Playing with food

Enriching and diversifying the gastronomic experience through play

Master Thesis by **Ferran Altarriba Bertran**
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ABSTRACT

It is often said that "*we should not play with food*". But why? This thesis is an exploration on the intersection between gastronomy and play. Following a participatory Research through Design approach, I discuss how the experiences proposed by gastronomic restaurants could be enriched through play.

The study begins with a contextual research on the state of the art in playful gastronomy. Philippe Regol's idea of play-food (*Regol, 2009*) is discussed and compared to a series of examples of playful eating proposals, both from inside and outside the boundaries of the gastronomic restaurant. The contextual research allows me to discuss to what extent gastronomic restaurants can nowadays be considered playful.

Next, I conduct a literature review to discuss the nature of play, and the myriad forms it may take (*Caillois, 1961, and Arrasvuori, Boberg, & Korhonen, 2010*). That allows me to clarify an understanding of free play that will be the grounding for the rest of the thesis. Following, I present elBulliLab's definition of gastronomy, and discuss it through a series of interviews with stakeholders. The interviews allow me to reflect on the limitations of gastronomic restaurants in terms of play, and to spot a series of design opportunities for an increasingly playful approach.

In order to explore these design opportunities, I conduct a participatory Research through Design process. I facilitate a series of meals in which, together with the participants, I design and experience a series of playful dishes. I also run a workshop to discuss the impact of my approach on the creative process of real chefs. Through a qualitiative analysis of the findings, I then reflect on the impact of different forms of play on the gastronomic experience.

The experiments and the workshop lead to a discussion on the potential of Research through (Gastronomic) Design as a reinterpretation of Research through Design methodologies in the gastronomic context. The discussion allows me to propose an innovative approach in the design of playful gastronomic proposals. I suggest four design principles that might help us embrace a richer and more diverse understanding of play in this context. I then discuss the effect of those principles based on the potential impact they had on my explorations. Finally, I open up a series of opportunities for further inquiry that emerged as a result of my research.

ACKNOWLEDGEMENTS

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INTRODUCTION

Eating is one of the most important rituals in the lives of human beings, another is play (*Caillois, 1961*). Research on the experiential value of eating suggests that play is an influential factor in the unfolding of the eating experience (*Wang, 2013*). From a sociology perspective, formal and functional similarities between the rituals of play and feast have been spotted and discussed (*Huizinga, 1950*). However, it is commonly said that "*one shall not play with food*". Why is bridging play and eating socially unacceptable? Are any there any similarities between the pleasures felt by a diner in a gastronomic experience and those experienced by a player when playing a game?

1.1 - RESEARCH IDEA AND CONTRIBUTION

In 2015 I analysed a series of eating experiences through the lens of game design, using LeBlanc's *8 Kinds of Fun* (*Hunicke, LeBlanc & Zubek, 2004 in Altarriba Bertran, 2016*). Through that study I realized that eating and playing experiences have several common features, including the importance of discovery and surprise in their unfolding. These common features raised the question of what the impact of articulating a dining experience through other game pleasures (*Hunicke, LeBlanc & Zubek, 2004*), such as narrative, expression, or challenge, might be.

To reflect on this question, my collaborators and I conducted an experiment of a playful eating experience: *The Mad Hatter's Dinner Party* (*Altarriba Bertran et. al., 2016*, Fig. 1). Our hypothesis was that binding together the multi sensory contents of the experience through the use of game mechanics (*Sicart, 2008*) would achieve a greater level of immersion, and improve the diners' perception of the experience as a whole. Our experiment demonstrated that play can be an impactful strategy to enhance the interactive and social characters of the eating ritual. The game mechanics were suc-
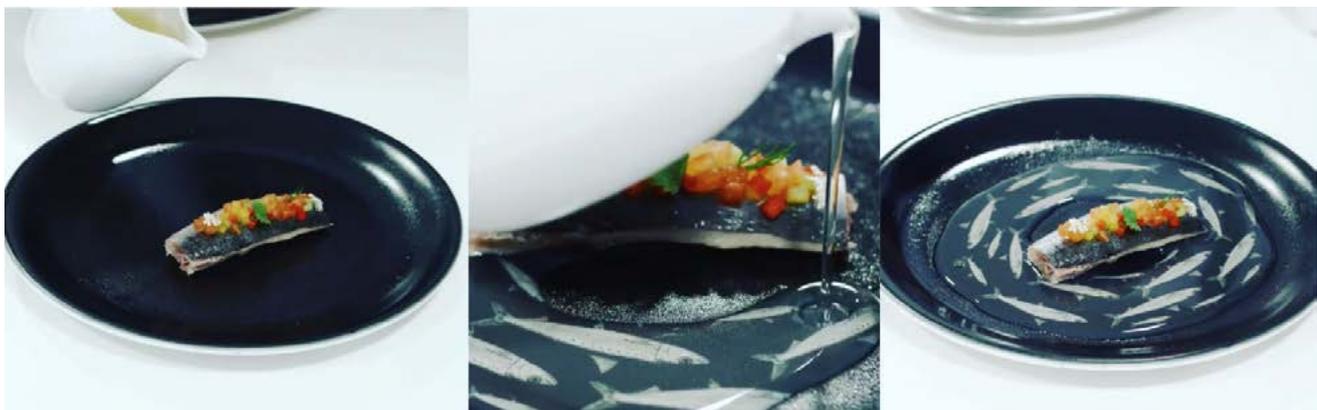
Figure 2. Plate that changes appearance thanks to the use of black thermochromic pigments. Initially, the plate is black (left); when a warm liquid is poured (center), the black thermochromic pigments become transparent; in the end, the plate's appearance is different (right). The prototype in the image was developed by EureCat (www.eurecat.org).

Figure 1. The table at a given point in The Mad Hatter's Dinner Party. "The labyrinth" (left), "the cards" (center) and "the magic forest" (right) dishes are featured.

I then undertook a two-month internship on the R&D team of El Celler de Can Roca (voted #1 restaurant in the World by the World's 50 Best Restaurants Academy, 2013 & 2015). Here, I worked on design concepts to support playful gastronomic experiences. For example, a plate that changed its appearance through the use of thermochromic pigments (Fig. 2). Or, ice-cream packaging that used multi-sensory stimuli to appeal to the memories and emotions of the diner (Fig. 3).

cessful in binding together the multi-sensory contents of the experience, and resulted in a bigger and richer perception of pleasure by the participants. One of the participants pointed out that she had not felt "*such immersion into a fantastic world since childhood*". Similarly, another mentioned that while he came with a clear agenda of eating—he was starving—he soon forgot his hunger and became immersed in the story. The study also opened space for new areas of exploration, such as the possibility that playful interactions might have an impact not only on the perception of the experience as a whole but also on the perception of taste.

At El Celler de Can Roca, I spotted a challenge in designing for playfulness in the context of gastronomic restaurants: the range of forms of play the restaurant was willing to embrace was rather limited. First, the chefs' creative processes hardly contemplate play and interaction as aspects to focus on. Second, there was a huge gap between their areas of expertise and the knowledge that could inspire them to design more playful gastronomic experiences. Third, while my projects demonstrated that play could be valuable to the gastronomic experience, there were a lack of design strategies that could facilitate the design of playful eat-

Figure 3. Packaging for a forest-flavoured ice-cream. To reinforce the feeling of eating a piece of forest, the packaging design resembles a sphere of grass.

ing. All in all, most ideas that emerged during the two months were discarded as being "*too risky*". This experience taught me about the importance of conducting further research in this area. Actual knowledge about the interplay between play and eating is required to design playful gastronomic experiences that fit well in the context of a restaurant. Having a better understanding of that relationshop would be greatly benefitial in the design of richer and more diverse gastronomic experiences.

The contribution of this thesis is threefold. First, I explore the convergence between gastronomy and play, from a theoretical standpoint—through contextual research—and by interviewing relevant stakeholders. In doing so, I discuss to what extent eating at a gastronomic restaurant can be considered playful. Second, I identify a series of design opportunities that I explore through a Research through Design process. Based on those explorations, I reflect on what might support an increasingly playful approach in the design of gastronomic experiences. The combination of theoretical reflection and the design interventions lead me to the third contribution: suggesting playas a source of knowledge that could be harnessed in the design of eating experiences.

RESEARCH QUESTION

How could we enrich and diversify the experience of eating at gastronomic restaurants through play?

How might play inspire the design of playful gastronomic experiences?

How can we elicit play not only in expert diners but also in people with little or no experience?

How might elements of play elicit curiosity about degustation in people who profess little interest in gastronomy?

What can we learn from eating experiences that take place outside of the gastronomic restaurant?

1.2 - CONTEXT, FRAME AND METHODOLOGY

This research was conducted across two different research contexts: the IT Product Design MSc program (ITPD) at the University of Southern Denmark (SDU Design) and elBulliLab, Barcelona. The ITPD program focuses on Participatory Innovation and Embodied Design, with a strong emphasis on Design Research methodologies. elBulliLab (Barcelona, Spain) is a research institution led by the world-renowned chef, Ferran Adrià. Among other projects, elBulliLab is gathering, organizing and contextualizing data in order to better understand the different factors involved in the experience of eating in gastronomic restaurants.

The research studies were conducted in Catalonia, a region in the north-east of Spain whose capital is Barcelona. The culture of Catalonia was necessarily taken into account throughout the research process. The unfolding of the explorations and the subsequent discussion of results was greatly influenced by this contextual frame. This research project was articulated through three main phases (see also Fig. 4).

These three phases shed light on 1) the value of converging gastronomy and play, 2) design strategies for playful gastronomic design, and 3) unexplored areas of inquiry in the intersection between eating and play.

1. an intial immersion into the context of elBulliLab with the aim of understanding their practice and research intentions. In this phase, I learnt the basic concepts in the field of gastronomy and juxtaposed them with my knowledge of interaction design and play. Reflecting on these concepts empowered me to identify relevant themes, as well as stakeholders with whom I could explore some of those themes.

2. a theoretical study on the convergence between play and gastronomy. I interviewed stakeholders with different views on what a gastronomic experience might be. My findings pointed to a series of design opportunities for playful gastronomic experiences.

3. a series of co-creative activities using Research through Design (*Zimmerman, Forlizzi & Evenson, 2007, and Frankel, 2010*) with a participatory approach (*McIntyre, 2007, Ehn, Nilsson & Topgaard, 2014, and Heape, Larsen & Revsbaek, 2017*). My aim, here, was to discover strategies to address the design opportunities identified in phase 2, for increasingly playful gastronomy, and to prototype them in the form of playful dishes. I concluded this phase with an ideation workshop where I gathered chefs and game designers.

PHASE 1: ONBOARDING

Challenges:
• Broad contextual exploration.
• Juxtaposition of my knowledge with elBulliLab's.
• Identification of 1) interesting themes of exploration and 2) relevant stakeholders to work with (and their situations).
• Rough research planning.

Methodology:
• Reading literature.
• Reading elBulliLab's materials.
• Writing reflections.

INTERIM OUTCOMES

Stakeholders to work with

Themes to explore

PHASE 2.1: INTERVIEWS

What does "gastronomic experience" mean to different stakeholders? What kind of play is and could be appealing to them in the gastronomy context?

CHEF   MAÎTRE   GASTRONOMIST   FOOD ENTHUSIASTS   NON-EXPERT

Methodology:
• Qualitative analysis of open interviews.

PHASE 2.2: THEORETICAL STUDY

What do play and gastronomy mean?
What are the formal similarities between them?
What are the existing examples of playful gastronomy, both in and outside of the restaurant?

Methodology:
• Literature-based and self-directed reflection.

INTERIM OUTCOMES

Forms of play that are already present in the gastronomic experience
Limitations of the gastronomic restaurants in eliciting play
Opportunities in the design of playful gastronomic experiences

PHASE 3: CO-CREATIVE EXPLORATIONS

Social play
What playful interactions could enhance the social value of gastronomic experiences while not disrupting the degustation negatively?

The co-creative diner
How could we increase the feeling of interactivity and comfort in inexpert diners by having waiters play the role of a facilitator?

The challenge of degustation
Surprise and challenge are the two main forms of play already felt by experienced diners. How can we enhance them?

Chance, teasing and other forms of unserious play
What forms of play could be appealing to inexpert diners in a way that they are empowered to understand and experiment with food?

Cooking games
What forms of play could be harnessed in the gastronomy experience, beyond the ones that are already used nowadays (challenge and surprise)?

How can the insights learnt through the four explorations be brought into actual tangible gastronomic proposals in the form of dishes?

Methodology:
• Research through gastronomic design with a participatory approach.

FINAL OUTCOMES

Insight on the value of converging gastronomy and play
Design strategies for playful gastronomic design
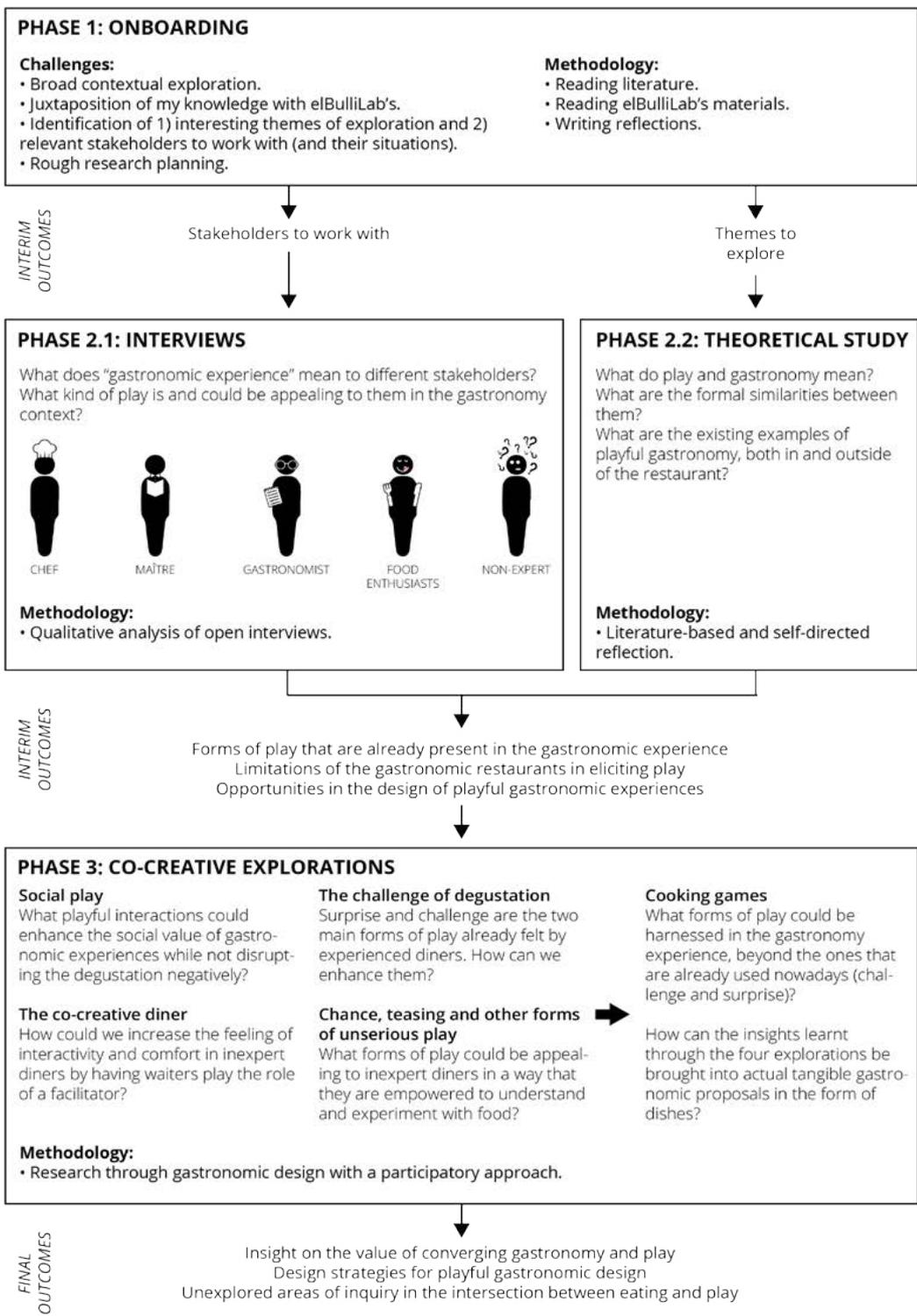Unexplored areas of inquiry in the intersection between eating and play

Figure 4. Diagram of the research process.

1.3 - OVERVIEW OF CONTENTS

In **Chapter 1 - Introduction**, I provide an overview of the research project, the context, and the methodologies used. I thus define the frame of this study.

In **Chapter 2 - Playful eating: state of the art** I discuss a series of examples of playful eating experiences both from inside and outside the boundaries of gastronomic restaurants. Doing so allows me to begin discussing to what extent play is elicited in those restaurants.

In **Chapter 3 - Understanding play** and **Chapter 4 - Understanding gastronomy**, I set a theoretical background to support later discussions. In Chapter 3, I give an account of different theoretical frameworks related to play and games. The aim is to clarify my understanding of play and facilitate a common understanding of the findings. In Chapter 4, I focus on gastronomy as opposed to other forms of eating. I describe elBulliLab's approach, and discuss it from the perspectives of different stakeholders to better understand the diverse nature of gastronomy and its playfulness. I finally conduct an interim

discussion in which I give an account of the limitations of gastronomic restaurants when it comes to their play qualities.

In **Chapter 5 - Research through (Gastronomic) Design**, I open up four design opportunities for playful gastronomy. I explore these opportunities by conducting a series of co-creative explorations with different stakeholders. Doing so enables me to discover design strategies, and prototype them in the form of playful gastronomic proposals.

In **Chapter 6 - Discussion: design strategies for playful gastronomy** and **Chapter 7 - Future work**, I harness learnings from the research project in order to answer my research question: how could we enrich and diversify the experience of eating at gastronomic restaurants through play? I also suggest new areas of exploration, building on my findings.

Lastly, in **Chapter 8 - Conclusion**, I summarize how the findings address the initial research question, highlighting the essential learnings from the process.

CHAPTER 2
PLAYFUL EATING: STATE OF THE ART

Playful eating is hardly new. Both casual eating and gastronomic restaurants are situations in which the consumption of food is imbued with elements of play. In this Chapter I study the extent to which play is present in the experiences proposed by gastronomic restaurants. First, I provide a general overview of some proposals that are considered playful. Following, I analyze playful eating experiences from outside of the gastronomic restaurant. I thus begin to identify a research oportunity towards an increasingly playful approach in the design of gastronomic experiences.

2.1 - PLAY INSIDE THE GASTRONOMIC RESTAURANT

In 2009, Philip Regol—one of the most renowned critics in the gastronomy scene—wrote an article discussing the elements of play emerging in avantgarde cuisine (*Regol, 2009*). He coined the term *play-food* to refer to the proposals in which play was present, one way or another. According to Regol, avantgarde cuisine cannot be understood without taking into consideration the willingness chefs have to "*put a smile on the diners' faces*". In his opinion, there is a ludic dimension in the proposals offered by a significant amount of high gastronomy restaurants. Chefs have a clear intentionality to amuse the diner, to use humor in order to elicit emotions such as surprise or mystery. Regol suggests eight ways in which his idea of *play-food* unfolds in practice:

Deconstruction elicits surprise—and sometimes humor—by providing the diners with a reinterpretation of a dish they know well. The texture of the ingredients is modified so that the form and consistency of the dish changes radically while the taste remains the same.

Reconstruction—as opposed to deconstruction—consists in a dish that looks like a particular ingredient but in reality is made out of other ingredients. For example, a dish that looks like a tomato but is in fact something else.

Landscape games are aesthetic representations of a particular landscape (such as a forest, the seaside, the spring season...).

Cromo-cuisine represents dishes that are elaborated following a special color code.

Performance refers to dishes presented to the diner using surprising techniques. For example, liquid nitrogen, which, in contact with ambient temperature generates the visual effect of fog.

Theatrical spectacle refers to gastronomic proposals that are served by restaurant staff in a performative manner.

Aesthetic games are dishes that are visually composed as representations of architectural or pictorial pieces of art.

Provocations are dishes that aim at eliciting curiosity and surprise through mystery. Provocations can be literary (i.e. a play of words in the name for the dish), degustative (i.e. a salty flavour when one expects a sweet one) or aesthetic (i.e. a plate that looks intriguingly wrong).

One might wonder if Regol's categories represent all that play could mean in the context of a gastronomic experience. With their differences, the eight forms of *play-food* appeal to a same emotion: surprise, sometimes with the nuance of being humoristic. They fail to represent the myriad ways in which play can manifest. More to the point, they place the diner in a rather passive position. The examples of *play-food* described by Regol are not opportunities for play the diner can actively engage with—they are rather structured proposals from the chef whose limit of action is to generate a "wow" effect. If Regol's *play-food* is narrow in terms of play, we should look to other gastronomic proposals and see whether there are exceptions that appeal to different forms of play. To do so, I focus on five iconic dishes from five of the most renowned gastronomic restaurants in the World in the last couple of decades.

I begin with a dish that according to Ferran Adrià, who created the dish, is the first example of a gastronomic game. **Las especias** (Fig. 5) consists of a rather neutral soup with small portions of 12 different spices positioned separatedly in the inner perimeter of the plate. Ferran Adrià designed this dish as a challenge to the diners. They were asked to guess what the 12 spices in the plate were. According to Adrià, it was rare that someone managed to guess a

Figure 5. "Las especias" by elBulli, a challenge to diners with the best of degustation skills. Retrieved March 1, 2017, from http://www.alifewortheating.com/posts/april-2012/nextelbuli by Adam Goldberg.

significant amount of the spices. *Las especias* is a clear of example of a particular form of play—challenge—articulated in a way that can only appeal to experienced diners.

The second example was designed by El Celler de Can Roca in collaboration with the artist Neil Harbisson. **Tocaplats** (Fig. 6) is a dessert comprised of colorful pieces of food, disposed in the perimeter of a circular structure that can rotate around its center. A camera and a speaker are placed below that structure, such that when the colours of the food are seen by the camera the speakers emit a specific tone. Using *Tocaplats* the pastry chef can design a food composition that integrates: taste, aesthetics and musicality. There is some playfulness in this proposal, mainly in terms of surprise and amusement, similar to the emotions elicited by the examples of *play-food* suggested by Regol. Significantly, it is the pastry chef who does the taste-pictorial-musical composition—in most occasions, the interaction between the diner and the plate is limited to rotating it to trigger the musical notes. While no one prevents them

from doing so, diners rarely rearrange the the food elements on the plate in order to creatively express themself by modifying the composition. First, the texture of the food elements does not always enable transportation once they have been plated (i.e. a creamy texture). Second, the fact that the chef provides a composition of his own is likely to be understood as if that composition is the ideal. Only a few diners will challenge that. Creative expression might be better elicited if diners were given the chance to make their own compositions in the first place.

The third example also gives a strong role to sound. **The sound of the sea** (Fig. 7), by Heston Blumenthal (The Fat Duck), is a seafood dish that is paired with the sound of a seaside landscape. The diner is provided with a

Figure 7. "The sound of the sea" by The Fat Duck, a dish that elicits playfulness in the form of fantasy. Retrieved March 1, 2017, from https://www.starchefs.com/features/ten-international-pioneers/recipe-sound-of-the-sea-heston-blumenthal.shtml by StarChefs.com.

Figure 6. "Tocaplats" by El Celler de Can Roca, a composition of flavours, musical notes and colours all at once.

multi-sensory experience in which the notion of sea communicated by the ingredients and flavours of the dish is reinforced by the auditive stimuli. Food is paired with sound, to make the experience more immersive. *The sound of the sea* can elicit play in the form of make-believe, by allowing users to experience the fantasy of being elsewhere.

The **Balloon** (Fig. 8), by Grant Achatz and his team at Alinea, is a sugary blend that, when inflated with helium, floats in the air. The dish is consumed by sucking any point of the ballon. Since it is full of helium, when the diner slurps the *Balloon* his voice changes pitch. The *Balloon* is an example of play that elicits surprise. In the first place, it presents diners with something they would not expect to be edible. In the second place, it provokes a hilarious mo-

Figure 8. "Balloon" by Alinea, a dish that elicits playful surprise both in its form and its consequences. Retrieved March 1, 2017, from https://www.youtube.com/channel/UCprPL2xor8Wr87XPQiuM6bw by Alinea Restaurant.

ment when it changes the diners' voice tone. It is a source of silly, fun playfulness.

Finally, **Kaolin potatoes** (Fig. 9), by Andoni Luiz Aduriz (Mugaritz), are two potatoes that look like stones. It is an example of a dish that looks like something it is not. Significantly, most people would be afraid to bite a stone. The dish brings playful emotions of humor and surprise. It also elicits a playful feeling of risky danger.

Comparing these five examples with the idea of *play-food* presented by Regol, suggests a richer understanding of what it means to play. Some of them (*Las especias, Balloon* and *Tocaplats*) illustrate how socialization might be embraced. They are exceptions to Regol's idea of a diner who simply "*sits and contemplates*". Additionally, Regol's *play-food* is mainly articulated through surprise and make-believe, while some of the other examples elicit other forms of play such as challenge (*Las especias*) and creative expression (*Tocaplats*). This begs the question: do these gastronomic proposals represent the myriad forms play can take?

Figure 9. "Kaolin potatoes" by Mugaritz, a snack that makes one feel the playful risk of biting a stone. Retrieved March 1, 2017, from http://luciagaray.blogspot.com.es/2010/10/mugaritz-algo-mas-que-la-experiencia-de.html by Lucía Garay.

2.2 - PLAY OUTSIDE THE GASTRONOMIC RESTAURANT

In the previous section I considered play in gastronomic restaurants. In this section I discuss five examples of eating experiences that are playful in one way or another, and that happen outside the boundaries of gastronomic restaurants. One of the most iconic links between eating and play in a commercial context is the McDonald's **Happy Meal**. It includes a toy children can play with, while and after eating their food. The play that comes with the *Happy Meal* has

Figure 10. Examples of the plates designed by 5.5 designstudio. Retrieved March 1, 2017, from www.5-5designstudio.com by 5.5 designstudio.

little to do with the act of eating, it is independent. The same happens with other forms of food merchandise such as pogs, or toys found in industrial food products. The toys do not offer an opportunity for playful eating, but rather the opportunity to play regardless of food. I therefore am unconvinced that such food merchandising are examples of playful eating.

In 2015, 5.5 designstudio (*www.5-5designstudio.com*) designed a **plateware** series aimed at facilitating better eating habits in children (Fig. 10). Each plate includes simple three-dimensional models of objects such as an airplane, mountains or a volcano. As simple as they are, the plates provide children and their parents with multiple opportunities for play that are intrinsically related to eating. The plates become a scenario that in combination with the food can lead to the play of fantastic stories of make-believe. This example is a clever augmentation of the traditional "choo choo train" strategy many parents use to seduce their children into eating. What makes it powerful as opposed to the make-believe proposals by gastronomic restaurants discussed in the previous section, is that it does not impose a predetermined story. Instead, it provides the players (the child and, optionally, the person feeding the child) with a blank canvas that becomes an opportunity for pure play.

Other projects by food designers propose open opportunities for play instead of actual eating games. One of them is Martí Guixé's **Meal-**

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ing (*Guixé & Knolke, 2010*, Fig. 11), a cup, with snacks attached to its external walls, aimed at facilitating socialization in public events. The playfulness derived from Guixé's cup is interesting to this discussion for three reasons. First, it is a strong source of social interaction. Second, it blends the act of eating with the context for which it was designed: a public event in which people stand and move around. In this case, play is not a disruption, but an augmentation of what is important in that context: eating and socialization. Third, and similar to the previous

example, *Mealing* does not impose a single kind of play activity. It provides people with opportunities for social play, opportunities that they may or may not use, and that can be approached in multiple ways depending on the intentions of the player.

In contrast to the merchandise-oriented examples discussed at the beginning of this section, the plates by 5.5 designstudio and Guixé's *Mealing* offer opportunities for play that are intrinsically interconnected to eating. They elicit play in the interaction with food, in such a way that eating and play cannot be dissociated.

We also encounter examples of playful eating as cultural tradition. The **tortell de reis** for example (Fig. 12) is a traditional dessert eaten in Catalonia on King's Day as part of a Christmas celebration meal. The *tortell de reis* has two small treasures hidden inside it: a figure of a King, and a bean. Whoever finds the King in their cake will be the King for the whole day, and will wear the paper crown that comes on top of the cake. Whoever finds the bean will have to pay for the cake. As simple as it is, the addition of those two small objects into the cake opens up a huge opportunity for social play. The whole family gathering becomes a friendly competition, an arena for teasing each other and betting on who will be so unlucky to get the bean. Similar traditions are enjoyed in other countries. In France, the *galette de roi* (the King's Cake) has a bean. Whoever finds it is King for a day (with the paper crown) and is considered to have good fortune for the rest of the year. In Britain, *Christmas pudding* has

Figure 11. Mealing, by Martí Guixé. Retrieved March 1, 2017, from http://www.dhub.org/edible-interiors by D*Hub.

coins within it. All of these traditions harness uncertainty and chance, as a source of playfulness, excitement and social interaction.

Playfulness can also have its origin in the actual characteristics of food. This is the case of **pimientos del padrón**, a variety of green peppers often eaten in Spain (Fig. 13). The *pimientos del padrón* have a particularity over other kinds of peppers: only some of them are spicy. Eating them has become a ritual that is mostly performed in group. The thrill of not knowing whether the pepper one is putting into one's mouth will be spicy, is a source of playfulness, which is enhanced by the excitement of seeing others have the bad luck of eating a spicy one. In this case, social play enhances, rather than disrupts, the focus on the food.

These five examples of playful eating outside of the gastronomic restaurant prove that playfulness can exist in forms that go beyond high gastronomy. Regol's *play-food* is only articulated through surprise and make-believe. Some exceptions from gastronomic restaurants incorporate other forms of play such as challenge. Examples from outside of the restaurant illustrate how social and open-ended play are also desirable to eating. Those examples open a space for broadening the spectrum of types of play elicited in gastronomic restaurants. To address this challenge, I will discuss what play is, and the forms it can take. I will also present an idea of what is a gastronomic restaurant, and how the experience of eating there differs from any other eating experience. Based on that, I will discuss how the myriad forms of play might be harnessed in the design of playful gastronomic experiences.

Figure 13. A portion of pimientos del padrón.

Figure 12. The image to the left presents a tortell de reis, with a paper crown on top of it. The image to the right includes the two objects that are hidden inside the cake: a bean and the figure of a king.

UNDERSTANDING PLAY

When we play we are aware that we are playing, without the need to rationally analyze the fact (*McGonigal, 2011*). However, that does not teach us the specific traits of play. Play as a concept is ambiguous (*Sutton-Smith, 1997*), and difficult to measure (*Huizinga, 1950*). In this Chapter I review the literature to clarify what idea of play will be embraced in this study. I also discuss some of play's essential traits. I then give an account of two theoretical classifications of types of play. That theoretical grounding will be central to my explorations and the discussion of the findings.

3.1 - WHAT DO WE UNDERSTAND BY *PLAY*?

There is evidence that play has been a central part of civilization throughout history (*Huizinga, 1950*). While it is often associated with games, its influence is much greater—it penetrates all of social life (*Caillois, 1961, and Huizinga, 1950*). Play has been described as the quintessential autotelic activity: a self-rewarding activity that can provide the players with satisfying work and learning, the experience of being successful, the pleasure of social connection, and a purpose to their actions (*McGonigal, 2011*). Play has a positive impact in the well-being of groups of people (*Huizinga, 1950*) and individuals (*McGonigal, 2011*). The effects of play transcend the scope of pure entertainment—they are influential in most areas of human life. According to Caillois (*Caillois, 1961*), play is

free. Players must engage voluntarily, and feel free to stop playing whenever want.

separate from other activities. It happens within a frame of space and time that is normally defined before play takes place.

uncertain. The outcome of a play activity cannot be determined before it takes place.

unproductive. The reason for playing must be desire for fun in itself. The ends of play are the means of play (*Cohen, 2007*).

governed by rules that do not necessarily agree with ordinary laws. These rules can arise from two distinct sources. On the one hand, they can be determined by an act of **make-believe**. This is typically the case of improvisation-driven as if play children engage in. For example, when a group of kids are acting as if they are cowboys, this story will dictate the rules according to which they play. On the other hand, rules can be arbitrarily defined to regulate a game. For example, in chess, whoever does not know them in advance is not capable of playing.

Play is simultaneously liberty and invention, fantasy and discipline (*Caillois, 1961*). It can be approached both as a free, improvisation-driven activity, and as a structured activity that is framed by imperative conventions. A child pretending to be a train might be playing as much as a chess player is. Caillois' definition of play represents both. Play is rarely complete-

ly free or structured, but rather somewhat in between. It is fun what ultimately characterizes the essence of play (*Huizinga, 1950*).

Such a broad definition of play is different from the idea of games as goal-oriented activities often embraced by game studies authors (*Crawford, 1984, Costikyan, 2002, Koster, 2004, Salen & Zimmerman, 2004, McGonigal, 2011, and Schell, 2014*). Games are not necessarily always playful nor the only existing source of playfulness (*Sproedt, 2012*). We have all had the experience of playing a game that did not feel fun. Games are activities, while play is a state of mind that flourishes throughout an activity, let it be a game or any other kind (*Brown, 2009*).

It is the tension between rules and the freedom to act within them what ultimately unfolds as play (*Thomas & Seely-Brown, 2011*). That is why games are often playful: they tend to be good at presenting participants with clear goals while being flexible in allowing for different strategies depending on the opportunities and needs the participants have (*Sproedt, 2012*). However, while games tend to be fun, they are not the only existing source of play.

3.2 - THE EMERGENT NATURE OF PLAY

Play can facilitate learning through sense-making (Caillois, 1961, and Sproedt, 2012), spark curiosity (Lazzaro, 2004, and McGonigal, 2011) and empower people to be imaginative and critical about their experiences (Sproedt, 2012). For this

to happen, it must give us space and freedom to handle the rules in our very own way.

In game studies, a distinction is often made between progression and emergence. While I am not specifically focusing on games as such but rather on play in the broad sense, the notions of progression and emergence are still important to this discussion. Games of progression present a series of separate challenges, whereas games of emergence rely on a set of simple rules that, in combination, lead to multiple and diverse gameplay strategies (*Juul, 2002*). Games of progression are manifestly linear—with moments reserved for interactivity—whereas games of emergence leave space for improvisation and negotiation of one's role.

Progressive gameplay presents players with a storyline they can complete. The word complete here is important, in that it is not on the players' hands to define their means of playing—it is the game designer who provides them with a predetermined set of possible strategies. In that sense, the designer holds a high control on the unfolding of the experience (*Dormans, 2011*), which makes it easier for him to shape the experience and assure its quality standards. However, in the eyes of the player, a gameplay that is strongly articulated through progression might compromise the notion of free exploration and the sense of agency. elBulli's *Las especias* is an example of gastronomic proposal with a structure of progression; it provides the diners with a single goal (guessing all the spices) and strategy (tasting them once).

Emergent gameplay presents players with a set of rules they need to explore in order to figure out their own means for playing. As opposed to progressive gameplay, emergent gameplay places players in a position in which they are meant to explore, imagine and decide instead of just completing (*Dormans, 2011*). In that sense, the designer is no longer in control of the unfolding of the events—the construction of the experience will be influenced by the rules, and it will emerge because of and through the players' interactions. Guixé's *Mealing* is an example of emergent playful eating; it defines a simple set of conditions the player can deal with in her own way, to meet her own interests.

Emergent gameplay gives players a bigger sense of agency. There is no right strategy to undertake: it is in the hands of the players what to do, how to do it, and what to learn from it. More to the point, emergent gameplay allows for the unfolding of a game in radically different experiences (*Juul, 2002*). However, emergence can also be undesirable (*Juul, 2002*)—since it is no longer in the designer's hand to define the unfolding of the events, there is always the possibility that players' interactions lead to situations that compromise the quality of the experience. Additionally, emergent gameplay requires players to find their way through the game, and on occasions they might feel lost.

In the light of this, one is inclined to think that play is more likely to be elicited in activities that thoughtfully combine emergence and progression. Far from being incompatible, they can be integrated—harnessing both is likely to help designers design activities that are likely to unfold in experiences that are both compelling and free (*Dormans, 2011*). In that way, the quality of the experience will be less likely to be compromised, but the conditions for play to elicit sense-making, learning, curiosity and imagination will still be met.

3.3 - TYPES OF PLAYFUL EXPERIENCES

Play can emerge in the performance of a large spectrum of activities—from those that provide participants with goals they need to achieve, to others that expose them to the thrill of being passively overwhelmed by physical stimulation, and many more. Caillois differentiates between *paidia*, "*a primary power of improvisation and joy*", and *ludus*, "*the taste for gratuitous difficulty*" (*Caillois, 1961*). According to Caillois, no matter if we are talking about competition, chance, simulation or vertigo (*Caillois, 1961*), most categories of play have examples of activities that are free, spontaneous and open ended, as well as others that are structured, driven by the purpose of solving arbitrarily designed problems. He suggests four categories of games: *agôn, alea, mimicry* and *ilinx* (*Caillois, 1961*). He proposes that all forms of play could be derived from activities that are a representation of one or more of those categories (Fig. 14).

Agôn refers to the human desire for competition. One of the strongest human motivators is the desire to prove one's value, in particular,

in comparison to others (*Caillois, 1961, and Huizinga, 1950*). In fact, the desire to show one's superiority over others permeates human behavior. Such a desire for competition has been noted by several researchers in games studies. McGonigal, for example, calls it *fiero* (*McGonigal, 2011*). *Las especias* by elBulli is a good example of this kind of play.

In **alea**, the trigger for an outcome in the activity is not the player's skill. Rather, the game is articulated through the effect of chance. The thrill of not being able to control the outcome of a situation in which something is at stake is a poweful drive for fun (*Caillois, 1961*). *Alea* is compatible with *agôn*, in that a competitive activity can leave room for chance. In fact, most games are a combination of these two categories. Significantly, *alea* mitigates, even sometimes eliminates, differences between players: being skillful is not always effective when the outcome of a competition is greatly influenced

by chance. For this reason, *alea* is appealing to those who are not confident about their chance of victory in competitions based on the test of a particular virtue (*Caillois, 1961*). Catalonia's *Tortell de reis* is an example of play articulated through *alea*.

Mimicry, in contrast, does not imply the search for a clear outcome. Instead, the fun in mimicry lies on simulation. An activity dominated by *mimicry* is an act of make-believe. It is the simulation in itself that regulates the unfolding of the events. Fun is a result of a conscious immersion into an alternate reality. The word *conscious* here is very important: for *mimicry* to occur and to be playful, participants need to be aware that it is only being played out and is different from reality. Players can thereby experience a purposeful escape from reality (*McGonigal, 2011*). The plates designed by 5.5designstudio are a good example of open-ended play based on *mimicry*.

Table I. Classification of Games

	AGÔN (Competition)		ALEA (Chance)	MIMICRY (Simulation)	ILINX (Vertigo)
PAIDIA Tumult Agitation Immoderate laughter	Racing Wrestling Etc. Athletics	not regulated	Counting-out rhymes Heads or tails	Children's initiations Games of illusion Tag, Arms Masks, Disguises	Children "whirling" Horseback riding Swinging Waltzing
Kite-flying Solitaire Patience Crossword puzzles **LUDUS**	Boxing, Billiards Fencing, Checkers Football, Chess Contests, Sports in general		Betting Roulette Simple, complex, and continuing lotteries*	 Theater Spectacles in general	Volador Traveling carnivals Skiing Mountain climbing Tightrope walking

Figure 14. Table including examples of activities that relate to the principles of agôn, alea, mimicry and ilinx, positioned in the vertical axis according to how structured (ludus) or free (paidia) they are (Caillois, 1961).

Ilinx is also not subject to the desire for an outcome. The fun in *ilinx* lies in the gut sensation of *vértigo*: of losing control over one's physical and/or mental self. Such fun is directly related to risk. However, for *ilinx* to be fun, participants need to feel safe—the risk must be a playful illusion, not a real threat to a player's integrity. The *pimientos del padrón* are a gastronomic proposal that elicits playfulness in the form of *ilinx*.

Caillois' classification provides a general overview of the most compelling emotions that can be elicited through play. However, it is too

broad to be used as a framework in an actual design process. It hardly gets to the details of what constitutes a playful experience and the several forms it might take. Arrasvuori, Boberg and Korhonen, instead, propose a list of 22 playful experiences that is meant to be used as design and evaluation tools (*Arrasvuori, Boberg, & Korhonen, 2010*, Fig. 15). Even though it was envisioned to support design of interactive products, the *PLEX framework* proposes a list of principles that could apply to other scenarios. Since it is based on several studies on pleasurable experiences (*Costello &*

Experience	Description	Experience
Captivation	Forgetting one's surroundings	Captivation
Challenge	Testing abilities in a demanding task	Challenge
Competition	Contest with oneself or an opponent	Competition
Completion	Finishing a major task, closure	Completion
Control	Dominating, commanding, regulating	Control
Cruelty	Causing mental or physical pain	Cruelty
Discovery	Finding something new or unknown	Discovery
Eroticism	A sexually arousing experience	Eroticism
Exploration	Investigating an object or situation	Exploration
Expression	Manifesting oneself creatively	Expression
Fantasy	An imagined experience	Fantasy
Fellowship	Friendship, communality or intimacy	Fellowship
Humor	Fun, joy, amusement, jokes, gags	Humor
Nurture	Taking care of oneself or others	Nurture
Relaxation	Relief from bodily or mental work	Relaxation
Sensation	Excitement by stimulating senses	Sensation
Simulation	An imitation of everyday life	Simulation
Submission	Being part of a larger structure	Submission
Subversion	Breaking social rules and norms	Subversion
Suffering	Experience of loss, frustration, anger	Suffering
Sympathy	Sharing emotional feelings	Sympathy
Thrill	Excitement derived from risk, danger	Thrill

Figure 15. To the left, the 22 categories of playful experiences according to the PLEX framework (Arrasvuori, Boberg, & Korhonen, 2010). To the right, a modified version of the list highlighting the experiences embraced by Regol's play-food (green), the ones elicited by the examples reviewed in Chapter 2 (yellow), and the ones that are not present in gastronomic restaurants (red).

Edmonds, 2007), game experiences (*Garneau, 2001, Bartle, 2003, Sweetser & Wyeth, 2003, Yee, 2003, Hunicke, LeBlanc, & Zubek, 2004, and Poels, de Kort, & Isselsteijn, 2007*), emotions (*Csikszentmihályi, 1975, Kubovy, 1999*) , and elements of play (*Caillois, 1961, and Apter, 1991*) , it is representative enough to be helpful in understanding and discussing the playful aspects of eating.

If we have a look at the list, we can easily see that the idea of *play-food* suggested by Regol (Chapter 2) only covers three of the forms of play the *PLEX framework* suggests: captivation, discovery, sensation. The other examples of playful dishes I reviewed elicit other forms of play, but they are rather unique exceptions. *Las especias* is mainly a competitive challenge; *Kaolin potatoes* add a note of thrill to the idea of discovery; *Sound of the sea* builds on the idea of fantasy; *Balloon* may be a trigger for fellowship; and some diners might express themselves creatively with *Tocaplats*.

In this Chapter, I discussed what play means and how it will be understood throughout this research project. I established a distinction between play and games—the former being a state of mind that may or may not be an effect of the latter. I also clarified that play can be elicited both in goal-oriented and open-ended activities. I reviewed two theoretical frameworks that allow us to classify playful experiences: Caillois' four categories take into account the human instincts underlying play. Arrasvuori, Boberg, & Korhonen's playful experiences help evaluate existing forms of playful eating and discuss the implementation of novel ones. The combination of these two frameworks will facilitate discussing the traces of playfulness I identify in my explorations, as well novel ways to elicit play in gastronomic restaurants. Play is extremely diverse, and building opportunities for play into the dining experience is an area with much unexplored potential (*Wang, 2013*). To enhance the forms of play embraced by gastronomic restaurants, we first need to understand what constitutes the experience of eating there. In the following Chapter, I discuss gastronomy as opposed to other forms of eating.

CHAPTER 4
UNDERSTANDING GASTRONOMY

Eating is one of the most recurrent activities in our lives. It can be approached in multiple different ways, and articulated in a broad range of formats. In this Chapter I study the gastronomic experience as a particular way of eating. I first give an account of some important motivations behind why people eat. I then clarify the difference between eating and gastronomy, embracing elBulliLab's idea of a gastronomic experience (*elBulliFoundation, 2017*). Following, I explore that idea through a series of interviews with stakeholders with diverse understandings on what gastronomy is. Finally, I discuss the limitations of gastronomic restaurants when it comes to eliciting play.

4.1 - WHY DO PEOPLE EAT?

The need for nutrients is intrinsically related to the intake of food. We cannot disentangle eating from survival, just as we cannot stop our bodies from assimilating nutrients when we eat. While there are many occasions in which people eat for reasons other than survival, it only takes half a day without eating for a person to feel that they are starving and craving for food. Together with this biological need, a social component is also a part of food intake (*Douglas, 1972,* and *Ochs & Shohet, 2006*). Eating does not only sate our appetite, it also sates our need for socialization.

To design playful eating experiences, it is important to think beyond the food itself. The circumstances in which people eat, including the interactions between them, are critical to the perception of the experience (*Warde & Martens, 2000*). Eating is also pleasurable. It plays both a functional and a symbolic role. Sometimes people eat out of necessity. Sometimes

they do it as part of a celebration. At other times they eat as a means to enjoy a sensorial pleasure (*Warde & Martens, 2000*). In the context of gastronomy, the term degustation is used to refer to situations in which eating is a source of pleasure and the core of the experience is the food.

Nutrition, socialization and degustation represent three of the most important functions eating plays in our lives. From hereon in, I will use those three categories to support the discussions. This choice does not indicate that nutrition, socialization and degustation are the ultimate set of reasons why people eat. Rather, this simple and clear classification will help me to better understand and articulate when and how play might have a positive impact in the gastronomy experience.

When considering the interplay between these three three motivations to eat, we might also consider if they are absolute or complimentary to each other. For the sake of this research

project, I understand nutrition, socialization and degustation as complimentary components of an eating experience. For example, when a food enthusiast attends a gastronomic restaurant, degustation is likely to be a more dominant concern than nutrition; or in a meeting of friends around some tapas socialization will probably be at the core of the experience. Their dominance manifests differently in every situation, and can vary throughout one same experience. The proportion in which they appear is affected both by the situation (the context, the environment, the food, etc.) and by the intentions of the individuals towards the act of eating.

In this section I discussed three principal motivators that make eating a fundamental activity in our lives. I suggested that the impact of eating trascends survival and encompasses the need for socialization and the desire for sensorial pleasure. This brings us closer to the point in which eating might become a gastronomic experience. The question remains: what is a gastronomic experience? And how does it differ from other forms of eating?

4.2 - FROM EATING TO GASTRONOMY: elBulliLab's APPROACH

Gastronomy is a complex concept. It has been approached extensively from the perspective of practice, but has not yet been explored deeply from a theoretical point of view. There are many definitions that try to explain what gastronomy is, but no clear thread to establish consensus. In general terms, gastronomy is often understood in two ways. On the one hand, there is a trend that sees gastronomy as the relationship between humans and food from a general perspective (*Brillat-Savarin, 2009*). On the other hand, there is a trend to narrow down the scope of gastronomy, to differentiate it from nutrition by focusing on the experiential and cultural aspects of eating. elBulliLab, in Barcelona, is working on a complete and comprehensive definition of gastronomy (*elBulliFoundation, 2017*) following the second trend. In this thesis, I embrace elBulliLab's approach to gastronomy and related concepts.

Gastronomy is a discipline concerned with those eating experiences in which there is an explicit search for excellence in degustation (not necessarily in price). The flavour and the degustation make up the very core of the experience. A gastronomic act has a festive character that makes it ludic (*elBulliFoundation, 2017*). It is also likely to be social—participants must have the will to build community and/or to enjoy already existing affective relationships.

According to elBulliLab, having a gastronomic experience is a matter of attitude. For an eating experience to be gastronomic, both the producer and the consumer—the restaurant and the diner—need to show this gastronomic attitude (*elBulliFoundation, 2017*). This attitude is the conscious will to concentrate one's attention towards the experiential value of eating. A gastronomic attitude is fundamental to the unfolding of a gastronomic experience.

If the diner does not put a minimum of attention on the degustation of the food, it will be unlikely that she is able to grasp the gastronomic value of the experience. Connecting back to the motivations to eat we discussed earlier, degustation is crucial to a gastronomic attitude. At the same time, if the restaurant staff do not strive to provide an experience that is as close to excellence as possible, the diner's effort in trying to enjoy it from a degustation point of view will probably be in vain.

The gastronomic attitude is subjective, and that makes any gastronomic experience a subjective one as well. Since the unfolding of the experience depends highly on the diner, the perception he will have is going to be rather personal and unrepeatable. Not only will it be unlikely that somebody else perceives the experience in the same way, but the diner will not perceive it equally in another moment in time—there are many variables and conditions that will change from one occasion to the next.

Though it is in gastronomic restaurants where we often refer to gastronomic experiences, such experiences are not limited to restaurants. A dinner at home might well lead to a gastronomic experience, provided that it is prepared and consumed with a gastronomic attitude. Similarly, attending a gastronomic restaurant will not necessarily guarrantee that one will have a gastronomic experience. The restaurant might present the diner with a proposal that has been conceptualized and executed with a gastronomic attitude, but if the diner does not approach it with such attitude the eating experience will not be a gastronomic one. That being said, the focus of attention in this project will be the gastronomic experiences proposed by gastronomic restaurants.

The research done by elBulliLab suggests a rather simple yet precise definition of what a restaurant is: an establishment in which food is cooked and served to customers who pay for that service. This definition applies to all kinds of restaurants—from those whose function is to feed people when hungry, to those that aim at delighting people through an enlightening sensorial experience. In the light of this, elBulliLab establishes a distinction between ordinary restaurants and gastronomic restaurants.

The function of gastronomic restaurants is not simply to feed people, but to provide them with an experience that is both pleasant and cultural. They are something more than food providers; they must provide experiences in which the combination of the atmosphere and the sensual perception form some sort of theatrical performance (*Campbell-Smith, 1967*). At an ordinary restaurant it is likely that the experience of eating pivots around the search for nutrition or, maybe, around an act of socialization. In contrast, the focus of gastronomic restaurants is to provide diners with carefully designed stimuli to their senses and, in some occasions, to appeal to their emotions and intellect—the case of trends such as *techno-emotional cuisine*, initiated by Ferran Adrià at elBulliRestaurant around a decade ago. A gastronomic restaurant, then, differs from a regular restaurant in that it strives to offer the

highest quality that its possibilities allow for, and to generate gastronomic experiences of a determined style.

The idea of a gastronomic restaurant suggested by elBulliLab presents the gastronomic experience as a rather uni-directional process of communication, in which there is a transmitter, the restaurant, and a receiver, the diner (Fig. 16). With this idea in mind, the elaborations designed and reproduced by restaurants become some sort of pieces that embody the idea that the restaurant wants to communicate. In other words, the gastronomic restaurant has a rather defined, distinctive and even personal proposal that is communicated to the diners through the dishes that conform a meal.

This idea of what a gastronomic experience is resembles very much the transmitter-receiver communication model (*Shannon, 1948*). This model is nowadays considered outdated, for communication is rather interactive and reciprocal, not uni-directional (*Watzlawick, Bavelas, Jackson & O'Hanlon, 2011*). Such a view on the relationship between the gastronomic restaurant and the diners will lead to interesting reflections about the role of the diner within the experience, but I will get to this later on in this study. For now, let us focus our attention on understanding the context of my explorations: the gastronomic restaurant. According to elBulliLab, the experience of eating at a gastronomic restaurant is comprised of 10 acts (Fig. 17).
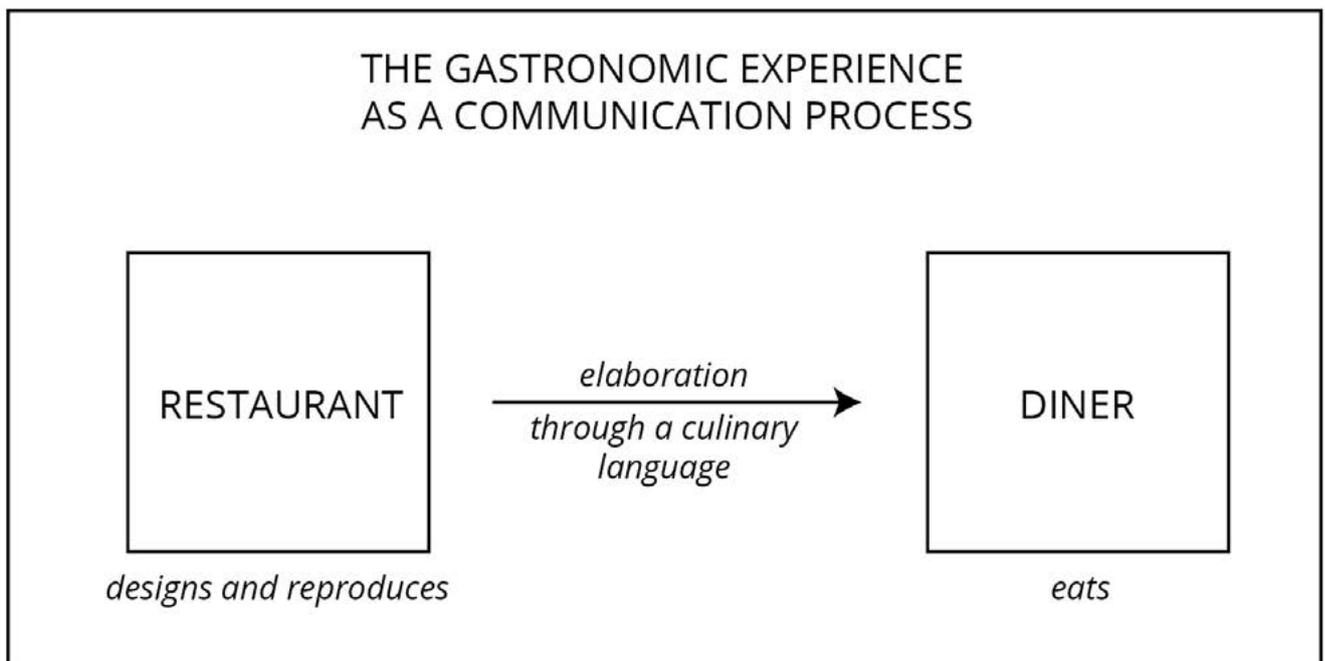

Figure 16. elBulliLab's idea of the relationship between the restaurant and the diner, seen as a transmitter-receiver communication process (Shannon, 1948). The restaurant designs and reproduces elaborations through a particular culinary language; the diner receives and eats those elaborations, thereby understanding the message the restaurant wants to communicate.

Decision to live the experience

Reservation

Journey to the restaurant

Welcome and entrance

Accomodation

Decision of the degustation

THE DEGUSTATION

Payment

Exit
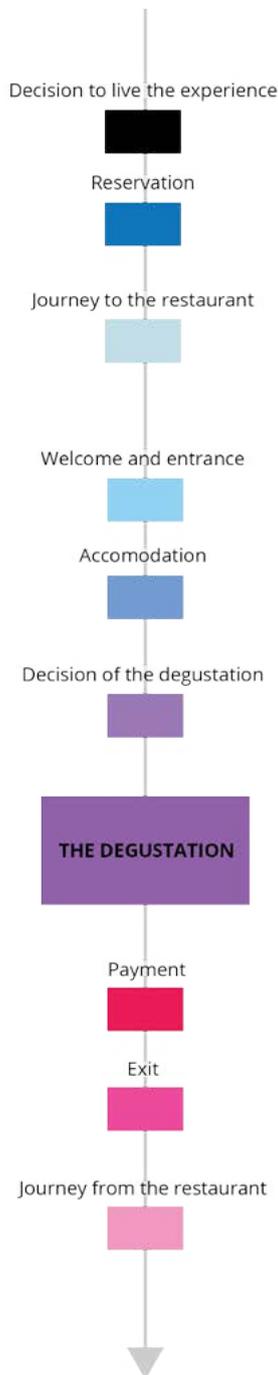
Journey from the restaurant

Figure 17. The 10 acts of the experience a diner lives at a gastronomic restaurant, including the moment of the actual degustation but also a series of previous and posterior events. Translated to English from the original in Spanish, extracted from elBulliLab's archive (elBulliFoundation, 2017).

From this perspective, the experience of eating at a gastronomic restaurant trascends the moment in which one is eating. A series of events that happen before and after the degustation have an impact on the perception of the experience as well. Some of those events are not limited to the boundaries of the restaurant— acts such as the decision, the reservation or the journey happen before even entering the physical space of the gastronomic restaurant.

With this in mind, it is important to clarify the focus of this study. While play could certainly be harnessed in all of the acts of the gastronomic experience suggested by elBulliLab, I focus on the moment of the degustation. The explorations and discussion are thus aimed at better understanding how play could have an impact on the gastronomic experience in the context of the degustation at a gastronomic restaurant.

4.3 - THE DIVERSITY OF GASTRONOMY

The understanding of gastronomy proposed by elBulliLab suggests a particular kind of experience in which degustation is at the very core, while nutrition is disregarded as not relevant. Socialization is relegated to a second degree of importance: it's presence is acknowledged, but also seen as a factor that could become a negative disruption to the degustation. elBulliLab's idea also assigns very clear roles to all of the stakeholders involved; the restaurant is a (rather active) creator who provides the (rather passive) diners with dishes they will consume.

Coming back to the examples studied in Chapter 2, Regol's *play-food* aligns very well with this understanding of what a gastronomic experience is. The diners focus on the degustation of proposals that somebody else has prepared for them, submitting to a rather progressive experience that is strongly framed by the restaurant. With this understanding of the experience in mind, there is not much space for open-ended or social forms of play. The question is: is this idea of a gastronomic experience representative of what gastronomy means to all kinds of diners? What is a gastronomic experience for them? What forms of play might be interesting to them?

In order to get a broader understanding of the gastronomic experience and how it is perceived by different diners, I conducted interviews with a range of people who have different relationships to gastronomy (Fig. 18). That includes: a *chef*, a *maître d'*, a *gastronomist*, some amateur *food enthusiasts* and a *young adult with little expertise* in gastronomy. My plan was to better understand what was essential to them and what was extraneous, and

to discuss what forms of play might align with their idea of what a gastronomic experience should be. The interviews consisted of four main steps, and were recorded in audio files.

1. A short and easy warm up activity.

2. A rather open conversation over a meal.

3. Two activities using tangible tools.

4. The writing of a recipe of what a playful gastronomic experience might be.

For the warm up I showed the participant four empty malmalade jars (Fig. 19). The jars had a tag. Three were labeled after the three motivations to eat discussed in Chapter 4: tasting, socialization, and nutrition. The fourth one was blank. I then gave the participant a bunch of *M&Ms* and asked him to put them into the containers to represent his motivations when deciding to have a gastronomic experience. I asked the participant to assess the importance of socialization, degustation and nutrition in the gastronomic experience. In case the participant had a fourth motivation, he could write it down on the blank label, and use it together with the other three jars.

Chef   Maître d'   Gastronomist   Food enthusiasts   Non-expert

Figure 18. The five stakeholders I interviewed.

Once the *M&Ms* were stored in the containers, we moved on to step two, the open conversation over a meal. The format of the meal varied depending on the interview. My aim was to raise tensions and paradoxes in the conversation. For example, I spoke with a *young adult who is not an expert on gastronomy* at a gastronomic restaurant, whereas I interviewed the *maître d'* of a two-michelin-starred restaurant at a random cafe while eating a sandwich. During each meal we had a rather open conversation, in which I tried to raise general themes such as:

· Why do you go to gastronomic restaurants?
· What makes you feel good? And bad?
· What is a gastronomic experience?
· Is there any remarkable story, good or bad?

Approaching the open conversation with a short, general set of questions allowed me to

be flexible in adapting the conversation to the themes that were raised. I could dig deep in what the participants were willing to and capable of sharing with me, and I discovered things I had overlooked before. Once the meal was finished, I offered coffee to the participant and came back to the *M&M* containers. I opened the containers and offered the *M&Ms* as an entertainment to complement the coffee. By doing so, I could bring the participant back to a state in which he would be actively engaging in a conversation through tangible materials.

I next gave the participant a bunch of pieces of paper, all of them including things that restaurants do throughout a gastronomic experience (i.e. "ask for the food", "bring a new dish", or "fill your cup"). I asked the participant to use them to build a domino-like structure that represented their idea of what a gastronomic

Figure 19. The four containers with M&Ms in them. The container to the right of the image was tagged by the participant to represent the search of "reflective interaction" in the gastronomic experience.

experience is. I left some pieces blank so that the participant could add unexpected things. When the structure was assembled, I provided the participant with another set of pieces of paper, this time including a list of things that people tend to consider as fun, based on Jon Radoff's *42 FUNdamentals* (*Radoff, 2011*) (i.e. "being silly", "competing", or "exchanging gifts"). The *FUNdamentals* are a list of very specific actions that are often perceived as playful, and I used it to help the participant articulate their thoughts into actions he could easily relate to. I asked him to choose which of those things he would like to do at a gastronomic restaurant. I then asked him to insert his chosen things into the restaurant structure he built (Fig. 20). By doing so, the tensions between playful interactions and the formal structure of gastronomic restaurants emerged.

For the second activity, I handed the participant a set of *PLEX cards* (*Arrasvuori, Boberg, & Korhonen, 2010*) and asked him to position the cards on a map with two axis: can vs. can't, and want to vs. don't want to (Fig. 21). I asked the participant to assess whether he would like to have certain kinds of playful experiences, and whether he could currently experience them in gastronomic restaurants. Through this activity, I could learn more about what kind of experiences might be missing in gastronomic restaurants. Participant choices gave me hints on what to start experimenting with in the next phase of the research.

To complete the interview, I gave the participant a paper with a template of a recipe (Fig. 22). I asked him to use it to write down his ideal playful gastronomic experience, based on the themes raised throughout our conversation.

Figure 20. White papers forming a sequential structure of the gastronomic experience, and green papers representing the playful interactions that one of the participants would like to experience at a gastronomic restaurant. Some of those interactions fit the current idea of gastronomic experience, but some others did not.

The space for writing in the recipe was intentionally limited. Following Wilde and Andersen's approach (*Wilde & Andersen, 2009*), I wanted the participants to synthesize their thoughts, and to only suggest the essential things. The result was that I collected a series of "*recipes of what a playful gastronomic experience is*" from very different perspectives.

To analyze the interviews I first wrote a transcript of the audio files, then used the transcript and photos of the results of the participants' interaction with the tangible tools to identify themes of interest. I then conducted a qualitative analysis of those themes through the writing of a narrative (*Hesse-Biber & Leavy, 2010*). I did this for each interview.

Once I had completed the five interviews and analyses, I proceeded to connect the findings across all of them. Inspired by Wilde and Andersen's approach (*Wilde & Andersen, 2010*), I collected the most relevant themes raised during the interviews into tangible cards, and

Figure 21. The PLEX cards positioned on the map. Left meaning they could not, right meaning they could; top meaning they wanted to, bottom meaning they did not want to. The example in the figure presents a lot of experiences that the participant would like to live but, in his opinion, are not facilitated by gastronomic restaurants.

played these cards to find interesting connections (Fig. 23). By doing so, I could establish a link between the perspectives of all the stakeholders I interviewed. The links allowed me to identify areas that could be worked on further in the next phase of my research.

By embracing as many points of view as possible, I was exposed to a more representative reality of what it means to have a gastronomic experience. That allowed me to understand to what extent the experiences proposed by gastronomic restaurants are appealing to a broad spectrum of stakeholders, as well as the variety

of things those stakeholders expect to find in a gastronomic experience. The following conclusions are from the five interviews. The separate analysis of each can be found in the appendix A.

Degustation is often the core experience provided by gastronomic restaurants. Out of the three motivations to eat discussed so far, degustation dominates the experience embraced by most gastronomic restaurants. Nutrition is disregarded as not important. Socialization is seen as accessory and even, on occasions, disruptive. Such a strong focus on degustation fits very well the desires of a particular type of diner. The *food enthusiasts* I interviewed, for example, argued that being surprised in trying new ingredients and new ways of eating was one of their main motivations. In the opinion of the *maître d'*, understanding the message and the culinary language behind the elaborations he is served is very important for him.
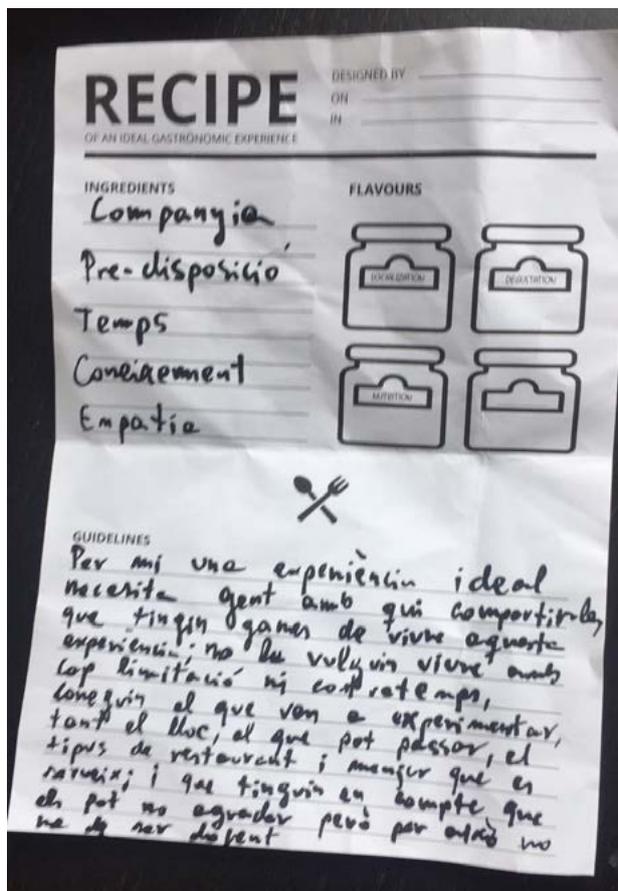
Figure 22. Recipe of a playful gastronomic experience created by one of the participants.
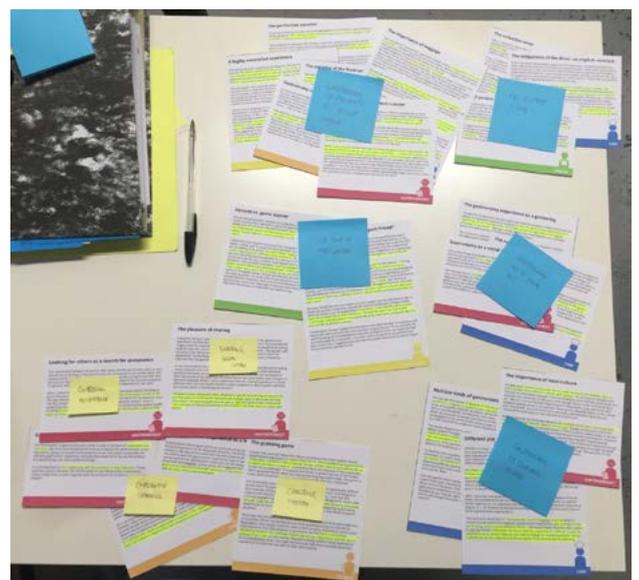
Figure 23. The cards representing the relevant themes raised in the interviews, clustered by thematic affinity. Red cards represent the gastronomist; green cards represent the mâitre d'; blue ones represent the chef; yellow ones represent the non-expert; and orange ones represent the food enthusiasts.

Anything that might distract the diner from the actual tasting of the food elaborations (e.g. socialization) is often seen as an obstacle from the point of view of the restaurant staff, since it disrupts such a strong focus on the degustative qualities of the gastronomic experience.

The diner has obligations. Across the interviews, I understood that the diner has to behave in a particular way if they want to enjoy the experience of eating at a gastronomic restaurant. They must focus their attention on the degustation, assuming that the experience will include moments in which socialization and other things will be accepted. According to the *chef* I interviewed, "*if the diner does it perfectly, I will give her time to talk*". Similarily, the *food enthusiasts* argued that "*you do not go to a gastronomic restaurant to socialize*". This does not represent well the flexible nature of other kinds of eating experiences, in which degustation and socialization happen simultaneously, such that one cannot be dissociated from the other.

Gastronomic restaurants tend to be serious, especially those where the dominant format is the tasting menu. The *gastronomist* I interviewed sarcastically described such a serious approach as "*adult cuisine*". While this is appealing to people who look for feelings of commodity and comfort, it does not represent what gastronomy means to a lot of other people. The way the *gastronomist* saw it, this is a problem because it turns high gastronomy into something elitist, not only economically speaking but especially because of the restaurants'

style. The *non-expert* I interviewed is a clear example of this perspective: he feels that the constraints he experienced on the occasions he ate at a gastronomic restaurant prevented him from actually enjoying it.

Expertise plays a role. Articulating the gastronomic experience around an idiosyncratic degustation of complex food elaborations, performed according to a series of rules, implies that a certain expertise is required to fully enjoy it. A diner may feel uncomfortable if he is not used to behaving in the way gastronomic restaurants require. For the diner to understand the proposals he is being served, a certain baggage is needed. Without previous experience and/or knowledge in gastronomy, it may be difficult for a diner to enjoy a complex gastronomic proposal.

A highly controlled dinner does not guarantee a perfect experience. The need for a certain expertise is often problematic since, as the *maître d'* said, "*most people do not have the experience or the knowledge to get involved in a gastronomic experience*" of the kind proposed at restaurants like the one he represents. In his opinion, restaurants should "*be more humble and realize that a lot of people are not understanding*" the experiences they propose. Gastronomic restaurants strive to provide diners with the best food elaborations they are capable of, and in doing so they often follow the strategy of designing experiences that are controlled to the smallest detail. Experiences that are strongly framed and focused on degustation fit very well with the intentions of a

particular type of diner, but fail to be appealing to others. While an expert diner with a strong interest for pure degustation will be delighted by an intense and framed tasting menu, somebody with a different understanding of what a gastronomic experience is might be more inclined to enjoy experiences that are more emergent.

There is pleasure beyond the degustation—socialization is important. Gastronomy is diverse, and so are the ways to experience it. The dominant format in gastronomic restaurants highlights the importance of degustation over other things. Yet, degustation cannot be considered the only factor in a gastronomic experience. Not only the people with little expertise on cuisine, such as the *non-expert* I talked to, see the gastronomic experience as a "*gathering, an act of socialization*". Experts like the *gastronomist* I interviewed also believe that "*socialization is always there*". Socialization seems to be a fundamental part of what some people understand as gastronomy.

The relationship with staff is also important. Staff are the interface between the diner and the restaurant. According to the *maître d*'s experience, "*even though we often say otherwise, waiters normally act as servants*". This makes some diners feel uncomfortable, because they see waiters as intruders and they feel observed. When I discussed this with the *maître d'* he noted that he behaves differently when he is working than when he goes to eat at a gastronomic restaurant with less experienced diners. In the former case, his role is to "*explain a*

story"; in the latter, he tries to "*facilitate that people experiment with their food in an active way*". Pulling this thread, the idea of a waiter that embodies the role of a facilitator instead of that of a storyteller emerged.

Different stakeholders enjoy different types of play, and not all of them are elicited in gastronomic restaurants. While diners who are naturally interested in and experienced with degustation are likely to have a feeling of challenge and discovery, these forms of play are not elicited for diners with different agendas. Creative expression, social contact, learning through experimentation, or un-serious fun are some of the types of play that are not elicited in the experiences proposed by gastronomic restaurants but still were mentioned in some of the conversations I had with the stakeholders. Surprise seems to be a form of play that generates consensus—all the stakeholders I interviewed seemed to be interested in surprise.

4.4 - THE LIMITATIONS OF GASTRONOMIC RESTAURANTS

Gastronomic restaurants do a great job in eliciting some types of play for a particular type of diner—surprise, for example. However, they fail to propose experiences that are perceived as playful and interesting by other diners. This is clear both from the stakeholder interviews I conducted and from the analysis of the playful eating proposals reviewed in Chapter 2. In this section I reflect on the limitations of gastronomic restaurants.

The experiences proposed by gastronomic restaurants are often understood as uni-directional communication processes. The restaurant embodies the role of the creator, and the diner acts as a receiver of a proposal that is articulated through the restaurant's very own culinary language. Restaurants do not normally strive to learn how people eat outside of the restaurant in order to embrace those interactions in their proposals. Instead, they follow a well established format of service. It is true that some experimental restaurants propose innovations to that structure. El Celler de Can Roca's *El Somni* (*Aleu, 2013*) presents an idea of gastronomy as a multi-sensory spectacle. Alinea (*Alinea, 2017*) and The Fat Duck (*The Fat Duck, 2017*) understand cuisine as an emotional experience in which the diner undertakes a journey full of playful surprises. Enigma (*elBarri, 2017*) takes this idea of a surprising journey to the extreme, proposing a restaurant experience in which the diners physically move from one space to another throughout the whole dinner. However, those innovations are not an attempt at embracing real-life interactions. They are rather the result of a search for radical experiences that surprise the diner.

Another limitation we see in gastronomic restaurants has to do with the role they give to the diners. Although the act of eating at a gastronomic restaurant allows diners to be active in many ways, the impact their actions can have on the proposal designed by the restaurant is limited. A gastronomic experience implies a certain degree of interactivity. Nonetheless, it cannot be considered an emergent

or highly interactive one—it is articulated through a linear progression, based on pre-defined parameters. For further reflections on the interactive role of the diner in gastronomic restaurants, see the appendix B.

Such a lack of interactivity has an impact on the playful qualities of the gastronomic experience. Regol (*Regol, 2009*) notes that restaurants propose forms of play in which the diners participate by "*sitting and watching*". The forms of play often embraced by restaurants are mainly articulated around surprise, which give diner a passive role. In terms of culinary proposals, gastronomic restaurants are greatly rich and diverse—however, in terms of play they are not. The field of gastronomy could benefit from harnessing playful design principles such as the *PLEX Framework* (*Arrasvuori, Boberg, & Korhonen, 2010*). That would help us diversify the breadth of formats of gastronomic experiences proposed by restaurants in a way that the needs expressed by the different stakeholders I interviewed might be better addressed.

Additionally, due to the closed and non-interactive structure of tasting menus, the experience of eating at a gastronomic restaurant is progressive. This may be conflictive for diners who see the gastronomic experience as a social and emergent one. Diners encounter activities that might elicit a certain type of play, but these activities are highly structured. Diners do not really have the chance to find their own ways to play. Restaurants seem to propose games, instead of offering diners opportunities for free play in which they can

find their own means for participating. Besides designing closed play activities (e.g. elBulli's *Las especias*), it may also be interesting to design opportunities for free play in which the diners may or may not engage (e.g. Guixé's *Mealing*). Emergent play resembles the way social interaction often unfolds. Given the circumstances that regulate a context, participants adopt a role that aligns to their interests, and events unfold dynamically according to their actions. Embracing the idea of emergent play in the design of gastronomic experiences could be a strategy to enhance their social nature. Adopting a playful interaction design approach may help to enrich and diversify the playful and interactive qualities of gastronomic experiences. In doing so, user-centeredness (*Abras, Maloney-Krichmar & Preece, 2004*) becomes critical—if we really want to design experiences that appeal to the diners in ways they can relate to, we must strive to understand what forms of playful eating they normally engage in.

I am not suggesting that all restaurants should be appealing to all kinds of diners; I am neither suggesting that the current format of gastronomic restaurant should disappear. Rather, I am proposing that diversifying the playful nature of gastronomy may seduce people who would otherwise see high gastronomy as something alien to them. I am also suggesting that interaction and playful design could be great sources of knowledge when it comes to understanding the myriad ways play unfolds in eating. By putting the diners' interactions at the center of the dining experience, we might discover ways to transition from the highly progressive experiences that dominate today towards more emergent ones. These approaches could be reinterpreted and harnessed in context of gastronomic restaurants. Critically: playful gastronomic design should focus on forms of play that are intrinsically bound to the act of eating, and not to those who might actually become a distraction to it.

So far, I considered the great potential of play when it comes to dynamizing a gastronomic experience. However, gastronomic restaurants tend to focus on a very specific form of play: surprise. There are also examples of gastronomic experiences built around the idea of make-believe, although this is more often seen in ordinary restaurants than in gastronomic ones. Importantly, surprise and make-believe are forms of play that relegate the diner to a rather passive position. While this may be coherent with the idea of gastronomic experience as a transmitter-receiver communication process, as suggested by elBulliLab, it does not represent eating in its full richness.

RESEARCH THROUGH (GASTRONOMIC) DESIGN

In Chapter 2 I demonstrated that the forms of play present in gastronomic restaurants are limited. In Chapters 3 and 4 I clarified my understandings of play and the gastronomic experience. I thereby was able to reflect on the current state of play in gastronomic restaurants, and their limitations. In this Chapter I explore a series of design opportunities for playful gastronomic design: *The co-creative role of the diner*; *The challenge of degustation*; *Un-serious play*; and *Social play*. I then present a workshop I facilitated in which game designers and chef students collaboratively designed playful gastronomic experiences.

5.1 - DESIGN OPPORTUNITIES FOR PLAYFUL GASTRONOMY

Restaurants, with the different professional roles and skillsets they employ, are extremely good at coming up with rich and creative culinary proposals. However, they are less effective when it comes to designing the interactions that happen at the table. The diversity in formats of tasting menus and the forms of play that are elicited in them remains limited. Designers' expertise in identifying, comprehending, and enhancing the quality of real life interactions could be of great value to the design of gastronomic experiences.

Through the interviews (described in 4.3), I identified four opportunities for playful design intervention in the gastronomic experience. First, diners are often given a passive role. Empowering them to participate in the creation of their food might increase the interactive qualities of the gastronomic experience. Second, challenge appears to be an appealing source of fun for expert diners. However, it has not been much explored by gastronomic restaurants. Third, the gastronomic experience is perceived as "*too serious*" by some diners. Play could be helpful in changing this. Fourth, socialization is important for many diners. The gastronomic experience would be more appealing to them if its social nature was enhanced and enriched.

In an attempt to address those opportunities from a design perspective, I first tried to link them to playful design theories, such as the *PLEX Framework* and Caillois' categories of games (Fig. 25). My aim was to clarify what types of play might be a good fit. However, I found that the amount of types of play that could—in theory—match each of the design opportunities, was too big. Far from being helpful, such a complex network of links between the opportunities and the types of play would overcomplicate a design process. I addressed that complexity through a series of Research through Design explorations. I undertook four experiments, one for each design opportunity.
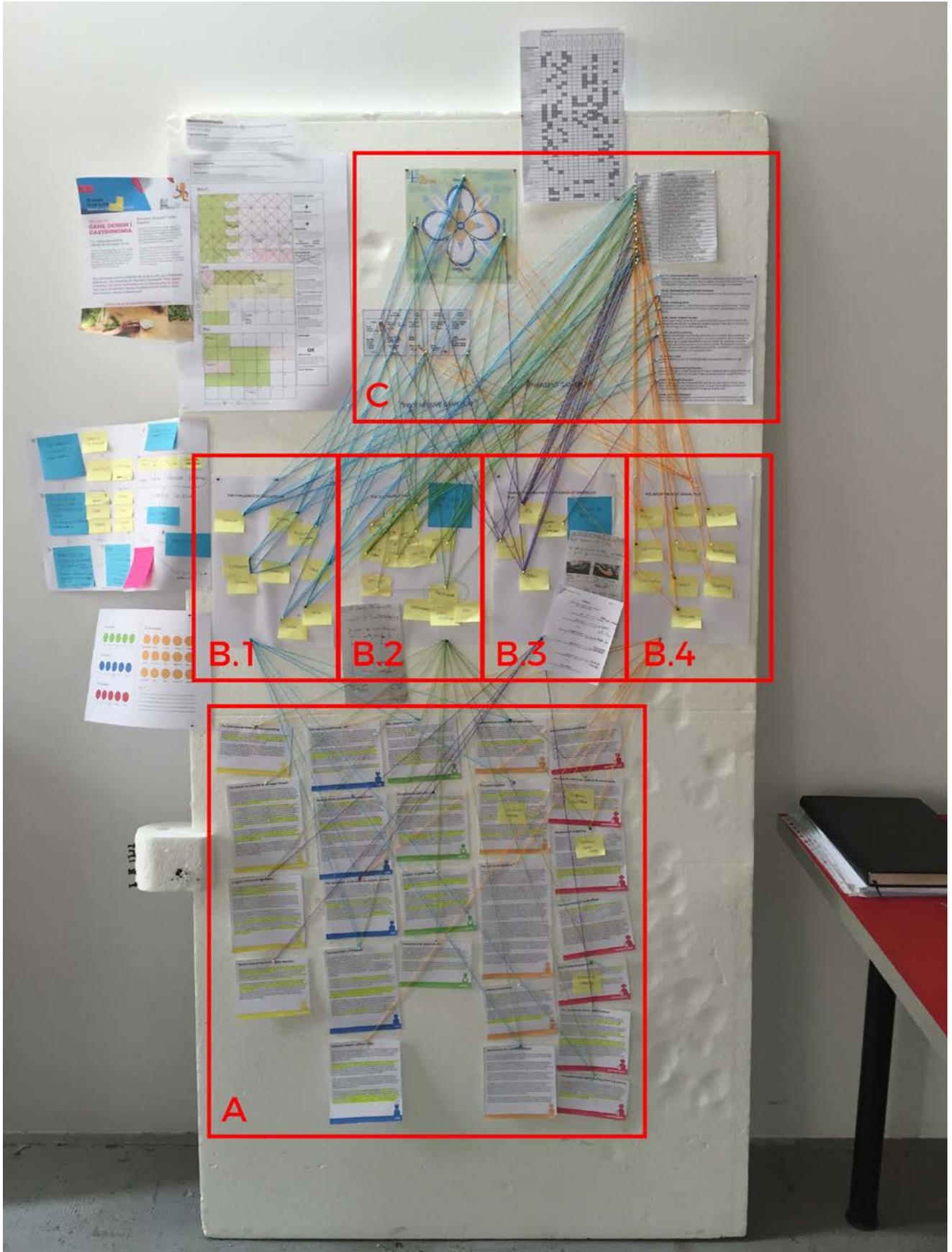
Figure 24. The findings from the interviews (A), the four design opportunities (B), and the types of play (C), connected with threads.

I approached the experiments differently, depending on the characteristics of each of the opportunities. The degree of involvement by participants also varied.

The co-creative diner (see 5.2, below), was an ideation session in which I co-created a playful dish with two previous interview participants: the *non-expert* diner and the *maître d'*. I asked the *maître d'* to facilitate a cheese tasting for the rest of us. Being exposed to the activity helped us discuss ways to get non-experts to engage more actively in a degustation. Instead of designing the experiment as a structured activity, I deliberately kept it open. The two participants had strong real-life experience of the situation I was exploring, so I felt the experiment would be much more effective if I allowed them to ideate freely without me regulating the unfolding of the events.

The challenge of degustation and **Un-serious play** (described in 5.3 and 5.4, respectively) took the form of meals in which I prepared a series of dishes, each representing a different form of play. I invited different stakeholders as diners to find out which forms of play were more appealing to them. In contrast to the first experiment, I carefully designed the explorations to unfold in a specific way. Having identified types of play that might fit the scenarios I was exploring, I designed experiments to target them.

Social play (described in 5.5) also took the form of a meal, but in this case I asked the participants to prepare the food themselves. I gave each of the diners an assignment, including

a course for which they were responsible and a type of play (e.g. "an appetizer that makes us be silly"), and asked them to come up with their own interpretation. I decided to let participants design the dishes because I wanted to make sure different forms of socialization would be embraced. The aim was to reflect on which forms of social play were most fun.

In the first experiment (*The co-creative diner*), I wanted participants to engage freely with the materiality of the ingredients they had at their disposal in order to reflect and share their insights. I did not want to influence their thoughts; and felt they would be less constrained if I did not impose a documentation format. I simply recorded our conversation on an audio file.

Differently, in the other three experiments (*The challenge of degustation, Un-serious play,* and *Social play*) I followed two specific strategies for the documentation. First, I gave the participants a camera and asked them to take photos of all that they considered interesting (a dish, a moment, a face…). I wanted to make sure the photos from the dinner would explain the participants' story, not my interpretation. While the photos were helpful for research purposes, their quality was not always good enough for communication purposes. In future studies I would possibly combine the participant-led photo documentation with staged photos of the dishes, taken by myself or a photographer. A collection of the photos can be found in appendix C. Second, I designed a questionnaire in the form of petit-four (Fig. 25) to facilitate a

smooth transition from the dinner to the reflection. The participants could reflect on their experience as a part of the dinner itself, while eating sweet snacks and drinking some coffee. I asked participants: which dishes were most fun, which ones they liked the most, which ones were uncomfortable, and which types of play they had experienced (based on the *PLEX framework*). The questionnaire was helpful in keeping the volume of data small and concise. It also provided participants with the necessary tools to articulate their thoughts (clear questions with clear answer choices). While that might have been problematic in an experiment in which I wanted to collect rather open responses (e.g. *The co-creative diner*), in this case it helped the participants focus on what I was interested in: the forms of play worked best.

After the four experiments, I ran a workshop—*Cooking games* (described in 5.6)—where student chefs and game designers worked in multidisciplinary teams to design and prototype playful dishes. My aim was to test how
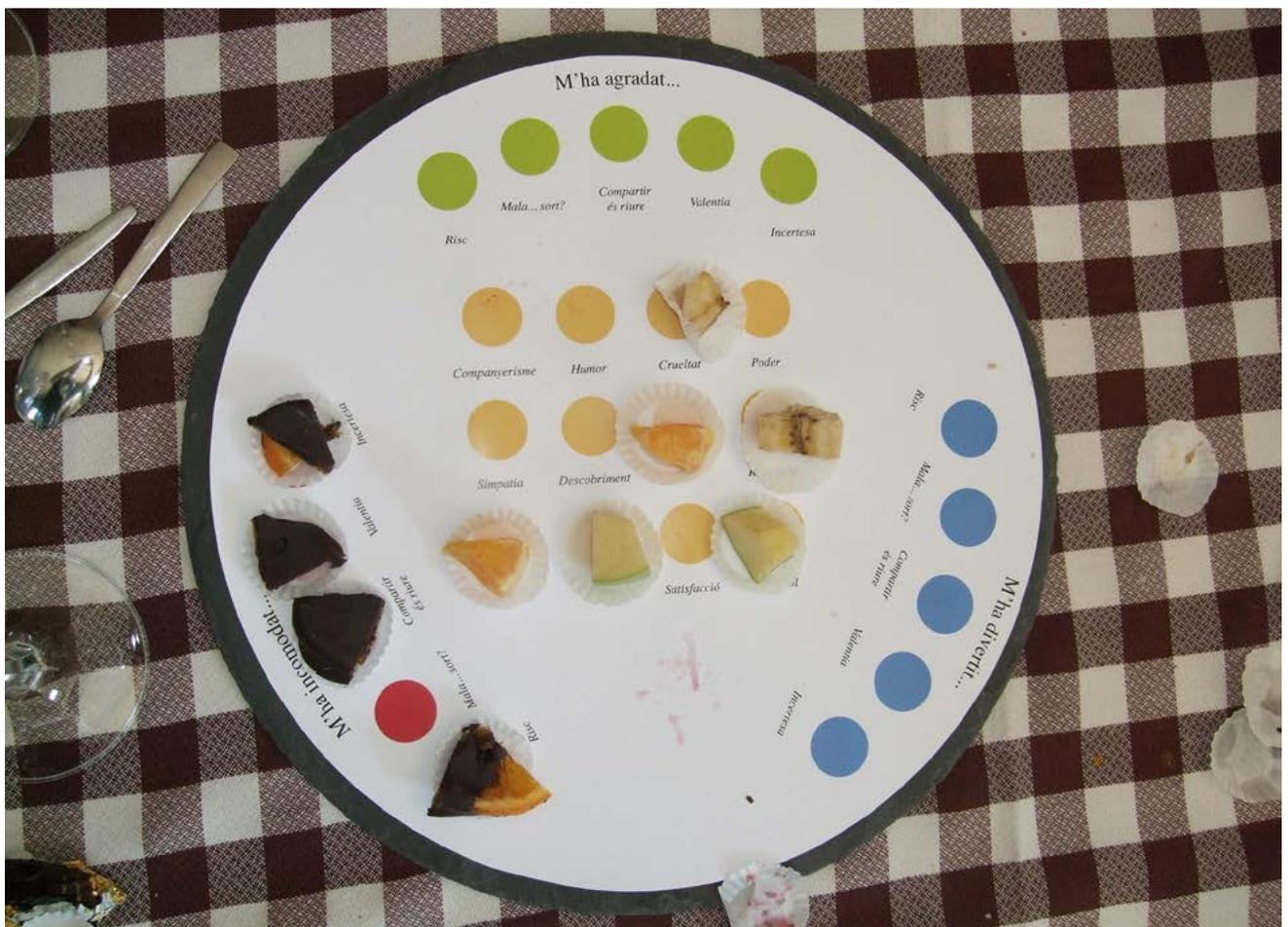
Figure 25. Petit-four based questionnaire, answered by the participants in the Social play experiment. Around the perimeter of the plate, the three questions: what did you like?, what was fun?, what made you feel uncomfortable?. In the center of the plate, 12 of the emotions included in the PLEX framework.

chefs perceive the idea of playful gastronomy. I also wanted to see how they dealt with the approach I suggested: what was useful to them, and what was missing? The aim of this thesis is to discuss how play could be harnessed in the design of richer gastronomic experiences. Hence, this knowledge must be accessible to chefs, as they are the ones who will ultimately make use of it. The workshop also allowed me to explore the four design opportunities described in this Chapter from another angle. It would be chefs in training who came up with gastronomic proposals, not me.

5.2 - THE CO-CREATIVE DINER

Gastronomic proposals are sometimes hard to understand because of their complexity, especially for diners with little past experience. In such a scenario, experimentation and creative engagement might be useful. There is a design opportunity in providing the diners with a co-creative role in parts of a gastronomic experience. To explore this opportunity, I organised a co-creative session with two of the stakeholders I interviewed previously (Chapter 4). I invited the *non-expert* (who is also a game design student) and the *maître d'* to my place for a dinner, and asked the latter to facilitate a cheese tasting for us. The aim was to experience a tasting in which there was a clear difference in expertise between the diners. By exposing us to that situation, were be better positioned to reflect on ways to actively engage non-expert diners in complex degustations. Crucially, I tried not to influence or shape the unfolding of events. Due to the interviews I

previously had with the two participants, I was confident that interesting dilemmas would be raised throughout the dinner.

The cheese tasting led to the discussion about how a co-creative role for diners could lead to a more interesting and fruitful degustation. Co-creation might increase the sense of agency in non-expert diners. By taking part in the elaboration of their food, diners may feel less constrained when it comes to understanding the degustation; they could find their own means for exploring the food and its flavors. Such active participation might also open up new opportunities for exchange of insights between diners with different expertises. Co-creation is likely to dillute the imbalance of expertise between the diners, in a way that all diners could participate actively regardless of the knowledge they have. In discussing strategies to implement co-creation, two forms of play came accross: creative expression and randomness.

For some, creative expression is a powerful motivator when it comes to engaging actively in the preparation of food. In my interview with a *gastronomist* (Chapter 4), I learnt that cooking for others makes some people feel good. It is both a source of pleasure and a way to demonstrate affection. Sharing food and cooking for others are pleasurable (*Wang, 2013*). They are a source of creative expression and a strengthener of social relationships. In occasions, cooking for others may also sate our need for acceptance—it makes us happier when people praise us about it.

Chance was also identified as a design strategy to a co-creative gastronomic experience. As discussed in Chapter 3, chance and uncertainty (*alea* in Caillois' words) are forms of play that help mitigate differences in expertise between participants of an activity. The effect of chance would be helpful in putting all the diners at a similar position in which they could both propose and receive regardless of their previous knowledge. Instead of a uni-directional flow of knowledge that is typically established between expert and non-expert diners, a playful participation by both might facilitate more insightful learning processes based on trial, error and experimentation. The non-expert might feel more empowered to contribute, while the expert might discover new knowledge as a result of apparently random combinations of food. The participants came up with a design idea harnessing creative expression and chance:

Cheese Tasting Roulette

Different types of cheese, together with different ingredients that are to be paired with them, are placed on the table. Each of the diners is given a series of small plates. In rounds, participants prepare a combination of a cheese with one or more ingredients. They place their prepared combination on a Lazy Susan—a rotating circular structure—at the center of the table. Once all participants have placed their selection, the roulette Wheel is turned, and a random portion of food is thus assigned to each of the diners.

In discussing to what extent diners might feel uncomfortable with eating food prepared by other diners, the *maître d'* came up with a design strategy to mitigate that risk. He suggested betting as a way to allow diners to decide whether to participate in the exchange, or to eat their own creations instead. In each round, diners could decide whether to place their creation on the roulette. Only by doing so could they participate in the activity, otherwise they could simply eat their own combination.

According to the *maître d'* and the *non-expert,* that idea was interesting because it explicitally focused the diners on the ingredients and the taste, and might enhance the exchange of insights between diners. Whatever they ate was prepared by somebody else, and vice versa. Conversation about the combinations of ingredients and the reasons behind them would subsequently emerge. Such combination of creative expression and randomness could be a trigger to many other forms of free play. A diner might elaborate a tasty combination to please his partner, to demonstrate affect; or make a weird combination as a way of friendly pranking; or come up with an innovative and insightful mix in order to impress another diner; or elaborate a complex combination to teach another diner something new. Instead of providing diners with a game that has a single goal and a defined strategy to pursue this goal, this design idea allows diners to find their own means to participate. It is thus a good example of the emergent and free forms of play that I identified as desirable in the design of playful eating experiences (Chapter 4).

5.3 - THE CHALLENGE OF DEGUSTATION

Playful surprise is harnessed by restaurants in many different ways. In contrast, playful challenge is not elicited so often, and when it is, it is articulated in a rather simple and direct way. Some expert diners, such as the food enthusiasts I interviewed (Chapter 4), perceive a degree of playful challenge in their gastronomic experience, but it is often motivated by their own actions, not by the food itself. elBulli's *Las especias* (Chapter 2) is a rare exception. A design opportunity thus exists to find richer ways to offer challenge in degustation to expert diners. To explore this opportunity, I invited to dinner the two *food enthusiasts* I had previously interviewed. Since they said that they enjoyed challenging each other to guess the ingredients of a dish, I articulated the meal through different forms of playful challenge: *Discovery,*

Creative Expression, Collaboration, and *Competition.* The meal ended with a *Sweet reflection* around the petit-four questionnaire.

Discovery, with traces of competition, took the form of bread and olive oil (Fig. 26). I gave each of the diners 6 small plates, and poured some oil in one of them. The oil was infused with a certain ingredient; the diners had to guess it in order to be served a new type of oil. Significantly, they could choose whether to share the information with each other. Therefore, the whole discovery process could end up being either a collaboration or a competition, in which the amount of varieties of oil earned signified the progress done by each of the diners. To facilitate the discovery process, I placed a series of ingredients at the center of the table, including those employed to infuse the oils.

Creative Expression took the form of dumplings (Fig. 27). I gave each of the diners three dumplings, filled with different ingredients. I did not tell the diners what the ingredients were; I simply associated each of the dumplings to an icon: a mountain, the sea, and a plant. I placed three jars with different sauces at the center of the table, and associated each of them to an adjective: from the kitchen-garden, lactic, and asian. I asked the diners to use

Figure 26. Discovery. To the left, the plate with sample ingredients. To the right, a participant tasting one of the oils.

Figure 27. Creative Expression, featuring the dumplings (left), the icons (center), and the sauces and their corresponding adjectives (right).

the limited information I gave them to pair the dumplings with the sauces and, in doing so, discover what they were made of.

Collaboration took the form of six omelettes, each one filled with a different ingredient (Fig. 28). I used black colorant to make the six omelettes look the same, and gave the diners three omelettes each. I also gave each of the diners three containers with a smelly liquid. The smells in one participants' containers belonged to the ingredients in the other participants' omelettes, and vice versa. For the diners to guess what were the ingredients in the omelettes, they had to collaborate: one of them would taste, and the other would smell.

Finally, **Competition** took the form of a dessert (Fig. 29). I placed nine bowls at the center of the table with sweet condiments, together with a plate full of *recuit* (a fresh cheese typical of Catalonia). I asked one of the participants to close his eyes, while the other prepared a small portion of *recuit* with a condiment of her

choice. If the former could guess the sauce, he would continue being fed. If he was wrong, participants exchanged roles. The dessert was over when the participants ran out of *recuit*.

After the dessert, I asked the participants to reflect on the experience using an individual **petit-four questionnaire** (Fig. 30). The questionnaire helped them bring their thoughts into words. However, since it had to be answered individually, it did not provoke a collective discussion between the participants. The results of the questionnaires indicated that

Figure 28. Collaboration. To the left, omelettes filled with three different ingredients (A, B and C), served to one of the participants (P1). To the right, their corresponding smell containers, served to the other participant (P2).

Figure 29. Competition. To the left, the nine sauces. To the right, a participant being fet by the other participant.

two of the dishes were perceived as most fun: *Discovery* and *Competition*. The discovery-oriented bread-and-oils activity was successful in allowing the diners to explore freely on their own. Through an activity that was completely habitual for them (tasting something), they progressively built a playful mindset. Since *Discovery* was a side dish they could combine with other dishes, participants kept playing throughout the whole dinner, until they managed to guess the last type of oil. Side food (i.e. bread, oils, butter, crackers...) seems to be an opportunity for play through free discovery—it is not as limited by time as a regular dish, since it can be on the table for a whole meal. Side food allows the diners to interact whenever they want, without the limitation of a specific time frame in which a dish is served.

The competitive dessert was the most compelling moment of the evening. Diners had to be creative when feeding each other to make sure the ingredients would not be guessed. The combination of challenge, competition, and physical engagement—both with the food and with each other—was often a source of laughter. Many different social dynamics emerged: teasing, hard competition and, eventually, open demonstrations of affection.

Besides the great fit of *Discovery* and *Competition* in *The challenge of degustation*, I was also struck by the feedback the *food enthusiasts* gave. In our interview weeks before, they made it clear that when they went to a restaurant, they simply wanted to eat, no distraction involved. I designed the experiment assuming

Figure 30. Sweet reflection. The participants interacting individually with their petit-four questionnaire.

that some of the forms of play might be perceived as a distraction. To my surprise, nothing was. Both the petit-four questionnaires and their comments indicated so.

All of the forms of play had their origin in an activity the *food enthusiasts* told me they liked: guessing the ingredients of a dish. What is more, no activity was disruptive to their intentions. Playing did not prevent them from behaving the way they often behave in similar situations; it only made it easier and more compelling. In the light of these findings, I am now confident to stress the importance of observing the interactions in eating as a source of inspiration when it comes to designing playful gastronomic experiences.

5.4 - UN-SERIOUS PLAY

In my interviews with stakeholders (Chapter 4) I found that the dominant format of gastronomic experience feels exaggeratedly serious to some diners. It does not represent their idea of

what enjoying food in company means. Surprisingly, this is not only the opinion of non-expert diners; the *gastronomist* I interviewed shared this feeling. There seems to be a need to elicit joy and carefree fun in gastronomic experiences, in a way that such perception of seriousness fades away. A design opportunity thus emerges: to discover strategies to elicit the feeling of free play and joy in diners. To explore this opportunity, I invited two married couples in their fifties—who often go to restaurants together—to lunch. I prepared a meal for them consisting of different dishes representing different forms of un-serious play: *Risk, Bad... luck, Sharing is laughing, Bravery,* and *Uncertainty.* The meal ended with a *Sweet reflection* around the petit-four questionnaire.

Risk took the form of an appetizer that was a re-interpretation of *pimientos del padrón* (as discussed in Chapter 2). Using molecular gastronomy techniques, I turned blended pepper juice into tiny bits representing the seeds of *pimientos del padrón* (Fig. 31). I plated them in

Figure 31. Risk. To the left, the four portions of pimientos del padrón seeds. To the right, the face of the diner who got the spicy portion.

four different portions; one of them was spicy. When I served the dish, I told the diners that one of the portions was spicy.

Bad… luck? took the form of a second appetizer (Fig. 32). I prepared four ravioli, the dough made of zucchini. Although the four portions looked identical, I filled them with different ingredients: one was tasty (cheese, apple and carmelized nuts); two were insipid (boiled zucchini); and the last was sour (fresh lime). When I served them, I did not tell the diners the raviolis were different. Instead, I gave the diner who unfortunately got the spicy portion in the previous dish a paper with the following message:

> *"The one at your left is delicious; the ones in the middle are insipid as hell; the one at your right will make you all laugh… Well, all but who ends up eating it! You decide who is eating them".*

I wanted to turn his bad luck into a good one in an unexpected way, giving him a feeling of power and, perhaps, of friendly vengeance.

Sharing is laughing took the form of an entree (Fig. 33). I prepared four different dishes (a salad, pasta, cous-cous, and a soup), and served each of them randomly to a different diner. I also provided the diners with a series of small empty plates. Next, I told them a clear and simple rule: to taste another diner's food, they had to make her laugh. Whoever made someone else laugh was entitled to ask for a small portion of their food.

Bravery took the form of a main course (Fig. 34). I served each of the diners a piece of pan-fried salmon—no dressing, no side food, not even seasoned with salt. Next, I placed a series of black boxes in the middle of the table. Each of them had an icon that was an abstract representation of the food in their inside. I told the diners the salmon had no seasoning of any kind, and that they might find some in those boxes. The only deal was that the box they opened, they had to eat the food it contained, whether they liked it or not.
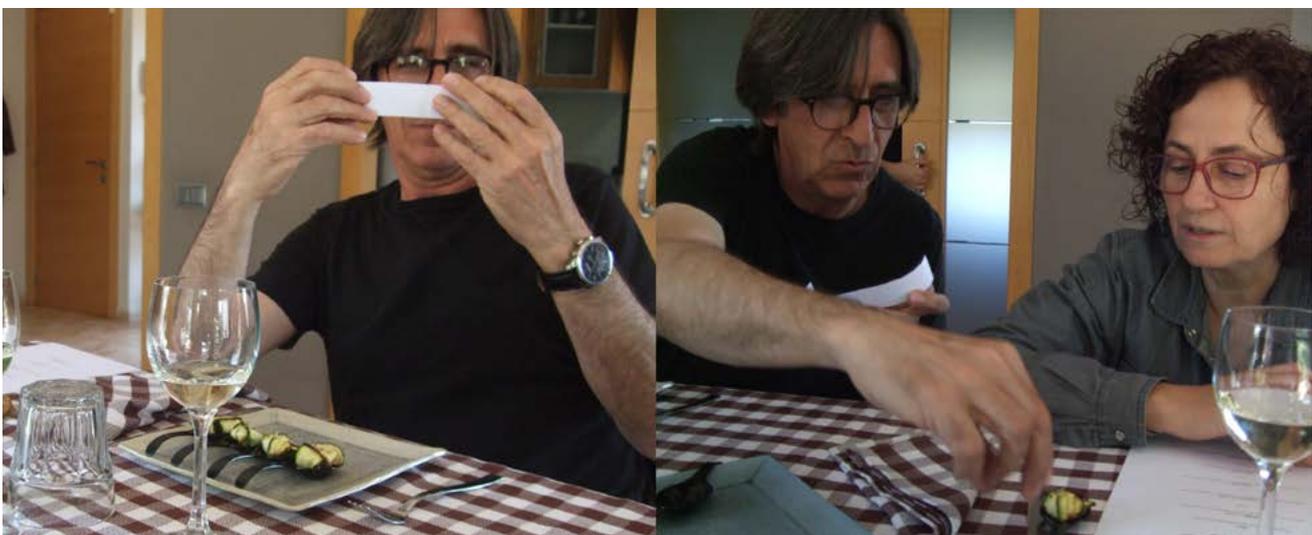

Figure 32. Bad… luck?. To the left, lucky diner reading the paper with his privileged information, and the four raviolis in front of him. To the right, lucky diner serving a ravioli to another diner.

Figure 33. Sharing is laughing. At the top, the four entrees. At the bottom, some of the small plates the diners shared.

Figure 35. Uncertainty. At the top, the boxes for two of the diners, positioned in a way thay only them could see the words. At the bottom, a diner, trying to find a way to guess what desserts another diner had.

Figure 34. Bravery. The salmon and the mysterious boxes.

Uncertainty took the form of a dessert (Fig. 35). I served 12 small portions of different desserts, each of them inside a box. I printed a word on each of the boxes, representing vaguely their contents (e.g. "sweet" for an apple pie, or "classic" for a pudding). I served each of the diners three boxes, and gave them the oportunity to exchange one with another diner. Significantly, the diners were only allowed to see the words for their own desserts, so they were almost exchanging blind. Once the exchanges were done, the diners were allowed to open the boxes and eat the desserts.

Again, I ended the meal with a **petit-four questionnaire** (Fig. 36). Instead of giving each of the diners an individual questionnaire, I prepared a single one for all of them. Articulating the petit-four questionnaire as a group activity improved the discussion, both quantitatively and qualitatively. It lasted longer, and encouraged the diners to verbalize the decisions they made. This, in turn, made it easier for others to argue back, leading to deeper and more insightful discussions.
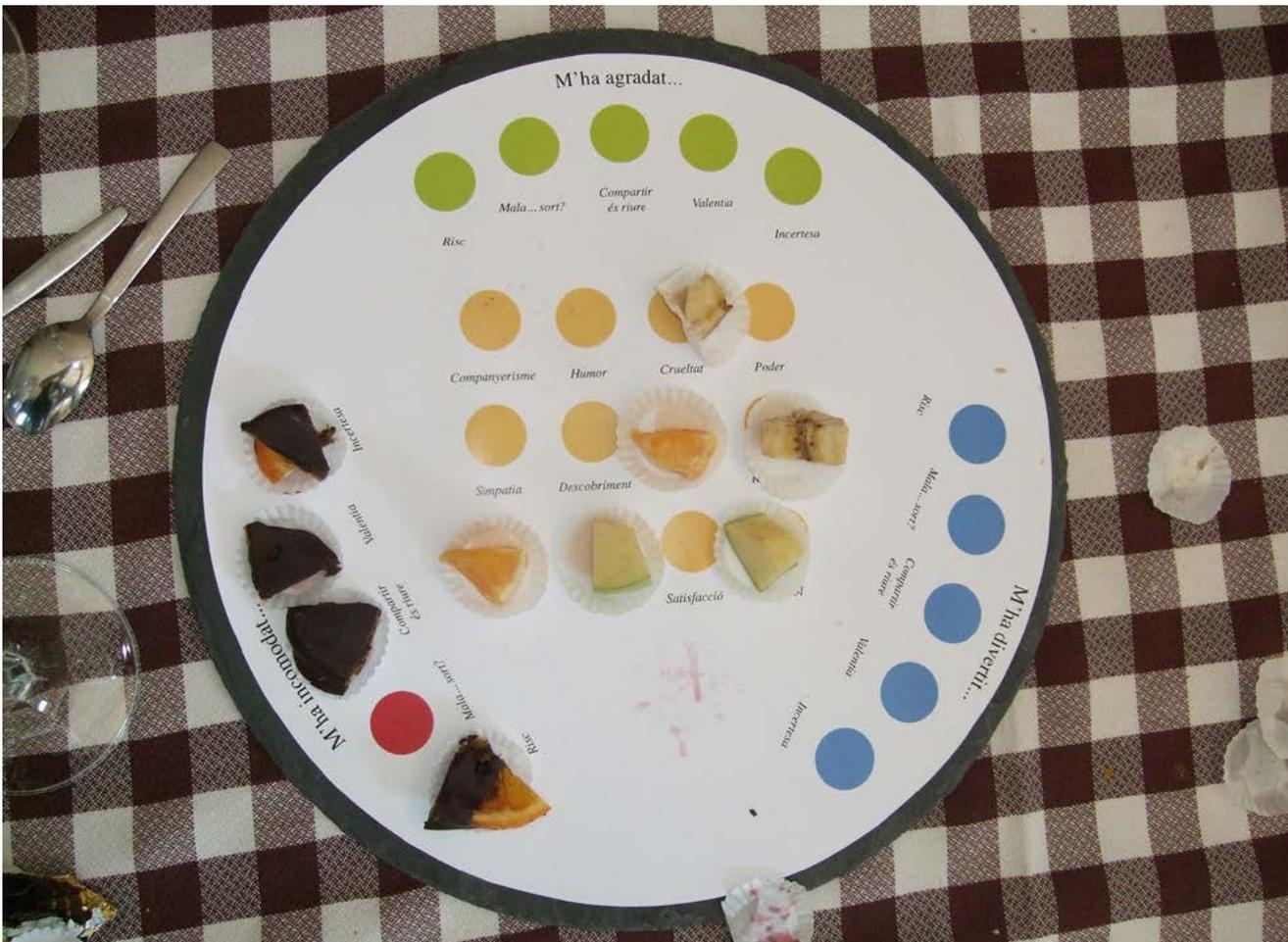
Figure 36. Sweet reflection. Collective petit-four based questionnaire. Around the perimeter of the plate, the three questions: what did you like?, what was fun?, what felt uncomfortable?. In the center of the plate, 16 of the emotions included in the PLEX framework. The participants chose all the dishes to answer "what was fun" and "what they liked", and only one of them to answer "what felt uncomfortable".

According to the results on the petit-fours plate, and the conversation during the discussion, the participants enjoyed all of the dishes. It was hard for them to decide which was most fun. They also chose many of the playful experiences from the list: fellowship, humor, power, sympathy, and satisfaction. However, there were two things that stood out in their discussion: the surprise of dealing with mysterious packages, and the carefree fun of laughing in group.

Both the main course and the dessert felt remarkably fun to them. The fact of having a series of boxes at their disposal, and having to guess what they contained, to get the best food, was perceived as very pleasurable (Fig. 38). Some participants even suggested to increase the risk factor; for example, allowing diners to open only some of the boxes, so that they had to choose carefully.

Carefree laughter also came across as a powerful source of fun (Fig. 39). The diners experienced it in different forms: first, they made fun

Figure 37. Participants interacting with the mysterious boxes At the top, a diner, suspicious of what he found inside a box. At the bottom, another diner, happy about what she found.

Figure 38. Carefree social interaction. To the bottom-left, two diners celebrating. To the bottom-right, one of the diners laughing openly.

of one of the diners (who was unlucky to get the spicy appetizer); later, they made each other laugh to steal food. The risk of unpredictability and chance, as well as the different forms of social play that happen at the table (e.g. teasing each other) might be interesting strategies in achieving such non-seriousness.

There was also an occasion in which one of the diners could exert vengeance (*Bad... luck?*, the second appetizer). This diner said he felt uncomfortable about having the power to make somebody eat something unpleasant. However, some other diners argued they would enjoy that feeling. This tells us that it might be desirable to let the diners choose whether to use a given power they are gifted with, so that they do not feel forced to do something they do not want to do.

5.5 - SOCIAL PLAY

The forms of play currently embraced by gastronomic restaurants do not give much space for socialization. However, it has become clear through this research that socialization is a key component of a gastronomic experience in the eyes of many diners. Discovering strategies for social play in the gastronomic experience seems to be a relevant area of inquiry. To explore this opportunity, I invited five young adults (25 to 30 years old) to dinner, but I did not prepare the food myself. Instead, I asked each of them to bring a dish. I suggested the course (i.e. appetizer, main course, dessert...) and gave them a playful experience that their dish had to represent. The menu was thus comprised of their interpretations of the forms of play I suggested: *Being silly, Exploration and Discovery, Cruelty, Collaboration*, and *Competition*. The meal ended with a *Sweet reflection* around the petit-four questionnaire.

Being silly took the form of an appetizer (Fig. 39). The participant who designed it grouped us in pairs, and gave us an XXL-sized t-shirt. One had to put on the t-shirt, with his arms inside; the other had to enter the t-shirt from the other's back, and put his arms through the sleeves. The latter, blindly, had to feed the former. Then, we would exchange roles. The designer of this dish also gave us accessories to dress up funnily.

Exploration and discovery took the form of the second appetizer (Fig. 40). Inspired by *Harry Potter*'s *Bertie Bott's Every Flavour Beans* (*Warner Bros, 2001*), the participant prepared a series of croquettes full of different ingredients. He asked us to guess them. He did not warn us that some of the croquettes were full of jalapeño, a spicy variety of pepper!

Cruelty took the form of tacos (Fig. 41). The participant prepared a platter full of tacos, some of which he said were spicy. He later gave each of us three folded papers including a number; we all had a 0, a 1, and a 2. In order, we unfolded one of the papers and had to take as many tacos as it indicated. Once the first round was complete, we started with the second, and then the third. The designer put two conditions. First, we could not drink during the whole dish. Second, whenever we found a

Figure 39. Being silly. To the left, two diners (from different pairs) dressing up. To the right, a pair trying eat the appetizer.
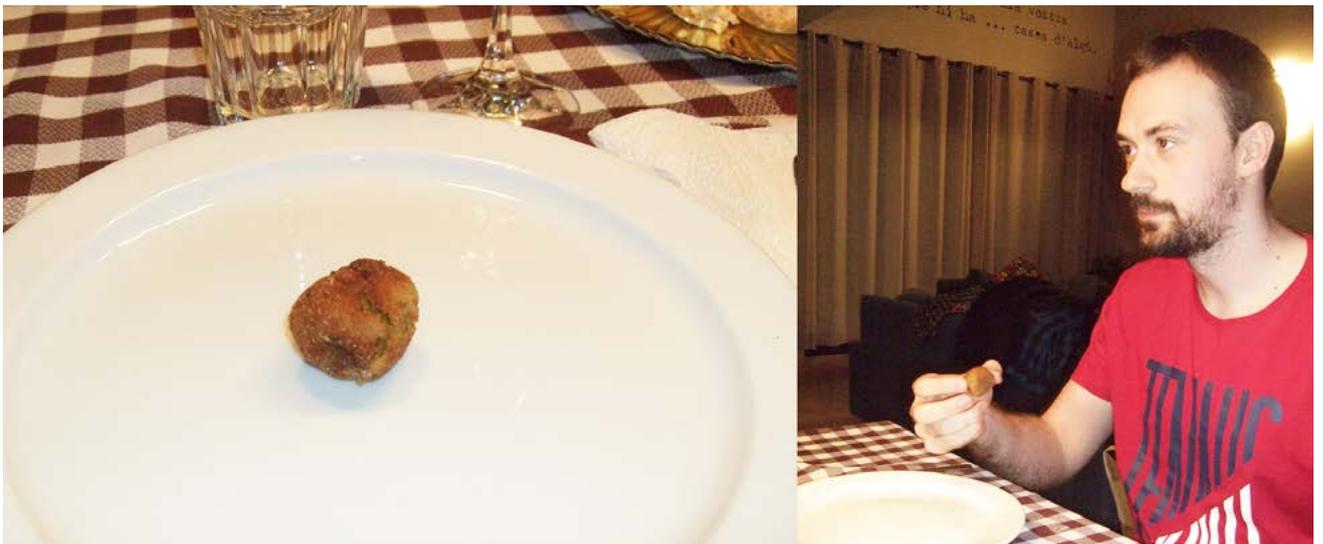

Figure 40. Exploration and Discovery. To the left, a mysterious croquette. To the right, a diner eating one of them.

Figure 41. Cruelty. To the left, some of the tacos. To the right, the papers before being folded.
being able to hide he ate a spicy taco.

spicy taco we had to prevent the others from knowing, for the person who showed he had eaten more spicy tacos would be punished with 10 extra minutes of no drinking.

Collaboration took the form of a main course (Fig. 42). The participant served a piece of pork fillet to each of us, and placed some sauces at the center of the table. Next, he gave us a piece of paper in which we were told to make-believe we had a particular limitation. The limitations were "facing the opposite direction of the table", "being blind", "not using the right hand", "not using the hands at all", and "owning the sauces, but not owning any pork". We had to collaborate in order to eat; otherwise our limitations would make it impossible.

Competition took the form of a dessert (Fig. 43). The dessert consisted of three chocolates attached to a big cookie with melted (and later on solidified) white chocolate. The cookie was

placed on top of a glass that was full of tabasco. The chocolates had to be eaten using a plastic fork (no hands involved). If nothing went wrong, the dessert would never be in contact with the tabasco. However, if the cookie broke, everything would fall into the glass. Significantly, the designer placed a bowl full of chocolates in the middle of the table, and told us we

Figure 43. Competition. The cookie and the chocolates, placed over a glass full of tabasco, and the plastic fork provided to eat them.
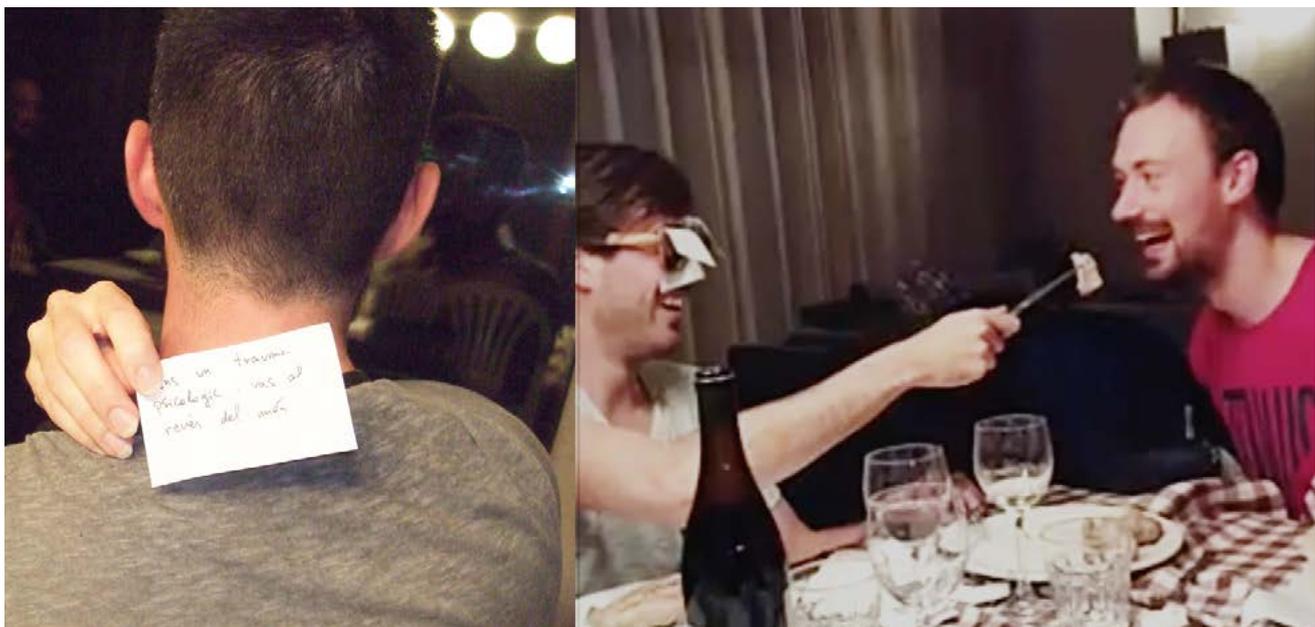

Figure 42. Collaboration. To the left, a diner sitting facing the opposite direction to the table, and showing the paper he got. To the right, a "blind" diner feeding one "without hands".

could eat them once we had finished our dessert. Hence, we had to hurry up, otherwise the other diners might finish the bowl of chocolates before we even got there. But we also had to be careful, for if our cookie broke our dessert would be soaked in tabasco.

Similar to the previous experiments, the meal ended with a petit-four questionnaire. Since the collective petit-four in *Un-serious play* triggered more discussion than the individual one in *The challenge of degustation*, I decided to make it collective once more. However, I was afraid that participants might not be comfortable criticizing each others' dishes openly. To make sure their answers were not influenced

by social pressure, I kept the evaluation of the dishes as an individual questionnaire; and the general discussion on the types of play that were elicited throughout the meal was conducted over a collective questionnaire.

In interacting with the collective petit-four questionnaire, participants recognised and enjoyed most of the playful experiences included in the *PLEX framework* (Fig. 46). Few were disregarded, considered not present or not desirable. This finding supports one of the suggestions of this thesis: the forms of play that are desirable in the context of gastronomy are numerous and diverse.
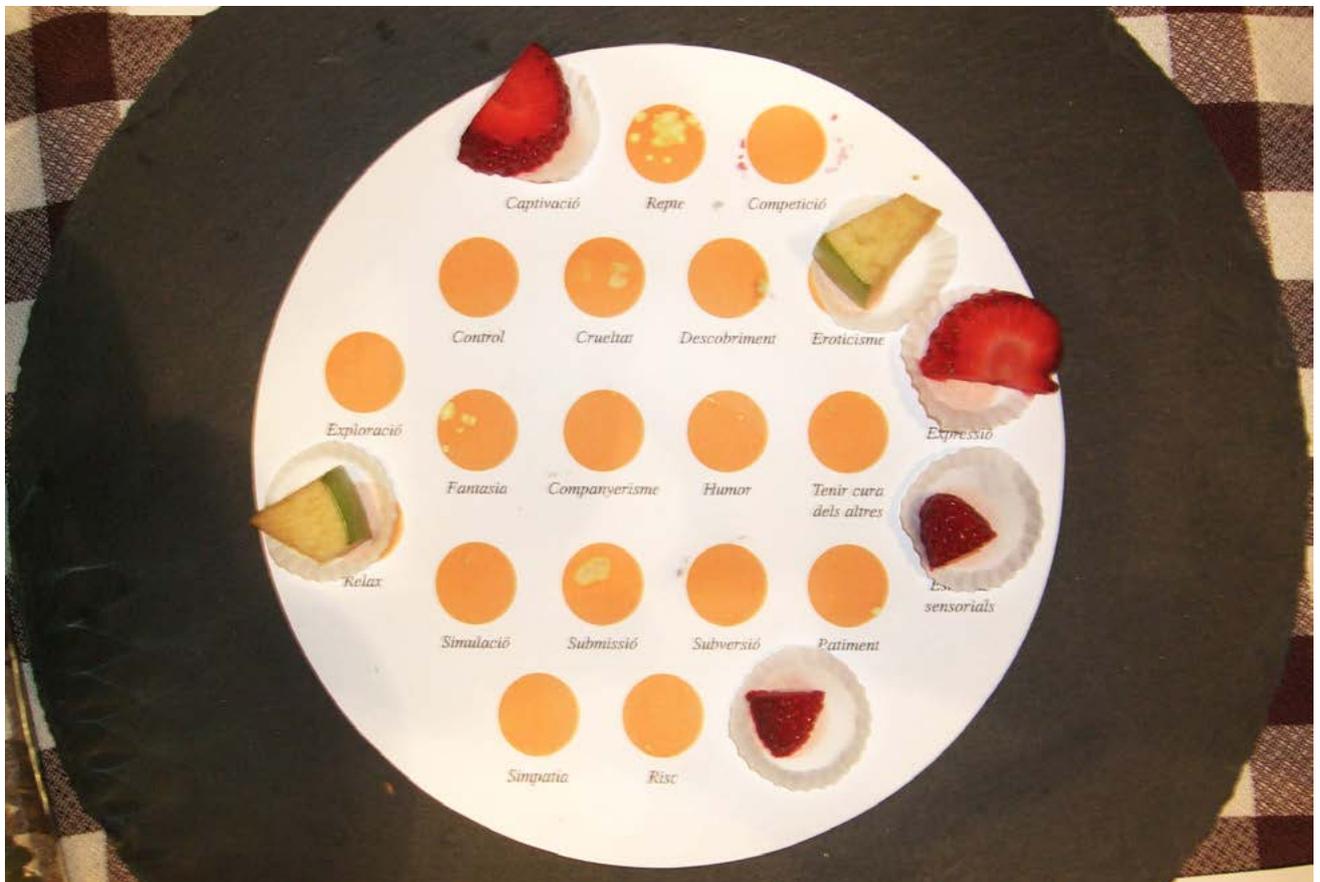

Figure 44. Sweet reflection, collective part. The participants experienced and enjoyed all of the playful experiences in the PLEX framework besides: captivation, eroticism, expression, relax, sensation, and fear.

From the individual questionnaires, I discovered that *Collaboration* and *Being silly* were perceived as most fun. They both presented an opportunity for free play, rather than imposing a goal and a strategy. Some of us fed each other with a servile attitude, while others deliberately pranked the rest of us. This supports the idea that free play seems to be more desirable than goal-oriented games when it comes to facilitating social play in the gastronomic context. I also discovered that *Cruelty* felt uncomfortable to the majority of diners. This may sound contradictory, since some said they enjoyed pranking each other in other dishes. However, in this case, it was not us who were cruel—it was the dish itself (and the participant who prepared it). We did not have the chance to decide who to be cruel to, and how to do it. Instead, we were facing the fear of being inevitably punished (Fig. 45). That allowed us to reflect on the effects of risk, cruelty, and fear. They might only be pleasurable emotions if players a chance to dominate them, using them as a strategy to exert friendly pranking.

Figure 45. A diner complaining about eating too many spicy tacos.

5.6 - COOKING GAMES

After the four experiments, I ran a workshop where student chefs and game designers worked in multidisciplinary teams to design and prototype playful dishes. My aim was to test how chefs perceived the idea of playful gastronomy. I also wanted to see how they dealt with the participatory approach I suggested: what was useful to them, and what was missing.

I began the workshop with a short presentation in which I introduced my research. Instead of giving a lecture about my findings, I decided not to influence the participants too much. I only gave them four pieces of advice inspired by my work.

1. I told them **there are multiple forms of play**, and asked them to think beyond clichés.

2. I encouraged them to look for inspiration in **real-life eating** scenarios.

3. I suggested they designed **free play** activities instead of games.

4. I reminded them about the importance of designing for playful eating, and **not for play that distracts** from it.

Figure 46. Ingredients the participants could use in their dishes.

After the presentation, I grouped the partici- pants in 5 multidisciplinary teams, and gave a different design brief to each of them. Four briefs were related to the four design opportu- nities explored in this Chapter, while the fifth allowed the team to come up with a scenario of their choice. I also provided a list of food in- gredients they had at their disposal (Fig. 46).

I also prepared a document aimed at facilitat- ing the design process (Fig. 47). The brief was written inside a box at the top-left of the docu- ment, including the description of a scenario, a target group, and their likes and dislikes. Next, there were two empty boxes where informa-

tion about the users had to be written down: what interactions do they nornally perform while eating?, and what forms of play do they enjoy? The bottom-left of the document in- cluded a list of "play ingredients" (the 22 playful experiences in the *PLEX framework*) they could use as inspiration. Finally, the bottom-right of the document included a space to write down and/or draw the design idea before prototyp- ing it.

Idea generation took two hours, including user research (drawing on personal experience within the group), ideation, and production planning (Fig. 48). After a lunch break, the
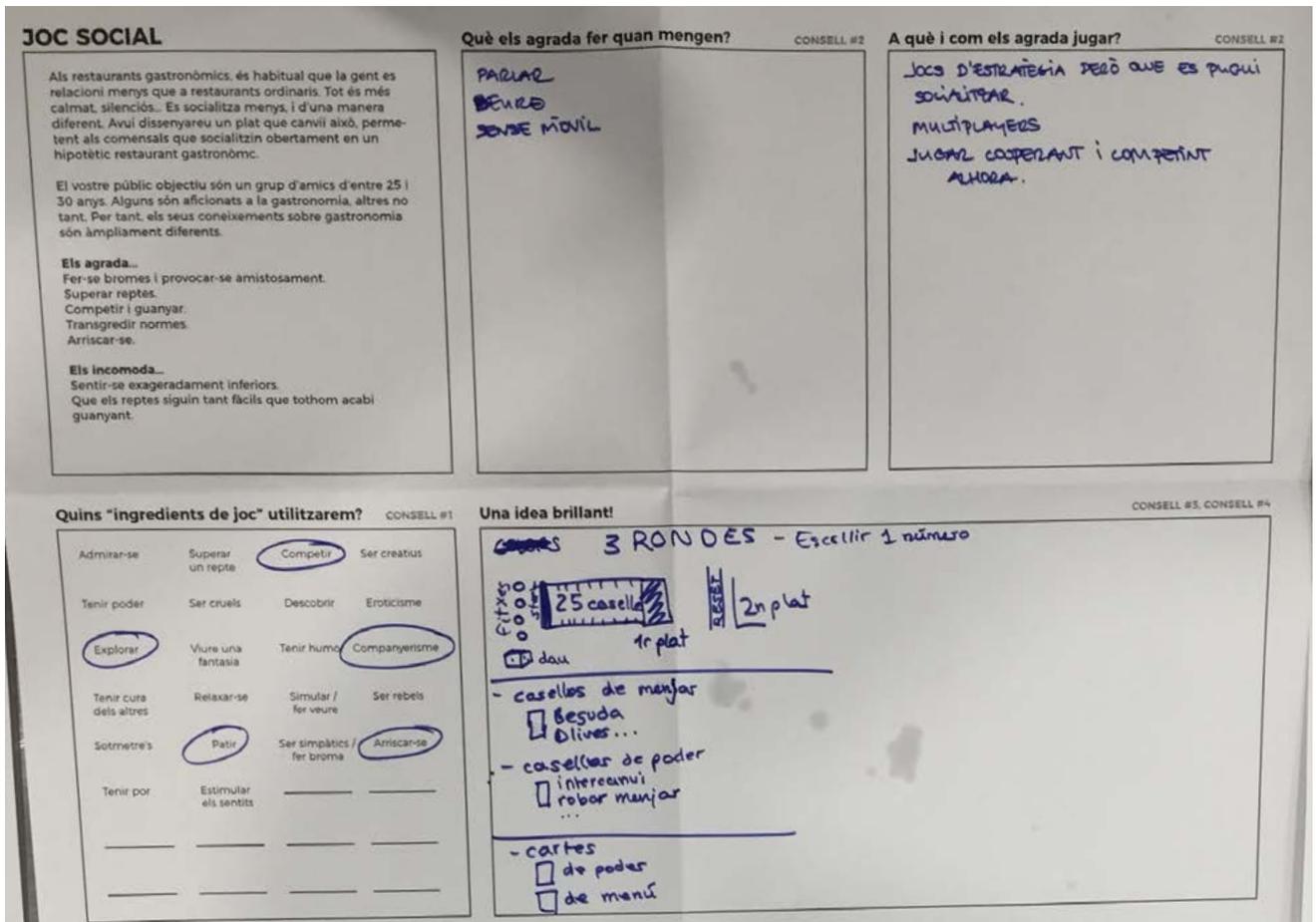

Figure 47. Playful gastronomic design document, including the brief (top-left), the space for diner research (top-right), a list of "play ingredients" (bottom-left), and a space for ideation (bottom-right).

teams spent an hour and a half prototyping their ideas (Fig. 49). At the end of the workshop, they did a brief presentation of the designs, followed by questions.

I documented the workshop in three different formats. First, the design documents contained essential information about the 5 dishes. Second, I took photos and recorded video through the whole workshop, including the final presentations. Third, I asked participants to send an e-mail with a short reflection (5-10 lines) about the workshop.

To my surprise, game designers and chefs connected easily and fast. Although the former had more knowledge on game mechanics, the latter engaged very actively in the ideation process. They could easily draw from their own experience and observations. The advices I gave, plus occasional insights provided by the game design students, helped the chefs conduct an insightful creative process. Not only they came

up with interesting proposals, but they were able to reflect on them critically based on the design principles I suggested.

The design document also played a role in facilitating the ideation process. First, it provided the teams with a concrete brief they had to address. Second, it suggested clear steps to follow. Third, it provided the participants with a list of "play ingredients" they could use as inspiration. According to the participants, it was helpful to their ideation process. More to the point, it helped them keep their focus on the users, hence designing for free play, inspired by real-life interactions, instead of games with closed and arbitrary rules.

The team that explored *the co-creative diner* enriched the idea of preparing food for others by adding a mystery and a reward in the form of some sort of "superpower" for those who solved it (Fig. 50a). Those who worked on *un-serious play* suggested splitting the diners
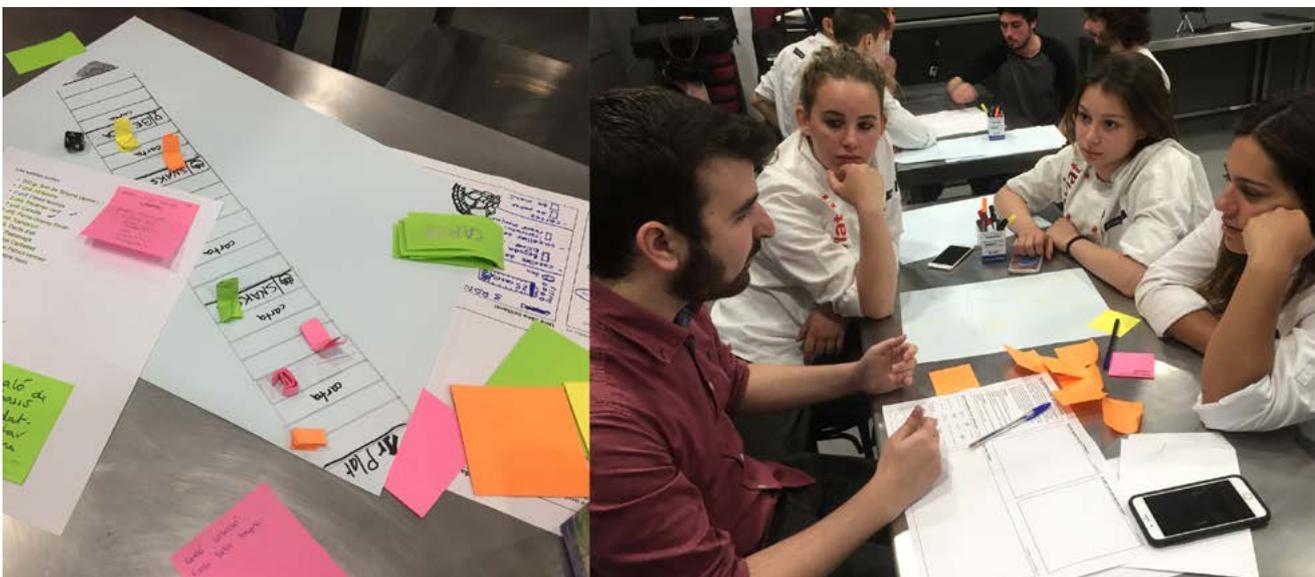

Figure 48. Ideation. To the left, materials used by a group in their design process. To the right, a game design student interacting with his chef students teammates.

in two teams and getting them to compete for a final prize (Fig. 50b). Another team used the popular game Mikado as an inspiration to design for *the challenge of degustation* (Fig. 50c). The team that worked on *social play* designed a rather game-like activity inspired by parcheesi, harnessing the effect of chance through rolling a dice, aimed at dynamizing the serving of appetizers and the choice of the drinks and the main course (Fig. 50d). Finally, the team with an *open brief* suggested a degustation of ravioli, with a reward for those who guessed the ingredients correctly, and a punishment for those who did not (Fig. 50e).

The conversations I had with the participants were also a source of interesting insights. For example, I had a conversation about the feasability of playful gastronomic proposals in real restaurants with one of the chef teachers. To my surprise, and against what I expected a professional chef to think, he was confident that the logistic and economic side of it would not be an issue. What is more, he thought that the implementation of playful dynamics would reduce the amount of tasks to be done by the waiters, as well as the amount of plates and cutlery needed. In his opinion, the playful dishes the students designed could be served in group portions, hence reducing the amount of plates used and served. Although my research does not focus on economical and logistic considerations, this is a finding worth taking into consideration.

Besides informing my research, the workshop was also inspirational for the participants. The game design students were happy about having a chance to broaden the scope of their practice, engaging with the materiality of a medium they are not used to work with. The chef students greatly empathized with the idea of using "play ingredients" in their creative processes—some of them said they would use this approach for their graduation project.

Figure 49. Prototyping. To the left, game designer students and chef students working on one of the ingredients of their dish. To the right, a moment in the plating process of one of the designs.

Figure 50. Dishes designed at the workshop, including (a) the co-creative diner, (b) un-serious play, (c) the challenge of degustation, (d) social play, and (e) the dish by the team with an open brief.

DISCUSSION: DESIGN STRATEGIES FOR PLAYFUL GASTRONOMY

The gastronomic experience has different meanings to different people. Through a series of interviews with stakeholders, including a *chef*, a *maître d'*, a *gastronomist*, two f*ood enthusiasts*, and a *non-expert*, I found that the importance of socialization and degustation varies depending on the intentions of the diner (as discussed in Chapter 4). Certain types of diner enjoy focusing on degustation, regarding socialization as accessory. Others claim socialization is as important to gastronomy as the tasting of the food itself. Arguably, both degustation and socialization should be taken into account in the design of gastronomic experiences.

Play has long been present in gastronomic restaurants. However, these restaurants' idea of play is typically limited to generating a "wow effect". Though there are exceptions that harness challenge, creative expression and risk, playful gastronomy is mostly articulated through surprise and make-believe. Such an approach fails to embrace socialization as a key component of the experience. In contrast, playful eating outside of the gastronomic restaurant presents a richer spectrum of forms of play. The examples I reviewed in Section 2.2 illustrate how playful eating benefits from being social and giving the diner an active role. Social play is not a disruption to the tasting of food. Rather, it has the potential to enhance it. This begs the question: why do high gastronomic restaurants not embrace a richer understanding of play?

These restaurants' understanding of the gastronomic experience often resembles that of a transmitter-receiver communication process (*Shannon, 1948*) in which the diners "sit and contemplate" (*Regol, 2009*). Many people do not empathize with this idea of gastronomy. It comes across as too formal, too serious, and too different from their own understanding of what enjoying food means. The gastronomist I interviewed brilliantly described it as "*adult cuisine*", a kind of experience that seems to be aimed at either specialized diners or diners who value comfort and glamour on top of everything else. The chefs' creative process is driven by their personal culinary language; it is an act of artistic expression. In my interview with world-renowned chef, Ferran Adrià (discussed in Chapter 4), Adrià referred to the relationship between the chef and the diners in the following terms:

> *"When you came to elBulli, I wouldn't let you choose, right? You eat the menu, yes or yes? You go to the cinema and do not change the movie, right? Aren't you coming to see the work of a creator?"*

Such an understanding of the chef's role resembles the idea of the designer-expert that dominated before the rise of user-centered design (*Bürdek, 2005, and Blomberg et. al., 2009*). Like a designer-expert, the chef's creative process relies entirely on their own expertise. This chef-centric approach might explain why playful gastronomy is often articulated through surprise and make-believe. Play is motivated by and articulated through the chef's desire for creative expression. It is not

meant to reflect the diners' desires, dining habits, and understandings of gastronomy. Rather, the experience is a representation of the chef's personal idea of what dining and play mean. It is the chef who takes the lead by surprising the diners or telling them a story. Thus, play often is articulated uni-directionally: the chef surprises, and the diner is surprised. That does not leave much space for the diners to explore their own means for play. As a result, play emerges mostly in the relationship between the chef and the diners, and not between the diners themselves.

Enriching the playful qualities of the gastronomic experience might imply a re-negotiation of the chefs' role. While chefs often look for inspiration in "real-life eating" when it comes to the food (*Gelb, 2015*), as my research demonstrates they rarely do it in terms of interaction. The findings from my interviews and explorations (dicussed in Chapters 4 and 5, respectively) indicate that playful interactions could be harnessed as ingredients in the design of gastronomic proposals. Shifting from a chef-centric to a more participatory approach might be helpful in adopting an understanding of playful gastronomy that is richer, more varied, and more representative of the diners desires. Chefs would thus become facilitators that set the conditions for the diners to find their own means for playing (*Sproedt, 2012*). In that way, play would be less likely to be perceived as a disruption to the act of eating. While this may sound obvious, there is a fine line between playful eating and play that distracts from the food. Throughout this study I provided examples of playful eating experiences in which play is an

augmentation of the act of eating. Forms of play that relegate the food to a secondary level of importance run the risk of becoming a negative disruption to the gastronomic experience.

Play can be beneficial to the gastronomic experience. It enriches social interaction, facilitates learning through active engagement, and enhances our capacity to be critical and creative. The discussion so far suggests four principles to be considered in the design of playful gastronomic experiences.

1. there are many different forms of play, and it is desirable to design beyond surprise and try to embrace participatory and social forms of play—theoretical models like the PLEX framework (Arrasvuori, Boberg, & Korhonen, 2010) can be helpful in doing so.

2. the social interactions happening throughout a gastronomic experience are more likely to be enhanced by **free, emergent play** than by goal-oriented, close games.

3. real-life eating interactions occurring both in and outside of the restaurant are a source of inspiration that chefs and gastronomic designers should take into account.

4. play must enrich the degustation of the food, not become a distraction to it; this, however, this does not mean that socialization should be dismissed.

In order to illustrate how these four design principles might be applied, I explored a series

of scenarios that are common in gastronomic restaurants and might benefit from an increasingly playful approach (discussed in Chapter 5). I conducted a Research through Design process (*Zimmerman, Forlizzi & Evenson, 2007, and Frankel, 2010*) with a participatory approach (*McIntyre, 2007, Ehn, Nilsson & Topgaard, 2014, and Heape, Larsen & Revsbaek, 2017*). First, I discussed the idea of *giving diners a co-creative role* (Section 5.2), which appeared to be desirable if articulated through the pleasure of creative expression and the thrill of risk and chance. Second, I explored *the challenge of degustation* (Section 5.3), and saw how active discovery and competition made it more appealing to expert diners. Third, I explored how play could challenge the perception of *gastronomy being too serious* (Section 5.4), and found humor, fellowship and mystery to be helpful in doing so. Fourth, I experimented with different forms of *social play* (Section 5.5), collaboration and pranking being the most successful ones. I also conducted a workshop where I gathered chefs and game designers and asked them to design and prototype playful dishes (Section 5.6). Significantly, the use of playful interactions as ingredients was perceived as both helpful and inspiring by most of the participants.

Other design opportunities could have been explored, such as the relationship between diners and staff; the search for knowledge acquisition by expert diners; or the experience of eating with strangers. However, it was not the intention of this research project to develop an ultimate list of all the possible strategies for playful eating. Rather, the aim was to illustrate how the playful qualities of the gastronomic experience might be enhanced and enriched by challenging the chef-centric approach described earlier. Conducting those explorations with a participatory approach allowed me to harness the participants' extensive—and diverse—experience in eating. The forms of play that emerged were richer and, importantly, embraced a broader understanding of what eating and gastronomy mean. The playful dishes designed throughout the research process (by myself, the participants, and the student chefs) reinterpret eating interactions that have been observed in real-life scenarios, and therefore embody the desires and understandings of gastronomy expressed by real diners.

My research demonstrates the potential of *Research through (Gastronomic) Design* as a reinterpretation of Research through Design methodologies in gastronomy. My process enabled me to reflect on abstract dilemmas related to the gastronomic experience, for example: encouraging active participation through play, as explored in *the co-creative diner* (see Section 5.2); and the impact of play on social dynamics common in gastronomy, as explored in *un-serious play* or *social play* (discussed in Sections 5.4 and 5.5). Additionally, I realized that at some points in the process my approach evolved from a Research *through* to a Research *for* Design (*Frankel, 2010*), to address specific questions to inform concrete design choices, for example, when I investigated whether the challenge of degustation in a particular scenario was more fun if elicited through competi-

tion or collaboration, see Section 5.3. Research *through* and *for* Design proved to be compatible. On the one hand, Research *through* (Gastronomic) Design empowered me to broaden the understanding of what play might mean in the gastronomic context, as well as to reflect on how it could be designed. On the other hand, Research *for* (Gastronomic) Design helped me narrow down the types of play that were desirable in particular eating scenarios, or to serve particular purposes.

Adapting Research *through* and *for* Design methodologies to the context of gastronomy requires further development. The petit-four questionnaire I used facilitated the reflection by smoothly integrating it within the act of eating. It also helped the participants articulate their thoughts. Over the course of the research I kept modifying the questionnaire; first it was individual, then collective, and finally a combination of the two. Further reflection on this and the other approaches I used throughout the experiments might provide insight on how to

successfully adapt design research methodologies to the context of gastronomy.

This project combined theoretical study, contextual research, multi-stakeholder interviews, and a Research through (Gastronomic) Design process. My findings demonstrate the potential of play when it comes to enriching and diversifying our understanding of what a gastronomic experience is. Play does not have to be a negative disruption to eating; this research proves there are many ways in which play could enhance degustation. Not only gastronomy could be playful–it already is. I discussed many examples that prove this. However, gastronomic restaurants are far from harnessing the richness of what play means. In this study I stressed their limitations in terms of playfulness, and suggested participatory design strategies to overcome them. In the following Chapter, I discuss future directions for this research. Playing with our food might often be desirable. It is time to be creative and insightful in designing experiences that empower us to do so.

FUTURE WORK

This study was not aimed at providing a final guideline for the design of playful gastronomic experiences. Instead, it is provocation for other designers, researchers, gastronomists and chefs to experiment with an approach that still remains remarkably unexplored. The bridges between eating and play, in and beyond gastronomy, are strong and numerous—only by studying them will we be empowered to harness them. Throughout this thesis, I identified a series of areas of inquiry that might be helpful in this endeavour.

First, I would conduct a historical research of all the examples of playful eating. In Chapter 2, I analysed a series of examples of playful eating experiences in order to discuss the extent to which gastronomy is already playful. Although representative of the state of the art in playful gastronomy, these examples do not cover the totality of playful gastronomic experiences. It was beyond the scope of this project to do an exhaustive contextual research of all the playful dishes ever designed. Expanding my analysis might provide us a more accurate understanding of the relationship between eating and play throughout history.

Second, I would do further experiments to explore how all 22 of the *PLEX framework*'s playful experiences might be harnessed in gastronomy. Throughout this study, I tested some of those playful experiences, based on design opportunities I identified. It is also desirable to find out new design opportunities that allow us to assess the impact of other kinds of playful experiences. We would also benefit from

testing the designs in real restaurants, and with a larger sample of participants.

Third, I believe that the study of playful gastronomy would also benefit from approaches that are complementary to design research. Crossmodal Psychology researchers have quantitatively assessed the impact of multi-sensory stimuli on taste perception (*Wang, 2013, Spence & Piqueras-Fiszman, 2014, and Spence, 2017*); studying the impact of specific forms of play on the perception of taste might provide us with knowledge that complements the findings of this thesis. It might also be desirable to conduct a thorough ethnographic study on play and eating in real-life settings. Studying how play unfolds in different eating scenarios accross different cultures might help us find patterns that can lead to a more generalizable knowledge. Finally, a study of the economic and logistic implications of implementing those interactions at a restaurant might also be useful in facilitating the design of playful gastronomic proposals that are more likely to be successful in a real context.

Fourth, I am confident about the potential of Research through Design and Participatory Design methodologies in gastronomy. In this study, those approaches were instrumental: they helped me answer my research question. However, it was beyond the scope of this thesis to reinterpret Research through Design into a solid methodology that better fits the particularities of the gastronomic domain. Thus, there is a research opportunity in developing Research through (Gastronomic) Design methodologies, such as the petit-four questionnaire.

Finally, research on playful eating beyond the context of the gastronomic restaurant is desirable. This thesis is a study of playful gastronomy in restaurants. I am confident that play might also be impactful outside of the gastronomic restaurant. As Janice Wang puts it, "*the future of eating as an artistic venue, as a playground, as a tool for social change, is open like never before*" (*Wang, 2013*). Eating and play are strongly interlinked, and such connection might be benefitial in a broad spectrum of scenarios, such as education, houlsehold meals, or even the healthcare sector.

CHAPTER 8
CONCLUSION

In this thesis I discussed play and gastronomy to suggest an increasingly playful approach in the design of gastronomic experiences. I presented some of the myriad forms of play that exist. I also explored the notion of gastronomy as understood by different stakeholders. This approach allowed me to discuss to what extent gastronomy can be considered playful nowadays. Based on this discussion, I explored design strategies for an increasingly playful gastronomy that address the needs and interests of real stakeholders.

Through the research, I formulated four principles that might facilitate the design of playful gastronomic experiences. First, gastronomy would benefit from embracing forms of play that go beyond surprise and make-believe. Second, emergent forms of play are desirable due to the intrinsically social nature of gastronomy. Third, the interactions that naturally happen at the table should be harnessed as an inspiration in the design of playful gastronomic proposals. Fourth, play must facilitate the degustation, and not distract from it.

To illustrate how those design principles might be implemented, I explored four design opportunities following a Research through (Gastronomic) Design approach: T*he co-creative role of the diner*; *The challenge of degustation*; *Un-serious play*; and *Social play*. I also ran a workshop aimed at testing the impact of my approach in the creative process of real chefs. The workshop allowed me to reflect on the benefits of harnessing a participatory approach in the field of gastronomy, and to spot areas of inquiry that could be explored further.

While there are bridges between play and eating, there is space for strenghtening the connections between the two. As my findings demonstrate, play is a source of knowledge that could be harnessed in the design of gastronomic experiences. This study suggests a participatory approach to enhance the playful qualities of those experiences. It also demonstrates that a richer understanding of play might be helpful in diversifying the gastronomic scene, making it appealing to a broader spectrum of diners.

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APPENDIX

A - The interviews

For each of the interviews with stakeholders I conducted, I wrote an analysis highlighting the essential learnings. I synthesized those learnings into different themes. A document with the 5 analyses can be found on the following link:

https://goo.gl/v38ZpL
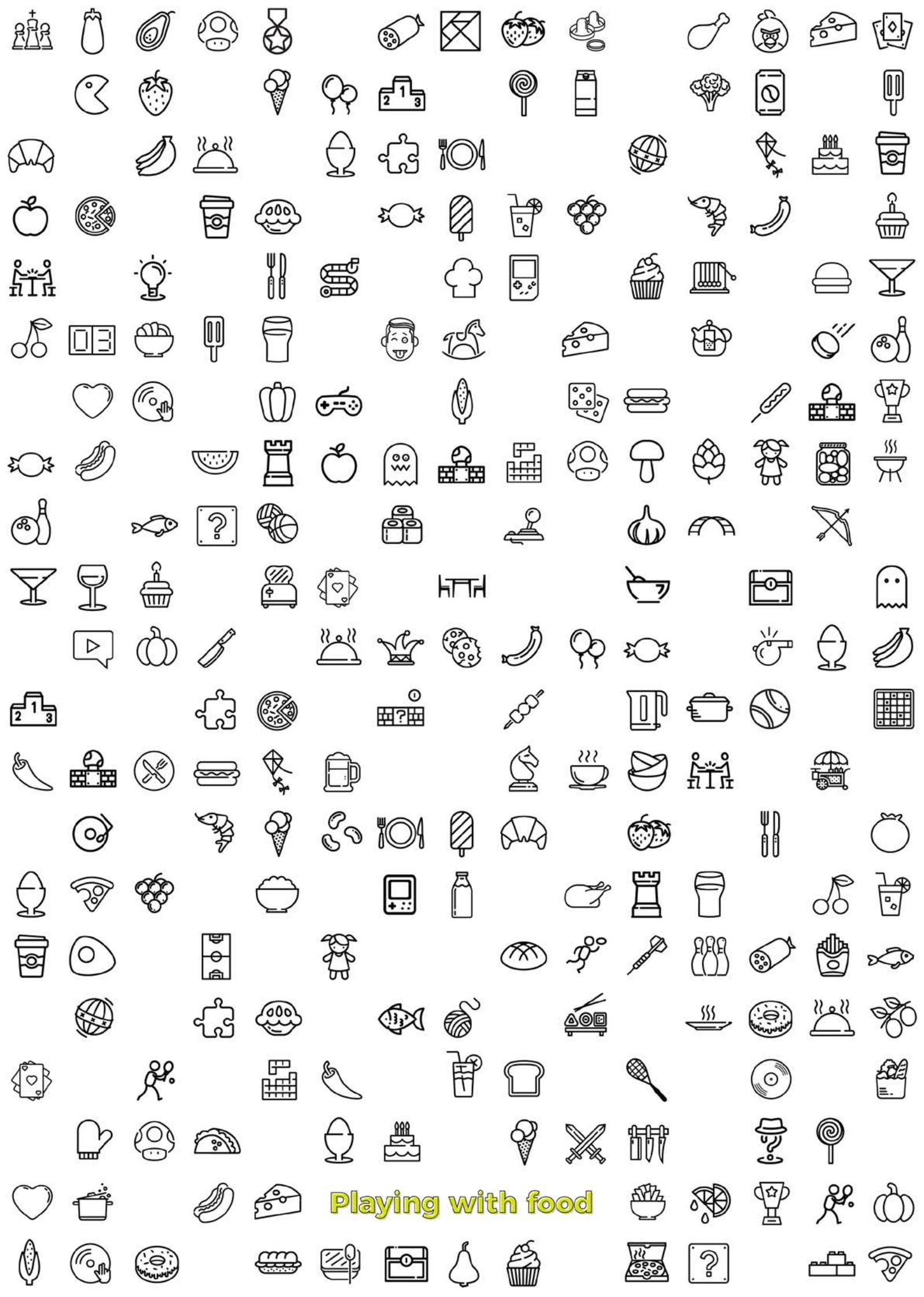
B - The interactive role of the diner

As part of my research project, I wrote a paper on the interactive role of the diner in gastronomic restaurants. The paper was presented at the SIDeR 2017 conference (Delft, The Netherlands) in April 2017. The paper can be found on the following link:

https://goo.gl/8G23Ed

C - The experiments

The workshop and the experiments I conducted were documented on photos (except for *The co-creative diner* experiment). A collection of photos from the experiments and the workshop can be found on this link:

https://goo.gl/kdLbHR

Playing with food