Collaborative Video Game Design Work and Diversity

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ABSTRACT

This overview describes my ongoing dissertation research on diversity within collaborative video game design. First, I explain why research into daily work within this field is needed, especially with a focus on diversity. Next, I briefly review previous research and identify three key areas for considering diversity in the field: participation of underrepresented and marginalized groups, the structure of organizations, and collaborative work tool selection and use. I then outline my qualitative research approach of conducting semi-structured interviews with video game designers. Finally, I present some preliminary results and expected contributions for this research.

CCS CONCEPTS

• **Human-centered computing~Computer supported cooperative work**
• **Applied computing~Computer games** • Social and professional topics~Employment issues

KEYWORDS

Diversity; Collaborative tools; Information organizations; Video games; Digital design

1 MOTIVATION

We all see the world from different perspectives; these perspectives shape everything from our usual work routines to our entertainment choices. With 67% of households in the U.S. in possession of a device that is used to play video games [12], the video game industry is one of the most significant sites for both producing and using Information and Communication Technologies (ICTs). Such engagement rates indicate that video games can and do appeal to diverse individuals. At the same time, the video game design industry remains strikingly non-diverse—according to recent surveys, 74% of video game designers are male and 68% are white [4].

Diversity in a video game design work team affects both the work process and the resulting games [2]. Accordingly, diverse representation in games can only be created in an "environment where people feel safe to share their different perspectives," in addition to supporting demographic workforce diversity [6]. Yet while 84% of video game designers feel that diversity is important in the game industry, only 33% feel that there is currently "equal treatment and opportunity for all in the game industry" [4]. Simultaneously, multiple stakeholder groups—including game players, game designers, and critical theorists—have increasingly called for greater diversity and diverse representation within video games.

2 BACKGROUND

Much of the previous research on diversity in the general area of video game studies has focused on the experiences of users/players of games and on diverse representation within games themselves, rather than on diversity within the workforce [10]. Among the few existing studies of video game designers, Koleva et al.'s [7] study of multiple design teams particularly illuminates key features of the collaborative workflow and highlights the importance of collaboration tools [7:149]. Panourgias et al. [8] similarly explore the relationship of developers' use of specific ICTs to generating creative ideas in game-playing experiences. However, neither study specifically focuses on how that tool usage may be related to diversity.

In contrast, Johnson's [5] study of commercial video game studios is among the only previous research that examines diversity and collaborative work within the context of video game design organizations. Johnson analyzes the effects of organizational culture and argues that employing "other types of diverse organizational structures can impact the role of video games for the broader culture" (p. 136). Johnson concludes by noting that more research on game production is needed "to compare different organizational structures," as well as "studios of different sizes" (p. 156).

Research Questions

- What is the relationship between the structure of an organization and the role of diversity within collaborative video game design work?

- What is the relationship between diverse perspectives held by different individuals and groups of stakeholders within video game design work and the selection and use of specific work tools?

- How could individuals and organizations actively utilize organizational structure and collaborative work tools to promote inclusion of traditionally underrepresented and marginalized groups?

I thus identified three key aspects to focus on in relation to diversity in this work (participation of diverse people, especially underrepresented and marginalized groups; organizational structure; and the selection and use of collaborative work tools) and developed corresponding research questions.

3 RESEARCH APPROACH

This research, inspired by multi-sited [3] and digital [9] ethnographic approaches, adopts a bottom-up approach to understanding the digital nature of the workplace within this field. Participants must have experience working on at least one collaboratively-authored video game at any level of organizational scale and may play any role within the project (e.g., programmer, director, writer, artist). I am recruiting participants through professional organizations and meetups in my area, including organizations focused on supporting underrepresented groups within the field. I am also reaching out to my university's game design program for alumni of the program and encouraging participants to help promote the study.

I am conducting in-person, semi-structured interviews with participants; participants are asked to bring any devices containing their collaborative game design work or work tools, if possible. These interviews explore the three main areas outlined above by drawing out specific instances related to diversity in participants' experiences of collaborative video game design work. I am analyzing transcripts through an iterative process of thematic analysis [1] using NVivo (qualitative data analysis software) to code this data and to assess the diversity of my participant sample, which I seek to maximize. To date, I have conducted 15 interviews, and plan to conduct 10-15 additional interviews.

4 PRELIMINARY RESULTS

I began examining the specific role of diversity within collaborative video game design work with an extensive literature review [10]. Additionally, this research partially builds on a related study [11], including by refining questions from the prior interview instrument.

Based on preliminary analysis of the conducted interviews, participants have consistently discussed important features of their organizations' structure, as well as how some of these features might relate both to diverse participation in their organization and to diversity of representation within the final game product. For example, multiple participants have indicated that a lack of diverse representation within lead positions or other decision-making roles can have an effect both on members' ability to propose more diverse game content and support for such content throughout the

design process. While most participants expressed an interest in broadening participation within their organization and in their hiring processes, only a few have previously thought extensively about how such goals might be accomplished.

Similarly, while most participants have indicated that their organizations' collaboration tools do not serve all members' needs equally well (sometimes leading to certain sub-groups adopting separate tools), only a few participants have clearly articulated how these differences might be related to established hierarchies or impact specific groups.

Academic Situation

I am interested in applying for acceptance into my first ACM SIGCHI Doctoral Consortium. I am a PhD candidate who has passed my dissertation proposal defense and is currently conducting my dissertation data collection and preliminary analysis; I intend to have completed all of my data collection and much of my data analysis before the 2019 Doctoral Consortium is held. I am entering the final stages of my PhD program and preparing to enter the academic job market as a tenure-track faculty member in Information Studies or a related field.

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For example, one participant discussed how an emphasis on using video conferencing tools to communicate with remote collaborators (rather than text-based options) might place some of his collaborators—who are located in Montréal and speak English as their second language—at a disadvantage for spontaneously contributing to the discussion.

5 EXPECTED CONTRIBUTIONS

First, the area of everyday collaborative video game design work itself needs to be better understood in order to fill the "paucity" that Koleva et al. [7] have correctly identified. Examining the role of various forms of diversity should inform both current and future practitioners about how to better understand and support diversity within their own work, as well as video game design curriculum recommendations. More broadly, this research should contribute to literatures on workforce diversity and broadening representation in ICT design. This area of research should also be brought into conversations around diversity and ICT use and design within other fields of research, including HCI.

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