"TECHNICALLY THEY’RE YOUR CREATIONS, BUT . . ."

Children Making, Playing, and Negotiating User-Generated Content Games

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Introduction

From creating house rules for *Monopoly*, to constructing elaborate make-believe play scenarios, making (and modifying) games has long been a core part of children’s cultural experience, as well as a key site for children’s learning, socialisation, and development (Evaldsson & Corsaro, 1998; Gussin Paley, 2004). The emergence of child-friendly digital games centred around user-generated content (UGC) and do-it-yourself game design (herein referred to as ‘UGC games’) introduces important new forums for children to shape their digital play in much the same way (Fields & Grimes, 2017; Willet et al., 2009). Like other forms of making, children’s game design (i.e., game design activities undertaken by children) is currently a popular topic among educators, child advocates, and policymakers (Kafai & Burke, 2015). It is also the focus of a burgeoning market niche. UGC games extend traditional practices into the digital world, but they are also unique, in that they enable children to publish their game ideas at a mass level (e.g., Comunello & Mulargia, 2015). They are thus part of an unprecedented cultural development, in which children are increasingly assuming the roles of producers, authors, and designers of their own media and popular culture.

While UGC games offer promising opportunities, they also introduce new challenges. As commercial products, many UGC games resitute children’s creativity within a quasi-public context that is corporately controlled and market-driven (Grimes, 2014). This raises complex questions about children’s cultural rights (including fair use and freedom of expression), access (who is included/excluded in the games’ designs and marketing), and the responsibilities of the game companies providing these new participatory spaces for children. To date, however, most of the research on children’s UGC games has focussed on educational applications and outcomes (e.g., Niemeyer & Gerber, 2015). There are notable gaps in the literature when it comes to the frequency with which different groups of children engage in UGC game design, how children’s participation is shaped by the companies who publish UGC games, and what types of games children are creating and sharing with them.

This chapter discusses findings of a recent study aimed at uncovering children’s thoughts and experiences of UGC game tools, their opinions about the potential and limitations of these tools,
as well as their motivations for creating game content. This chapter focusses on children’s understanding of the legal implications of making content in a commercially owned UGC game, and highlights the depth, diversity, and occasional contradictions found within children’s knowledge of complex legal concepts like copyright. It argues that there is a need for a deeper integration of legal issues within digital literacy curricula for children, as well as a broader inclusion of children within public discussions of authorship, ownership, and other rights in the digital age.

**Literature Review**

Easy-to-use customisation tools are now found in a wide range of digital games – from sports titles featuring intricate character creation tools, to first-person shooters containing map and level editors. As in other areas of the digital realm, web 2.0 and participatory culture are prevalent in gaming culture and integral to many game companies’ business models and promotional strategies (Banks & Potts, 2010; Young, 2017). Concurrently, several game design programs and engines aimed at non-specialist (or non-professional) users, including children, are now available. This has fuelled a surge in amateur game development and renewed interest in using game design to teach children how to code (Resnick et al., 2009).

The titles referred to here as ‘UGC games’ lie at the intersection of these two trends – games in which the central focus of activity consists of game making and/or customisation. The games in this category feature ‘what you see is what you get’ tools and templates that do not require coding or other sophisticated technical skills to use. Instead, players select menu options, click and drag, move and modify, combine and restyle a wide range of objects, features, and mechanics to make original or derivative creations. While many of the titles in this category do include some officially produced content or storylines, they are, for the most part, unstructured and prioritise player creativity as the main mode of play. Most contain copyrighted assets – such as characters, set designs, or theme songs – associated with well-known media brands that players can incorporate into their creations for a fee (as purchasable downloadable content, or DLC). The UGC games market is dominated by a handful of high-profile titles, most of which are either targeted to or are inclusive of children. They largely carry ratings that classify them as appropriate for children and feature media brands that are popular among children. Key examples include *Little Big Planet*, *Minecraft*, *Disney Infinity*, *Super Mario Maker*, and *Roblox*.

The rise of UGC games has motivated the formation of vibrant new cultures of practice. It has also attracted a growing body of scholarship, a significant portion of which focusses on the highly popular sandbox game *Minecraft* and its potential benefits for children’s learning. For example, Niemeyer and Gerber (2015) propose that *Minecraft* fosters participatory learning. Other scholars emphasise the creative dimensions of *Minecraft*, arguing that its unique combination of ‘limitless’ tools and building materials, emergent design, and social aspects function as a catalyst for invention (Cipollone et al., 2014; Nguyen, 2016). Absent from much of this literature is a consideration of the commercial and legal relationships that children enter into when they make and share content in *Minecraft* (and other corporately owned titles), and how this might shape their creative process and experience.

Notable exceptions include Willett’s (2016) study of the socio-economic contexts of children’s literacy relating to *Minecraft*‘s business model, in which children were asked how the game makes money, who owns it, and why it contained in-game advertising. Another is Bak’s (2016) analysis of *Disney Infinity*‘s promotion and adherence to the official ‘versions’ of well-known Disney characters, and how this emphasis puts discernible constraints on players’ creative freedom. Similarly, Grimes (2015) argues that *Little Big Planet*‘s closed technical infrastructures ‘tether’ players and their creations to the game’s proprietary system and its associated brand identity. Together, these works cover important ground, providing crucial insight into the educational and political
economic dimensions of UGC games. What is missing from the literature to date, however, is a focussed exploration of how these aspects of UGC games overlap, or how they both shape and are shaped by the activities and experiences of the games’ players. How do children understand the terms and conditions that are placed on their creativity within commercial UGC games? Does this limit or extend their creative process? What are children’s thoughts on who owns and controls the content they make within UGC games, and how do the games in turn contribute to their emerging understandings of authorship?

While very little is known about how children experience these aspects of UGC game making, there is a wealth of relevant research to draw upon on the topics of children’s creativity (Marsh, 2010), evolving notions of ownership over things and ideas (Shaw et al., 2012), and the benefits of ‘remix’-type practices for children’s media and digital literacy (Jenkins, 2008). For example, research by Olson and Shaw (2011) challenges the assumption that younger children are unable to grasp complex concepts like intellectual property. Their study found that children as young as six years old made “negative moral evaluations about those who plagiarise as compared to those who produce unique work” (p. 438). Overall, the literature suggests that even young children can have nuanced opinions about key facets of intellectual property, from the ownership of ideas to what makes a work ‘original’ or derivative. Contrary to traditional child development models, many children develop a very early awareness, and at least a burgeoning understanding, of these concepts. While products aimed at children tend to downplay such processes in their packaging and promotional materials, children are clearly impacted by the business mechanisms and legal rules that shape commercially owned game titles and platforms.

The Current Study

This study builds on the emerging body of academic work examining the political economic dimensions of UGC games and contributes important new insight into the perspectives and experiences of child game makers. Previous research on children’s learning and playing in Minecraft and other UGC games supports the idea that children engage in important forms of creativity when they make or modify game content in these contexts. Yet, still very little is known about how children experience this form of creative expression, or what feelings of ownership they have over their creations. To fill some of these gaps, the researchers conducted a series of focus groups and interviews with elementary-school-aged children who regularly participate in UGC game making. Data collection was done in the form of a ‘game jam’. The children were invited to participate in an afternoon session that interspersed game making with semi-structured interviews, followed by a group-wide show-and-tell, and finally a small group discussion. The methodology was inspired by Gauntlett’s (2007) ‘creative explorations’ approach, which seeks to engage participants in hands-on creative activities through which complex questions can be explored in a participatory and reflexive way. It also drew on child-centric participatory research traditions advanced by new sociology of childhood scholars such as Jenks (2005).

Recruitment

The call for participants aged six to 12 years who “like to make things in Minecraft, Little Big Planet, Super Mario Maker or another video game” was posted to various social media networks, email lists, and blogs, and shared with an intentionally diverse range of children’s organisations. A screening survey was conducted over the phone with the parent or caregiver to establish eligibility. Although the researchers strived to include a diverse group of children, most of the participants were recruited through university-related networks and reflected demographic trends common to Canadian university communities, but not to the general population. For instance,
all the participants came from households in which at least one parent had (at minimum) an undergraduate education. Despite prolonging the recruitment stage by several weeks in the hopes of reaching gender parity, the researchers failed to recruit an even number of boys (15) and girls (six). Participants did include children of varying ages and several children (7) who were identified by their parent as members of a visible minority/person of colour.

Participants

Participants consisted of 21 children between the ages of six and 12 years. Each participant self-identified as someone who liked making game content. The majority (18) mostly made content in Minecraft. However, more than half (13) had also made content in at least one other game. Only three of the participants ‘mostly’ played a UGC game that was not Minecraft (Super Mario Maker, Project Spark, and Roblox, respectively). Experience levels varied, from those who had only ‘recently’ (i.e., less than one year) started making content in one specific game, to those who had been making content in games for several years, to those who had received formal training in game design. Participants had varying levels of access to digital games in the home: some had strict ‘screen time’ limits (e.g., one pair of siblings was only allowed two hours per week), while others engaged in 15–18 hours (or more) of UGC game-making on a weekly basis. Some participants rarely shared their creations with anyone, while others frequently shared their work with family and friends. Still others uploaded their creations to online communities or posted videos about them on YouTube. Despite these differences, participants had a shared enthusiasm for game-making that was evident in their responses to researchers’ questions, as well as in the regular expressions of excitement and joy displayed during the game jams.

The Game Jams

A total of three standalone game jams were conducted between August and September 2016. Each had seven child participants. Upon arrival, participants were divided into pre-selected teams – three teams of two participants and one researcher, and one team composed of one participant and one researcher. Each participant attended one game-jam session and each session lasted three hours. The game jams were held at the authors’ home university, in a spacious multi-purpose room set up in the style of an open concept ‘design studio’, with a ‘design station’ assigned to each team.

For the game jams, children were tasked with working together to make (or modify) a game, while the researcher asked questions, took notes, and observed their actions. Each design station included console systems ‘pre-loaded’ with the UCG games that parents had identified as the ones their child(ren) used most for making games. When the children arrived, the gaming systems were already on, with their ‘preferred’ game open and ready to play at their assigned stations. Although Minecraft was by far the most popular, three design teams began with a different title. The Roblox team elected to switch to Minecraft almost immediately, while another switched back and forth between Minecraft and Little Big Planet. The predominance of Minecraft among the other design teams appeared to be a contributing factor in these teams’ decision to switch to Minecraft as well, as they each expressed excitement to try some of the texture packs the other teams were building with.

Each design team included a researcher as participant-observer. Researchers were instructed to let the children take the lead in all design decisions. Instead, they focussed on incorporating interview questions into the conversation, keeping the participants focussed on the task at hand, and mediating any minor conflicts that arose (e.g., one participant not letting the other have a turn). If participants ran into technical problems, the researchers served as knowledgeable but ‘hands off’ helpers,
prioritising the children’s own knowledge of the games and design processes. In the three teams comprised of one researcher and one participant, researchers assumed a more active role in the design process, but always deferred to the children and supported their choices. Three additional researchers ensured that the recording equipment functioned without interruption, and a fourth served as the ‘reference librarian’, available to look up information on the internet for the children at their request.

Toward the end of the session, researchers held a show-and-tell that consisted of a tour of all four design stations. The children each presented or co-presented their creations. Overall, the participants seemed very excited about the show-and-tell. They were engaged and enthusiastic about the other teams’ designs, and many of them provided each other with praise, suggestions, and constructive criticism. In the final group discussion, the research team shared some preliminary observations, workshoped themes to explore at the data analysis stage, and gave the participants an early opportunity to correct, clarify, or add to the record.

**Discussion of Findings**

During the game jams, participants made an assortment of highly creative and sophisticated game ‘builds’. While they designed, and negotiated, these creations they also discussed a range of topics related to their experiences and knowledge of how UGC games work. In response to the interview questions, in dialogue with the games and with each other, participants talked about gaming, popular culture, creativity, where ideas and inspiration come from, family dynamics and the key role of siblings and parents in collaborative creation, thoughts on why games contain advertisements and in-game purchases, licensed game content, and a range of issues relating to the corporate ownership of games and whether this extends to player-made content. A wealth of data was generated out of these sessions. As a comprehensive analysis of the patterns that emerged among participants of different ages, genders, previous gameplay experience, and other variables is still underway, the findings presented herein are partial and preliminary. They include some overall trends, but largely centre on examples and outliers that have been identified as compelling potential themes of inquiry. Below, the focus is exclusively on the participants’ thoughts about who owns UGC games and player-made content, who controls player-made content, and the role of copyright within these dynamics.

**Who Owns UGC Games?**

Participants varied in terms of the precision of their knowledge about what company (or companies) ‘owned’ the games they played. Most participants had some understanding that a company, person, or entity had created the game software, that someone owned it, and that these two things were not necessarily the same. Nearly all the players knew at least one of the companies associated with Minecraft – either Mojang, the game’s original developer, or Microsoft, the company that acquired Mojang in 2014. Some participants said that “Not” owned Minecraft, referring to the game’s original creator, Markus Persson.

Participants had mixed ideas about whether they owned the content they created. Though one participant said confidently that she owned the content she made, most had more ambivalent opinions about their ownership of in-game creations. Many participants seemed to be grappling with ambiguous and somewhat contradictory ideas about ownership and control. In keeping with previous work on people’s perceptions of what constitutes an original creation, several of the participants expressed a perceived linkage between effort and ownership. The more effort one put into making something, the stronger one’s ownership claim over the result. Nonetheless, many participants described that there were restrictions on what they could do with their creations. The
youngest participants expressed a relatively fluid understanding about the ownership of player-made and in-game content, viewing it all as a shared resource or as a sort of ‘commons’. Conversely, many of the older participants reported that another entity (companies, other players, server hosts, etc.) had some claim and power over their work.

In response to questions about ownership, ‘Simber’ (age 9) stated, “I own my build, but Mojang technically owns Minecraft”. As such, the company could come to her house and take away her build, by taking back her copy of their game. When researchers asked if she owned a picture that she drew on paper, she said the same rule applied. The person who had invented paper could come take her picture from her (no matter “how much you’ve drawn on it”), just as the inventor of bricks could come and take back the bricks that made up her house. This applied to all commodities, Simber explained, “Everything isn’t owned by you, you just bought it”. Her description revealed a sophisticated understanding of the closed, proprietary software licensing model, which indeed underlies Minecraft and most other digital games, apps, and media ‘purchases’. Her expansion of this model to all areas of market exchange, however, raises questions about its spread and, ultimately, normalization. Simber’s responses both confirm and problematise findings uncovered in previous research on children’s understanding of transfer of ownership, which suggest that this concept can be particularly challenging for children to grasp (e.g., Berti & Bombi, 1988). On the one hand, her description suggests some important gaps in her comprehension of this aspect of market exchange. On the other hand, as more businesses move toward license and subscription models, her assertion that creators (or companies) maintain ownership rights over their products – and can take them back ‘anytime in the world’ – is becoming increasingly accurate.

Who Controls UGC?

When asked about the game companies’ authority and control over the game, player creations, and saved files (i.e., copies of builds stored on the child’s own gaming device), responses were often tentative and conditional. Very few participants had experienced a clear or direct form of interference, a term used here to describe any form of official reprimand, warning, or disciplinary action (such as having one’s content removed or account suspended) taken by a game’s corporate owner or distributor. Most of the participants were unsure about what type of content or activity could invite such a response. Several of them questioned whether Microsoft even had the ability to delete or alter player-made worlds. Others suggested that perhaps their content had previously been deleted ‘by the game’, though these participants were unclear as to how or even if that had occurred. Nonetheless, most participants insisted that the potential for interference did exist. Notably, most of them also described that corporate interference was always justifiable. At the very least, it could not be challenged or overturned by a player. Many participants were furthermore uncertain about what happened to player-made builds once they were deleted. For instance, Trixie (age 8) agreed that, once deleted, a world was “gone forever, you can never see it again”, but also replied that she didn’t know if Microsoft kept a copy of it for themselves.

The younger brother on the one team that contained a sibling pair, ‘Cloudy’ (age 8), became agitated when researchers asked if the makers of Minecraft could change or delete his world without notice. He did not overtly question their ability to do so, but insisted that they would not because “Mojang is nice and that would be mean”. His older brother, ‘Mr. Minecraft’ (age 10), agreed that the worlds could be deleted, but had a different view of the risk. He explained that it was no different than a competition server he played on in which the culture was that players destroyed each other’s creations soon after they were built. He said that once he knew this was the culture of the server and understood that it was not personal, he no longer minded when his creations were destroyed. He thought he would feel similarly if he found out that a world he had created was removed.
Some participants pointed out that interference was not the only way players could lose access to their creations. For example, ‘Nicholas’ (age 10) told us that he lost access to a world he had created when he accidently left the phone it was ‘on’ in the pocket of a pair of pants that went through the washing machine. When the phone came out of the wash it was no longer usable, and he believed that the world he had created on it was lost forever. Another participant mentioned that if a player forgets their password, their builds would still exist but would become inaccessible to them. These players put the deletion of player-made content by Microsoft in the same category as other random acts of fate, and justified it in similar terms. While frustrating, ultimately no one was to blame and no recourse was available.

Navigating Copyright

Issues pertaining to corporate copyright and copyright infringement surfaced quite frequently during discussions about ownership, as well as in response to the questions asked about licensed content, in-game purchases, and advertising. Notably, many of these issues were raised by the participants themselves. Although several of the research questions related to intellectual property, transfer of ownership, copyright and fair use/dealing, the researchers rarely, if ever, used the legal terminology when broaching these topics with the participants. Instead, participants were asked if they owned the content they created, who they considered to be the owner(s) of the game itself, and who (if anyone) could delete or change player-made content. However, several participants’ responses included legal terms like ‘copyright’ to describe licensed content, or ‘infringement’ to talk about derivative player-made content. The older participants were most likely to utilise such terms. Interestingly, the older children were also more likely to think that their UGC creations were owned by someone other than themselves – either by the game owner, or by a corporate copyright holder.

One of the participants, ‘Bob!’ (age 10), a self-described ‘professional’ Super Mario Maker designer, had an especially deep understanding of copyright and authorship. Unlike most of the other children in the study, he reported that he himself had directly experienced interference related to copyright, although not exactly within the context of a UGC game. He explained that he regularly posted ‘Let’s Play’ videos of levels he had made in Super Mario Maker and Minecraft to his YouTube channel, and had received one or more cease and desist notices. Some of his videos had also been ‘taken down’ by YouTube. With the help of his parents, he reposted the videos with the sound removed, which ‘solved the problem’. He was not sure why the sound made a difference, but he knew that was the way to ensure his content remained posted. As he later replied to the researcher’s question about who owned his player-made levels, “Technically they’re your creations, but … I can’t put a copyright on it or anything”. This led to a longer conversation about the nature of copyright. Neither he nor any of the participants described copyright as something they could claim. For the children in this study, ownership may be fluid, variable, and complex, but copyright belongs solely to corporations.

Notably, many children, including some of the participants, learn about copyright in the classroom, as part of a digital literacy curriculum. While an analysis of these curriculum materials was beyond the scope of the current study, previous work in this area has flagged multiple problems with the information contained in child-targeted copyright lesson plans. As Gillespie (2009) describes, when children are taught about copyright, the emphasis is often placed on delineating corporate copyrights. Meanwhile user rights, such as fair use, are downplayed or omitted altogether. The digital literacy materials included in his study largely positioned children as (potential) copyright infringers – not as content creators or as possible copyright holders themselves. While copyright law is indeed highly complex and beyond the full comprehension of many adults, let alone children, Moore’s (2018) research demonstrates that even kindergartners
can grasp the underlying principles of authorship, attribution, and fair use that guide intellectual property rights. He advocates for a more comprehensive approach to teaching copyright at every grade level, one that encourages children “to confidently and thoughtfully claim their rights as both creators and users of copyrighted material” (p. 272). These findings support the argument that there is a clear need for a firmer delineation of children’s rights as authors, creators, and emerging digital citizens, within digital literacy curriculum.

**Conclusion**

A preliminary review of the findings from the game-jam study yields a compelling snapshot of the complex relationships that children of various ages have with ownership and copyright in UGC games. Even the youngest participants had strong opinions about who owns and controls the content they create in these games, as they navigated the complex terrains of corporate sovereignty and user rights embedded in corporately controlled UGC game titles. Previous studies of UGC games largely focus on educational applications, emphasising their potential to contribute to children’s learning and creativity. Other works highlight how the commercial priorities of many UGC games introduce unexpected political economic relationships into children’s creative processes. The current study builds a bridge between these disparate bodies of research by revealing some of the ways in which the political economic dimensions of UGC games are experienced, understood, and negotiated by the children who play them.

These findings support the conclusions drawn in recent studies conducted by Shaw et al. (2012), Olson and Shaw (2011), and Moore (2018). Although the concepts of idea ownership and fair use are abstract, variable, and traditionally considered to be beyond children’s (especially younger children’s) grasp, young game makers are clearly engaging with these concepts. They have situated knowledge about various legal terms, and formulate judgements about the meanings and implications of these complex processes for themselves and other players. At the same time, in reviewing the children’s descriptions of their ownership rights, and those of the companies who make and manage UGC game titles, there was evidence of important gaps in children’s understanding of both the scope and specificities involved in creating original and derivative content within corporately controlled forums. This supports Moore’s conclusions that there is a clear need for a deeper and more concerted integration of legal issues within children’s digital literacy curricula.

More than this, however, there is a growing need to include children, their needs and vulnerabilities, within copyright discourses and policy development. The expansion of children’s access to digital creation tools brings with it a wide range of exciting possibilities for supporting children’s cultural rights, fostering their sense of agency, and increasing their participation in shaping shared digital culture. Previous research on UGC games and the broader children’s consumer culture makes it clear that the responsibility for realising this potential cannot be delegated to the tools alone. Nor should the onus be offloaded onto children, teachers, and their caregivers through a narrow focus on digital literacy strategies. Fully supporting children’s newfound roles as game makers and mass media creators will also require a disruption and shift in the industry standards, regulatory policies, and social conceptualisations that continue to configure the child as first and foremost a consumer or passive user – rather than the active, engaged *producers* of content so many of them already are.

**Notes**

1 The term ‘game jam’ refers to a popular activity in digital game culture in which teams of people come together over a short period of time, either a day, a night, or a weekend, etc., to collaboratively create one or more games.
Our participants included two six-year-olds (one girl, one boy), one seven-year-old boy, four eight-year-olds (two girls, two boys), two nine-year-olds (one girl, one boy), eight ten-year-olds (one girl, seven boys), and four 12-year-olds (one girl, three boys).

For each session, eight participants had been confirmed to attend. However, in all three instances, one participant cancelled at the last minute.

As much as possible, participants were paired with another child close in age and with similar gaming habits.

On teams made up of children with different ‘preferred’ UGC games, we pre-loaded a game that both children had previously made content with instead. Before starting the game jam, these teams were consulted about their game selection and given the chance to switch.

Recording equipment was set up at each design station, and an additional camera was positioned to capture the room in its entirety. Pictures were taken throughout the day. All but one of the design teams’ game levels or ‘builds’ were preserved for later analysis and reference (one was deleted by a participant, as per an option outlined in our ethics protocol).

Children were prohibited from directly accessing the internet during the game jam, as per our ethics protocol.

The term ‘build’ is commonly used by Minecraft and other game makers to describe their creations.

All the participants were asked to suggest a ‘code name’ or pseudonym for themselves that the researchers could use in any reports or writings about the study.

All but one of our teams comprised participants and researchers who did not know each other prior to the game jam. The sole exception was a pair of brothers who insisted on joining the same team. Three other sibling pairs participated in our study, including one set of twins, all of whom happily agreed to be on different teams.

References


