Flow It, Show It, Play It: Hair in Digital Games

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ABSTRACT

This paper proposes digital hair as a lens through which to explore a number of issues surrounding culture and representation in videogames. While the difficulty of creating hair which looks and moves in a photorealistic manner is notorious in both animation and digital games, the effortless ability to create hair which carries with it social and cultural meaning has not been examined with the same fine-tooth comb. Sociologists and anthropologists from Sir Edmund Leach to Emma Dabiri emphasise how hair can carry a multitude of social, cultural and political meanings, and this paper argues that many of these are carried over into digital worlds. These meanings are examined here in terms of the colour, length, and texture of digital game characters' hair in relation to culture, gender, and race, providing further avenues for the exploration of representation in digital games.

Keywords

Hair, representation, gender in games, race in games

INTRODUCTION

Realistic hair, be it human or animal (or something else altogether), is notoriously difficult to draw, animate, and render, so much so that it has been a measure of great animation and photorealism for decades. As Plante, Cani, and Poulin note: "Since the first appearance of synthetic humans in computer graphics, hair has been a major obstacle in producing realistic characters." (2001, 139) In video game development, the ability to create hair that looks and moves as 'real' hair does has led to the development of specialised software libraries like AMD TressFX and Nvidia Hairworks, which tackle the physics and rendering difficulties of believable hair.

While the relationship between the appearance of digital hair and its appearance in real life has been explored from a technical perspective across animation and games design literature and courses, the social and cultural significance of hair in relation to digital games has remained tangential at best. In other words, the relationship between the appearance of digital hair may not have always been realistic (particularly not photorealistic), but it has always carried real-world meanings. Like all aspects of representation, digital hair has reproduced the cultural, social, and political meaning that real hair has carried and constructed across civilisations, even when its appearance has fallen short of the real thing. This paper begins to explore the meaning of digital hair in games, its importance, and its potential. As an initial dive into the representation of hair, this paper focuses on qualitative explorations of the head hair of prominent protagonists.

THE IMPORTANCE OF DIGITAL HAIR

The study of hair in fields like anthropology, psychoanalysis, sociology, and history has demonstrated the undeniable significance of hair in culture and society. As Ferrante explains: "There is ethnographic material on cultures from much of the world to demonstrate the social significance of hair. Styles of wearing hair on the head and body represent group differences, crisis situations (especially mourning), rites of passage, and different allocations of social power." (Ferrante, 1988, 219) While Ferrante describes hair as significant in a broader sense (socially and culturally), Lowe focuses on the importance of hair to the individual, as an expression of identity, as well as focusing on its materiality:

> "It matters. It has an incredible power to annoy your antagonists, attract potential lovers, infuriate your neighbors, upset your parents, raise eyebrows at work, find compatible friends, and allow you to create, or recreate, your identity. While we think of it as a part of ourselves, it's also an object, one that can last for centuries in a locket or a grave, and cultures worldwide suspect that it might, at least under certain circumstances, hold your soul." (Lowe, 2016, p1-2)

These two explanations of the roles that hair can play already illustrate the variety of the possible angles from which hair can be explored. Hair can be a personal choice, but is also subject to social and cultural regimes and even laws. Hair is important to individuals, to society, to culture, it is part of rituals from birth to death, and it can outlive us all, despite never being alive at all. Hair carries many of these meanings across into digital worlds.

Here, social and cultural meanings are ported, either unintentionally, or often as semiotic shorthand, into character design, as they are in other media. Due to the specificities of the medium, there are also aspects of games which relate to issues of identification in unique ways. For instance, in games where players can customize aspects of the player-character's hair, the choices available can create new avenues for self-expression and identification or limit them in disconcerting ways. Hair can certainly have a stronger bearing on players' emotional investment in characters.[1]

The meanings of hair are not only multiple, but mutable. Lowe notes that "while hair styling has meaning, that meaning is not fixed or universal – it changes with time, place, and social group – and in secular settings it can mutate practically overnight." (Lowe, 2016, 11). An example that he notes is the shaving of hair, which can have a wide variety of meanings whether it is religiously motivated (as an offering to specific gods, for instance), socially imposed (such as marking a significant life event, like the death of a spouse often also religiously motivated), imposed in certain extreme situations (such as undergoing cancer treatments like chemotherapy or even as part of the dehumanisation imposed by concentration camps on their victims). The absence of hair can, thus, act as a visual marker of any of these practices, as well as cultural or subcultural status, or be a personal choice with other motivations altogether, all of which can be observed in video games.

Fully bald protagonists are relatively rare, but prominent examples illustrate their diversity, although common elements also appear. For instance, religious motivations appear clearly in the implied tonsure of the monk Aaang (original appearance in a video game in *Avatar: The Last Airbender*, 2006) and yogi Dhalsim (original appearance in *Street Fighter II: The World Warrior*, 1991), the latter also illustrating how protagonists who are part of a larger roster from which players can choose tend to rely more heavily on stereotypes. Baldness can also indicate a type of liminal

humanity, whether it is the primitive humanity of Bonk (initially appeared in *Bonk's Adventure*, 1990), the post-humanity of *Hitman* series' Agent 47[2], a genetically enhanced clone (initially appeared in *Hitman*, 2000) or the half-humanity of demigod Kratos, the eponymous *God of War* (initially appeared in *God of War,* 2005). The two latter characters can be described as antiheroes, and thus mirror the bald heads of many antagonists, including Sonic's Dr Eggman, *Knights of the Old Republic*'s Darth Malak, and *Punch-Out!*'s Bald Bull. The meaning of a bald head is further complicated by procedural elements of the games themselves, and differences between embedded and emergent narratives. To illustrate this, two examples have been chosen here because of their contrasting uses of baldness: *Assassin's Creed: Origins* (Ubisoft Montreal, 2017) and *Space Station 13* (Anon, 2003).

In *Assassin's Creed: Origins*, an early cut-scene prominently features the quasi-ritualistic shaving of the lead character Bayek by his wife Aya, whose destinies unfold during the Ptolemaic Kingdom of Ancient Egypt. This is an extended scene in which we see the two together for the first time, and a rarity in that shaving is actually included, thus emphasising the narrative meaning of Bayek's subsequent bald head. It begins with the two sharing a tender moment and updating each other on the progress of their revenge quest for their murdered son, which the couple are pursuing independently. It continues with a passionate moment of love making, after which we see them together taking a bath, and we see Aya shave Bayek's hair and beard. The postcoital moment describes the intimacy of their relationship, both in terms of the trust they clearly have in each other, and in terms of the implied history that exists between them. This is, of course, a heavily gendered ritual as well, with Aya performing the grooming, this intimate labour of caring, but this hierarchy in the heterosexual couple is somewhat undermined by their conversation, and Aya's almost threatening description of the violent acts she had previously committed with the same knife. The gesture is framed as a gesture of affection, rather than submission, and Aya often reclaims her independence throughout the game, and this forms an essential part of their mutual trust. Bayek doesn't only trust Aya with a knife near his throat, but this appears like a long-practiced habit, in which Bayek will leave his hair and beard to grow while he is apart from his wife, in a quasi-religious ritual, and as a symbol of their relationship. It is also worth noting that, as Lowe describes, letting hair grow out is often a gesture of mourning, and was also practiced by Ancient Egyptian priests, albeit far earlier than the age in which *Assassin's Creed: Origins* is set. Nevertheless, Bayek growing his hair and beard can be interpreted as part of his mourning for his son, and the ritualistic shaving as coming out of the initial period of mourning, aided by his wife.[3]

Baldness carries a completely different meaning in the community-driven multiplayer hardcore simulation game *Space Station 13*. The game features a character creator in which people can name their characters and customize them to some degree, although this is relatively limited due to the pixel graphics of the game. Here, being bald is the equivalent of being inexperienced, as it is the default setting in the character creator. It demonstrates that the player has not invested sufficient effort in developing their character before joining a round. Playing bald means playing with the default settings, and thus not committing to a game that clearly requires a significant amount of dedication from its players, dictated by its player-base. A 'baldie' is thus likely to be looked down-upon and likely harassed, if not even killed. Having a bald character is so clearly related to being new to *Space Station 13* that a forum thread on the topic of first experiences with the game is titled "We were all bald once." (Thundy, 2015)

These two examples are meant to demonstrate the breadth of meaning that the same hair, or in this case the lack thereof, can evoke, in terms of the different types of narratives at play, and different game genres, even beyond the complexities of

societal, cultural, and personal contexts. In *Assassin's Creed*, the cut-scene describes a singular moment of intimacy, and Bayek's subsequent shaved head represents his relationship with his wife and their son. In *Space Station 13*, on the other hand, it is a signifier of inexperience applicable to any player-character during any round. It is also important to note that both examples are of bald heads as choice rather than male pattern baldness or alopecia. One is embedded, one is emergent, in that one is part of the embedded narrative, while the other emerges out of player behavior. One communicates something about the player-character to the player, while the other communicates something about the player themselves to the rest of the players of the game.

If the same hairstyle (or lack thereof) can have such drastically different meanings, it becomes evident that different types of hair can produce limitless combinations of meanings in videogames, as they can outside of digital worlds. For the purposes of this paper, therefore, the aspects of hair which will be discussed need to be clearly delimitated. Firstly, the focus will solely be on head hair, and facial and body hair will not be discussed. Furthermore, it will focus on three specific characteristics of hair and the way in which they relate to three specific socio-cultural issues: colour and its relationship to culture, length and its relationship to gender and sexuality, and finally texture and style, and their relationship to race. These will be explored through the textual analysis of three specific case studies, whereby each ideally exemplifies the complexities of each topic. It needs to be noted that while these issues are considered as isolated here, they are all inter-related aspects and interrelated socio-cultural issues. For example, hairstyles relate to culture, gender, and races simultaneously. The final example discussed in this paper will focus on hair as central focus of gameplay and the acknowledgement of its cultural status.

COLOUR

All hair colour is semiotically charged: neither the golden locks of princesses from Peach to Zelda, nor the relatable brown of action heroes from Gordon Freeman to Nathan Drake are purely aesthetic choices; the golden locks of princesses denote at the very least a particular kind of angelic innocence (if not an Aryan ideal), while brown tresses are an almost universal (in Western countries) symbol of the everyman, and un-natural colours like blue, green, or purple, can also act as semiotic shorthand in variety of circumstances. Each of these choices could (and should) be the topic of an entire paper; however, rather than providing a necessarily cursory overview of what different hair colours could mean in games more broadly, this section will focus specifically on the colour white, as it bridges what is perceived as natural (due to ageing) and what is perceived as un-natural (often due to magical interference). Geralt of Rivia's white locks exemplify both, and their meaning is both broad (cultural) and specific (narrative) Because of the way in which they exemplify both, and communicate a myriad of both narrative-specific and broader cultural meanings, the locks examined in this section are those of Geralt of Rivia, protagonist of the *The Witcher* fantasy RPG series (2007-present), as well as the Andrzej Sapkowski novels on which they were based.

Within the narrative of the games, Geralt is said to have obtained his white hair as part of the dangerous process of becoming a witcher (The Trial of the Grasses), which involves demon mutagens which give him superhuman abilities. Few of the other witchers have white hair, however, and this is because Geralt had an even higher tolerance to these than most, and thus this extraordinary level of experimentation turned his hair white. His hair is thus a symbol of his uniqueness, as well as his hypermasculinity – he suffered through more trials than his fellows and that makes him more powerful, more masculine, and more solitary. His white hair is a marker of

his exceptional status, as well as common semiotic shorthand for the supernatural, in male characters particularly a morally neutral (or even demonic or evil) supernatural (see Sephiroth in Final Fantasy VII [Square, 1997]). While white is not necessarily considered an unnatural hair colour, it often presents as such in characters who are otherwise too young for their hair to have turned this colour, or at least do not present other signifiers of old age, marking characters as unusual, or magical[4], as is the case with Geralt, who, in the tutorial section of The Witcher 3: The Wild Hunt (CD Projekt Red, 2015), has whiter than that of his much older mentor, Vesemir. While Geralt is described as "near a century old" by his mentor, the rest of his appearance (more youthful skin and physique) suggests a much younger man, because within the lore of the books and the games, witchers are known to live for hundreds of years, and indeed only the much older witchers like Vesemir have graying hair.

The use of white hair as a signifier of the magical and the exceptional is common in both Western and Japanese genre fiction. This occurs to such an extent in anime and manga that in the transmedia franchise Angel Beats! , titular character Angel is presumed to be magical by the other students because of her white hair, making her lack of magic exceptional. This is, however, not necessarily culturally specific, and can also be observed in Western comic books from X-Men's Storm to Supreme's titular character, wherein gaining or activating magical powers often turns characters' hair white. This is also often a sign that the magical powers that the characters are tapping into are evil – or at least designed to be evil or have a demonic origin, as with Dante's demon blood in the Devil May Cry series.

Like all other aspects of hair, this meaning is not universal and not immutable, but can be interpreted in context to be a broader signifier. Hair is, in fact, often associated with ritual and magic. In his seminal essay Magical Hair, Sir Edmund Leach describes numerous religious rituals which involve hair, and the invoking of its magical properties, which form part of innumerable cultures' beliefs. (Leach, 1958) While his essay focuses on the relationship between these rituals and sexuality, it is clear that there are aspects which relate to magic and hair which can be applied here. Leach argues that "ritually powerful human hair is full of magical potency not because it is hair but because of the ritual context of its source, e.g. murder, incest, mourning etc. It is the ritual situation which makes the hair 'powerful', not the hair which makes the ritual powerful." (Leach, 1958,159)

In the Witcher series, Geralt's hair does not hold power, but was obtained as part of the ritual (and, depending on the source, subsequent experimentation) that granted him extraordinary powers. It is a permanent marker that is additional to the cat-like eyes that all witchers have in the games. Like The Lord of the Rings' Gandalf the White, Geralt is transformed and empowered, and his hair is a permanent marker of his strength, his exceptionality, and his magical prowess.[5]

Geralt's hair, however, also has another significance in the games: it links him to his adoptive daughter Cirilla. Her hair is described as "popielate włosy" in the books and commonly translated as "ashen" in the books and games, but appears much closer to Geralt's white locks in the ludic adaptation, particularly in The Witcher 3: The Wild Hunt. The reason for this is evident: hair is, of course, a hereditary trait, so the similarity in terms of hair colour emphasizes their familial bond. At the same time, Ciri's hair is also inherited from her biological family, specifically her mother Pavetta and grandmother Queen Calanthe, and is thus also a marker of her hereditary princess status, her most significant relationship in the game is with Geralt (and, to a certain degree, Yennefer, who acts as an adoptive mother). The player is only introduced to an already-orphaned Ciri, and the way she plays also mirrors Geralt's style in some ways, and her unique talents in others. (Bertrand, 2017, p. 13) Her hair is thus clearly

a visual representation of their bond, which is so strong that it appears hereditary even when they are not biologically related, but also her independence and individual talents.

To conclude, hair colour, as exemplified through Geralt's distinctive white, is, more often than not profoundly semiotically charged, and can play a number of narrative functions within games, as in other media. Geralt's hair colour is significant as visual marker of his relationship to Ciri, one that is distinctive amongst gaming fatherhoods, as, as Bertrand argues, "patriarchal authority is neither reinforced nor restored, but rather challenged, with a possible opening on an alternative mode of fatherhood and paternal masculinity." (2017, p.14). Furthermore, his hair colour is so significant to his persona and personality that it is commemorated in his sobriquet, The White Wolf.

LENGTH

In 1986's *Metroid*, the famous reveal that the player-character Samus is a woman, can occur (or not) in a number of ways, depending on the skill level of the player: the 'bad' ending will reveal nothing, leaving Samus completely covered in her spacesuit (which she had worn throughout the game), while the 'best' ending will leave her in a particularly revealing bikini; however, the 'neutral' ending (somewhere in between in terms of skill level), will only remove her helmet revealing her long red locks. Alongside the reddish pixels representing her rouged lips, her hair is here the minimal required signifier of femininity. (Nintendo R&D1 and Intelligent Systems, 1986) Depending on the version of the game (in terms of platform, for instance), this can be reduced to hair alone. It is, thus, clear that beyond the bows and rouged lips that marked early characters like Ms Pac-Man as feminine, long hair was also a relatively early marker of gender within videogames, from Lara Croft's (mostly braided) locks to *Horizon Zero Dawn* protagonist Aloy's 'tribal' do. (Sony Interactive Entertainment, 2017)[6]

This section focuses on a protagonist whose hair is particularly central to her character: Bayonetta, the eponymous protagonist of the Platinum Games 2009 hack and slash. Her sexuality, power, and femininity are all uniquely embodied in her tresses which both clothe her body and are used to perform deadly attacks. While there are earlier examples of female characters with long hair who perform hair attacks – most notably Shantae of the eponynmous game series (first appearance in Shantae, 2002) – Bayonetta's uniquely sexualised attacks make her an ideal case study to illustrate the semiotics of long female hair. Indeed, Krzywinska describes the game as an "an ambiguous mix of power and objectification" (2015, 31) Phillips similarly describes Bayonetta herself as "a figure that easily fits within the trope of the hypersexual action heroine" but argues that "she disturbs this role with a queer femininity that reaches out through the game's technical apparatuses to implicate the gamer in its own pleasures while deftly avoiding the game camera that is programmed to prioritize battle over titillation in crowded visual scenes that resist easy viewing." (2020, pp. 104-105) Throughout the first game in the series, Bayonetta battles amnesia and a great variety of angelic antagonists, with the aid of her magical powers, largely imbued in her hair, which both reflects and resists ideals of femininity, like the protagonist herself at times resists and at times engages directly with the camera.

The association between hair length and gender is the most evident. As Ferrante states, "One of the most frequently noted symbolic and ritual uses of hair is in association with expressions of gender. Men and women, guided by social norms, arrange head and body hair to reflect larger cultural conceptions of masculinity and

femininity, of sex roles, and of changes in social-sexual status." (Ferrante, 1988, 220) In contemporary Western societies, this association can be summarised very simply as long hair being associated with femininity and short hair with masculinity. As Dabiri explains: "The world around us fuels a powerful narrative about hair and femininity. From fairy tales to advertisements, movies and music videos, our icons tend to be lusciously locked. For girls and women, femininity is intricately bound up in hair. For a long time long, flowing hair remained one of the most powerful markers of being a woman." (Dabiri, 2019, 10)[7] The power of these associations and their role as social norms becomes most evident when they are transgressed. For instance, Tarlo discusses the power of hair as a symbol of femininity becoming most evident when it is cut off, which, in the early decades of the twentieth century in the US (and gradually across the globe), "ate away at the very boundaries that distinguished men from women and women from men." (Tarlo, 2016, 6) Similarly, in the 1960s and 1970s in America (and gradually in Western societies), men started growing out their hair as a symbol of the subcultures they belonged to, as well as the broader social and political unrests which underpinned them, once again blurring the lines between men and women. As Lowe notes, "male hippies were hated for looking like women, which makes sense in the logic of gender distinctions." (Lowe, 2016, 6)

The importance of the gender-coding of hair is further described by Lowe as follows:

> "Throughout the history of our species, rapid gender identification of strangers has been essential for survival (and potentially sex.) While it is probable that there have always been gender-bending individuals within human societies, all cultures have created clear rules of dress and hairstyling to indicate gender and (usually) marital status. In general, we humans have a low tolerance for ambiguity." (Lowe, 2016, 6)

For videogames, ambiguity was enhanced because of the pixelated nature of their characters throughout their history, thus making the need for semiotic shorthand even stronger. In the days when groups of pixels were starting to look more believable as representative of human figures, the genders of these figures could not be indicated with any kind of nuance. Therefore, female characters needed to be gendered through pink bows, red lips, and flowing locks as indicators of femininity, while masculinity did not really need visual gender-coding that was so specific, as it was most often considered the default gender for video game characters. Games have come a long way in terms of graphical fidelity, but not necessarily in terms of drawing on contemporary understandings of gender performativity. (Butler, 1999) In other words, long flowing locks are more often than not an indicator of femininity, and Bayonetta is no exception.

Bayonetta's hair is long, and styled in a type of adorned beehive, but it is also her costume – her black catsuit understood to be an extension of her head hair throughout the game. Character designer Mari Shimazaki explained that she insisted on the beehive as a more modern replacement of the witch's pointy black hat. (2009a) In the second instalment of the series, *Bayonetta 2* (Platinum Games, 2014), she gets a makeover which includes a haircut. Describing her now short haircut, Shimazaki mused: "I think her shorter hair gives her a generally more masculine look." (2014) To her, the associations between length and gender are straightforward.[8]

Hair is not only used here as a symbol of power, or femininity, however, but of sexuality as well. Leach argues that the sexual associations of hair, and particularly hair rituals have "been apparent to anthropologists from the beginning," (Leach, 1958, 150) His work and that of many others mentions numerous practices from around the world which link hair, sexuality, and ritual or magical practices (Leach,

1958; Ferrante 1988; Ebersole, 1998; Tarlo, 2016). Furthermore, hair is also associated with holding power, like in the biblical story of Samson and Delilah. Bayonetta's own literal fight against religion, with antagonists described by Phillips as "a thinly veiled analogue of the Catholic Church" (2020, p. 120) also exemplify her refusal to be restricted by what Milliken calls the church's "focus on women's hair and the need to restrain it" because of its relationship to sexuality. (2012, p. 4) [9]

It needs to be noted here, however, that the relationship between power and sexuality is significant even without hair as a mediator. The relationship between female sexuality and female power is particularly strong in videogames. In a 2016 study, Lynch et al conducted a content analysis of female characters in 571 games, finding a direct correlation between the sexuality of female video game characters and their capability. (Lynch et al, 2016) This is directly represented in *Bayonetta*, and her constant flirtation with virtually every mature character and, arguably, the player, manifests itself in a number of ways. For instance, the 'camera' commonly focuses on her rouged mouth, and her beauty mark, double signifier of both sex symbols from Marylin Monroe to Cindy Crawford, and of course witchcraft. Specifically, the camera often focuses on lollipops that the character often consumes, which become part of the gameplay, as different lollipops (of different shapes and colours) can confer different bonuses during combat. The associations hardly need further unpacking here, but her overt and even aggressive sexuality is also often seen as different from that of other videogame characters. Phillips, drawing on micha cárdenas, deems it a form of "femme disturbance," described as "the propensity of femininity to disrupt phallic power structures through its own excess." (2020, p. 121) For Cross, her strong characterization is part of what sets her apart, in that "her personality comes through via a sexual expression that weaves into combat, which weaves into kink, which weaves into the story." As Cross further notes, Bayonetta "wears an impish smile that feels inspired by the infernal realms whose denizens she commands. With her hair." (2016) Her hair thus uniquely distills her sexuality and becomes the literal focus of her power.

In other words, the two associations – of power and sexuality – are uniquely distilled in *Bayonetta*. Not only does her hair cover her body in the game, but it is necessary for her to use this hair – leaving herself nearly nude and posing sensually– in order to perform more powerful attacks.[10] These attacks – titled "Wicked Weaves" – use hair as a 'conduit' to summon forth demons, and require specific combinations of attacks to be performed. These manifest themselves most often as oversized limbs ostensibly made of hair (fists or high-heeled-shoed feet), which exit portals during these attacks. Thus, players' skills and experience are rewarded both with more powerful attacks and with the protagonist's nudity. The finishing moves takes these attacks to their extreme. Leaving hardly any room for subtlety or interpretation, these are titled "Climax Situations" and summon the largest demons available - animal-shaped figures of hair which will deal severe damage to opponents. During these attacks, the camera lingers the most over her naked body. There is also more than a slight BDSM undertone present here, with torture devices and violent attacks and sexual innuendo and lascivious camera moves superimposed throughout the games. As Cross described, "she is the dominatrix whose gun-toting-boots you walk in with style and whose whipping hand never seems to grow tired. She's the domina superheroine I wish I was able to grow up with, truth be told." (Cross, 2016)[11]

Overall, the relationships between hair and gender, sexuality, and power are uniquely synthesized and made literal in *Bayonetta*.[12] In this, the performativity of gender appears to be emphasized, and both Coville and Harper see it as aligned to drag and camp. (Coville, 2015; Harper, 2018) In her performance, like in many drag shows, hair has irrefutable power and contributes to the construction of a heroine whose

"queer sexuality reaches beyond the screen to implicate the gamer in its own pleasures, disturbing the narratives we tell about what it means to be a gamer, or a woman, or a slut, or a hero in contemporary times." (Phillips, 2020, p. 121)

TEXTURE AND STYLE

Hairstyles may be seen as the most complex of the hair characteristics loosely explored here, even if through sheer quantity – there are simply more hairstyles available than, say, possible lengths. While Geralt's medievalist half-pony or Bayonetta's witch-beehive are meaningful in their own ways, the semiotics of hairstyles become significantly more poignant when considered in combination with hair texture, in particular the absence of Black hair textures and styles. Emblematic of what hair choices fail to represent are games which feature character creators and customization options, where hair textures and styles that reflect and represent Black or African hair and Black and African cultures are not paid the same attention. A player can more easily encounter hairstyles that can be customized to match their personalities (like *Animal Crossing: New Leaf*) than hair that matches their actual texture and style, reflecting racist attitudes whereby 'good hair' can be more significant than skin tone. (Dabiri, 2019, 13-29) Through character creators and customization options, videogames perpetuate such attitudes, in that straight hair remains fundamentally the default texture. This is one of the main topics of discussion throughout the Kickstarter-funded YouTube Series *Invisibility Blues*, which focuses on the representation of race in games. The first episode of the series focuses on character creators explicitly, critiquing the affordances in *Elder Scrolls V: Skyrim*, *Elder Scrolls: Online*, and *Dragon Age: Inquisition*. The race essentialism typical of such fantasy gameworlds had already been examined elsewhere (eg. Monson, 2010), and *Invisibility Blues* furthers this argument, by expanding it to a discussion that focuses explicitly on hair, where Samantha Blackmon and Alisha Karabinus analyse the limited options of both head hair and facial hair in all three games. In his 2013 analysis of 65 RPGs and MMORPGs with character creators, Dietrich finds similar issues, whereby "hairstyles [..] were overwhelmingly variations on straight hair (with a handful of curly), but very few hairstyles could be naturally worn by those with "African" hair, including something as simple as short-cropped natural hair," further noting that "forty-two of the games examined had no such hairstyles." (Dietrich, 2013, 90) Upon additional examination, fewer than 10% of MMORPGs and only 20% of offline RPGs offered three or more "African" hairstyle options. 90-93)

These games exemplify a wider issue, whereby even in more detailed character creators, hair and facial features do not appear to be as much of a concern as skin tone, and straight hair remains the default. Black hair is at the very least a low priority, and at its worst, excluded. This resonates with real life attitudes towards black hair, where, as Tarlo notes, African-American women feel like the 'necessary' manipulation of their hair as children teaches them that "black hair in its natural, kinky, frizzy, curly, or so-called 'nappy' state was undesirable, unacceptable even." (Tarlo, 2016, 138). Dabiri takes this argument event further, noting that "hair-straightening for people of African descent emerges from a traumatic historical legacy." (Dabiri, 2019, 11) In other words, videogames further force black players into straight hair, to a certain degree furthering this trauma, by providing default hair options that are almost inevitably straight, and limited options in terms of styles.

There are few exceptions to this sad rule, and one of them is a problematic game that encapsulates a large proportion of the debates surrounding videogames in the 21st century: *Grand Theft Auto: San Andreas*. (Rockstar, 2004) *San Andreas* is a widely critically acclaimed and commercially successful game; it is complex, problematic,

and controversial, and it pushes boundaries in a variety of ways, including its violence, its nostalgic appropriation and remediation of 1990s American Black culture, its representation of gender and race, its sexual content (and the ratings controversy that ensued), and its grounding in real-life events including the L.A. Riots of 1992. The significance and complexity of *San Andreas*, as well as its position within the *Grand Theft Auto* franchise, have made it an ideal object of study, with much of Garrelts's edited collection *The Meaning and Culture of Grand Theft Auto: Critical Essays* (2006) focusing on this particular installment from industrial, cultural, aesthetic, and sociological perspectives, as well as significant works from Miller (2007, 2012), Morray (2005), and Leonard (2006).

Throughout the writing surrounding *San Andreas*, racial representation is a recurring topic, with the protagonist of the game, Carl Johnson (CJ), inevitably at the centre of many of these concerns: he is at the same time one of the (still) rare protagonists of colour in any videogame, while also conforming to stereotypes of a 'gangsta', doomed to a life of crime that players can vicariously indulge in. The importance of CJ's body is emphasised by Murray, who argues that:

> "With San Andreas, Rockstar has taken the poor black male body, which is encoded as a human stain on the fabric of a squeaky-clean American dream of opportunity, and pushed it into the center of our attention. This abject presence constitutes a reminder of a shameful history of genocide and slavery. Ideologically configured as base, grinning, dirty, incarcerated, and exhausted, the black body is the remnant of a national equation; a glitch that cannot be assimilated into the system. But now, that signifier of the black body, that shell upon which so many negative associations has [sic] been projected, becomes a mirror for a thorny cluster of societal relations in America." (Murray, 2005, 96)

The significance of the Black body in this context is also dictated by the amount of control the player has over it, not only in terms of movement and action, but also in terms of diet, exercise, clothing, and hair. While Murray sees this as a focus on these societal relations, Leonard sees it as their consequence and perpetuation, noting that:

> "In both the demonization and celebration of the virtual reality offered through the GTA series, the horror and praise resulting from suburban bodies entering the otherwise impenetrable (segregated) world of gangstas, thugs, hip-hop, and ghettos, and the surrounding discourse of reception, dominant understanding of race, hegemonic rationalization (explanations) of contemporary social inequality, and the advisable methods (policies) needed to address current issues become visible." (Leonard, 2006, 65)

Scholarly discourses thus echo the wider debate surrounding *San Andreas*, its controversial discourses seen as both contributing to and subverting societal attitudes and beliefs about race. Nevertheless, the game's importance is clear on two counts: firstly, it is a mainstream game that imposes a Black avatar. The distinction between games that feature a black protagonist or avatar and games that impose one is important because, as Hitchens explains in survey of over 566 FPS titles (although FPS is defined loosely here), while the majority of videogames impose a caucasian avatar or at least offer one as an option, "only seventeen games were identified were the avatar's ethnicity is explicitly non-Caucasian and the player is given no other choice." (Hitchens, 2011) While this number is likely to have changed since the study was conducted, the rarity of *imposed* Black avatars remains problematic, even the most recent installment of the *Grand Theft Auto* series - *Grand Theft Auto V* (Rockstar North, 2013) - imposing three avatars, only one of whom is Black.

Furthermore, the extent of hair customization options offered in *San Andreas* remain unrivaled, even in other games which enforce a black avatar, like *Mafia 3* (Hangar 13, 2016), where customization only extends to outfit changes which include specific hairstyles. *San Andreas*, however, offers as many as 14 different hairstyle options at different barbers throughout the game, not considering colour and facial hair options. These include relevant African-American styles from the 1990s (and not only), amongst which Cornrows, an Afro, and a Jheri Curl. Hair may seem like a minor point within the whirlwind of signifiers that is *San Andreas*, but its uniqueness in the videogame landscape is telling.

Leonard argues that the game offers "the presumed opportunity to 'become' a black thug or visit America's ghettos, fulfill longstanding fears of black sexuality, physicality, and violence, contributing to a particularly powerful panic centering on the affects of virtual blackness on white suburban youth." (Leonard, 2006, 54) Conversely, Annandale feels that "the denounciations from on high ironically grant the game the very powers the hegemonic forces fear," even arguing that "playing the game therefore becomes an act of unauthorized rebellion." (Annandale, 2006, 102) Whichever side the game falls, it becomes clear that the consideration for Black culture within it exceeds that of most AAA games. While Miller points out that "it is African-American music that receives the richest, most thorough, and most historically-aware treatment." (Miller, 2007, 421) within the game, the consideration afforded to hair suggests further nuance. This is also evidenced in later installments of the *Grand Theft Auto Series*, specifically *Grand Theft Auto V*, which also features a number of barbers where the three protagonists can change their hair. Here, the Black protagonist Franklin has significantly more head hair options (20) than his caucasian counterparts (5 each for Michael and Trevor). As Dabiri notes, "hair occupies a position of greater significance in African and African diaspora cultures than in most others." (Dabiri, 2019, 30) This appears to be reflected in the *Grand Theft Auto* series. This is not to 'defend' the series and its representation to race, but rather to emphasise that one of the most problematic series in terms of representation remains to this day one of the few (with the exception of sports games like NBA 2K20 [Visual Concepts, 2020]) to give such consideration to hair as part of character customisation. [13]

San Andreas thus remains an exception that only emphasizes the shockingly white virtual worlds which we habitually inhabit. As Dietrich notes, "It is one thing to live in a world where most white people live within a "white habitus" sheltered from contact with racial and ethnic minorities, but it is quite another to explore, socialize, and play in a virtual world where one is not just isolated from non-whites, non-whites simply do not exist." (2013, p. 95)

HAIR NAH AND OVERT POLITICISATION

So far, this paper has largely focused on how broader social and cultural issues can be analysed through the lens of digital hair in videogames. This last section will focus on quite a different angle: how videogames can use hair to discuss broader social and cultural issues.

In 2016, Solange sang:

> Don't touch my hair
>
> When it's the feelings I wear
>
> Don't touch my soul

When it's the rhythm I know

Don't touch my crown

They say the vision I've found

Don't touch what's there

When it's the feelings I wear.

The song, poignantly titled "Don't touch my hair", is referenced in Emma Dabiri's eponymous book, and echoes the feelings of countless Black women. (Dabiri, 2019, 82) The mere fact that Dabiri chose this as a title for her book, which explores black hair from a historical and sociological perspective, focusing on the history of colonialism and slavery, demonstrates how significant the experience is to many Black women. Momo Pixel also cites Solange as the influence for one of the hairstyles in her game which would become an indie sensation: *Hair Nah* (Wieden+Kennedy, 2017). The significance of the game is such that it opens Gray and Leonard's *Woke Gaming: Digital Challenges to Oppression and Social Injustice* as a rare example of antiracism in an otherwise problematic cultural landscape. As Gray and Leonard note, "both the game and its resonance captured a convergence of powerful contemporary racial and gendered dynamics and histories, from Black hair politics to the history of white supremacy as it relates to the hyperpolicing and surveillance of Black women's bodies, from the daily toll of racial microaggressions Black women face to the exhaustion of our current political moment." (Gray and Leonard, 2018, 3)

The game focuses on the intrusive gesture referenced in both the Solange song and Emma Dabiri's book: it puts the player in the shoes of Aeva who, as the first screen describes "loves to travel, but is hesitant because people often invade her personal space by touching her hair without permission." Players can then choose a skin tone, one of twelve hairstyles, including bantu knots, afros, and braids, and one of three destinations (Osaka, Havana, and Santa Monica Pier), before proceeding to defend their hair. Then, players need to use their mouse or arrow keys (the game is PC only) to swat invading hands away and fill the 'Nah!' meter before the time runs out (but without swatting too much, as that will cause the meter to run down). As the game proceeds, invading hands proceed to try and touch the player-character's hair, accompanied by frustrating statements including "Ooh, it's so fluffy", "Is it attached to your head?", and "Can I touch it?", the latter clearly a rhetorical question.

As the game progresses, a pixelated chibi-style character encourages the player with shout-outs such as "Come thru melanin! You better show out!" The game ends when the player-character has reached her destination and achieved her goal of swatting the hands of white people away. As the final screen of the game notes: "The game is over but this experience isn't. This is an issue that black women face daily. So a note to those who do it: STOP THAT SHIT." The message could not be clearer. As Gray and Leonard explain, "The game and its narrative construction locate structural oppression in the everyday. Playing this game highlights the power and potential of resistance of everyday and systemic violences within everyday cultural engagement." (Gray and Leonard, 2018, 3) While videogames often unintentionally perpetuate meanings and beliefs from the real world through the design of characters' hair and the options that they offer their players, *Hair Nah* uses hair as the means to communicate its anti-racist message.

In interviews, Momo Pixel, the creator of the game (as well as its art director, co-writer, and pixel artist) describes some of the design choices in *Hair Nah* that focus on representation and gaming: "The skin tone page, for instance. I purposefully put the dark-skinned women at the top because the world often tries to place them at the bottom. That wasn't going to happen in my game." (Wheeler, 2017) This small decision that fights against colourism is one of the many significant decisions in the game that make it a subversive challenge. Every frame, every mechanic, every reward in the small, free game, is, as Momo acknowledges, purposeful, addressing both the offenders of this micro-aggression, and its targets. As Momo notes: "The game is for everyone, but at the core it's for black women. I am a black women [sic] and I want to make something for us because there are a lot of things that aren't for us." (Weatherford, 2017) The public responded and the game quickly went viral on Twitter, followed by numerous reaction videos on YouTube from black women who found the game relatable and cathartic.[14]

Hair Nah demonstrates the possibilities for expression and political engagement that games can offer to creators, irrespective of background or design experience.[15] Moreover, as Gray and Leonard argue, "from its conception to reception, *Hair Nah* exemplifies the yearning for transformative games." (Gray and Leonard, 2018, 4) Alongside the works of Solange, Emma Dabiri, and many others, *Hair Nah* makes a powerful statement that is not really about hair, but about the experiences of Black women, and the continuing fight against racism.

CONCLUSIONS

The title of this paper references the lyrics of the title song of eponymous music. *Hair: The American Tribal Love-Rock Musical*, which opened on Broadway in 1968. After its origins Off-Off Broadway (Wollman, 2009, 42), the show's run on Broadway and subsequent tours naturally (and intentionally) elicited controversy, and as Wollman describes: "while some audience members perceived the musical as going too far, just as many seem to have felt that *Hair* did not go far enough." (2009, 56) The musical, arguably the first rock musical on Broadway, played with form and courted these kinds of controversies, whether perceived as a peek into the counterculture of the American 1960s for those outside of it, the commodification of the hippie, or a work of art that changed much about the musical as a form. What remains clear here is that *Hair* is unabashedly political, irrespective of how its politics may be interpreted, and its politics are unabashedly encapsulated in the long tresses of white hippie men and women, the afros of Black Power and 'Black is beautiful'.

The meaning of hair is at the forefront of *Hair,* as it is at the forefront of *Hair Nah*, but is perhaps even more powerful when it is not explicitly acknowledged, when its semiotic potency is taken for granted. This paper aims to begin looking at the subject of hair in digital games, but there are numerous avenues that are left unexplored: head hair is essentially an inevitable feature of all digital games that feature human (or humanoid) characters, even if animal hair is excluded, therefore there are a great variety of styles, colours and textures which could be examined. Further research on facial hair, as well as body hair would be particularly enlightening.[16] To conclude, this paper is only an initial exploration into the power of digital hair, from Agent 47's shiny head to Bayonetta's flowing locks, and CJ's barbers. Aeva's angry swatting begins to reveal the personal and political power that digital hair can carry, but much remains to be untangled in terms of digital hair's sociological, anthropological, and cultural significance.

ENDNOTES

[1] Players can become invested in hair even when they do not have a choice in its design, as becomes evident when famous characters undergo style changes that are seen as diverging too drastically from the original. For instance, in 2013, when Capcom decided to not only reboot the *Devil May Cry*, but hand over this reboot to the British studio Ninja Theory, its fans were not particularly happy. Much of their dissatisfaction seemed to focus Dante's redesign, which included a change of hair style and colour, his floppy silver locks transformed into a short black hairdo. The new hairstyle became emblematic of the problematic changes Ninja Theory had implemented, and of how fans perceived these changes, even before the game was released. (Edge Staff, 2015) Although the game was generally quite well received, gaining a Metacritic score of 85 and generally good reviews, its sales were disappointing, demonstrating, at least in part, how invested players were in Dante's floppy silver locks.

[2] In the case of Agent 47 specifically, there is the additional meaning of very short or shaved hair as symbolic of discipline. As Milliken notes, drawing on Hallpike, "the shorter the hair, the greater the discipline of the individual". (2012, p. 2) At the same time, Hallpike argues that cut or shaved head is "associated with re-entering society"; as they put it "cutting the hair equals social control", giving the examples of monks, soldiers and convicts (1969, pp. 260-261).

[3] The embedded meaning of the gesture is then somewhat undermined by the procedural ability to change the character's hair from a menu shortly after the cutscene. This can be seen as an example of ludonarrative dissonance, whereby the narrative of the digital game is seen to be undermined by its gameplay.

[4] The associations here, and their relationship to magic, can also be seen to mirror the association of people with albinism with magic, and magical rituals, which has even led to fetishism and murder in Tanzania, for instance, in the 2000s. For more on this, see Brocco (2016).

[5] This does not only echo Gandalf, but also characters of this archetype of wizard-god-wanderer or Jungian wise old man, from Odin to Merlin.

[6] Braids seem to be a popular choice, particularly for playable characters, potentially as they are perceived as more practical, while slight allowing for length. They can also be observed on famous female characters including Final Fantasy VII's Aerith (Square Enix, 1997), Street Fighter's Cammy (Capcom, 1993 - present)

[7] It is important to also note that Dabiri follows this up by noting that "that is not how Afro hair grows; generally, it grows up." (Dabiri, 2019, 10) In other words, this is not exclusively a question of gender, or indeed of length, but of direction and texture, and their association with whiteness.

[8] In another blog post, she also notes the semiotic significance of her hair colour, noting that "she carried strongly held, specific design cues such as witches being black with long hair". (2009b) Colour and length come together not only to signify feminine characteristics, but also witchcraft, further noting the association between hair and magic.

[9] This can also be seen as a reversal of what Milliken identified in Medieval art and literature as a trend toward featuring hair in the punishment of 'bad' women. (2012, p. 5) Here, Bayonetta does the punishing, and uses her own hair to do so.

[10] It should be noted that *Bayonetta* is not the first video game character known for her hair-based attacks. Another notable example is *Shantae* (WayForward Technologies, 2002), where the eponymous half-genie's signature move is her hair whip.

[11] It should be noted that there may be specific cultural connotations also at play here. As Ebersole notes, at one point in Japanese culture. "the long hair of young women was believed to have the power to attract *kami* or divinities, who would descend into it and temporarily reside there." (1998, 85)

[12] This is also emphasised in a particular scene in *Bayonetta 2,* wherein Bayonetta's actual weave (or rather a bundle of black hair) is held (and thrown around) by her opponent Jeanne as a symbol of the decline of Bayonetta's power. She has lost some of her hair - thus she has lost some of her femininity, her sexuality, and her power.

[13] It is also important to note that *San Andreas*, *Grand Theft Auto V* both have male protagonists, raising the question of variations in terms of gender. Dietrich also noted that there are more African hairstyles for male characters (2013, p. 97) in the games he analysed. Overall, this suggests that racist beauty ideals persist in the form of 'good hair' in digital worlds.

[14] BuzzFeedVideo posted a video titled "Women Play Hair Nah: Don't Touch Black Hair" that illustrates the variety of reactions to the game and has had over a million views (Retrieved from: https://www.youtube.com/watch?v=aphpJi5jKrM)

[15] Momo Pixel herself acknowledges her limited experience with digital pixel art prior to the development of the game and the important contribution of the rest of the team to the final artefact. (https://www.momopixel.com/hair-nah)

[16] An interesting starting point for the study of body hair may be *Conan Exiles* (Funcom, 2018), the survival video game in which the player character may start nude – or even play the entirety of the game nude. This is therefore one of the few games where pubic hair is visible, prompting a number of community discussions on the topic.

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