Reading out of context: Pornographic deepfakes, celebrity and intimacy

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Abstract: In this paper I bring together perspectives from porn studies, celebrity studies, and fan studies to bear on the issue of pornographic deepfakes. I identify two key questions that literature from these areas leads to with regards to deepfakes: To what extent are they a form of audience engagement with celebrity that seeks to access a private, intimate, or authentic person behind the star image? And to what extent are deepfakes created for circulation and enjoyment within a small community of practice as opposed to being intended for release to the general public? By comparing deepfakes to other types of sexualised audience engagements with celebrity, I show that they exhibit little concern with intimacy and the private, authentic person behind the star image, and that they are created and circulated within small communities of practice, who put effort into contextualising and containing them in those spaces. As a result, I argue that the reading of deepfakes suggested by the celebrity studies paradigm of intimacy and authenticity is insufficient, and that further work is needed to understand the kinds of meanings those who create, share and enjoy deepfakes make with them.

Introduction

Deepfakes came to the attention of the general public in early 2018, when social news aggregator site Reddit and pornography hosting site PornHub announced they were banning deepfake content from their platforms (Robertson, 2018; Hern, 2018). They had emerged

only shortly before then with the release of FakeApp, a relatively user-friendly piece of software that allows users to merge material from different videos, for instance superimposing one person's face onto video of another. While deepfakes have been used for political parody (Zucconi, 2018) and concerns have been raised about the technology's ability to create relatively convincing fake news footage (Schwartz, 2018), the use that has attracted the most media attention has been superimposing the faces of women celebrities onto pornographic videos. As a result, sites like Reddit and PornHub have grouped deepfakes together with revenge pornography under the heading of 'non-consensual pornography' and made efforts to ban them, and the communities who create, share and enjoy this material have moved to other, more niche, platforms.

Partly due to the recent nature of this phenomenon, deepfakes in general have to date predominantly received scholarly attention in AI research (Kim et al., 2018) and areas such as law and political science, which are concerned with the 'fake news' potential of the technology (Chesney and Citron, 2019). Pornographic deepfakes, in particular, have not been investigated from a cultural studies perspective yet. In this paper, then, I bring together perspectives from porn studies, celebrity studies, and fan studies to bear on the issue of pornographic deepfakes. I identify two key questions that literature from these areas leads to with regards to deepfakes: To what extent are they a form of audience engagement with celebrity that seeks to access a private, intimate, or authentic person behind the star image? And to what extent are deepfakes created for circulation and enjoyment within a small community of practice as opposed to being intended for release to the general public? I consider deepfakes within a wider context of what I call sexualised audience engagements with celebrity: audience-generated material about or featuring celebrities that is not

authorised, and that is explicitly sexual in nature. I consider audiences' intertextual reading and meaning-making practices, as well as the practices and paratexts the material is embedded in to answer the two questions identified. Specifically, I use secondary literature and my own past original research to compare deepfakes to three other types of sexualised audience engagements with celebrity: nude hacks (private, intimate images of celebrities obtained illicitly and shared beyond their original intended audience); Real Person(a) Fiction (RPF - a subset of fanfiction, frequently erotic, that fictionalises celebrities); and slash manips (still images created through digitally combining pornographic images with celebrity faces, created in communities that overlap with or are adjacent to RPF and wider fanfiction spaces). I show that unlike most of these other types of engagements, deepfakes show little concern with intimacy and the private, authentic person behind the star image, and that they are created and circulated within small communities of practice, who put effort into contextualising and containing them in those spaces. As a result, I argue that the reading of deepfakes suggested by the celebrity studies paradigm of intimacy and authenticity is insufficient, and that further work is needed to understand the kinds of meanings those who create, share and enjoy deepfakes make with them.

Intimate, authentic celebrity

There is a tension in literature on celebrity and audiences' engagement with it between viewing the celebrity purely as text on the one hand, and viewing them as a private person 'behind' the public image that the audience strives to see past on the other. Dyer's (2006) concept of the star image suggests a purely or predominantly textual approach to celebrity. The star image is made up from textual artefacts available to the audience: official materials such as public performances, unofficial material ranging from journalistic reporting to gossip,

and more recently material that blurs that boundary such as celebrities' interactions on social media. Other commentators, however, argue that the audience's fascination with celebrity is frequently based on the tension between that star image and an imagined private, *authentic* self. It is this quest for authenticity that drives much of audiences' engagement with celebrities. Marshall (2006) argues that this search for authenticity has in part been encouraged by celebrities themselves as a result of changes to media landscapes and the economics of celebrity. In this new environment, celebrities rely on disclosures hinting at a private, authentic person behind the star image to generate publicity for their work. Such disclosures may be more or less managed, ranging from carefully manufactured 'scandal' to paparazzi images in gossip magazines (Holmes, 2005). This dynamic adds a new layer between the textual construction that is the star image and the unknowable-to-most private individual. Van den Bulck and Claessens (2013) call this the 'official private persona' (p. 47).

This emphasis on intimacy and authenticity of celebrity can also be found in approaches to celebrities' sexualised performances and audience engagements with them. Lawson (2015), for instance, reflects on the implications of an incident in 2014 in which private, nude or otherwise sexualised images of mostly women celebrities were illicitly obtained from their private cloud storage accounts and released online. She positions the hack as an extension of audiences' desire to see behind the celebrity persona and gain access to a more authentic person, more specifically 'the authentic sexual woman' (p. 607). She points out a number of similarities and differences between the hacked celebrity nudes and amateur pornography: the domestic feel of the images gives the viewer a sense of intimacy and authenticity, of looking into someone's private life rather than at a professional porn performer, but unlike in amateur pornography, the subject here is not an everyday, ordinary person. The public exposure of

these private images, and the non-consensual nature of it, suggests that the viewer is getting a glimpse at the real, private person behind the star image. Yelin (2018) also draws this connection between exposure, implied or real non-consent, and intimacy and authenticity in her analysis of Lady Gaga's authorised book of 'behind-the-scenes' photographs *Lady Gaga x Terry Richardson.* She shows how it, too, plays with ideas of intimacy, privacy and authenticity. She argues that the presentation of the book suggests that the images were the result of an absence of boundaries between photographer and subject. They hint at an at least potentially forced exposure, at photos taken in the grey area of consent, and so suggest that the viewer is looking at Gaga the vulnerable, private person, not Gaga the professional performer and celebrity.

Beyond material produced by celebrities (officially or otherwise), digital technology and new media also allow audiences to more easily put the celebrity image to work for their own purposes and circulate such reworkings (Marshall, 2006; Kanai, 2015; Vares and Jackson, 2015). Such reworkings may be seen as relatively harmless, such as .gif reaction images using footage of the celebrity, or they may be regarded with more suspicion, such as pornographic deepfakes. The sexual and non-consensual nature of deepfakes in particular appears to be driving a reading of them within the intimacy and authenticity paradigm of celebrity studies. As a result they are positioned as inherently concerned with the private person behind the star image and more specifically as a violation of that private person. Yet to what extent audiences' reworkings of the celebrity are concerned with authenticity and the private person (official or otherwise) behind the star image arguably varies between different audience practices. While the celebrity relationship with media seems to assume that audiences crave authenticity, there are forms of engagement with celebrity that do not appear

to care one way or another, or even reject the idea outright. While individual celebrities may still legitimately perceive such engagements as a violation, this question is beyond the scope of this paper, and my interest lies instead in what meanings the communities who make, share, and enjoy deepfakes make with them.

Hayward and Rahn (2015) classify different kinds of celebrity sex tapes in the context of personal sex video production, and amateur and mainstream pornography, and focus on issues of pleasure, consent, and consequences for the participants. Most relevantly to the issues of intimacy, authenticity and deepfakes, Hayward and Rahn consider pornographic celebrity look-alike videos as a subset of the celebrity sex tape genre. While they concede that such videos are produced for a range of purposes, the authors give them the unexamined blanket label of 'parody', a word also sometimes associated with deepfakes (Zucconi, 2018), perhaps because of the free speech protections afforded to parody in US law (Liebler, 2015). They argue that because celebrity look-alike pornography does not use the celebrity's actual body, consent is not a relevant consideration, but do suggest that there are ethical issues involved in spectatorship and distribution similar to those that apply to revenge pornography. Hayward and Rahn note that celebrity look-alike pornography is frequently positioned as extending the celebrity's previous, authorised sexualised performances. They argue that, like revenge pornography, some celebrity look-alike pornography can be seen as an attack particularly on women celebrities' participation in public spaces. Yet this ostensible attempt to keep women in the private sphere is arguably different to attempts to access the private person behind the star image that phenomena such as nude hacks suggest, as it lacks both the intimacy suggested by private images and the authenticity of those images.

So while approaches to (sexual) celebrity are frequently concerned with issues of intimacy and authenticity, there are clearly other forms of engagement with celebrity. Deepfakes can be seen as another development in a long lineage of sexualised engagements with celebrity and star image - both consensual and non-consensual - including various forms of sex tapes (Hayward and Rahn, 2015) and nude hacks (Lawson, 2015). Notably, deepfakes are generated not by celebrities themselves, and arguably not even by commercial producers (unlike look-alike porn videos), but by audiences. A key question about deepfakes then becomes this: to what extent is this a form of celebrity engagement that seeks to give an impression of and is read as unrestricted access to the authentic, intimate, private person behind that star image? I seek to address this question by proposing a category of material I call "sexualised audience engagements with celebrity", i.e. material that is sexually explicit, focused on celebrities, and generated (in a broad sense) by audiences. I compare deepfakes to a range of other such sexualised audience engagements with celebrity, including nude hacks, Real Person(a) Fiction, and slash manips. Like deepfakes, the latter two of these in particular are practiced within relatively self-contained communities and, as I discuss below, have developed representational conventions and modes of reading and interpretation not necessarily accessible outside those communities. From this a secondary, related question arises about the target audience of deepfakes: to what extent are they a form of engagement with celebrity that is (deliberately) contained within a relatively small community of practice as opposed to something that is intended for the general public? I answer this by examining community practices and paratexts that deepfakes are embedded in, to argue that this is a relatively small and self-contained community, and that therefore further and different types of research is needed to truly understand the meanings and pleasures derived by this community from the material they create and share.

Methodology

The primary data for this research comes from two popular deepfakes sites: the dedicated site

mrdeepfakes.com and the voat.co 'subverse' v/DeepFake. Both sites were established as a

result of discussion platform Reddit banning the original forum where the deepfakes

community formed, r/DeepFakes (landoflobsters, 2018; Robertson, 2018). Voat.co is a

Reddit-like platform, which advertises itself as friendlier to 'free speech' and prides itself on

hosting content and discussions that Reddit bans and avoids, including racist, misogynistic,

homophobic and transphobic content (Pullen, 2015; Poletti, 2015).

It is useful to understand the key features of the two sites, as technical affordances have both

shaped the content and communities they host and the way this research has been conducted.

Voat offers a very similar feature set to Reddit, including discussion boards (subverses, as

opposed to Reddit's subreddits) separated by topic, threaded discussion, and an

upvote/downvote mechanic. Voat.co does not offer its own video hosting, so users who

produce deepfakes and share them on Voat have to find alternative hosting solutions. While

in the early days of deepfakes many users were able to host their content on mainstream porn

sites like PornHub, this has become more difficult as PornHub, similarly to Reddit, has

banned deepfakes content under the category of involuntary pornography (Hern, 2018). As a

result, Voat.co users appear to be hosting their video content mainly on amateur pornography

website erome.com. Mrdeepfakes.com, on the other hand, is a standalone platform dedicated

entirely to deepfakes, including video hosting, categorisation options, a 'community' section

where users' profiles can be viewed, and a discussion forum. The site also offers extensive

tagging and search functions, allowing users to tag the featured celebrity, optionally the porn

performer, and to add other tags such as 'masturbation', 'anal' or 'buttplug' which others can use to find specific videos relevant to their interests. Mrdeepfakes.com is funded primarily through advertising for other porn sites. It also allows users the option to 'donate' to video creators using bitcoin. The site bills itself as having 'the largest fake celebrity porn selection' (mrdeepfakes.com, n.d.) and as a major creator of deepfakes, encouraging users to request videos they would like to see. At the time of writing, mrdeepfakes.com hosts just around 2000 videos, with a handful of new videos being added daily. While it is more difficult to tell how many videos are posted on voat.co, that number is likely to be smaller. Content is also sometimes cross-posted between the two sites.

This research takes a digital or networked ethnographic approach (boyd, 2008; Hine, 2000; Hine, 2015), seeking entry points into the community being researched, following links that present themselves to users, acknowledging and leveraging the individualised nature of online experiences. In addition to the content of the sites, I take into account technological affordances, site design and feature set as part of my data (Beaulieu and Simakova, 2006). Moreover the relatively small number of videos on mrdeepfakes.com allowed me to conduct a systematic review of certain aspects of the material such as the metadata and paratexts surrounding it, and this in turn drove decisions on which content to engage with in more detail. As this research compares deepfakes to other forms of sexualised audience engagements with celebrity, it is worth noting that my engagement with these other types of material is a mix of primary and secondary research. References to manips and celebrity nude hacks are based on secondary literature; references to Real Person(a) Fiction are partially based on my own previous research on the subject (Popova, 2017) and partially on secondary literature.

Imagined intimacies

Given the contested nature of celebrity in our society, and interpretations of celebrities as variously texts or people, a key question about deepfakes is this: to what extent is this a form of celebrity engagement that seeks to give an impression of unrestricted access to the authentic, intimate, private person behind that star image? To begin to answer this, I propose viewing deepfakes within a wider context of what I call sexualised audience engagements with celebrity. I compare deepfakes and the intertextual resources those who create, watch and circulate them bring to the material, to other such material, particularly celebrity nude hacks, manips, and Real Person(a) Fiction.

Celebrity nude hacks are perhaps the closest we get to seeing the genuine private person behind the star image. While the images themselves are not generated by audiences, the way they are obtained and circulated is through audience action. These images are not intended to be accessible to the public, they are not part of a performance of stardom or celebrity. They show a high degree of intimacy, and tend to be regarded both by the public and the celebrity as authentic, and therefore as an invasion of privacy. Lawson (2015) argues that audiences who choose to view these images rely on their understanding of the celebrity's public and official private persona, as well as their own desire to gain access to the intimate, authentic, private person behind the star image to make sense of such material.

Authenticity and intimacy have also been key concerns in academic approaches to Real Person(a) Fanfiction. Readers and writers of RPF derive enjoyment from re-arranging the pieces of information they have about a celebrity and their life in many different ways,

creating many different, sometimes contradictory stories based around the same pieces of 'canon' information. Busse (2006a) argues that in this context, the authenticity of information about the celebrity is not necessarily the primary factor in whether it will be considered for inclusion in such stories. Rather, its fit with the community's collectively constructed image of the celebrity, one that Busse (2006b) notes is shaped to better meet participants' interests and desires, is the overriding criterion for whether the community will accept such information. Yet even in RPF circles a concern with authenticity cannot be entirely dispensed with, as becomes evident at points of crisis in fandom, such as when a celebrity is embroiled in a scandal that fans deem too inappropriate to use as inspiration for fanfiction (Popova, 2017). As a result, the precise nature of Real Person(a) Fiction's intertextual engagement with the star image is contested even within the communities that produce RPF, with many fanfiction readers and writers claiming that they 'compartmentalise' the fictionalised character they create (who is largely based on the celebrity's public and official private persona) and the private person behind the star image. RPF, then, strikes an uneasy, frequently shifting balance between striving for an authentic view of the private person behind the star image and recognising that any such view it purports to offer is clearly fictionalised. In some ways, RPF's textual nature allows it to do so with considerably more nuance than that raw materials of deepfakes. Authors are free to write not only sex scenes but to develop and explore characters and give their readers an insight into the imagined inner lives of celebrities, while also clearly marking those as fictional and imagined.

Another type of sexualised engagement with celebrity that can be seen as related to both RPF and deepfakes are slash manips. Slash manips are still images generated, like deepfakes, through the use of image manipulation software where a celebrity's face has been combined

with a porn performer's body to create an erotic or explicit image. Like RPF, manips are a

common fannish practice in communities that overlap with those producing fanfiction. Such

communities consist mostly of women and non-binary people and the majority of their

members identify as queer (centrumlumina 2013a, b), although like with fanfiction there are

also men (anecdotal evidence suggests they are mostly non-straight) who make manips

(Brennan 2014a, b; 2016). Manips frequently use the faces of actors, but as Brennan (2014a)

argues, they feature much more extensive additional edits, ranging from the digital addition

of clothes or the enlargement of penises, the addition of sweat or bruising on bodies to signify

a range of emotions and experiences, to significant changes to the background of the scene.

These edits function to anchor slash manips in a fictional 'canon', allowing the viewer to

place the scene as portraying not the celebrity actors whose faces are used but rather the

fictional characters they play in a film or TV series. This suggested interpretation may be

enhanced by paratexts or integrations of additional texts, such as image titles using character

rather than celebrity names, and even the inclusion of short fiction alongside the images.

Brennan also notes that manip artists frequently strive to achieve a look that visually echoes

the originary fictional work that their creations are based on. In this way, manips originating

in fanfiction and adjacent communities offer perhaps the most complex set of intertextual

meaning-making resources when it comes to sexualised audience engagements with celebrity.

Of course there is no guarantee that everyone viewing a manip will read it in the same way,

as representing the fictional character, either within the community that creates and circulates

manips or perhaps especially outside it. Nonetheless, manips offer multiple layers of possible

interpretations based on intertextual resources including the fictional characters, the celebrity,

and the representational conventions of pornography.

Sexualised audience engagements with celebrity, then, are created and read within a wider set of intertextual meaning-making resources, allowing for different kinds of interpretations: an emphasis on intimacy and the private person behind the star image in nude hacks, a clearly fictionalised private person in RPF, and a complex interplay between celebrity, fictional character and pornography in slash manips. How, then, do deepfakes resemble or differ from these other forms of engagement with celebrity?

Media commentators and hosting platforms have grouped deepfakes together with celebrity nude hacks and revenge porn under the heading of 'involuntary pornography' (landoflobsters, 2018; Robertson, 2018). Yet deepfakes differ significantly from stolen intimate images of celebrities produced by celebrities themselves for their own private use. Rather than intimacy and authenticity, deepfakes focus purely on the sexual. They are composed from images of the celebrity's face harvested largely from public performances such as interviews and other media appearances - i.e. occasions where what is on display is the star image, not the private person - and mainstream pornography videos featuring porn performers who are deemed to be a good 'match' in terms of body type, face shape, and hair for the celebrity being faked. Hayward and Rahn (2015) argue that mainstream pornography's representational conventions differ significantly from those of personal sex videos and amateur pornography, with amateur pornography creating an impression of intimacy and closeness to the real life of the individuals filmed. The relationship between amateur and commercial pornography is rather more complex than that, as becomes clear, for instance, in Stella's (2016) work. Stella shows how some genres of commercial pornography, particularly gonzo porn, have adopted some representational conventions from amateur pornography. Nonetheless, he argues, such cross-contamination has limits in that certain authentic intimacy is difficult to re-enact by

professional performers on screen. It is this intimacy that distinguishes amateur pornography from more industrial productions, and arguably if deepfakes communities' primary concern was with finding ways of representing an 'authentic' self behind the star image, amateur pornography would make an ideal source material. Yet that is by and large not the subgenre of pornography that deepfakes use as a building block. As a result, they rely heavily on the representational conventions and tropes of mainstream pornography, including industrial gonzo porn. Many videos, for instance, contain extended sequences where the performers' faces are not seen and the focus is instead on genitalia. They use mainstream porngoraphy staples ranging from cum shots and facials to double penetration and gangbangs. Others are shot from the male performer's point of view, allowing them to focus almost entirely on the female performer's body and actions. This is a far cry from other attempts to access the authentic private person behind the celebrity, including hacked private images of the celebrity.

In comparison to RPF, too, deepfakes show significantly less focus on intimacy. While fanfiction, including RPF, is frequently sexually explicit to the apparent exclusion of all else, the textual nature of the medium as well as the representational conventions of the genre allow incorporation of characterisation and even plot development within sex scenes (Driscoll, 2006). In contrast, deepfakes focus entirely on visual sex scenes, to the point where other material is frequently edited out from the source video. There is no reference in deepfakes to events in the celebrity's life (public or private), or their personality. This, again, would suggest that they are by and large not an attempt to access an intimate, private person behind the star image. There are clear comparisons to be made between manips and deepfakes, too: both are visual, and both use images of celebrities and porn performers as

their building blocks. Yet there are also key differences. They draw on significantly different intertextual resources for meaning-making and interpretation. While a significant proportion of the edits that manips undergo is for the purpose of suggesting the fictional character played by a celebrity in a film or TV series, deepfakes lack that potential fictional interpretational layer. At the same time, while deepfakes feature the celebrity's face, most retain the original soundtrack of the porn video they are based on, including the porn performer's voice and accent as well as dialogue typical of mainstream pornography. This adds a different potential interpretive layer to the deepfake, one in which porn performer and celebrity become one, new, character that is neither authentically the celebrity not authentically the porn performer. Rather than granting a look at the private person behind the star image, then, deepfakes take the celebrity's sexualised performances to the extreme and divorce them from ideas of intimacy. This makes them markedly different to other forms of sexualised audience engagements with celebrity where intimacy and the humanisation of the star, or the suggestion of a well-developed fictional character with an inner life, are key. Rather than seeking an intimate, human connection with the celebrity, deepfakes appear to reduce them to only the sexual element of themselves and the sexualised elements of their performance.

Escaping from context

Pornographies, including sexualised engagements with celebrity, tend to have their own representational conventions. Particularly niche pornographies, such as queer and feminist porn (Schorn, 2012; Liberman, 2015), are embedded in communities of practice who produce, read or view, and circulate the material, and are familiar with the representational conventions and meaning-making practices around it. Yet in a world of social media, we are also increasingly seeing such material or extracts from it shared beyond its original context,

for instance on 'tube' sites or (until recently) porn-friendly social networking sites like Tumblr. Brennan (2018) highlights the risks of pornographies escaping their original contexts and communities of practice. He recounts the example of a de-contextualised clip from a fantasy 'bareback sex addiction' website being reposted to PornHub and resulting in viewers speculating about the authenticity of the material. In their investigation of the creation, circulation of and meaning-making around porn gifs (short, looping extracts from porn clips that are easily shareable on social media sites such as Tumblr), Hester, Jones and Taylor-Harman (2015) also showcase the range of new and alternative meanings porn audiences can make with material that is taken out of its original context. Such new meanings may be positive or negative depending on the exact material, audience and context, but there is an added risk when it comes to de-contextualising sexualised engagements with celebrity: audiences who are not familiar with the original material and its representational conventions may potentially interpret it as a genuine and authentic depiction of the celebrity in question. This is also part of the reason why commentators group deepfakes together with revenge pornography and nude hacks into the category of 'involuntary pornography'. It is therefore worth understanding how the communities that produce and circulate sexualised engagements with celebrity relate to their material and its context. To what extent are efforts made to contain the material within the community of practice, and conversely are there attempts to bring it to the attention of the wider public and present it as authentic?

Real Person(a) Fiction and manips originating in fanfiction-adjacent communities have their own representational conventions, which are understood and shared by the members of the communities where these materials circulate. Such communities also have distinct norms and practices for producing, sharing, and enjoying the materials. Real Person(a) Fiction, for

instance, is embedded in wider fanfiction practices. These include tagging stories both to make them easily discoverable on archives and to give the reader an idea of what to expect from the story. Wider fanfiction paratextual practices also include titles, author's notes and reader comments that allow authors to claim ownership of the work within the murky copyright regimes governing fanfiction (Tushnet 2007; Herzog, 2012). While the risk of a written work being mistaken as a factual account of real events is relatively low, RPF communities have nonetheless established practices of including a disclaimer indicating that stories are a work of fiction and do not purport to report real events in the lives of the celebrities who serve as the basis for the stories. Some disclaimers are even phrased in ways that directly address a celebrity or someone close to them who may have found the story: 'If you got here by googling your name or someone you know, please hit the back button now' is a popular phrasing for this sentiment. Communities that produce and share slash manips also have practices and paratexts that identify these works as manips, and (as discussed above) draw in intertextual meaning-making resources from the fictional characters portrayed by the actors featured in them. Such practices and paratexts are a clear indication that the primary target audience of these sexualised engagements with celebrity are the communities that produce and circulate them in the first place - they are not intended for general audiences who are unfamiliar with the representational conventions and practices of the fan communities where these materials originate. This stands in stark contrast to materials such as celebrity nude hacks. Such images are deliberately taken from their original, private, context and published in ways intended to make them go viral and gain the greatest exposure possible among the general public (Lawson, 2015). So where fan communities who create Real Person(a) Fiction and manips have practices and processes in place to limit distribution of the material outside the community and to provide context for it, those engaging in the

distribution of hacked intimate celebrity images actively work towards decontextualising the images and making them available to audiences outside their original target. This raises the question of where on this spectrum of creating and containing the material on the one hand to distributing it to the widest possible audience on the other deepfakes sit.

It is worth at this point investigating the practices of deepfakes creators and those who view and share this material in order to gain a better understanding of community norms. There are some interesting differences between the two deepfake communities examined in this study, driven in part by technological considerations and in part by community attitudes. As previously discussed, mrdeepfakes.com offers its own video hosting, meaning that the vast majority of video content produced by that community is also hosted on the site, with no involvement from external platforms. As a result, content on the site is clearly contextualised and marked as not real footage in a number of ways. The URL and site logo and banner all feature the word 'deepfakes'. Similarly to fanfiction in fan community spaces, individual videos are embedded in a set of paratexts that function both to make them discoverable on the site but also to give context and additional information to viewers. They include tags describing the sex acts featured in the video, but also tags for the celebrity whose face is used and in about a quarter of the videos tags for the porn performer featured (either as a separate tag or in the author's notes field). This draws the viewer's attention to the fact that they are not watching the actual celebrity but a partially computer-generated image made up of visual artefacts of both the celebrity and the porn performer. Another important indicator of the 'fake' nature of the material is frequently embedded in the video itself as some prolific deepfake creators (including the owner of the mrdeepfakes.com site) include a logo or watermark in their work which features the word 'fake'. This may function as a way of

claiming authorship of the work, like author's notes in fanfiction (Herzog, 2012), but has the additional effect of clearly marking the material as not actual footage of the celebrity, even if it is shared outside its original context. Thus material on mrdeepfakes.com is clearly contextualised and marked as 'fake' both through the paratexts around it and in many cases through visual elements included the videos themselves.

The v/DeepFake subverse on voat.co presents a slightly different technical and social environment for the community residing there. As voat.co is not a site dedicated to deepfakes but rather a discussion forum platform hosting forums on many different topics, it offers neither the in-house video hosting capabilities of mrdeepfakes.com nor many of the tagging, sorting and search functionalities. There is therefore less of a rigid structure for the provision of paratexts: the user is not prompted by the technical interface to include tags for the celebrity, porn performer, or sex acts featured in the clip. Conversely, this means that users are free to include or not include contextualising information in other ways, for instance in the post title or as text included in the post. Some users do this, using post title and text to convey information similar to that carried by the tags on mrdeepfakes.com. This can include the celebrity name, the sex acts featured, or technical information about the video such as length or whether it contains sound. There are notably two different styles of post title on voat.co's DeepFake subverse: one which contains the celebrity name and sex acts featured in the video (for instance 'Taylor Swift - Stepdaughter Sex-Ed [Innocent, POV, HJ, Cowgirl] (14 Minutes)'), and one which clearly marks the content of the post as a fake (for instance 'Not Emma Watson 3 - Longer Vid w/ Sound'). Even within the relatively closed community of voat.co users, then, some deepfake creators clearly mark their videos as fake in the way they present them. The fact that voat.co users' videos are hosted on external platforms adds

another dimension to the question of paratexts and contextualisation. The majority of deepfake creators on voat.co use amateur porn site erome.com for their video hosting. Erome.com offers very limited interaction capabilities and almost no space to provide context beyond the video title. Additionally, as the voat.co community's main interaction space is on voat.co itself, there is little incentive for users to also include extensive paratexts on erome.com. It is therefore technically possible for erome.com users to stumble upon deepfake videos with very little context, and in fact at the time of writing a deepfake video was featured under the 'most popular' section on the erome.com front page. It is notable, then, that the practice of clearly marking the video as a fake in the title is more widespread on erome.com than on voat.co. Video titles on erome.com are generally more in line with the 'Not Emma Watson' style (as was the case with the one featured on the front page), in contrast to many of the post titles on voat.co itself which lead with the celebrity name. The difference between titles used on voat.co and those on the hosting platform suggests that creators of deepfakes distinguish between the relatively closed community of practice that is the v/DeepFake subverse and the relatively open environment that is erome.com, and seek to contextualise the material in spaces where it could more easily be encountered by accident and taken out of context.

Like fanfiction and manip communities, then, and unlike individuals who distribute celebrity nude hacks, deepfakes communities across both sites examined in this research appear to be finding ways of contextualising the material they create as 'fake', i.e. not a factual representation of the celebrity they are engaging with. Additionally, where a higher risk exists of the material spreading beyond the community of practice, such as with videos hosted on erome.com, an effort is made to limit such spread or to at the very least retain some

context. While some of these practices may be a way of claiming ownership of the work and building subcultural capital (Thornton, 1996), the fact that contextualising practices differ between the community's main interaction platforms and the video hosting site suggests that efforts to contain the material within the community of practice are deliberate. Broadly speaking, then, this is a community that does not seek the widest possible, de-contextualised exposure for its creations (unlike those who release celebrity nude hacks), but rather seeks relatively private pleasures shared only with those who have a similar understanding of the material. This, together with the fact that the intimacy and authenticity paradigm offered by celebrity studies does not appear to explain what meanings deepfakes communities make with the material they create and share, indicates that different approaches with a focus on insider interpretations are needed to really understand deepfakes.

Towards context

As deepfakes communities are relatively small and self-contained, not seeking more general exposure for their creations, outsider readings of pornographic deepfakes lack necessary context to understand the kinds of meanings made with this material. Yet gaining that context has also proved remarkably difficult. Here, I would like to offer some observations and speculation that may guide future work.

One common approach in digital ethnography involves examining and perhaps participating in the online interactions of the community one is studying: comment exchanges and other kinds of conversations, for instance. Yet neither the users of voat.co nor those of mrdeepfakes.com appear to produce a significant number of comments or in-depth conversations. The most commented-on videos on mrdeepfakes.com have less than 30

comments. Interaction between creators and viewers, or even just between viewers, is rare, and comments are generally standalone responses to the video. Two categories of comments stand out: requests for more work by the creator, either featuring the same celebrity or for videos of a different celebrity; and commentary (both positive and negative) on the creator's technical capabilities and the technical qualities of the video. A significant subset of the former category are comments requesting deepfakes of Bollywood or K-Pop stars. Comments acknowledging that the material is erotic or arousing are notable in their rarity, particularly in comparison to some of the other sexualised engagements with celebrity covered in this paper, such as RPF or manips. The small amount of data available here makes it difficult to draw any robust conclusions, but the structure of the comments that are available raises questions about the performance of masculinity in these spaces, and the prevalence of requests for deepfakes of Bollywood and K-Pop stars adds a raced dimension to these questions.

Deepfakes communities' lack of concern with intimacy and authenticity also highlights the articulation of the sexual and the intimate both in media coverage of this material and in the authenticity paradigm of celebrity studies: there is an assumption underlying these discourses that sexualised engagements with celebrity are also necessarily intimate engagements with celebrity. Yet rather than the intimate, authentic, sexual celebrity, perhaps the closest we can get to an outsider understanding of what deepfakes offer is the amalgamation of porn star and celebrity. The superimposition of faces, bodies, voices, and dialogue flattens two people, two performances, into one. The final result, rather than intimate or personal, is a simulacrum of both sex and celebrity.

Conclusion

Outsider readings of deepfakes broadly sit within the celebrity studies paradigm of attempts to access the authentic, private person behind the star image. Yet neither the intertextual resources used in the creation and reading of deepfakes nor the community's practices of containing and contextualising the content support this interpretation. Comparing deepfakes to other sexualised audience engagements with celebrity such as slash manips, Real Person(a) Fiction, and nude hacks, shows that deepfake communities are much less concerned with issues of intimacy and authenticity of the private person behind the star image than other communities producing such sexualised engagements. Intertextual resources that other communities use to suggest different, more intimate interpretations of the material, such as visual and textual elements that suggest characterisation and humanisation of the star and paratexts that situate the material in an intimate context, are largely absent from deepfakes. Instead, deepfakes build predominantly on mainstream pornography, including commercial gonzo porn, rather than other genres that would be able to convey more intimacy. Additionally, examining the practices and paratexts around the creation and circulation of deepfakes shows that deepfake communities are making significant efforts to contextualise the material and contain it within their community of practice rather than release it to wider audiences. Material is clearly marked as fake in paratexts, especially on sites with a less specialised audience, and many of the videos themselves feature watermarks indicating that they are deepfakes, thus making it harder for them to be misinterpreted as authentic celebrity sex tapes. Deepfakes, then, are created by a small community of practice for circulation within that community, and outsider readings of the material lack the necessary context to make sense of it.

There is significant additional work needed to understand what meanings deepfakes communities *do* make with this material. Inquiries into the structure of the communities that form around deepfakes, how they perform their own identity within the community, the impact of being forced to move to increasingly niche platforms, and their interactions with other communities on those platforms would also be of interest. There are also significant challenges to this: the relatively small communities and niche platforms, but also the communities' relatively low interactivity, limit the usefulness of digital ethnography methods. Users' anonymity and pseudonymity also make it difficult to follow connections across sites and platforms and understand what other networks deepfake community members may be part of. At the same time, community members are also likely to be reluctant to participate in interview based research. Yet to understand the work deepfakes do and the communities that form around them, a reading in context is essential.

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