

Bridging the Gap: Designing Games with and for Non-Gamers

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ABSTRACT

Despite the cultural ubiquity of digital games, many people remain excluded from participation for various reasons, such as lack of interest, cost, and unfamiliarity barriers. This paper argues that to broaden the inclusivity and relevance of digital games, we must design with and for non-gamers and gamers with less experience. It describes recent work from HCI, accessibility, and game studies to show how non-participation is socially constructed, and propose a method of engaging non-players and low-experience players in design using visual prompts to elicit their assumptions, preferences, and expectations. This approach offers a low-barrier path for co-design that surfaces values often invisible in conventional game development. The goal is to reframe the boundaries of game design and propose a more inclusive path forward for play, participation, and interaction.

Index Terms: Game Design, Non-Gamers, Elicitation

1 INTRODUCTION

Digital games are a dominant cultural and commercial force, but the assumption that “everyone plays” is misleading. Despite the variety in platforms and mobile devices, many people do not play digital games, and even more do not identify as “gamers”. This divide is not merely demographic, but conceptual. Game design continues to privilege the preferences, values, and competencies of a narrow subset of users, typically younger, able-bodied, and male, despite research showing that the demographic of people who play games is diverse [14]. As a result, large populations remain excluded from the processes that shape what games become.

This paper is a call to reimagine how games are designed and who they are designed for. It argues that the divide between gamers and non-gamers is not always an issue of accessibility or taste, but a result of structural and cultural exclusion. To bridge this gap, we must engage non-gamers not as reluctant users, but as collaborators and co-designers. Doing so can help identify which assumptions and norms in game design create friction for new audiences and open up opportunities to design new forms of play.

2 BARRIERS TO PLAY ARE DESIGNED

Non-participation in gaming is frequently misunderstood as apathy or disinterest. However, as Bergstrom [1] notes, people opt out of play for complex reasons. Intrapersonal factors such as lack of confidence, difficulty with controls, or low self-efficacy are compounded by interpersonal and structural barriers. For example, many non-gamers perceive gaming as socially isolating and unproductive, a perception shaped by both media narratives and personal experience.

Ha and Kim [6] build on this with a model of innovation resistance. They show that digital games can violate users’ expectations about how leisure time should be spent, what constitutes effort or

reward, or what kinds of aesthetics and interactions feel comfortable. Their participants resisted games not because they were unfamiliar with them, but because they found them misaligned with their values or lifestyles. Similarly, Kort-Butler [11] highlights the identity divide. Even individuals who play games often distance themselves from the gamer label due to perceived toxicity or cultural mismatch.

3 BELONGING AND BROADER INCLUSION

Game design often focuses on a narrow vision of who a “gamer” is, reinforcing dominant aesthetics, metaphors, and expectations that may feel alienating to many people. This includes individuals who do not see themselves reflected in games, or who feel excluded based on values and self-perception.

Brown [2] shows that older adults, often overlooked in game studies, prefer games with slower pacing, meaningful narratives, and real-world relevance. Hassan [8] argues for a broader view of inclusion that accounts for emotional resonance and experiential design. These insights suggest that inclusion involves not only providing access to gameplay, but also creating experiences that feel worthwhile, familiar, and welcoming.

Yet, even as character diversity appears to increase in visible ways, such as more female or non-White protagonists, deeper issues persist in the underlying design. De la Torre-Sierra and Guichot-Reina [4] show that female characters remain underrepresented and are frequently portrayed in stereotypical or hypersexualised ways. Many are relegated to secondary roles, presented with unrealistic bodies, or masculinised in order to be seen as strong. Such portrayals undermine the potential for genuine identification or empowerment, especially for players seeking alternative expressions of identity.

Kukshinov and Shaw [12] further demonstrate that dominant social groups, particularly White men, often do not seek representation in character selection because their identity is assumed as the default. In contrast, players from marginalised groups actively seek characters who reflect their gender or race, but are often forced to compromise due to a lack of options or fear of harassment. This suggests that inclusion is not just about who is visible on screen, but about whose experiences are normalised and supported within the game environment. As such, these barriers also might mean they are difficult to recruit for the purpose of co-design, due to lacking a feeling of belonging, as partaking in these spaces require the learning of particular social conventions or language which may be unaligned with their own values [3, 9].

Further, the distinction between those who produce and play games has been critiqued, stating that the exclusion of play has direct links with those who produce the games [7]. As a result, by highlighting the underrepresentation of minorities and presence of exclusionary language, current research [4, 12] demonstrates that there is still a lack of diversity in those who design and develop games.

4 PROPOSED METHOD: SCREENSHOT-BASED ELICITATION

To support design with non- and less experienced gamers, we propose a lightweight approach: screenshot-based elicitation. This

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method, inspired by participatory design and elicitation from data visualisation and gesture interaction studies [10, 13], presents participants with game mock-ups or stylised screenshots, and prompts them to share interpretations, expectations, and assumptions. This method differs from top-down approaches that analyse common game design patterns or adapt mechanics in existing game genres in order to design for non-gamers, which is still susceptible to stereotypical game features, and instead approaches co-design from a bottom-up approach [5].

The mock-ups used in this method will be deliberately designed to vary across key dimensions: genre familiarity (e.g., fantasy, simulation, non-fiction), visual complexity (e.g., minimalist vs. diegetic interfaces), and interface metaphor (e.g., clearly game-like vs. deliberately ambiguous). This controlled variation allows us to explore how different kinds of visual cues are interpreted depending on a participant's experience with games. All visuals will be static and captionless, presented without genre labels or explanations, to avoid leading responses. These will be presented digitally, and as games can be played on multiple platforms, such as console, desktop computer, and mobile phones, a range of screen sizes will also be used to present the screenshots in a randomised order and combination to prevent any prior biases from game genre and game platform. Further, players may have some knowledge of common game controls and hardware, and thus will be encouraged to think beyond what interactions they may have been exposed to.

The screenshots will be created using a combination of bespoke mock-ups and modified assets from existing prototyping tools (e.g., Twine, Unity wireframes, or user interface (UI) kits). Some will closely mimic standard interface patterns (such as a heads-up display (HUD), map, inventory, or dialog choice), while others may intentionally borrow from non-game domains like standard mobile app designs. More abstract designs could also be included, such as those without clear HUDs or playable characters. However, if playable characters are included, non-humanoid or ambiguous designs would be preferred to avoid reinforcing any gender, race, or body type stereotypes.

4.1 Elicitation Prompts and Goals

The session itself will take the form of a semi-structured interview. Each participant is shown a series of 4–6 screenshots, one at a time, and asked to reflect aloud while responding to the below prompts. These conversations are video-recorded with the audio transcribed. Multiple data types will be collected from these recordings, for example verbal interpretations and behavioural cues, including hesitations, confusion, re-interpretations, since these moments may reveal divergence from assumed design logic. It will also be made clear that there are no right or wrong answers to this task, and that the games have not been developed yet. It will be crucial to evoke a sense of agency in the participants in order to elicit information that diverges from typical game genres and controls.

Participants are shown a series of static images and prompted with the following questions:

- What do you think this game is about?
- What do you think the goal is?
- What actions would you expect to be able to take here?
- How would you interact with this? You may suggest any forms of interaction.
- Would you want to play this game? Why or why not?
 - This question will be prompted further by asking what the goals or actions would need to be present in order for the players to want to play it

This method does not test playability or task completion, but instead invites bottom-up reflection. It functions as both a co-design tool and an interpretive probe, designed not to validate game ideas, but to surface the values and assumptions people bring to games as cultural artifacts.

4.2 Recruiting Along a Spectrum of Game Experience

Due to the ubiquity of digital media on the internet, finding participants with no exposure to video games may prove difficult. Instead, this method proposes recruiting across a spectrum of game literacy, using a questionnaire to classify participants as:

- **Non-gamer:** Rarely or never play digital games.
- **Casual gamer:** Occasionally engage with mobile, social, or puzzle games.
- **Gamer:** Regular players with extensive or recent experience.

Classification will be determined by frequency of play (including historical experience as frequency questionnaires often only consider recent experience), experience with various genres, intentional and non-intentional media exposure to games (e.g. watching Twitch, YouTube, short-form content), and their own self-categorisation. Results from this survey may present with additional classification that may inform a greater depth to the analysis. In addition, age, gender, and cultural background will also be taken into account during recruitment to ensure a diverse sample, and asked about during the interviews to gain insights whether any of these factored into their interpretation of the designs.

5 LIMITATION: THE DESIGNER'S BIAS

Although screenshot-based elicitation enables participation from non-experts, it introduces a critical methodological flaw: the designs themselves are top-down. Initially, designers or researchers familiar with games will be the ones creating the mock-ups, and thus our choices inevitably inform the genre conventions, interaction models, and aesthetic assumptions in the designs. Even speculative or abstract mock-ups risk privileging gaming fluency, making them less legible to those unfamiliar with common game patterns.

To mitigate this design asymmetry, we propose two specific strategies:

1. **Designing for visual diversity.** Mock-ups should vary widely in metaphor, complexity, and interface language. Some should mimic familiar game UIs; others should intentionally resemble non-game tools (e.g., journals, maps, meditation apps).
2. **Using ambiguity as a feature.** Screenshots that are not overly prescriptive, those that encourage multiple interpretations, help surface participants' assumptions rather than testing their ability to read an "intended meaning."

6 CONCLUSION

This paper proposes a design method that invites non-gamers to interpret game mock-ups and reflect on what they expect, value, or find unfamiliar. The goal is to involve participants in the earliest stages of design, through visual prompts that support reflection and discussion.

By recruiting across different levels of game experience and analysing participant interpretations, this approach may reveal how expectations are shaped by prior exposure to games, and where common design patterns may fail to communicate. These moments will be treated as design signals rather than misunderstandings.

Rather than aiming to validate specific ideas, the method aims to uncover alternate perspectives that may otherwise be overlooked.

It positions interpretation as a generative part of the design process and offers a way to bring non-gamers into conversation with the forms and languages of games. The next stage in this work is to empirically test this design approach and explore how it can inform iterative design practices across contexts.

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