
Chasing Play Potentials in Food Culture to Inspire Technology Design

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Abstract

We propose a Situated Play Design (SPD) workshop aimed at exploring how culture and traditions can guide playful design. Using food as an accessible starting point, we invite scholars from diverse communities to share, analyze, and make creative use of playful traditions, and prototype new and interesting eating experiences. Through hands-on engagement with traditions, play and technology, we will discuss strategies to make designerly use of forms of play that are embedded in culture. The outcomes of the workshop will be twofold: First, in response to recent calls for increasingly situated and emergent play design methods, we explore strategies to chase culturally-grounded play. Second, we produce an annotated portfolio of “play potentials” to inspire the design of future food-related technologies. The workshop will contribute to enriching the set of tools available for designers interested in play and technologies for everyday-use, in and beyond the food domain.

Author Keywords

Situated Play Design; Culture; Participatory Research through Design; Human-Food Interaction.

CSS Concepts

- Human-centered computing~HCI theory, concepts and models

Background, Motivation and Goals

Play and playfulness are increasingly popular in HCI. More and more, designers resort to play- and game-inspired strategies to design technologies addressed at everyday scenarios such as education (e.g. [16]), health (e.g. [9]), or workplace (e.g. [14]). Designers employ different strategies to design for play, including: best practice knowledge (e.g. [17]), theory informed design (e.g. [12]), player-centered methods (e.g. [3, 8, 10]) and co-creation (e.g. [2, 5]). Each of these approaches allow designers to leverage diverse forms of knowledge to craft compelling interventions.

A recent call for new methods for play design highlights the need for new strategies that allow designers to *chase play potentials* by interacting with both context and users [2]. The call proposes “uncovering existing manifestations of contextual play as a starting point for designing for situated and emergent playful engagement”. It builds on the idea that *play potentials*, framed as “existing playful dynamics that are already meaningful in context” [2], should be at the core of play designs aimed at open-ended everyday activities, as they represent forms of engagement that fit well the activity and context targeted by the design.

In our workshop, we highlight an area for *chasing play* that we argue has not yet received enough attention as a source of design inspiration: culture and traditions. That is a missed opportunity, as culture is imbued with play [4]; indeed, play has been a major force in the formation of society [11], and a society can be understood by looking at how its members play [11]. Play is an important factor in many human traditions [18], e.g. *Pimientos del Padrón*, a Spanish tapa comprised of several small green peppers, some of

which are very spicy, though they all look identical. In Spain, eating Pimientos del Padrón has become an opportunity for social play, to the extent that the rhyme “Pimientos del Padrón, algunos pican y otros no” (*Padron peppers, some are hot, some are not*) is typically uttered when you get that tapa, setting the mood for a playful “Russian roulette”. In such traditions, play is deeply and seamlessly integrated into culture, to the extent that the food embodies *play potentials* relevant to people from that culture.

Despite strong connections between play and culture, we see a lack of actionable methods that help designers chase and make designerly use of play potentials embedded in traditions. This workshop explores how to leverage such latent knowledge to design culturally meaningful playful technologies and experiences. We ask: how might play designers identify interesting manifestations of play that are culturally embedded, and unpack them so that they can become a useful design material? We see CHI Play as a locus of cultural diversity that congregates people with a long-standing commitment to play, games, and design, making it the ideal venue to tackle this challenge.

Workshop Theme

Our workshop will bring together designers and researchers from diverse cultures to discuss how personally relevant cultural traditions can serve as a source of inspiration for play design. To facilitate nuanced and sensitive discussion across traditions and cultures, we narrow the scope of our enquiry to food-based traditions, motivated by three factors: (i) food rituals often have elements of play; (ii) there is increasing interest in food-related research in the CHI and CHI Play communities [1]; and (iii) food is

Morning Activities

9-9.30am: Welcome and outline of workshop plan.

9.30-10am: Participants share their own strategies to chase cultural play.

10-11am: Leveraging those strategies, groups of 3-4 people enact and experience playful food traditions to chase play potentials.

11am-12pm: Groups share findings and strategies used. All play potentials are clustered on an affinity diagram and linked to the strategies employed.

12-1pm: Lunch.

culturally rich and food practices universally relatable. Critically, while food gives the workshop focus, the core discussions will transcend food-related technology.

Over the course of a day, through hands-on co-creative activities, we will share and analyse playful, culturally situated food traditions, and creatively experiment to create novel and interesting play experiences. We will unpack and make designerly use of cultural manifestations of play to inspire technology design. We will identify strategies to reflect on the socio-cultural and ethical implications of making design use of cultural play, ensuring cultural sensitivity and ownership, and to avoid over-simplification, stigma and stereotype. We will explore mechanisms through which ideas can be vetted by people from the culture of inspiration, and promote discussion of how to avoid distortions in culturally-grounded play design. The workshop will be of interest to any scholar interested in designing situated play and playful interventions, regardless of experience with food-related research. The workshop builds on the idea that all humans are experts at eating. Everyone has had exposure to (playful) food practices and is therefore prepared to participate.

Pre-workshop Plans

To recruit a multidisciplinary group of scholars with diverse perspectives, we will promote the workshop through personal and professional connections, using social media, HCI mailing lists, the workshop website, and other relevant channels, e.g. a database of academic publications of HFI research [1]. We will use our networks to contact local participants, from play (e.g. game designers) and gastronomy (e.g. chefs), and will contact participants of previous HFI workshops [6,7,13,19]. We expect to host up to 15 participants.

Workshop Structure

The workshop will run from 9am to 5.30pm. In the morning, we will share strategies to chase cultural play, and analyse playful traditions (Sidebar 1). In the afternoon, we will design and prototype new play-food experiences inspired by traditions, and discuss how playing with culture can inspire technology design (Sidebar 2). Fundació Alcía, a local gastronomy research institute, will provide utensils for the workshop activities. Ideally, the workshop will take place in a kitchen or, at least, in a room with access to running water. If the conference organisers cannot offer such space, we will use local contacts to find an appropriate space in Barcelona.

Post-workshop Plans

The main goal of the workshop is to explore strategies to *chase play* in culture to inspire technology design. To that end, the first outcome will be a methods paper that presents and extends the workshop discussions, proposing strategies to identify, unpack and make design use of cultural play. We will invite interested participants to take part in the writing of the paper.

The second outcome will be an annotated portfolio of food-related play potentials. The portfolio will share the playful food traditions experienced, analyzed, and reconfigured during the workshop, surfacing the embedded *play potentials*. A professional illustrator will capture the traditions and designed activities into storyboards, which will complement photos and video documentation. To avoid cultural biases, we will invite all workshop participants to take part in the construction of the portfolio. Our goal is to ensure the knowledge offered in the portfolio is diverse.

Afternoon Activities

1-2.30pm: Design session 1. In groups of 3-4 people, participants ideate a playful food intervention, using as inspiration the play potentials chased in the morning.

2.30pm-3.30pm: Design session 2. Groups finalize designs, document them and prepare for the *play-tasting* session.

3.30-4.30pm: *Play-tasting* of the designs and discussion about how they relate to the traditions and play-chasing strategies presented in the morning.

4.30-5pm: Reflection on how playing with culture can inspire design and research.

5-5.30pm: Discussion of future steps in this area.

5.30pm-onwards: Optional dinner and drinks at a playful restaurant.

Organizers

Ferran Altarriba Bertran is a PhD student at UC Santa Cruz. His research explores the design space of everyday-use playful technologies, with a focus on their social and emotional value. ferranaltarriba.com

Danielle Wilde is associate professor of Design at the University of Southern Denmark. Her research investigates how designing with, for and through the full sensorial richness of the human body might transform how living and designing unfold, to support individual and planetary flourishing. daniellewilde.com

Oscar Garcia Pañella directs ENTI-UB, the first Video and Serious Games University Center in Barcelona. He also does research on Serious & Applied Games and is Gamification consultant at Cookie Box. enti.cat

Laia Badal León is the head of scientific research at Fundació Alícia, a gastronomy research institute that investigates on food innovation with special attention to addressing food restrictions and encouraging healthier habits. Fundació Alícia is also concerned with enhancing the gastronomic heritage of local territories. alicia.cat

Elena Márquez Segura is a researcher at Uppsala University designing and researching in the domain of movement-based co-located social play. She specializes in embodied design methods that can serve in different stages of the design process.

Jared Duval is a Computational Media PhD student at UC Santa Cruz. His research leverages play and participatory design with people with disabilities to inform the design of therapy games. jareduval.com

Katherine Isbister is full professor at UC Santa Cruz. Her research focus is emotion and social connection: understanding the impact of design choices on these qualities and getting better at building and evaluating technology that supports and enhances social and emotional experience. katherineinterface.com

Call for Participation

In this one-day workshop, we will explore how culture and traditions can guide the design of playful technologies and experiences. Using food as an accessible starting point, we will gather scholars from diverse cultural backgrounds to share, analyze, and make creative use of playful traditions, and prototype new and interesting eating experiences. Through hands-on engagement with traditions, play and technology, we will discuss strategies to make design use of forms of play that are embedded in culture. Importantly, to participate, applicants need not be food experts—given the commonplace presence of food, we hope the workshop themes are widely relatable.

We invite interested researchers to submit a position paper to ferranaltarriba@gmail.com, sharing: (i) examples of playful food traditions from their family, culture or community, (ii) strategies they have used to source inspiration in cultural play; and/or (iii) thoughts on how cultural play can inspire play design. Example traditions and strategies can be found on the workshop website. Proposals will be selected based on originality and relevance to workshop themes, as well as to ensure a diverse pool of participants. At least one author of accepted papers must attend the workshop.

More information: playandculture.wordpress.com

References

1. Ferran Altarriba Bertran, Samvid Jhaveri, Rosa Lutz, Katherine Isbister, and Danielle Wilde. 2019. Making Sense of Human-Food Interaction. In *Proceedings of the CHI'19 Conference on Human Factors in Computing Systems*, May 4-9, 2019, Glasgow, Scotland UK. ACM.
2. Ferran Altarriba Bertran, Elena Márquez Segura, Jared Duval, and Katherine Isbister. 2019. Chasing Play Potentials: Towards an Increasingly Situated and Emergent Approach to Everyday Play Design. In *Proceedings of the 2019 on Designing Interactive Systems Conference (DIS '19)*. ACM, New York, NY, USA, 1265-1277. DOI: <https://doi.org/10.1145/3322276.3322325>
3. Tilde Bekker, Linda De Valk, and Berry Eggen. 2014. A toolkit for designing playful interactions: The four lenses of play. *Journal of Ambient Intelligence and Smart Environments* 6, 3 (2014), 263–276.
4. Roger Caillois. 2001. *Man, play, and games*. University of Illinois Press.
5. Karin Danielsson and Charlotte Wiberg. 2006. Participatory design of learning media: Designing educational computer games with and for teenagers. *Interactive Technology and Smart Education* 3, 4 (2006), 275–291.
6. Hilary Davis, Jeni Paay, Jesper Kjeldskov, and Markéta Dolejšová. 2018. On and off the table: re-imagining food and wine interactions. In *Proceedings of the 30th Australian Conference on Computer-Human Interaction (OzCHI'18)*. ACM, New York, NY, USA, 612-617. DOI: <https://doi.org/10.1145/3292147.3293452>
7. Markéta Dolejšová, Rohit Ashok Khot, Hilary Davis, Hasan Shahid Ferdous, and Andrew Quitmeyer. 2018. Designing Recipes for Digital Food Futures. In *Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems (CHI EA '18)*. ACM, New York, NY, USA, Paper W10, 8 pages. DOI: <https://doi.org/10.1145/3170427.3170622>
8. Anders Drachen, Pejman Mirza-Babaei, and Lennart E Nacke. 2018. *Games user research*. Oxford University Press.
9. Jared Scott Duval, Elena Márquez Segura, and Sri Kurniawan. 2018. SpokeIt: A Co-Created Speech Therapy Experience. In *Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems (CHI EA '18)*. ACM, New York, NY, USA, Paper D501, 4 pages. DOI: <https://doi.org/10.1145/3170427.3186494>
10. Tracy Fullerton. 2014. *Game design workshop: a playcentric approach to creating innovative game*. AK Peters/CRC Press.
11. Johan Huizinga. 1950. *Homo ludens-a study of the play element in culture*. Beacon press.
12. Robin Hunicke, Marc LeBlanc, and Robert Zubek. 2004. MDA: A formal approach to game design and game research. In *Proceedings of the AAAI Workshop on Challenges in Game AI*, Vol. 4. 1722.
13. Rohit Ashok Khot, Deborah Lupton, Markéta Dolejšová, and Florian 'Floyd' Mueller. 2017. Future of Food in the Digital Realm. In *Proceedings of the 2017 CHI Conference Extended Abstracts on Human Factors in Computing Systems (CHI EA '17)*. ACM, New York, NY, USA, 1342-1345. DOI: <https://doi.org/10.1145/3027063.3049283>
14. Sherif Mekky and Andrés Lucero. 2016. An Exploration of Designing for Playfulness in a Business Context. In *Proceedings of the 2016 CHI Conference Extended Abstracts on Human Factors in Computing Systems*. ACM, 3136–3143.
15. Katie Salen, Katie Salen Tekinbaş, and Eric Zimmerman. 2004. *Rules of play: Game design fundamentals*. MIT Press.

16. Eric Sanchez, Shawn Young, and Caroline Jouneau-Sion. 2017. Classcraft: from gamification to ludicization of classroom management. *Education and Information Technologies* 22, 2 (2017), 497–513.
17. Jesse Schell. 2014. *The Art of Game Design: A book of lenses*. AK Peters/CRC Press.
18. Brian Sutton-Smith. 2009. *The ambiguity of play*. Harvard University Press.
19. Erica Vannucci, Ferran Altarriba, Justin Marshall, and Danielle Wilde. 2018. Handmaking Food Ideals: Crafting the Design of Future Food-related Technologies. In Proceedings of the 2018 ACM Conference Companion Publication on Designing Interactive Systems (DIS '18 Companion). ACM, New York, NY, USA, 419–422. DOI: <https://doi.org/10.1145/3197391.3197403>