

Community, Socialisation, and Empowerment in Cultural Game Jams with Youth Citizens

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Abstract: This paper examines social and collaborative elements of Cultural Game Jams developed and implemented in the large-scale Europe Horizon research and innovation project, EPIC-WE: *Empowered Participation through Ideating Cultural Worlds and Environments* (2023-2026). The project explores and develops transdisciplinary collaboration and co-creation across cultural heritage institutions, creative industries, higher education institutions, and youth citizens (ages 16-25) towards Cultural Game Jam interventions across three European sites: Óbidos (Portugal), Hilversum (Netherlands), and Aarhus (Denmark). The Cultural Game Jams are held at cultural heritage sites and are aimed towards value-sensitive game design and youth empowerment. This paper explores Cultural Game Jams as a potential format for enabling and developing youths' empowered participation, communality, and cultural socialisation by analysing the first Cultural Game Jam (2024). Framed by a Design-Based Research methodology and guided by experimental and short-term ethnography and design experiments, the analyses draw from qualitative empirical material, e.g., interviews, participatory observations, field notes, and the Cultural Game Jam participants' reflective process and design documentation. The analyses illustrate how co-creating games within cultural heritage contexts can develop youth perceptions of community, cultural socialisation processes, and individual/collective empowerment. Furthermore, the paper offers insights into the co-creation of games as new expressions of cultural heritage through epistemic collaboration and cultural participation in game jams while discussing possibilities for enabling new experiences of empowered participation, social learning, and community among youth citizens.

Keywords: Cultural Game Jam; Youth Citizens; Transdisciplinary; Epistemic Collaboration; Empowered Participation.

1. Introduction

Game jams are accelerated, social game-making events characterised by their relatively short time span, creative design constraints, and the public dissemination of created games, game concepts or game prototypes (Kultima, 2015; Fowler et al., 2016). Though participants in game jams emphasise different features as most exciting or relevant, e.g., enabling creativity and innovation or socialising, communities, and learning (Kultima, 2015), there is a lack of research detailing how game jams might foster empowered participation along with experiences of communality and socialisation beyond networking and elements of joyfulness and fun (Lai et al., 2021). While game jams generally revolve around a specific theme or constraint and might emphasise social topics and purposeful and serious approaches, technological challenges, or game typologies (e.g., Boulton et al., 2018; Lai et al., 2021; Abbott et al., 2023) less is known about game jams connected to culture and cultural heritage. However, isolated examples of 'purposeful game jams' can be located, with, e.g., the Sámi Game Jam addressing Indigenous culture and diversity (Kultima and Laiti, 2019) and cross-cultural online game jams across countries (Park et al., 2023). Generally, scholars find that cultural diversity and inclusivity "is still lagging behind its ever-diversifying reality" in the global game industry (Park et al., 2023, p. 2), calling for new approaches towards more culturally explorative, diverse, and sustainable game-making practices and experiences that also address the participants individual and social values that permeate and guide game-making. Hence, game jams that are set and enacted through culture and within cultural heritage spaces to produce games *through* and *for* culture are a novel format that this paper's underlying research and development project seeks to develop and examine.

This paper studies social and collaborative elements of Cultural Game Jams (CGJs), which is a game jam format developed and implemented in the large-scale European research and innovation project EPIC-WE that builds on transdisciplinary collaboration and co-creation across cultural heritage institutions (CHIs), creative industries (CIs), higher education institutions (HEIs), and youth citizens (YCs; age 16-25) towards CGJ interventions across three European sites: in Óbidos (Portugal), Hilversum (The Netherlands), and Aarhus (Denmark). CGJs, held in cultural heritage sites, focus on value-sensitive game design and youth-empowered cultural participation (Nørgård & Holflod, 2024). Drawing from the first project intervention, this paper examines the participating youths' experiences of value-sensitive game-making in diverse communities and cultural participation and socialisation (understood as individual and collective processes of acquiring knowledge of cultural histories, traditions, identities, and values), leading to the following research question guiding the present paper: *How can*

Cultural Game Jams enable youth experiences of empowered participation, communality, and cultural socialisation?

The paper first examines social, communal, and relational perspectives on game jams, addressing CGJs and their potential in youth cultural empowerment. It then outlines the design-based research methodology used in EPIC-WE and presents findings from the first CGJ, discussing the potential for social learning, novel communities, cultural playfulness, and youth empowerment.

2. Social, Communal, and Relational Perspectives on (Cultural) Game Jams

In recent years, game jams have emerged as a novel method and approach for introducing youth to diverse educational, cultural, and societal topics (Fowler et al., 2016; Lai et al., 2021) while serving as platforms for research and innovation (Kultima and Laiti, 2019). Despite this, they remain relatively unexplored (Kultima, 2021). Game jams are social, collaborative events where participants come together to ideate, develop, and prototype games within a limited time frame (Kultima, 2015). The goal is to foster creativity and rapid game (concept) development (Meriläinen et al., 2020). These events vary in duration, typically spanning from a few hours to a weekend, encouraging focused development without excessive planning. Participants come from different backgrounds and thus integrate experiences and competencies across disciplines, e.g., design, technology, programming, or visual arts, providing relevance in the enculturation of aspiring game developers who might look towards entering the industry (Kultima, 2015; Olesen and Halskov, 2018).

Game jam events furthermore promote fellowship and community, providing a platform for skill development, learning, and feedback (Kultima, 2018, pp. 146-147; Meriläinen et al., 2020). As a format and experience, game jams are thus collaborative, social, and communal places and spaces for rapid game ideation and development, enabling the potential of enculturation in, particularly, game industry domains. However, even after 'Two Decades of Game Jams' (Lai et al., 2021), there is still a lack of knowledge about how participating youth experience elements of sociality, relationality, and communality that extend beyond themes of social networking (Arya et al., 2015), social capacity building and social capital (Fowler et al., 2016), and social skills as a learning outcome (Aurava and Meriläinen, 2021).

A *CGJ*, a game-making format developed in EPIC-WE, integrates values-sensitive design (Friedman and Hendry, 2019) to innovate game ideas and prototypes within cultural heritage spaces. Unlike traditional game jams, these events emphasise creating games *as, through* and *for* culture and transforming cultural heritage using arts, archives, and local cultural collections. They aim to enable youth participation in cultural and societal domains, featuring collaborative work over a short period (36-48 hours) connecting four thematic categories of Games, Culture, Citizenship, and European values, which are 1) human dignity, 2) freedom, 3) democracy, 4) equality, 5) rule of law, and 6) human rights (Lisbon Treaty, 2007). These CGJs moreover address themes of diversity, inclusion, intergenerational perspectives, and cultural and societal challenges, which scaffold the participants to reflect on and enact new modes of social, communal, and empowered participation in game jams. Finally, CGJs follow four taxonomical phases: Experience, Play, Imagine, and Create (EPIC phases), leading youth through cultural game-making. The underlying WE Dimensions (Worlds and Empowerment) guide processes, focusing on empowering youth towards exploring new cultural and gaming worlds. In each phase, the participants reflect on their collaborative game development and thematic, cultural, and value-sensitive exploration and design through writing Game Logs.

3. Methods: Cultural Game Jams as Design-Based Research Interventions

Framed by a Design-Based Research (DBR) methodology (McKenney and Reeves, 2019) and drawing from experimental and short-term ethnography (Pink and Morgan, 2013; Estalella and Criado, 2018) and design experiments (Brown, 1992), this study examines diverse qualitative empirical material from a CGJ intervention. The data includes in-situ vox pop interviews, participatory observations, field notes, and the youth participants' reflective processes and design documentation during the CGJ.

EPIC-WE is situated in an ecosystem with different sectorial partners collaborating to design, develop, and implement DBR interventions within a quadruple helix innovation ecosystem, a strategic model for university-government-industry-public interactions and collaborations (Carayannis and Campbell, 2012), where CIs, CHIs, HEIs, and YCs collaborate on interventions with both scientific and innovation goals. DBR emphasises the interaction between developing theoretical insights and practical solutions in real-world contexts, closely involving stakeholders from and within the specific domains and contexts the interventions are designed

towards and address (Barab and Squire, 2004; McKenney and Reeves, 2019). This approach is applied explicitly to the co-creation of CGJs as design experiments (Brown, 1992) that involve cross-sector partnerships between CIs, CHIs, and HEIs, whereas YCs become epistemic and practical partners during the interventions by problematising and co-creating the field of CGJs together with the different partners, drawing inspiration from experimental collaboration (Estalella and Criado, 2018).

This paper primarily draws on the first intervention of the project by examining a two-day CGJ at the ARoS Art Museum in Denmark and the participating youths' (n=23), primarily students, experiences of collaboration, social engagement, and communality. CGJs engage youth citizens in creating games with material inspiration from cultural heritage through value-sensitive design processes and collaboration with peers from diverse backgrounds to co-create games that reflect and emphasise culture. The inspiration from tangible cultural heritage, such as artworks and artistic installations in the museum, along with more intangible cultural heritage, such as the European values also influencing the youths' ideation and design processes, led to different and novel approaches to collaborative game design processes of re-thinking, criticising, and transforming cultural expressions through game. In this process, the youth participants thus take on roles as both game-makers and culture-makers within cultural heritage domains. Through CGJs, the project aims to enable youth to experience and cultivate empowered participation and a stronger sense of belonging in culture and cultural heritage. By inviting them to be partners in culture-making and game-making, the overarching emphasis is on supporting them to explore and navigate cultural and societal challenges with curiosity, creativity, agency, and imagination - thus becoming empowered participants in culture and society.

A pilot game jam was also tested earlier in the project with 40 youth students (ages 17-18) (Eriksson, Holflod and Nørgård, 2024). During the CGJ, 23 youths (ages 15-25) co-created game prototypes drawing on cultural heritage and artworks as materials, imbuing and reflecting on their game-making processes, design and prototyping with European values. As a DBR intervention inspired by short-term ethnography, it is conceptualised as an intense and participatory inquiry through the intervention time and space (Pink and Morgan, 2013) by co-creating and accelerating the research process through intervention design and facilitation.

3.1 Data Production and Analysis

The empirical material produced during and after the CGJ employs a multi-method approach, incorporating in-situ vox pop interviews (Bayne and Gallagher, 2021), participatory observations and observation notes, and documentation of participants' reflective processes in game-making and design. At the outset of the CGJ intervention, we conducted vox pop interviews, seeking brief 5–10-minute insights from all youth participants about their motivations and expectations for the event. We asked questions like "What motivates you to be here today?" and "What do you expect from the game jam?" The researchers documented the participants' responses immediately after the vox pop interview. Researchers observed the game-making processes throughout both days of the CGJ, applying an observation grid to document the dynamics of youth participants' teamwork, collaboration, and participation. They also observed the facilitation and structure of the event, the participants' vocal reflections on the process, and the conditions and potentials for cultural reflectivity and empowered participation. An integral part of the CGJ involved documenting the youth participants' iterative reflections, game ideas, and game-making processes through the Game Logs. This documentation captured their thoughts on how their participation intersected with cultural heritage and European values in the context of game creation. The table below visualises the characteristics of the CGJ regarding organisation and details of the participating youths' backgrounds.

Table 1: Cultural Game Jam Details

	Cultural Game Jam 2024
Organisers Government - Cultural heritage Industry - Games University - Research	ARoS – Aarhus Art Museum (CHI) Filmby Aarhus (CI) Aarhus University (HEI)
Venue	ARoS – Aarhus Art Museum
Duration of CGJ	2 days
Facilitators	2 art/museum guides (culture-making); 4 coding/game design guides (game-making)
Public - Number of youth participants	23

	Cultural Game Jam 2024
Age distribution	15-27 Avg: 21.4 SD = 3.33
Gender distribution	M: 10 F: 7 Other: 6
Number of games created	5
Distribution of participants by field of interest	Arts & Culture: 1 Game-making/Games: 8 Game-making/Sound design: 2 Art-making/Visuals: 7 Creative programming/Technology: 3 Idea Management/Design processes: 2

The analysis of the empirical material draws from thematic analysis and is guided by an emphasis on the researcher's reflexive positioning as both a condition and an asset in constructing themes and analyses across the empirical material (Braun and Clarke, 2022). In this paper, we accentuate two themes of participation created during the analyses: 1) Participation, communality, and empowerment in CGJs, and 2) Social learning and cultural socialisation in CGJs. These themes are interrelated, although different lenses through which we can understand the potentials and challenges of youth participation in CGJs.

3.2 Research Ethics and Data Management

Before the CGJ, all participants who signed up were provided with materials covering research ethics, GDPR, intellectual property rights (IPR), and general ethical considerations. These materials outline the formal procedural ethics of the project's research and interventions, including the participants signing declarations of informed consent prior to the game jam and IPR-related guidelines and agreements regarding game ideas and concepts that might be developed during the CGJ. Additionally, the project's framing within DBR emphasises the importance of participatory and relational ethics, thus highlighting how participation and representation are active democratic inquiries in the research and interpersonal relationships involving youth - and, therefore, inherently epistemic and interdependent connections. Finally, the project also had ethical consent from the ethical board at the university responsible for the present study.

4. Results: Exploring Youth Citizen Experiences of Cultural Game Jams as Social and Communal Spaces for Empowered Participation

The EPIC-WE CGJ was a two-day event in February 2024, where 23 youth participants collaborated on game-making *through* and *for* culture across diverse backgrounds and experiences at the ARoS Art Museum in Denmark. The HEI, CHI, and CI partners facilitated the event. In the following sections, we examine youth citizens' experiences of participating in the CGJ in Aarhus, their motivations to participate, their jam experiences, and their reflections on the CGJ and the cultural and value-sensitive game-making processes.

4.1 Lens 1: Participation, Communality, and Empowerment in Cultural Game Jams

During the first day of the CGJ, we performed 20+ in-situ vox pop interviews that generally display that the participants are motivated by an eagerness to explore both culture and games and test their different skills, particularly in the context of a CGJ. Moreover, they highlight the motivating factors of networking, potential career development, and exploring and innovating the intersection between games and culture. Through the interviews, participating youths express expectations of gaining new social and individual experiences while building relationships in a creative, collaborative environment. Regardless of background, they seek to expand their skills in game design, art, culture development, and programming. Common motivations include applying and extending existing skills in a different setting and exploring career opportunities. The communal and relational aspects of novel participation across disciplines and backgrounds are also highlighted as important. The community and socialising perspectives are, however, not only about meeting new people in a novel situation but also a vocal desire for a sense of community situated within a unique *game jam feeling*. This resonates with other research on game jam experiences that highlight the prevalence of perspectives on community and belonging as central motivating themes in participating across disciplines and cultures and towards building social capital (e.g., Fowler et al., 2016; Park et al., 2023). To exemplify this, one youth participant with a programming background emphasised “the communal elements of creating together, experiencing the game jam feeling and involvement, and being motivated by the process of creating something

new and different from others” in a vox pop interview. This message of communality and exploring new interplays between games and culture resonates across the vox pop interviews, with another youth from a game-making background articulating “the intensity of creating something together, and thus also the communal and collaborative elements of participating in the game jam.” Of particular importance - and highlighted in the participatory observations - is the disciplinary diversity, with youth participants coming from different backgrounds and disciplines, though they generally emphasise the same motivations of exploring “... a different experience by jamming with other people and taking her friends with her and meeting new people. To socialise - and being and becoming part of a community that enables new connections and relational experiences”, as articulated by a participant with a background in culture and project management.

Throughout the CGJ, and across interviews and observations, general themes voiced by the participants were the motivations and desires to become part of a different community that emphasises relationality across cultures and hence longings for novel ways of connecting within cultural game-making and design communities. It further relates to elements of empowered participation with and through culture, individually and collectively, and how it might be enabled by CGJs as a communal and safe environment to “... learn from each other and socialise in open settings while enjoying the experience of meeting other young people in a cosy, informal environment that ‘feels’ safe.” Hence, the game-making activities in CGJs might be recognised as playful events or playful learning spaces, mimicking the characteristics of playfulness that are procedurally constructed by the participants towards trustful relationships (Whitton, 2018), as ‘magic circles’ for both vulnerable and empowered social participation in culture, further influenced by the value-sensitive processes of collaborative game-making as a playful and experimental co-creation of objects (games) that mediates and strengthens cross-cultural communication and relationships (Holflod, 2023).

4.2 Lens 2: Social Learning and Cultural Socialisation in Cultural Game Jams

The participants in the game jam came from diverse backgrounds, including audio design, visual design, programming, game-making, escape room design, animation, and dramaturgy. This variety fostered a rich and dynamic environment where different disciplines could converge to ideate and create something new and different. For example, a youth participant with an artist background reflected on this interdisciplinary collaboration during an interview, stating, “I had a feeling that it was lovely meeting across disciplines and perspectives. At some point, I drew a square on a Post-it note, and later, it blew from the table to the floor. Even later that day, some of the group members saw it, picked it up, and were excited with potential ideas stemming from the simple drawing - and it created a nice experience of learning from each other’s perspectives.” It exemplifies and highlights the perceived and experienced value of collaborating across diverse perspectives to spark creativity and innovation during the game jam. However, this case was enabled through an unexpected or unplanned situation, which was not explicitly designed for.

During the CGJ, the youth participants approached cultural material - artworks, tangible cultural heritage, and European values - as materials for their design processes, resulting in different game concepts and prototypes. The five cultural games created during the CGJ are publicly available (<https://itch.io/jam/epic-we-game-jam-01-aarhus/entries>), and they display how the participants drew inspiration from national paintings and artists, emulating a vibe, aesthetic, or atmosphere or by creating new ways of interacting with and in the specific artworks. An example of this is the game “Roomination”, wherein the player navigates and ruminates on the eerie, melancholic hallways of a Vilhelm Hammershøi (1864-1916) painting – and experiences freedom (as an incorporated European value) in its interaction design as something that can be strived for but quite difficult to reach. From a processual perspective, the participant's collaborative engagement through a more and more refined game idea was a medium for social learning and cultural empowerment across backgrounds and disciplines. They actively learn from and build upon cultural artefacts by choosing, adopting, and remixing specific artworks. Moreover, by exploring different disciplinary perspectives on the artworks, such as aesthetics or narratives, and integrating them into their games, they assert their creative agency and reinterpret cultural heritage in ways that resonate with themselves as cultural citizens in contemporary society.

Cultural integration and socialisation became a central focus during the CGJ, with participants keen on exploring the intersection of games, culture, values, and citizenship - and their individual and collective relationships with culture and cultural heritage. While a few participants focused on CGJ themes and examined the processes and methods involved, the overall interest was integrating cultural elements into their game designs. Several participants emphasised the significance of cultural diversity and exploration within the game development process - and how it changed their perceptions of the cultural collection and artworks and their experiences of being and becoming cultural citizens less foreign to cultural heritage than before. As such, the format of CGJs

scaffolded potentials for cultural socialisation, which relates to processes of social and cultural influence wherein the youth participants acquire culture and are thus socialised into culture otherwise foreign to them, affecting and shaping cultural identity and relationality - towards both games as culture and as a medium for ideating and experiencing new expressions of culture.

During the final exposition of the created game prototypes, the research team observed and participated with the youth participants. It became evident that many of them had undergone significant shifts in perspectives towards cultural heritage. The participants from cultural backgrounds voiced similar processes of becoming more receptive and sensitive to the potential of game-making as both an interest and cultural expression. In contrast, game-oriented youth participants discussed embracing cultural perspectives and expanding their understanding of cultural heritage. They were immersing themselves in tangible cultural heritage, e.g., artworks and cultural worlds, in new ways previously perceived as difficult or impossible for them, with both 'groups' of participants articulating becoming more open to different European values, how they influence us, and how they can change perspectives on culture and games. These changes in perspectives are not only conceptual or theoretical but also very actionable and practical by expressing and demonstrating changes in ways of thinking, voicing, and acting, leading to more empowered and engaged participation with cultural heritage, both *tangible*, like artworks, and *intangible*, like values (Eriksson, Holfod and Nørgård, 2024).

5. Discussion: Empowering Communities and Cultural Playfulness

This study illustrates how co-creating games within cultural heritage contexts can develop youth perceptions and experiences of community, sociality, and individual and collective cultural empowerment. Moreover, the experimental ethnographic and design-based perspectives support examinations of democratic inquiry (DiSalvo, 2022) with participating youth citizens who become both epistemic and practical partners (Estalella and Criado, 2018) during the CGJs by co-creating and problematising the field with different participants and stakeholders.

From the Sámi Game Jam (Kultima and Laiti, 2019), it was discussed that the participants reflecting during the jam on their thinking and views led to experiences of empowerment; they learned something about their identity and could thus deal with personal and collective culture differently. On a similar note, the CGJs led to youth participants experiencing their own culture and cultural identity as a polyphony of voices from games, culture, values, and citizenship permeating and empowering their participation with cultural heritage and towards emergent communities. As mentioned, the first CGJ drew from experiences with designing and testing the format during a pilot test, revealing several vital insights. It underscored the importance of carefully designing and planning how participants interact with cultural heritage and values in game design and conceptualisation, and it highlighted a need for deeper engagement with specific cultural heritage pieces to facilitate the ideation processes of creating games through culture within empowering spaces of being, becoming, and belonging.

5.1 Playing with Culture, Participation, and Communities

Though game jams are mainly viewed as game-making events that are experimental, creative, and social, play and playfulness as theories and practices might offer new perspectives to conceptualise and discuss the CGJ participant's experiences of relating and socialising across backgrounds, disciplines, and culture in experimenting and creative processes. A recent review on adult playful learning and collaboration found that tangible construction play, i.e., creating, making, building, or materialising things together, are mediums to collaborate across disciplinary boundaries and hold the potential to permeate boundaries when the objects (e.g., games) are mediating materials for externalising one's perspectives along with enabling new participatory and communal spaces (Holfod, 2022). As also highlighted in the analysis, the youth participants were creating together throughout the CGJ - both in diverse design and game-making activities and the game prototypes themselves, and these processes enabled safe spaces for participation. In play, the players continuously negotiate and frame - communicate and meta-communicate - the boundaries of play (Bateson, 1972). They, in other words, examine questions of 'what if' and 'what might be' in a relationship between a playworld and a 'real' world, wherein playful engagement with objects (e.g., artworks and material cultural heritage) can become intrinsically connected to individual and collaborative world-building through objects in play (Holfod, 2023). Here, approaching cultural heritage playfully aids in supporting the players to create, frame, and reconfigure their processes and situations, with cultural heritage collections as play objects becoming references to the real world (Fink et al., 1968), supporting the creation and safe space (Whitton, 2018) for collaborative learning, game design, and relationships across backgrounds.

6. Conclusion

This paper reports on and discusses findings from the first CGJ from a cross-cultural European research and innovation project, with multiple similar game jams planned for and held during 2024 and 2025. As such, clear limitations of the present study are its local emphasis and lack of testing across sites and contexts, but in alignment with a DBR framework, it explores and produces tentative local theories by examining limited manifestations of a phenomenon, leading to context-sensitive knowledge about a specific domain (McKenney and Reeves, 2019). It, moreover, leads to possible implications to scrutinise and reflect on regarding game jams in cultural places and spaces and how youth participants experience social, communal, and collaborative practices and learning within such formats and environments.

Throughout this paper, we have explored the interplays between culture and games within the format of CGJs with youth participants, presenting and discussing their motivations and experiences regarding social and relational perspectives, communities, enculturation, and empowered participation. CGJs contribute towards youths engaging with cultural heritage in new ways, which materialise in games and become new expressions of cultural heritage. Moreover, more playful entanglements with cultural heritage and play methods to ideate and design game concepts can support collaborative and co-creative practices and relationships through safe spaces and mediating materials. Though this paper disseminates themes of interest to game-based learning environments and formats such as game jams and hackathons - in cultural, educational, and social domains - more robust knowledge through multiple interventions and studies is essential. We thus hope that the present study can inspire others to develop and test related formats and concepts for the cultural empowerment of youth citizens through game-making.

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