

Chapter 53

Gastroludology: Gastronomy Meets Ludology

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Abstract

Food and drink invite play. Play with flavours, textures, and appearance, play as part of the preparation, delivery, and presentation, and play as part of the act of eating and drinking. As such, food provides nourishment for the soul as well as the body. Conversely, the consumption of food and drink is bound and regulated by social and cultural norms which at times conflict with the notions of play, for example the old exhortation to children not to play with their food so as not to waste precious food or time. Furthermore, while the appearance and sound of food and eating are easy to capture and mediate as exemplified by countless media examples, the gustatory (taste) and olfactory (smell) elements of food are incredibly difficult to define and convey. In our work, we aim to break new ground by exploring the challenges and potentials of human food interaction.

Keywords: *Food, Play, Experience, Interaction, Gastronomy, Communication*

Introduction

Food and drink invite play. Play with flavours, textures, and appearance, play as part of the preparation, delivery, and presentation, and play as part of the act of eating and drinking. As such, food provides nourishment for the soul as well as the body.

Conversely, the consumption of food and drink is bound and regulated by social and cultural norms¹ which are at times in conflict with the notions of play², for example the old exhortation to children not to play with their food³ so as not to waste precious food or time. Thus, outside of the playful flair exhibited by cooks, hosts, and waiters or where it has become part of tradition (e.g. hiding the Afikoman during a Passover dinner⁴), playing with food has been constrained to the hidden margins where boundaries are broken, such as the feeding of small children⁵ (e.g. “here comes the aeroplane”), wild parties, and romantic interludes⁶.

¹Visser, Margaret, *The Rituals of Dinner*. (Pennsylvania State University, 1991).

²Caillois, Roger, *Man, play, and games*. (University of Illinois Press, 2001).

³Mechling, Jay, Don't Play with Your Food. *Children's Folklore Review*, *American Folklore Society* 23 no. 1 (2000): 7-24.

⁴Sherman, Sharon. R, *The Passover Seder: Ritual Dynamics, Foodways, and Family Folklore*. In Counihan, Carole (Ed). *Food in the USA* (Taylor and Francis, 1988).

⁵Orrell-Valente, Joan K., et al., “Just Three More Bites”: An Observational Analysis of Parents' Socialization of Children's Eating at Mealtimes, *Appetite*, 48 no. 1 (2007): 37-45.

⁶Cole Ellen, et al., *Women's Conflicts About Eating and Sexuality: The Relationship Between Food and sexuality*. (Haworth Press, 1992) <https://doi.org/10.4324/9781315820651>.

As a result, although food and drink have featured prominently as a motif in art⁷ and form an integral part of religious and cultural practices from the ancient practice of sharing bread to the modern practice of sharing food photos, the notion of literally playing with food, that is utilising food as an element of play either on its own or as part of a game as opposed to playing with its flavours, textures, and appearance as part of its preparation or presentation has only recently begun to be explored.

In addition, our experience of food is highly visceral and thus while the appearance and sound of food and eating are easy to capture and mediate as exemplified by countless media examples, the gustatory (taste) and olfactory (smell) elements of food are incredibly difficult to define and convey. In our work, we aim to break new ground by exploring the ways in which we can harness the opportunities and traverse the challenges associated with our interactions with and through food.

The Physical Affordances of Food

As noted above in recent years there have been some novel explorations of food and digital technology. However, despite the great diversity and innovation exhibited in these various approaches and applications, the majority do not utilise food as an element of play, and those that do, do so in the established paths of the culinary arts and game design in which the cook continues to play with the flavour, texture, and presentation of the food albeit with the addition of digital technology and the game designer starts using real apples⁸, straws, and chocolates but continues to relate to them as symbolic tokens instead of making use of their inherent potential for play.

But why should we restrict ourselves in such a way? The physical properties of food and the rituals of eating hold within them an inherent potential for play such as (1) the opportunities for creative deconstruction and manipulation offered naturally by foods such as oranges with their peels and segments, and cobs of corn with their rows of kernels, or by design, by biscuits with serrated edges or by cookies with their layers of cream and pastry; (2) the element of chance offered by the spiciness of chili peppers; (3) the timing mechanisms that follow from the ripening of a banana or the temperature of an ice cream; (4) the magic circle⁹ that is formed as one fills a plate at a buffet table, bites into a pita bread, or reaches across a table for a shared dish; (5) the delicate balance between physical action, taste, and texture encapsulated in the act of dipping a churro in hot chocolate or a piece of sushi in soy sauce; (6) the rhymes and rhythms involved in the use of forks, knives, spoons, and chopsticks; the acts of licking, biting, and chewing; and the challenges presented by dishes like spaghetti or xiaolongbao; and (7) “the music of mastication”¹⁰ and other sounds associated with the act of eating or the process of digestion.

To date these properties of food and aspects of eating have only just begun to be explored, and as such these explorations have primarily focused on issues of perception and/or specific applications of

⁷Ferry, Jane F, *Food in Film: A Culinary Performance of Communication* (Routledge, 2003).

⁸Arnold, Peter, et al., "You Better Eat to Survive": Exploring Cooperative Eating in Virtual Reality Games, TEI '18, ACM (2018).

⁹Huizinga, Johan, *Homo Ludens: A Study of the Play Element in Culture* (Beacon, 1955).

¹⁰Rossen, Jake, *The Science Behind Why We Crave Loud and Crunchy Foods* (Mental Floss, 2018).

technology¹¹. We propose the need to uncover, analyse, and categorise the various properties, affordances, mechanics, and procedural rhetorics¹² of food and eating and map them to the mechanics, dynamics, and aesthetics of play and games both as a means of enriching our mechanics vocabulary and as a means of better understanding the set of mechanics regardless of how we choose to define them.

Eating like the practise of sports has a physiological effect on the body and thus play with food like any sport or physical challenge will need to be carefully balanced. In addition, food also presents unique challenges which are not normally part and parcel of game design, namely palatability and wholeness. In traditional games, be they physical or digital, the players are not concerned with the palatability of the game tokens or the hygiene of the playing surface as they are neither going to eat the tokens nor use the play surface for eating. Yet, if eating is an integral part of the game this becomes a matter of prime concern both from a food safety¹³ perspective and from individual notions of hygiene and palatability. Furthermore, in traditional games all the elements of the game are considered to be complete, i.e. all the pieces on a chess board are assumed to be whole and not broken, etc. However, in a game in which eating is part of the narrative of play this cannot be assumed as a given, as any element may be eaten in whole or in part during the course of the game. This brings a whole new set of challenges and potentials to the game; how would we play a game of chess in which we have half a king and a quartered queen? How far can we push this physical form of pixelisation?

Overcoming Physical Constraints Through Digital Technology

Beyond the challenges and opportunities offered by the physical properties of food and the acts of eating and drinking lie a whole host of associated challenges which we have begun to explore by weaving together strands of the physical and the digital. Among them are:

- Exploring the use of animation and gamification to engage children with eating vegetables.¹⁴
- Exploring how to effectively communicate the spiciness of food through virtual taste sensations.¹⁵
- Exploring the use of haptics in the communication of texture in botanic and gastronomic inquiries.¹⁶
- Exploring sonic interactions for augmenting and/or regulating the experience of eating.¹⁷

¹¹Spence, Charles and Carlos Velasco, *Digital Dining: New Innovations in Food and Technology* (Springer, 2025).

¹²Bogost, Ian, *Persuasive Games: The Expressive Power of Videogames* (MIT Press, 2007).

¹³Motarjemi, Yasmine, (Ed.), *Encyclopaedia of Food Safety* (Academic Press, 2013).

¹⁴Wissigkeit, Tobias, *Motivating children to eat vegetables by enhancing meals with digital media*, Unpublished Thesis, (HSRW, 2019).

¹⁵Ladani, Siddhi, *An exploratory study of how to effectively communicate the level of hotness/spiciness of food items*. Unpublished Thesis, (HSRW, 2022).

¹⁶Pinson, Annie, *Exploring a Haptic Herbarium: Investigating Engagement with Digitised Plant Specimens through Haptic and Pseudo-Haptic Interaction*, Unpublished Thesis, Goldsmiths, the University of London (2025).

¹⁷Ge, Ruixan, *Sonic Interaction in Eating: Exploring Chewing Rhythm and Sound Feedback*, Unpublished Thesis, Goldsmiths, the University of London (2025).

- Exploring the limits and possibilities of asynchronous social interaction with and through food.¹⁸

We are also beginning to explore more conceptual challenges such as how to imbue purely digital objects such as emojis with taste and smell as for some there is a direct mapping, like a rose or a pineapple, and thus the challenge is in representing the smell but for others, such as a smiley, there is no direct mapping and thus the challenge is discovering how they are perceived, whether they are universal or culturally dependent and how they can be effectively conveyed across media, language, and culture.

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¹⁸Hwang, Saenarae, 2025, *Asynchronous social eating: Reimagining the Limits and Possibilities of Asynchronous Interaction*, Unpublished Thesis, Goldsmiths, the University of London.

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