own (image above). I created a station at each table, with napkins, a small printed note with an illustration referring to the milk and the napkins and text that shortly explained what the work was about (see images p 82), and invited people to share their thoughts and add to one of two “Share” boxes at hand. Pens were provided. (see images from the intervention below).

Cosmetic, calming and binding were some of the qualities Barthes (1957) ascribed milk with. I am a great fan of milk, at the same time as I find these on an abstract level fit well with the ideas around the
Moment

What: Intervention during From Business to Billionaire
Where: Höfði, café, Hallgríms University
When: 12 June 2009, 09:45 – 10:00

Moment is a temporary project in two parts and developed for a coffee break during From Business to Billionaire design and business conference in Iceland. It is part of a larger body of work evolving around the idea of simply pausing and observing the moment instead of focusing on constantly planning for the future. The work consists of an intervention that coincides with the natural act of pausing, eating, or socializing in one of multiple soundscapes carefully selected for the situation and locations with a print referring to status updates on the social networks Facebook and Twitter for sharing those. The sound experience represents the small moments and the awareness of those. The idea behind the work is to bring closer awareness to mundane acts and advance the experience of those, doing what occupy this largest part of our lives.

Food and the act of eating is an important communicative medium in our lives for sharing and caring, exchanging thoughts and socializing. This makes eating an optimal setting for exploring how small moments in our daily life can be enhanced and if we can train our senses to noticing and absorbing such moments. Snaps is a heroic status in the interface where grand ideas are defined and here gives this purpose of a physical but disposable interface. They also connect to my own net addiction of snaps from years where that today have become moments of everyday moments, the work is meant to focus on an awakening around the importance of adding value to insignificant moments that otherwise pass by unnoticed. Those present are encouraged to contribute to the work by focusing on their moments and sharing what is on their minds or what they are doing. The snaps will then become part of an evolving public travelling snap collection.

By Edda Kristín Sigurjónsdóttir // stud. MA interaction design, K3, Malmö University //
contact: edda@shaken.com

What’s on your mind?
intervention. Most people drink milk in some form, if not only to their coffee. Calming here, refers in my mind to pausing, slowing down, which connotes well with a break during a conference and friends that meet for dinner and the great mission of the work to challenge people to absorb the present. Binding reflects the social element and sharing of thoughts, creating new relationships and collaboratively creating and experiencing. Barthes talks about milk being strong which yet adds a comic twist as taking milk in your coffee is not always associated with strength in modern day society. The real hardcore take it black.

Small speakers were taped under the table and a computer and wireless receiver were remotely placed on a nearby table. Cables from the speakers were taped to the floor so nothing was in the way but still visible if you looked carefully. The setup looked nice on the shiny red, elbow high tables, the red toning nicely with the simple appearance of the white and blue of the elements of Moment. The technology almost dissolved into the space, keeping the situation itself in a central role. The work had not been listed anywhere, presented or particularly invited to and became a surprise to conference guests.

I am aware that this kind of walk up and use setup require a lot from the potential participants. Discovery, interpretation, participation and contribution can be defined as four levels in such a work. A person has to discover that it is a piece of work to interact with and that they can contribute to it and what it implies to participate. The intervention at from Business to Buttons was an open walk up and use experiment during a coffee situation. It was different from some other walk up and use works in the way that the choice of participating did not necessarily have to be made, but as the work was not all too obvious it became an unexpected part of having coffee and milk, although the situation was familiar to the conference guests from the day before. This may in some sense be considered an intrusion and therefore the sounds were carefully chosen to fit the situation in a subtle way rather than evoking an uncomfortable siltation.

The coffee break
The intervention lasted 20 minutes which was the length of the coffee break. As conference guests started to leave the morning talk for a coffee break everything was ready and together with my assistant, Marika Bredler, we waited for people to come and of course hoped for most to take milk to their coffee. Soon before the morning talk ended the first guests arrived. A consistent flow remained through the whole coffee break where guests seemed to float into the serving area, stay for a bit and seamlessly depart from it. The coffee station never got overcrowded which gave space to the individual to spend an extra moment which many people did. It was clear that some never noticed the work, while others who had approached from one table moved to the one with the enhanced milk pot and chose to use that one, as if hearing someone else triggering a sound, or seeing that something was different from the day before had caught their attention.

I soon saw that people were choosing the enhanced milk pot as the surface of the milk in it lowered quicker than in the others. A few showed little or no reaction to the sound triggered by their act, while most smiled or laughed. Many people took an extra moment to what seems like observe the situation, they looked around, poured again, watched other people, looked into the box and read what the little note said. A few people were observed taking more than one napkin with them from the table. One woman was observed hesitating at the table, watching someone else pour and then do it herself. The same lady spent an extra moment and took a close look at each part of the intervention, including the pen. I observed many smile or
laugh a little to themselves as they poured and a few said something to the person standing next to them. “It wasn’t me!”, one said and laughed at the same time as the moohing cow was heard as someone else poured.

A large pile of the napkins were used, possibly around 130 but I found few of them again. A few were left used on the tables and I saw some in the rubbish bins. I presume others ended their life in other rubbish bins, or people may have brought them with them to use elsewhere. The comments that were left mostly evolved around the coffee itself and consisted of only one word, such as “what’s on your mind? - milk and coffee”, “coffy!” or “what are you doing? - having coffee”. One comment was about a workshop at the conference and read “Moodcase workshop rocked” and signaled the guests satisfaction with the workshop as well as it may have brought other’s attention to it. Another comment wrote “what’s on your mind? - that this is nice”, which in fact was written on one of the explanation leaflets that accompanied the intervention. Two drew a small picture and shared, one of a cup of coffee and the other of a chair both pointing towards a welcomed break from the busy conference.

**Outcome of the experiment**

Maintaining a professional appearance and following certain social rules showed to be important. No dramatic or extreme reactions were shown and the messages were all rather casual. Most of the comments that people left signalled focus on the much needed break and cup of coffee, with the single inspired guest that still seemed to have his mind in a previously attended workshop. A second guest made a general comment about the work as a nice experience, the only to comment on the work itself as creating a nice atmosphere. I consider all of these as valuable outcomes despite their different nature. They signal indeed the different interpretation people have and on what aspects in their environment they are aware of, that here are of equal importance. The lady that hesitated showed that it was not perfectly clear what was happening. In fact, there was not a right and a wrong side to go about but she seemed wishing to maintain a professional appearance and at the same time be curious and wanting to try, but needed to see someone else doing it first, as if someone might be playing on her, or if there was a hidden camera. As she had observed a guy pouring she did herself and finally left with an extra napkin. She did not share at this point and it remains unknown to me where her napkins ended. “What am I doing here?” was written on one of the napkins though, which may have been hers, or someone else who was slightly confused as well.

The “moohh” clearly evoked the most reactions when comparing physical or facial reactions to the sounds. The cow sound seemed to have a clearer connection to the situation and be easier to relate to in such a short timeframe, perhaps because of its familiarity and slightly comic nature. Signs of enjoyment were seen in form of smiles, some laughter or verbal comments to colleagues. No sign of awkwardness or discomfort were visible and the atmosphere remained light and pleasurable through the whole experiment.

Given that conference guests mainly were from the creative sector I had expected more people to share what was on their mind or show stronger reactions to the sounds. It was apparent that this was primarily a professional setting where keeping a professional appearance was important and showing great emotions might have broken the boundaries of the existing social rules. The reactions were generally very subtle with small comments, subtle facial expressions and the few comments that were shared on the napkins were short where some were descriptive while others were emotional reactions. “Milk and coffee” that someone
wrote, hinted at a focus on the coffee situation which indeed was one of the aims with the experiment.

A number of reasons may therefore have been for people not showing greater reactions or sharing more thoughts. The situation may have been unclear to some while some that got their coffee from another table and did not notice the work at all or that chose to ignore the work. Others may have felt that great reaction was inappropriate or felt shy or simply did not feel the work was interesting or worth paying more attention to.

**Private party enhanced by embedded mixed media**

The focus of this study is on a personal level and setting up the first intervention was indeed done in order to compare the outcome of the private setting to one that was very different. We had been invited to a dinner party at a friend’s house together with two other families. All knew each other though some were closer friends than others and a couple of us had only met three or four times. I asked the hosts for a permission to bring my intervention that they were familiar with and the associated napkin sharing which they were very excited about and thought it would add an extra twist to the party. The sounds were now 15, the table set with the napkins and share box. The duration was around 8 hours in total where the set-up was actively used for around three hours. Only the hosts (2 of the adults) knew about the intervention prior to arriving.

The evening had a Spanish theme. Tapas that tickled the taste buds was served, juicy sangria and cheerful music. In a Facebook chat prior to the dinner party, one of the guests suggested he arrived spray tanned and dressed up like a Spanish gigolo and as the family of four entered, all spray tanned, wearing gold chains, senorita dresses and open shirts, it set the mood for the night with a lot of laughter, humor and joy. Barthes’ semiological analysis of food products (1957) describes milk and wine as opposites, the milk being “the true anti-wine”. In contrast to milk’s qualities of binding and healing, wine releases, invades and changes. He goes as far as describing wine as surgical and converting mental conditions. The aim of this study is on a higher level to try and change people’s mindsets in absorbing qualities in their environment to a greater extent. A designer has to be aware of the complete context of his design. What is in the pots is in that case important in this study though I choose to oppose to Barthes’ in the way that not only the content, but the totality of the ongoing social situation determines the outcome of this study. Whether this affected people’s reactions to some extent as the hours went and the sangria pot had been filled up more often is kept in mind in this study but remains a side thought in analysing its outcome.

**The setting during a private dinner party**

A private apartment created the frame around the setting for this intervention. Dinner guests were 8 grown ups and 4 kids aged 8 – 13. The dinner lasted approximately as long as an average work day and the intervention while we sat at the dinner table, or approximately 3 hours. The table was large and square which created a very social spatial arrangement, opposed to long tables that only allow for talking to the people closest to you. The kids sat at a separate table and did not sit for as long as us grown ups did. The dinner consisted of numerous Spanish tapas and sangria, all prepared with love and care and generously served as the hosts are renowned for.

The same technical equipment was used as during From Business to Buttons, as well as the same
type of napkins and Share box. The sangria pot was optimal to mount my equipment on and I set the table with a folded napkin on each plate, the Sharing box and the enhanced sangria pot on the table and an extra pile of napkins and pens were at hand (see image to right). A second sangria pot was also on the table. Speakers were placed on a shelf right behind one side of the table, casting sound over the whole table.

**The dinner**

Dinner guests all welcomed the twofold experiment, the enhanced sangria pot and sharing of thoughts on the printed napkins. All guests quickly engaged in the experience and contributed with thoughts and comments in written and spoken word. Participation in the intervention was distributed over the whole dining and became a natural part of the setting, almost like a casual board game that floated without effort and melted into the conventional dining activities. A fun ongoing pattern of communication formed which together with the before mentioned costumes, delicious food and flowing sangria developed into a colourful night. Feedback was generally very positive and one guest said she had told numerous people about the experience. One guest later explained it so that the evening had been particularly fun and memorable because of the intervention as it actively involved all the guests and that they collaboratively created something. He suggested that people even had drunk more as a result of the intervention.

The first to show interest were the kids – this was before people sat down to eat. The Share box immediately caught their attention and they started exchanging e-mail addresses through the napkins that later were used for sharing images from the occasion. Later on they added comments about their and each other’s parents, such as “Hjölli, you are very cool” or “mum, you look like a chocolate Chinese”. Kids making comments about their parents by writing it down and sharing in a box, unsure if they would even see it, already early on hinted at a parallel communicative channel that was to develop during the course of the evening. The kids thought this was exciting and behaved as if they were sneaking into the grown up’s territory, giggled, wrote messages and ran into their room.

As we sat to the table the napkins quickly caught the attention of the other guests who immediately noticed that despite their plain appearance were different from what they were used to. I explained shortly that it was a combination of two parts, the enhanced sangria pot and the napkins as a physical interface. One guest instantly suggested writing in the field and it became quite natural to write in and outside the field and share. All of the guests have a Facebook account though some rarely used it. It took a little while for those to figure were the printed motive came from. The second sangria pot turned out to be in minimal use and eventually emptied to the enhanced one and removed from the table by one of the guests. The remaining enhanced sangria pot was filled up during the whole night and all sounds played numerous times through the night with the exception of the gymnastic sound, that did not play a single time.
Dinner guests wrote down thoughts as they struck them and shared in the box (images above). Quite a few napkins had been shared rather early on and as the evening went, more got added and people took the box and went through the ones already in there and some commented on others. A communicational pattern evolved were sharing of funny sentences blend in with complimenting the food to more controversial thoughts, wishes or even sentences that had a poetic undertone. Only one napkin was shared used. I presume some of the guests knew each other’s handwriting though the sharing was in theory anonymous. As people were focused on the ongoing conversation it was easy to write something in private and without anyone looking over your shoulder. At few occasions, guests were observed using their hand to cover what they were writing or bending over which made it impossible to see what they were writing. I am unsure whether this should be explained with secretive messages being written or simply that this was for concentration.

**Analysis of Shared contributions on napkins**

The napkin sharing opened a platform for sharing of thoughts that were intuitive or did not fit into the conversations for some reason. “Autumn is the time of humans” was written on one of the napkins and has in my mind a poetic undertone. Another message wrote “when I am confused I turn around, I turn around and turn around and sometimes I have even travelled a full circle”. These lines were in no connection to the ongoing conversation around the table and come cross as impulsive thoughts that the guest intuitively shared. “Autumn is the time of humans” has a dramatic undertone. Autumn is in literature often used as a symbol of the last part of a human life and hints at the mind of the guest momentarily drifting out of the context and finding
a place for his thoughts in the peripheral channel the napkin sharing provided.

The written comments on the napkins were anonymous. “I am having dirty thoughts”, “I have cellulite” and “Sometimes I feel like fucking another man” were thoughts that would be inappropriate to say out loud in this social context. They would not have belonged in the conversations and they would have challenged the existing social rules while secretly sharing in writing was acceptable. The online phenomenon Post Secret (http://postsecret.blogspot.com/, Warren 2004-) has by many been considered to have therapeutic values as people can share secrets by sending anonymous post cards that get published on the website. With the napkins a backchannel was created where secretive messages could be shared without interrupting the conventional dining activities and where other social rules dominated. This relates back to my grandmother’s confessions about why she had forbid my mother to continue in the girl scouts, where she had never had a suitable platform to express her frustrations, but found a way to tell as our conversation was slightly different from those we normally had.

“Play more Genesis” expressed a wish. It probably would have been a lot more effective verbally, but was kept at this subtle level. Two guests mainly took care of the music that night but it was open to all. For most of the evening the music was only in the background either the guest who wrote this did not feel like walking up and change the music or he/she could not be bothered.

Other comments were directed towards the food and the chefs where they were thanked for good food or were centred around the overall situation such as “sit, eat, drink, talk, laugh”, which someone responded to with “hehe, great party...reminds me of a heavy puppy”, adding a comic twist to the simple comment. “Sit, eat, drink, talk, laugh” was written on a used napkin which gave the words a deeper meaning and summed up the evening. It could only be sensed as a positive expression, very physical in some way and appeared to reflect the mind of a content dinner guest who after enjoying so much in food and drink had no more mental space to find additives to describe the feeling. The simple phrasing became more powerful than a more detailed description would have been.

In the followup feedback one guest said he could never share a used napkin while another one said it had been quite natural to share it used, that he had not thought about it that much and intuitively shared it after using and writing on it. Sharing a used napkin is intimate and in the same way food can carry meaning as revealed in the field study, social rules can be challenged. The story of the guy who baked a bread for a girl he had just met played with the boarders of intimacy and is here taken even a step further as potential leftovers of food already consumed are on the napkin. In a way a piece (e.g. the food) of what later became part of the person who shared the napkin is passed on. This could in a cannibalistic understanding be desirable but disgusting according to conventional social rules. It showed that all but one drew the line here. In a followup conversation the guy who shared it stated that this was and remained a napkin though it had been used and may now contain a story, a picture or something else that made it become a memory of an event, people or time passed. Using it was a part of that story. The memories could be fictional and remind of people you had never met as well as being real memories of real events. Embedding fictional memories or stories in an artefact relates here to sitting in front of a computer where a second or ideal self can be created, the truth twisted and a second reality comes to life in digital space.
Analysis of reactions to sounds
As for the sounds it was obvious that some evoke more reactions than others. It was as if the enhanced sangria pot gained human characteristics as people felt the sounds were aimed at them personally although they knew were played randomly. One talked about trying to cheat the pot by pouring very quickly, repeatedly or tilting it in the opposite direction or only a little. It was as if he needed to gain power over it or find flaws that he could connate with humans and according to himself he felt better understanding how things worked.

The sound of broken glass appears to be one of the most memorable. Guests said that it each time had a slight shocking effect but reliving at the same time as nothing had actually been broken. It normally evoke laughter and a gaze towards the person who was pouring as if to check if something had broken or if he / she were teasing by evoking that sound as if it was controlled. This connects to my partner and the spinach quiche that he ended up spitting in the bin which was very embarrassing and interrupted the social setting. Breaking something in your home is relatively common. Breaking something in somebody else’s home is another story and normally very embarrassing. This may be connected to maintaining a professional appearance at a conference and is in both cases about keeping face in front of people and staying within the social frame by following behavioural expectations. One mentioned that putting such a familiar sound, like breaking a glass that often happens in a home, into a new context was effective and would bring a new perspective into breaking glasses in the future. The reactions to this sound did not have an interrupting affect, as people felt relieved when they discovered nothing had actually broken. The sound was like a teaser that challenged people’s reactions were they momentarily got embarrassed but quickly moved back to conventional dining activities.

The sound of the running water related to the breaking glass, was slightly controversial and invited to various interpretations. It could easily be mistaken for piss, which evoke rather shocking reactions. “Is this piss! And in my glass!” People felt that the sound of the ice-water pouring was “cool”, “refreshing” and connected well with what they were doing. This sound was one of the most literal and related closest to pouring a liquid. The soundclip was among the longer ones and would continue for a little while after the guest had finished pouring to his glass. One guest mentioned liking this twist and felt he had cheated the pot in a way, he had finished, but the pot thought he was still pouring.

The mooing cow always evoked joy as well as the sound of laughter that one time got mistaken for one of the guests (mine). A girl poured and thought that I had been laughing and a sound had failed to be triggered. Another guest found this laughter particularly funny and I quite liked that it got mistaken for mine as I think it is nothing like it and much funnier than I imagine my own laughter! Another guest felt that this sound was a nice add to the group, as if it were a secretive invisible guest that came and went. Another guest remembered a moment where one was telling a rather serious story and suddenly laughter made people look around and wonder who was laughing. It was rather inappropriate at this moment but the rest of the guests could not but laugh with the “invisible guest” before returning to the story.

“Abbabbabbabbabb” called for various reactions and showed to be one of the more memorable. It deals with regulatory aspects of our culture and unwritten social rules that citizens are expected to follow. In this context this could be something in the line of maintaining the same pace in drinking as the others and not
get overly drunk as the only one or before everyone else. The host unfortunately got this sound three times in a row which she felt was unfair. The first and a third time a sound is heard is different. It is interpreted differently each time. Being reminded of something repeatedly moved from comic to feelings of being treated unfairly. This sound relates to the sound of the washing machine a friend shared on Facebook which reminded her of her parents nagging. The feeling of being looked over the shoulder or watched by a higher authority (such as parents) created a slight frustration as the host was now in the role of a parent and a host who should, if anyone, have this authority. The pot became an even higher authority that invaded her dinner party. “I haven’t even drunk that much” she said and laughed a lot less as the sound played for the third time. She later told me that she had taken it quite personally as if the pot was telling her to slow down in her drinking or that she had had too much. She said it had been slightly uncomfortable. Thankfully the pot applauded the next time the host filled her glass, resulting in dinner guests to raise their glasses and propose a toast to the chefs. Another guest interpreted the same sound as if someone was watching and she was really wild in her drinking and felt a bit naughty. It did not occur to her like the host that she was doing anything wrong or that she had had too much, even the opposite as she felt it encouraged more drinking.

According to guests my grandmother’s phrase “Darlings, please have more, there is pleeenty in the kitchen!”, was familiar to many and grew in meaning as the evening went. People felt it was warm and created a homely and cosy atmosphere. One felt that this phrase got funnier the more often he heard it while most felt it was more comforting to hear repeatedly. For me this phrase has become an inseparable part of any dining in my mother’s and grandparent’s home when extra effort has been put into the cooking. One of my respondents grandmother from the field study had used this phrase in a psychological way. She would say there was more food in the kitchen and encourage guests to enjoy as much as they liked. But as a matter of fact all the food had already been served and my respondent got nervous each time she encouraged the guests to have more. In one sense this was a symbol of status. My grandmother and my respondent’s grandmother always made enough, they only used different tactics in serving it as my grandmother would serve smaller portions at a time so she could go and get more food in the kitchen. This signalled that they had plenty for everyone. The granny phrase was in some way the opposite to the “abbababb” as it represents generosity of the hosts and encouraged more eating rather than holding back, perhaps reminding of enjoying the handcrafted food at home or reminding of the pleasure of enjoying all that food.

Even before knowing the story about the bully, people laughed intensely – and even more later on when the sound played again and they had heard the full version of the story. This is one example of a sound that over time grew and became more filled with meaning. Hearing the snippet from the bully story repeatedly created a channel specific for comic child stories. It invited to revisiting a previous part of the ongoing conversation, return to a story and collaboratively continue building upon thoughts around it. People refreshed memories from their childhood and shared comic stories about each other. Guests agreed that the soundclip became much more fun after they had heard the story but stated that in case you had not been told, the imagination would have taken over and created a story around it.

**Discussion and connection to research question**

A dining situation can be a fragile state. It sometimes does not take more than a mobile phone ringing to
interrupt the ongoing social situation which as a result might suffer lack of coherence or engagement in the present situation of those present. All in all it is the totality of a context that shapes an experience, the reaction to it and the consequences. Setting the intervention up in a private and a public setting gave an opportunity to compare reactions to it and what influences them.

Following the two interventions at From Business to Buttons and at the Spanish dinner party, several issues or thoughts came up. Issues related to visibility, temporality, anonymity, curiosity and accessibility dominated the conference setting while the dinner setting emphasised the importance of familiarity (in terms of interaction and material used, here the type of sounds), repetiton (that relates to temporality), collaborative creation, secrecy and playfulness. Issues related to visibility and accessibility disappeared in the private setting while anonymity and the temporal element took off to a different level. I will finish this chapter with discussing qualities and issues related to use of digital technologies in the two experiments and the translation of an interface from digital space to physicality.

The results of the two interventions suggest complex contexts and fragile social situations, such as dining, as potential areas to further explore the use of embedded digital technologies. During both interventions guests seamlessly shifted between the digital experience and the conventional dining / conference activities. This was even though it was a first time experience in both cases. The story stopped there at the conference and did not develop or unfold like it did in the private setting. At the conference guests came and went, had a single short experience and then quickly floated into the conference activities again. Despite its creative nature the setting at the conference was very serious while playfulness and personal and cosy atmosphere was dominant during the dinner party. Experiencing something a single time, and often alone as was the case during the conference, may be repelling for people, and was a first sign of the value of temporality. Temporality showed to be central element in creating a frame that people feel confident acting within. The notion of temporality can be divided in two parts, a short time frame on one hand and a long time frame on the other where repetition plays a central role as the key to familiarity.

Sounds that already were familiar to the participant evoked stronger instant reactions than those that the participant had no previous connection to. This was true for both settings and included particularly those that were of a slightly comic nature, like the sound of the cow and the riff from the Icelandic national radio that guests in the dinner party were familiar with from shared cultural heritage. This gave an idea about what type of sounds can be used in situations that only invite to a single experience. The reactions to a sound in a one time experience could nevertheless not be compared to what repetitive experiences invited to.

A second level of temporality was represented by sounds that some guests were familiar with but were new to others, such as my grandmother’s phrase “Darlings, please have more, there is pleeenty in the kitchen!” and “abababababbb!”. These showed to have a learning quality as knowledge got passed on between guests and they grew in meaning the more often they played. Hearing them for the first and the third time had different meanings. While the grandmother’s phrase got connoted with an increased sense of presence and warmth that contributed to a homie atmosphere, the “abababababbb!” gradually developed from being comic to a feeling of someone keeping an eye on the participant’s drinking.

Some sounds became more enjoyable and more tightly embedded in the ongoing social situation the more often they played, triggering stories and memories. A third level of temporality required repetition
which only the time frame of the dinner party allowed. Here, sounds that prior to the intervention were unknown to all guests, started to live their own life and branch of. The sound snippet from the bully story remains the best example where a theme around childhood stories developed throughout the night. The replay of the sound created a channel to revisit and build upon the story. The sound grew in meaning as it triggered related stories and memories, gradually layering upon the original story.

This does not mean that all sounds branched of the more often they played. Sounds that were controversial or personal showed to have a greater potential to evoke reactions and gain meaning. Others, such as wind, dogs barking or waterfall that embedded little or no controversy, comic or a personal connection showed to get quite boring in both situations and unmemorable at a later point. It felt almost disappointing when you got those sounds during the dinner which hints at the limits of material people can engage with and at what point it becomes overwhelming and disturbing for the social situation. The balance seemed to be maintained during the whole period of the dinner while it never succeeded to build up in the conference setting.

Translating an interface from digital space to physicality (From Facebook to napkins) turned out to be successful in the private setting as guests quickly engaged in it but failed to a large extent in the public setting. In both cases it showed that which question is posed (“what are you doing?” compared to “what’s on your mind?”) does not affect what kind of thought is shared. That suggests that people are familiar with the questions and the interface from Facebook and have got used to using this space online to express themselves and that knowledge was successfully transferred to physicality.

The napkin sharing became a backchannel during the dinner party, creating two ongoing parallel conversations were different social rules were obeyed. Already in the preparatory explorations it showed that secretive messages were shared that would not have belonged in an ongoing conversation. Again the temporal element was determinant in shaping the secretive channel as guests shared thoughts and instantly commented on each other’s. The timeframe during the conference did not allow for such a development to take shape. In a single walk up and use situation, were individual comments can only be shared, it would develop differently and only be possible over a longer period of time than I had at the conference.

During the intervention at the dinner party, the experience was collaborative and a body of work was collectively created. In contrast to central issues of ambient computing regarding fluency and to what extent digital technologies can be embedded in a situation, the digital technology introduced here added to the group experience in the private setting. The intervention created a feeling of unity and belonging. As one guest discussed the notion of collaboratively unfolding, experiencing and sharing made the experience fun, memorable and valuable.

The results strongly hint at temporal elements, including repetition and familiarity to have encouraged engagement in the experiments and sharing of messages on the napkins. Similarly, an explanation for why few contributed during the conference may be found in the various levels of temporality, lack of familiarity and lack of repetition resulting in the participant not being able to get used to or learn about the sounds and a communicative pattern to develop.
The aim of this work has been a miniscule effort to challenge the mindset of everyday people in urban society to ease the pace of urban living and enjoy qualities in everyday life a little more, by intervening with a familiar daily act in a socially fragile setting and inviting to share random thoughts on napkins. Two interventions, that consisted of two pieces of work, were tried out at two different occasions, which had different social framings and temporal qualities; during a coffee break at a design and business conference and for several hours during a private dinner party. I chose dining (rather than cooking) as a platform to conduct experiments as the field study showed that dining holds great social value and is a moment where people pause, reflect, share and discuss.

The work involved using digital media to intervene in a routinely act (pouring to a glass) on one hand and on the other sharing written messages in a social setting, referring to familiar status updates on Facebook. The two works complimented each other and created a space for expressing spontaneous thoughts and introduced sounds in a new way to dining. In that way I decided to adapt the initial research question that centred around enhancing and sharing moments of well being with digital technology towards integrating digital technology to ordinary dining situations that we routinely perform, and add a twist to it in form of a sound. By bringing these to a social setting I wanted to explore:

*the influence of integrating new media in dining for collaborative explorations and sharing of thoughts,*

*whether a familiar interface from an online social network could be translated to face to face interaction in an attempt to more actively and consciously engage participants in the present,*

*the effect of intervening in a mundane act by adding an unconventional element to it, such as interactive sound.*

I will end this work with reflections on the two interventions, in the conference coffee break at From Business to Buttons that was held in Malmö and the private Spanish dinner party that took place at a friends house. Following pre-testing of the technical equipment, interaction with the enhanced pot and sounds showed to work smoothly and be suitable to use unchanged for both interventions. The primary focus in the interventions was therefor on the content and the dynamics of engagement, partly caused by introducing a new communicative channel through the napkins and interactive sound. More specifically interactive sounds in relation to spatial, functional, aesthetic and sensual aspects, making up the mixed media situation. The most interesting outcome of this work was in two parts;
Development of two parallel conversations; the expected verbal conversation and the backchannel that the napkin sharing developed into, where secrecy became an unexpected quality, and elements of temporality that related to repetition and familiarity. Curiosity and surprise also played a role and underlined to some extent elements in human behaviour as subject to designing for wonderment and furthering celebratory perspectives.

I will discuss this study’s relation to work in the field of interaction design and potential elements to further explore. This discussion will be centred around the dinner party as for the nature of the setting and relevance to this study and that it provided a much richer picture of interaction with the enhanced artefact, a development of the social context and a parallel conversation that developed with sharing of napkins.

Central qualities
The private dinner was set in a domestic environment while the public setting of the conference provided an excellent insight into social behaviours in a public context and provided valuable material to compare with the private setting. Comparing two such different settings emphasised the value of certain qualities and how it shapes people’s reactions in a social environment. Dinner guests collaboratively engaged in the intervention, which served as one element in creating a sense of unity in the group, and lasted through the evening (rather than guests getting divided into smaller groups where conversations develop into different directions). The food was also for sharing in form of numerous small dishes (Spanish tapas) that were served at the same time and the spatial setting with a dining room that was open to the kitchen and guests sitting around a large square table (rather than a traditional long one). These factors were central to supporting the situation in staying a group situation and contributed to guests floating between the three states; that of conventional dining activities, the sound interventions and the peripheral communication through the napkin sharing.

Various aspects of temporality, visibility, accessibility, surprise, curiosity, and familiarity were the key elements to consider following the first intervention (at the conference), some of which disappeared in the private dinner (visibility and accessibility). Surprise and curiosity continued in the dinner setting but others dominated and showed to be the most interesting to explore and compare between the two settings. Temporality, repetition and familiarity that are strongly related in this context, showed to be what shape people’s reactions to a great extent. Temporal elements, such as repeated listening and ongoing collaborative engagement showed to determine value of a sound. Elements of these are found in numerous related studies, though I had to step outside the area of food and dining in interaction design to find those and outside the field of interaction design at several occasions.

Temporality showed to be one of the most interesting qualities to look into and one where a very clear difference was between the conference setting as a one time quick experience, compared to repeated
shared experiences during the dinner party. Repeated listening influenced people’s reactions and meaning was created. The temporal element is closely related to repetition and familiarity. Sounds:

(a) showed to gain meaning the more often they were heard (repetition),

(b) they triggered memories (familiarity), and

(c) invited to revisiting previously discussed matters (repetition that led to familiarity).

(a) Hearing a sound for the first and the third time has different meanings. What can be insignificant at a first impression can develop to have tremendous value with repeated experiencing. The field study revealed stories where the element of repetition was central, such as always hearing the same voices on the radio when having lunch being symbolic of a safe, warm and stable home in childhood. An element of this is found in Lover’s Cups (a pair of cups that glow when used simultaneously), as a peripheral communication channel with a potential to develop over time and grow in meaning with repeated uses. Lover’s Cups provides a single light output as an abstract symbol of presence, reminding of the warmth in a relationship. The simplicity of the output is ideal for distant communication, suggesting that it is not intended for mundane use in co-location. Feather and Hazed Windows are envisioned to have similar emotional qualities where the output gradually fades out. Theses have as far as I know not been tried out in the long timeframe they are designed for and conclusions therefor remain speculative. All of these examples concern solo experiences in contrast to this study, that is centred around social situations and dynamic collaborative use. A more complex output is explored in this study, where interaction was tested at two occasions. The material in this study is therefor not based on speculations but results of the two experiments.

Various examples from the dinner party showed this, such as my grandmother’s phrase (“darlings, please have more, there is pleeeently in the kitchen”) gained meaning the more it was heard, gradually signifying warmth, home atmosphere and comfort. This was one of few examples where the enhanced sangria pot gradually gained human characteristics and people got a little light hearted when they heard this sound. People talked about the sounds as personal messages in the form of the pot telling them this and that. In that way was “abbababababab” an innocent and rather comic sound at first listening, but developed to have elements of surveillance with repeated plays. A dialogue was created around the sound and guests even talked about the pot in a personal sense as if it were somebody reliable giving them advise or monitoring their acts (slowing down the drinking or feeling encouraged as the sound suggested it was forbidden, perhaps reminding of teenage years and parental guidance), despite them knowing that the sounds played randomly and had nothing to do with who they were or what they were doing. This points towards the importance of the context the autonomous incident is found in and how meaning can collaboratively be created.

(b) Through every step of this study, memory and food have shown to be strongly related. Dinnerware, the augmented tableware, has a nostalgic element to it as it encourages playing with your food,
therefor creating a strong connection to childhood. The central focus of Dinnerware is exploring whether the more neglected senses, like taste and smell can be worked with in a similar way like video or music which relates to how this work has looked more into how the social aspect of dining can be enhanced by bringing in a secondary sense to dining (hearing). It therefor connects to Dinnerware in the sense of experimenting with the senses when dining and on a secondary level by inviting to a collaborative playful experience. The Cloud project, that experimented with clouds snowing ice cream, has a similar connotation but instead of play it deals with dreams and critically deals with advances in science and their consequences for the environment, creating a dilemma for the potential participant. This study showed how specific sounds, (as an alternative to for example playfulness or smell), can trigger fond memories that are context specific, such as memories from the kitchen and remind of qualities of daily activities (in a kitchen for example). A riff from the Icelandic national radio, (equivalent to Sveriges and Danmarks radio P1 and BBC radio in the UK), that has been the same for decades was one of the sounds transferred from the field study to the dinner intervention. It showed to evoke memories from daily life as familiar voices on the radio evoke kitchen memories from childhood in the field study. Firstly does this point towards a shared heritage as possible content to link memories and mundane activities. Hearing the sound that was so familiar to all the dinner guests created a sense of belonging, being a part of a small culture of people. The guests shared a common understanding about this sound and the role this media plays in their country, as the media that connects the nation and is through ups and downs a constant factor in the people´s daily life. Secondly it points towards the value of common context specific artefacts, such as a radio in a kitchen. In this case it is part of the domestic soundscape that shapes dining and triggers a memory, but could in other situations be other artefacts in other environments. This opens up for further exploration of domestic soundscapes and how sounds in a home and a shared understanding of content and context can be used when developing interactive work.

(c) A third temporal element evolves around stories that are collaboratively built when a past moment is revisited. The soundclip were a snippet from a bully story was told, turned out to develop into a theme of comic childhood stories, where repeated listening triggered something being either added to the story (imaginative continuation of it) as guests spun off each other´s contributions creating new stories, or shared unrelated stories from own childhood, which resulted in a theme establishing, comic childhood stories. This element was therefor also a memory trigger in some cases. The core of it evolved around repetition that developed into collaborative creation of a theme. Few examples of work I came cross related directly to this element. Café Pantopia invites to building on an already established relationship between friends for example, by “meeting” at the café after moving apart. Online communities such as those on Facebook, food related websites or Kalas invite to gradually building on previous visits but both are rather different from what this study looks into as Café Pantopia is designed around distant communication where friends can meet in mirrored cafés apart, while Kalas deals with social navigation and is therefor interest based and is built for people who avoid going out for shopping. The social need is nurtured with Kalas but as for its nature only invites to online chatting and socialising. Presence and shared experiences are by contrast what this study focuses on and the notion of spontaneously and collaboratively creating something.
Other qualities showed to be consistent through both interventions, such as surprise and curiosity. Dinner guests quickly discovered that numerous sounds were part of the work, and one soon got curious to hear all of them and paid special attention each time someone was to pour from the enhanced pot to listen if a new sound would play. Another guest said that the sounds had encouraged more drinking because of the surprise element. The curiosity did not cause frustrations or disappointments but as discussed did some sounds grow in meaning while others did not create the same dynamics when heard.

Oleksik’s et al study (2008) of domestic soundscapes showed that simple sounds in daily environments were considered valuable material for enhancement. This points towards a much longer timeframe than the interventions presented in this study, and how value of sounds changes in the course of time. Some sounds seemed to continue to be surprising though they had played repeatedly, such as the breaking glass and the ice water, that in their controversial nature tapped into embarrassment (breaking glass) on one hand, while the ice water felt refreshing and smart as it was truly linked to the act of pouring, but added a twist to it.

The collaborative unfolding and experiencing was also valuable in the sharing of the printed napkins where the guests had the opportunity to answer a question from Facebook, “what are you doing?” or “what’s on your mind?” and share with the rest of the guests by placing them in a box on the table.

**Parallel conversations**

Communication showed to happen on two planes at the same time as a peripheral communication channel was created by the dinner guests. Building on Gaver’s views on dynamics of using design (2002) and Löwgren’s use of pliability as experiential quality (2007), the napkins served as a platform for the creation of parallel conversations and showed in my view how designing for interaction can move beyond implementing design, towards designing around the rhythms of social situations where the design subtly blends in with existing activities and becomes conducive to exploration (EKS, p 35).

Two qualities were central in the formation of this peripheral communication channel;

(d) a space was created for messages that fitted outside the conventional dinner conversation and its social rules, and

(e) an element of engagement in a moment was created and expressed in numerous of the messages.

Creating an increased awareness of a moment of well being was indeed one of the aims of this study, were ways of emphasizing it were explored. A peripheral communication channel showed to be a potential medium, at the same time as the sharing of secretive messages was an unexpected result.

(d) It showed that thoughts that fitted outside the social rules were shared in writing. Secretive messages in form of fantasy, confession or even a taboo (f.x “I’m having dirty thoughts”, “I have cellulite”), where shared and came as a surprise. This relates to Post Secret that has been described by some,
that have contributed to the service, as a relief and a substitute for saying something out loud that is not appropriate. Some have even said Post Secret to have therapeutic effects. The level of anonymity is obviously quite different when comparing the two. Though the messaging during the dinner was anonymous, we were only eight people and those who did not know each other’s handwriting could with some calculation figure out who’s was who. The level of intimacy was therefor rather surprising. These thoughts could also fit into the definition of wonderments, as thoughts “reverse of what might be expected” (Paulos et al, 2008). Considering that dinner guests were 4 couples, and that each couple knows each the handwriting of his/her partner, “I’m having dirty thoughts” might also be considered to have flirtatious qualities as being a part of secret message between partners.

The notion of peripheral communication is central to Lover’s Cups and Feather but with their single output do not invite to collaboratively expanding them as they are all designed for experiencing alone and be symbolic of emotions when apart, and are therefor not subject to dialogue as they are experienced. The Living Cookbook is a much more malleable concept where secret messages or tips could be left for others to discover though the system is not specifically designed for such communication, and is presented as a personal version of a cookbook. As the system is neither anonymous nor designed for collaborative use, it invites to ongoing dynamic use scenarios to unfold over a long period of time, and separately, while this work is centred around the dynamics of collaborative exploration and nuances in daily life rather than functional elements like sharing recipes.

(e) Sharing a thought on a napkin, rather than expressing it out-load, was actively used to communicate thoughts about the dining situation (for example “sit, eat, drink, talk, laugh”). These were thoughts that either evolved around the very moment they were written or more general thoughts about the dining. This type of comments had observational qualities, that hinted at the guests reflecting upon the moment and looking at the dining from a birds eye. A reference to this can be found both in Facebook status updates where people share a spontaneous thought that reflects the moment and gives an unexpected insight into their current state of mind, and in Stitching Together, where meaningful text messages are given a new status as they are transferred from the mobile phone to an embroidered patchwork of multiple messages from multiple mobile users. A thought that at a given moment struck someone’s mind (such as “12 oranges in my bag and I think of you” from Stitching Together) and was manifested in an sms, gains new and a permanent life when transferred from a digital message in a mobile phone to a patchwork as a tangible artifact. Text messages are focused around communication between two people (and therefor more intimate) but can be “stitched together” with other people’s messages, in a group. The remediating of the sms content can therefor happen without involved parties being present (such as the person who sent the message), while sharing thoughts on napkins as in this study is about sharing in a group on the spot. At the same time as I find Stitching together very inspirational in how it moves content between groups and contexts, I have focused on the creation of a backchannel in a domestic environment that unfolded a parallel conversation in real time and space. This has been done in some public settings, such as conferences where guests can twitter or send text messages that are displayed on the walls (for example during Innovationsforum in Potsdam, 2004) and some student projects that I do not have a record of. or that have explored cafés and workplaces as semi-public settings. I have yet to find a project where this has been
tried in a domestic setting, and over a long timeframe. In a domestic environment, a simple format like sharing of napkins, showed to be an accessible medium that is ready at hand for sharing of spontaneous thoughts that do not fit into the ongoing conversation but unfold in a parallel channel. These were emphasized by being documented and shared.

Exploring the celebratory perspective

The newly introduced design concept of wonderments and more specifically celebratory technology in the area of food and dining in HCI (and applicable to interaction design) are new directions for design and design research. These created a good framework to this study that I have tried to bring forward and use in practice. The celebratory perspective seeks out qualities to build on and considers the whole situation as the design space, including social, sensual and aesthetic elements. Human elements and feelings such as curiosity, surprise, playing, remembering, being familiar with and sensing become main subjects as a key to celebrate qualities of daily life.

Wonderment as described by Paulos et al (2008) focuses on small qualities in daily life that often get little attention, such as speculating curiously, being filled with admiration, to be astonished, puzzled or think of something that is not expected. I wish to add feelings to the definition of wonderments, like frustrations or annoyances that concern minor everyday problems, as luxury problems that can be dealt with from the same perspective. The creators of celebratory technologies (Grimes, Harper 2008) named the opposite corrective technologies as those that are centred around problems of inefficiency, uncertainty, distraction, inexperience or lack of nutrition knowledge.

Creativity, pleasure and nostalgia, gifting, family connectedness, trend-seeking and relaxation

are potential areas for creating celebratory technologies that already generate enjoyable and successful practices. I felt that there was an unexplored design area within the field of food and dining in relation to interaction design and was curious to explore it, but at the same time I feared that digital technology might possibly not belong there. Entering a fragile social situation like dining required moving beyond embedding or integrating technology and considering the totality of the situation as the design palette. When designing for fragile and complex situations, a designer has to understand the mixed media situation and respect its rhythms. Dourish explains this as the holistic and expressive concerns of interaction design (2004, p 202), as seeing interaction in a large frame (including f.x. cultural and social values) and that the design has to be considerate of the components of this frame. This brings the focus to the engagement of using the designed artefact and how embodied interaction turns action into meaning as part of a larger context than just the interaction with the interactive media. Sokoler (2004) discusses everyday as demanding and the world “a noisy place”, in which humans have to attend to multiple channels simultaneously, as we weave in and out between different activities. He discusses interaction with the design as embedded in particularities of social and physical settings, that interaction designers can only aim to design for, but not control, anticipate or define (2004).
Fluency between digitally augmented realities and conventional activities has been a concern in ambient computing and is one of the issues that relates to this study. Dourish (2001) argues that what has been referred to as “invisible interfaces” (when computing emerges into the environment, Weiser 1994, Ishii 1997), is problematic. He argues that “invisibility is not engaging; invisibility does not communicate” (p. 202). I agree with the term “invisibility” or “invisible” being problematic, although the interface in some cases totally disappears into its environment, but disagree with Dourish’s conclusion on invisible interfaces, as I found these possessing enormous potential for communication and lead to engagement. The two experiments showed that digital technology can be integrated in a complex social setting, and potentially contribute to it.

As Harper and Grimes´ study (2008) is centred around HCI, it points towards numerous directions of using screens and displays in the home to emphasise these qualities. Terrenghi’s et al Living Cookbook (2006a) is for example mentioned as a good example of work that enhances intimacy and fosters social bonds around cooking. Though I have to agree that it invites to creating a more lively and personal cookbook as the name suggests, it is like a new gadget in the kitchen that could be replaced with a laptop and use of social media (personal blog and YouTube for example), so it feels like taking the long way round. It disregards cooking and dining as a rich social situation and as a mixed media situation. If anything, I find aspects that are not introduced as part of the concept, but are part of the mixed media of cooking and dining, the most interesting, such as adding teasers to the video, playing music while cooking to add to the atmosphere, enabling others to change it or add their personal twists or continue documenting during the dining. Some of these are elements that unfolded in the dinner intervention as parts of a rich social context that according to results in the field study is the most important aspect of food.

Celebratory technologies are nevertheless a good foundational framework that is applicable to a much broader field of design, than food research in HCI and in combination with for example ambient computing and domestic environments creates an exciting area to explore which this study indeed has aimed at on a miniature scale. Oleksik’s et al (2008) study on soundscapes in domestic environments pointed at an unoccupied designspace within everyday life in domestic environments where routine and a long timeframe are central. During the intervention at the conference it showed to be largely sounds of a comic or controversial nature that evoke reactions, while the dinner guests showed reactions to a larger range of sounds, where those that feel insignificant at first were those that ended up being most meaningful. Sounds that were very abstract, such as melody on a xylophone or sound of a waterfall did not evoke much reactions but might in a longer timeframe fit into what Oleksik and colleagues discovered in their study.

Tight collaboration between behavioural sciences and designers when working with social relations and in complex social situations, such as in domestic environments, is one of the elements that Terrenghi et al (2006a) pointed at as a result of testing the Living Cookbook. Such social situations are filled with wonderments in human behaviour and concern the complex interplay where interaction is tightly coupled with spatial, functional, aesthetic and sensual factors as part of a mixed media situation. With celebratory technologies and designing for wonderment words were put on what numerous designers have worked with, a valuable first step in creating an acknowledged platform for a constructive and
coherent dialogue for designers that work outside the conventional problem / corrective oriented field.

The work in perspective

The private and public situations compared in this study were very different. Little negative reactions were experienced, but level of engagement was clearly more during the dinner. Focus on the work during the conference was perhaps too much on understanding how the pieces worked which resulted in people not being able to fully engage in the interactive experience consisting of sounds and communicative napkins. People also seemed busy with keeping their professional appearance, pointing towards the importance of considering the totality of a situation when designing for social situations. A more intimate setting that lasted longer and invited to repeated listening and a group experience showed to return much more reactions and fruitful results.

I chose in this study to work with a single mundane act, pouring, in two contexts, a private and a public context, and compare the two and study their qualities and issues. The sounds were adapted to each situation with sensitivity to personal appearance in mind. The napkin sharing was a second part of the work that was intended to co-exist with it, but ultimately be an independent piece of work. The two clearly complimented each other and together created a unity though interaction and reactions to them did not correspond to each other. In that way were thoughts about the sounds not shared on the napkins nor did they intertwine with the ongoing conversation.

The twofold intervention, with the enhanced pot and printed napkins for sharing, could be considered a re-mixable concept, malleable to a range of different contexts and interesting to explore in a series of new situations. The undertone is poetic and can with choice of content and ways of interacting softly shift direction according to the variation of situations it is implemented in. Experimenting with sounds of various nature and link them to mundane acts in a longer time frame would be interesting to explore, in order to emphasise elements of daily routines. An ongoing backchannel in a domestic environment would be worth exploring as a medium to reveal, manifest and thereby emphasise hidden qualities in daily life. Such a peripheral communication channel could both serve as platform to share what does not fit into a verbal conversation as some of the contributions of this study showed, as well as it could serve as an emotional backchannel like Lover’s Cups. Similarly it could serve as text messages shared between friends, family and loved ones that express a simple thought like “12 oranges in my bag, and I think of you” of Stitching Together, or status updates on online social networks, as nuances of everyday life that are worth manifesting, but often disappear as quickly as they appeared.

A peripheral communication channel could in a domestic environment serve as a collaborative alternative to a diary. Microblogging on Twitter and status updates on Facebook have shown to serve as such to some extent but integrating it in a daily environment for collaborative creation might reveal different dynamics in use.
Closing Remarks

Various reasons lay behind my wish to study this subject and for turning to those closest to me. Based on my family living through food, I envisioned food and dining as telling stories in other families too. Food is to me like music, it unifies people in social rituals. The heart of a home is often the kitchen and where things happen and stories unfold. I find cooking containing meditative qualities that together with dining serve as a powerful balance to speed in urban living. An element of sadness had haunted me as a result of observing people living too fast and letting the wonders of daily life pass them by unnoticed in a constant focus on what is to happen in the future. I was fascinated with how time and food have a different relationship than time and urban living. While we try to keep up with speed in society, that is by no means humane, food determines time it takes to prepare and enjoy it, forcing us to follow its pace. I was fascinated with how knowledge is created in families and how it is an ongoing weaving of negotiations between generations. Like many foodbloggers I wanted to create a documentation of food in my family but through a different channel, as blogging or writing a diary is not really my thing. Bringing together stories from many families seemed intriguing and I got curious to discuss food stories with members of other families and compare to some of my families’. It showed that every family has a relationship in some shape with food, but each in their own way. Regardless of the family’s interest in food as such, each one has its own dishes that hold special meaning and food stories that trigger memories. Family dishes and stories will at the same time continue to develop and unfold, to be remembered in the future, returning to my initial goal, to bring closer awareness to these moments as they unfold so we can enjoy them already today.

My approach has been very personal and the area so rich and diverse that I can by no means conclude with any generalisations, but only encourage further exploration of domestic soundscapes and dining in social situations as having great potentials. I have shown that sounds linked to a mundane act in a complex ongoing social situation can enhance people’s awareness and encourage engagement in the present, trigger memories and become meaningful. The popularity of status updates on the social network Facebook shows a clear need for a peripheral channel where thoughts on daily life that do not fit into other existing forms of communication can be shared. I introduced a simple peripheral communication platform to a dining situation that suggested this need equally to exist in domestic environments, where different social rules apply and parallel communication can develop in real time and space and bring further attention to daily qualities. The process of this study has numerous times showed to have self therapeutic drives and effects and remains a personal reminder to enrich life by paying closer attention to the subtle qualities in daily life. These are the poetry in our lives and its primary matters.
References


http://tidningar.vr.se/Nummer/2007-10/Artikelsida/?contentId=6390 (accessed October 9, 2009)


Kirk, N. 2009. *Profile on Facebook.* (Mad Kamp, I Danmark Spiser Vi, Kokkehandtegn)
Kirk og Maarbjerg: http://www.kirkplusmaarbjerg.dk/

Lazor, D. *Gastroporn; Food Obsession in the Internet Age*, in *Theme Magazine*, issue no. 18, 2008. Theme Publishing, Inc. Brooklyn, NY. USA


Little, A., E. Dickson, S. Muthyala. 2009. *Meet the Food you Eat.* (Interaction Design -The Danish Design
School / Copenhagen Institute of Interaction Design.)


Design.* Vol 1, No 3 2007.


Mynster, K. L. Poesien kan være din healer for livet, Interview hosted by Helle Solvang in *Vita* July 22,
2009 kl. 11:30 på P1, Danish National Radio.


Jeppe Hein’s website – Illusion for a Second : http://www.jeppehein.net/


Motoi Yamamoto : [http://www.motoi.biz](http://www.motoi.biz/)

Zuckerberg, M. 2003. The online social network *Facebook.* [http://www.facebook.com](http://www.facebook.com/)

Additional Websites used in this study:
Equator, Interdisciplinary Research Collaboration (IRC), supported by the EPSRC, which focused on the integration of physical and digital interaction:
http://www.equator.ac.uk/index.php/articles/632
http://www.equator.ac.uk/index.php/articles/c65/

Frilandshaven : [www.dr.dk/dr2/frilandshaven](http://www.dr.dk/dr2/frilandshaven)

Food Wiki : [http://recipes.wikia.com](http://recipes.wikia.com/)

Foodista : [http://www.foodista.com](http://www.foodista.com/)

IDEO : [http://www.ideo.com](http://www.ideo.com/)


Slow Food, philosophy : [http://slowfood.com/about_us/eng/philosophy.lasso](http://slowfood.com/about_us/eng/philosophy.lasso)

Tastebook : [http://www.tastebook.com](http://www.tastebook.com/)