



Article

Managing visibility on YouTube through algorithmic gossip

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Abstract

Beauty vloggers' feminised outputs often position them outside of traditional spheres of *technical expertise*, however, their strategic management of algorithmic visibility makes them an illuminating source of algorithmic knowledge. I draw from an ethnography of beauty vloggers and industry stakeholders to study the collaborative and directive processes used to formulate and sustain algorithmic expertise – algorithmic gossip. Algorithmic gossip is defined as communally and socially informed theories and strategies pertaining to recommender algorithms, shared and implemented to engender financial consistency and visibility on algorithmically structured social media platforms. Gossip is productive: community communication and talk informs and supports practices such as uploading frequently and producing feminised beauty content to perform more effectively on YouTube. Taking gossip seriously can present a valuable resource for revealing information about how algorithms work and have worked, in addition to revealing how perceptions of algorithms inform content production.

Keywords

Algorithms, gender, optimization, platforms, vloggers, YouTube

Introduction

This article studies the collaborative and directive processes employed by beauty vloggers to formulate and sustain algorithmic visibility. Technically, algorithms lay out the guiding processes for mechanical problem-solving and decision-making (Dourish, 2016; Gillespie, 2017). Algorithms are used by YouTube to solve two core problems: managing

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a growing mass of video content, and satisfying audiences, who hope to be served relevant entertaining, educational or informative videos. Algorithms are thus used to answer (and enact) the question, what should be made visible, and to whom? In the context of this article, algorithms are defined as the codified step-by-step processes implemented by YouTube to afford or restrict visibility. In practice, visibility is afforded by the platform in several ways; it is 'constructed and shaped' through 'personalised and social algorithms for search and front page layout, algorithmic search, and features like auto-playing 'related videos'' (Burgess and Green, 2018: 53). It is ultimately through these limited algorithmically informed affordances that YouTube that will aggregate YouTubers' audiences and promote their content (Postigo, 2014). To understand the theories and strategies used by content creators to negotiate and maintain visibility on YouTube, this article focuses its attention on beauty vloggers (video bloggers). So far, YouTube beauty communities have been examined as they curate microcelebrity (Senft, 2008) and perform entrepreneurship (Duffy, 2017), and intimately connect with their followers (García-Rapp, 2017). They have not yet been examined for their technical strategies and algorithmic expertise.

The research on algorithmic knowledge production generally falls into two camps. The first investigates 'technical' sites, such as recommender systems and tech organisations, to examine how algorithms are constructed (e.g. Dourish, 2016; Hallinan and Striphas, 2016; Seaver, 2017; Vonderau, 2019). This research interrogates those who have sanctioned expertise and *technical knowledge*. A second body of work investigates everyday interactions with algorithms, often through interviews or surveys. They highlight how functional theories on algorithmic processes are built despite users' ostensive *lack of technical knowledge* (e.g. Bucher, 2017; DeVito et al., 2017; Eslami et al., 2016; Myers West, 2018). The binary approach of this research does not capture the knowledge of platform producers, neither platform employees nor everyday users; these producers' income depends on successfully negotiating visibility on proprietary platforms. As such producers, *beauty vloggers* are sources of algorithmic knowledge whose feminised output positions them outside of the *technical*, yet whose work is contingent on algorithmic visibility. Their knowledge about algorithmic processes is shared and enlivened through gossip, defined as loose, unmethodical talk that is generative: gossip lies at the 'median point between random and agenda-driven' (Adkins, 2002: 216). Not only is gossip an important and under-studied form of knowledge production, it is 'embedded in traditional ways of knowledge production' (Adkins, 2002: 223). Gossip, particularly when associated with women, is dismissed for its bias, intimacy or as violation of privacy (McRobbie, 1982). Yet, gossip is an important resource and method for knowledge exchange, particularly for marginalised groups. In this vein, I define algorithmic gossip as communally and socially informed knowledge about algorithms and algorithmic visibility.

Detailed information on how platform visibility is determined is often unavailable to content creators. In part, this is due to practicality; there is no straightforward way of explaining how machine learning algorithms, often constructed across organisational silos, work (Crawford, 2016; Seaver, 2017). Second, platforms release limited instruction on visibility to maintain a 'competitive advantage', as they fear content creators 'gaming' the algorithm, or exploiting an algorithmic recipe to 'unfairly' surface videos (Kitchin, 2017: 20). Despite such methodological challenges, some academic works

have ventured claims about how aspects of the YouTube algorithm function. For example, Bernhard Rieder et al. (2018) systematically studied YouTube's search results to illuminate the platform's 'ranking cultures' (p. 52). The authors found that fresh news and trending issues were more likely to be surfaced on YouTube. Although fruitful to a certain extent, this work is inherently limited, as YouTube does not provide reliable access to key data and metrics that inform its recommendation algorithms. Due to the changeable and proprietary nature of YouTube's algorithmic cultures, both academics and content creators cannot know *for certain* why videos are (or are not) widely promoted, or how to ensure content gains (and sustains) visibility. Thus, the emotional and financial implications of ensuring and maintaining visibility is particularly profound for content creators, as visibility informs both income and opportunities.

Managing algorithmic visibility can be understood as a part of (often un-compensated) 'aspirational labour' as influencers build careers via social media presence (Duffy, 2017: 9). This article sustains a focus on full-time vloggers, or those who successfully attain a meaningful portion of their income from YouTube. These actors are making content *for a career*. The risk of losing visibility, and income, is high. In this context, maintaining complicity with YouTube's changeable organisational culture is an ongoing project. This article addresses growing concerns about how cultural producers navigate the increasingly algorithmic nature of content distribution (Hallinan and Striphos, 2016; Willson, 2017). Content creators must manage the risk of invisibility as they increasingly work in precarious fields of cultural production that are specific to, and contingent upon, social media platforms.

Optimising for platforms

Vlogging represents political economic changes in cultural industries as production and distribution become increasingly reliant upon social media platforms. For David Nieborg and Thomas Poell (2018), cultural production has been fundamentally altered by the social, institutional and economic penetration of social media platforms into cultural life. They define 'platformization' as the need for cultural producers to be visible for platform-specific contexts, or how 'producers ... are impelled to develop publishing strategies that are aligned with the business models of platforms' (Nieborg and Poell, 2018: 8). The production of content is now partly structured by what is (and is not) permitted on platforms. More specifically, there are growing motivations for producers to render themselves 'algorithmically recognisable' and 'orient themselves toward these algorithmic systems' if they are interested in having their content defined as 'relevant' and surfaced audiences (Gillespie, 2017: 2). Platforms' definitions of relevance do affect the strategies and tactics of content producers. However, platforms also update and shift their algorithms according to their business priorities, shaping what is seen and engaged with without users' consent or knowledge (Bucher, 2018).

Because of this constant shifting, algorithms have been framed as a 'black box' wherein their processes are opaque, secret and hidden. The 'black box' can thus be a methodological limitation, but also a creative methodological starting point (Seaver, 2017; Ziewitz, 2016). In this vein, Taina Bucher (2016) positions the black box as a 'red herring' (p. 94). She argues that ostensive algorithmic black boxes should not preclude

researchers from researching algorithms through autoethnography, or resources such as press, PR and patent applications. Indeed, by triangulating diverse sources, we can look beyond a 'fetishization' of algorithms, or an obsession with their opaqueness, to examine their hybridity and embeddedness in social life (Crawford, 2016: 89). I join these authors in arguing there is a need to research algorithms creatively, to study the complex relationships between cultural producers, platforms and algorithmic practice.

The figure of the black box remains culturally significant for content producers as it represents the 'mystification' of how social media platforms work, and in turn how producers navigate them (Striphas, 2015: 406). In her work, Taina Bucher (2017) observes that ordinary users address gaps in their understandings of everyday algorithmic systems through the 'algorithmic imaginary'. Algorithmic imaginaries guide how individuals engage with algorithms, often prompted by exceptional moments when an algorithmic recommendation is either a little bit too accurate or jarringly inaccurate. Similarly, Motahhare Eslami et al. (2016) have also investigated users' understandings of 'invisible algorithms', studying Facebook users, and finding 'perceived knowledge about the algorithm can affect their behaviour'; they term these understandings 'folk theories' (p. 1). The authors demonstrate how folk theories can be directive: users can inventively draw attention to what (users believe) are instances of algorithmic bias on social media platforms. Breakdowns in trust often cause participants' attention to be directed towards unpicking how the system works. My empirical approach builds on this work, highlighting how users manage and navigate algorithms that they cannot know or understand. The mystification surrounding algorithms is productive: a lack of information informs a perception of risk, and informs collaborative negotiation of risk.

Both imaginaries and folk theories can be collaborative and directive, but arguably more attention could be paid to how theories are employed and deployed by professional content producers to assist them with their work. To this end, Kelley Cotter (2018) examines a number of algorithmic strategies undertaken by aspiring and successful Instagram influencers, which she defines as 'playing the visibility game' (p. 1). She demonstrates how understandings of the algorithm blend with existing logics of authenticity and entrepreneurship to shape influencers' practice. For example, they interact heavily with followers or simulate interactions through strategic following and bots, because they believe this will increase visibility (Cotter, 2018: 11). However, what is missed in this approach is a detailed account of how influencers' collaborative and publicly shared experiences, assumptions and theories inform productive norms. In this vein, I argue such needs to be situated within a historical context of cultural production. Cultural production has long been a process of managing uncertainty and risk; risk in this sense is often concerned with the unpredictability of audience reception, and ensuring returns on valuable financial investments (Meehan, 1986; Ryan, 1992; Saha, 2018). Risk management often results in the reproduction of a small pool of stereotyped and generic content that often sustains societal inequalities and invisibilities. This perspective affords an examination of how theories are contextualised, shared and enlivened by diverse stakeholders, to make cultural production manageable. Anamik Saha (2018) outlines a process of 'rationalisation' or how hegemonic and racialised logics find their way into cultural production through 'processes, apparatus, rationales and logics that are embodied in each stage of production' (p. 138). This

approach is imperative for accounting for how understandings of organisational structure and processes of social interaction inform the content produced for platforms such as YouTube. A further useful perspective is 'industry lore', defined as a 'sense making strategy' that ultimately arranges the messiness of cultural production into a shared and 'coherent world view' (Havens, 2014: 50). This concept can support analysis of how content production for platforms is not 'top down' or 'bottom up'. Rather, it is informed by disparate assemblages of information, assumptions and risk-management strategies. What remains unsettled is how logics are shared or made through informal talk within platform-contingent media industries. The following analysis investigates how connected, subversive and collaborative talk informs theories about what 'works' for YouTube, and thus influences strategies implemented towards attaining visibility. Gossip remains under-researched in this context, particularly as it is used to manage risk and impacts cultural production.

Gossip

Organisational studies research on gossip can serve as a useful starting point to understand the function of gossip as knowledge production. For example, Kathryn Waddington (2012) points out that 'organisational gossip is a relational, reflexive communicative practice through which individuals engage in sensemaking and knowing' (p. 2). She takes a broad approach to defining gossip, attempting to shepherd multiple forms of reflexive evaluative talk under this umbrella. However, feminist accounts of gossip demonstrate how the term has multiple negative connotations, and thus can be ignored for a number of reasons. First, gossip is unruly and difficult to track. As feminist scholar Angela McRobbie (1982) observes, 'in the use of words, the tension arises between the anarchy and all-pervasiveness of talk and the order and formality of written words. We all talk, all of the time' (p. 50). McRobbie argues that women's forms of talk, of knowledge sharing, are located outside of institutionally sanctioned research practices, and are under-observed, and ghettoised. Similarly, Karen Adkins (2002) argues oral histories are often considered 'trivial' compared to the 'real stuff' of research – but argues that this distinction is ultimately 'false' (p. 215). Adkins (2002) draws attention to the erased role of talk in scientific or mathematic discovery, arguing 'women's ways of knowing are simply part of how all humans come to knowledge' (p. 215). Taking talk seriously enables us to synthesise accounts of gossip with algorithmic studies, to make visible how knowledge about algorithms is often not verifiable, but informs how producers navigate and manage visibility on YouTube.

This article points to three primary functions of algorithmic gossip. First, I consider algorithmic gossip as a collective resource for knowledge production; I outline how vlogging communities utilise directive and interested gossip as a significant and collaborative method of understanding and mapping algorithmic changes. Second, I consider algorithmic gossip as subversive, as a response to a highly uneven power relationship between cultural producers and the platforms they work on. These primary sections consider how gossip occurs: namely, who gossips and why. In the final section of this article I examine how gossip about algorithms can be applied as a methodology – how gossip can be utilised as data on how algorithms work and what they do.

Methodology

The production of media texts is influenced by economic, social and cultural processes. In this vein, the experiences, self-presentations and labours of YouTubers are not exclusively represented in content posted on their YouTube channels. My methodology encompasses 3 years of immersion into a 'messy web' of vloggers' participation on numerous social networks, and in 'offline' spaces (Postill and Pink, 2012). I conducted semi-structured interviews, 'online' ethnography across platforms, 'offline' ethnography at vlogging events and qualitative analysis of YouTube's promotional materials. I coded my data set in an instrumental sense, namely to summarise, identify and organise themes and genres in the corpus, field notes and interview transcripts. Examples of codes included beauty, 'get ready with me' videos, authenticity and anxiety.

Although I believe the experiences of *aspiring* vloggers are significant to study, I wanted to investigate the stakes of algorithmic visibility for vloggers who are reliant on the platform for a significant portion of their income. I interviewed 10 British beauty and lifestyle vloggers in addition to 9 vlogging industry intermediaries, including talent agents, Twitter's community manager for the United Kingdom and Europe and the (then) Director of the Internet Creators Guild, an international organisation intended to promote and support full-time content creators. Each interview lasted between 30 minutes and 3 hours. Three of the content creators I interviewed had vlogged full time previously, but currently attained a part-time wage from their vlog. I also interviewed one ex full-time vlogger who had since ceased producing content on YouTube.

In my 'online' ethnography, conducted between 2015 and 2018, I identified and followed upwards of 30 UK-based beauty vloggers with a minimum of 10,000 subscribers on YouTube. A total of 10,000 subscribers is the minimum requirement for engagement with YouTube's creator services and affords access to facilities such as the YouTube Space Creator Café and Creator Days. Beauty vloggers with 10,000+ subscribers have thus achieved a monetisable status that signals their 'A List' visibility (YouTube, 2019). Subscribers hold a high currency within the YouTube industry, as they point to individual career sustainability, whereas other visibility metrics such as *views* are seen as fluctuant and easily inflated. *Subscribers* are also visible in the platforms' architecture and are thus bound up with beauty vloggers' brands and symbolic capital. Communities very rarely stay, and their experiences are very rarely experienced on one site, platform or space. Research must account for the mobility of users and audiences across different offline and online spaces (Postill and Pink, 2012). Following vloggers across platforms allowed me to study the themes, genres, relationships, content and track scandals and events.

Algorithmic gossip as collaborative

A central component of gossip is how it functions as 'a collective narrative' (Adkins, 2002: 216). Within algorithmic gossip, knowledge is shared and collectively built: observations about individualised experiences of algorithmic (in)visibility are highlighted and enlivened through discussion and debate. The collaborative nature of theory-building and sharing can be formalised: an example of an institutionalised channel for algorithmic

gossip is the Internet Creators Guild (ICG), a non-union, non-profit organisation established in 2016 by vlogger Hank Green. The ICG is designed to support hopeful creators through connection – their website boasts the prominent strapline ‘we bring creators together in order to make their profession more sustainable’ (ICG, 2019). ICG membership strongly supports vloggers contributing experiences and knowledge to the organisation. They offer a ‘Platform Changelog’, based on ‘gathered experiences’ and ‘shared expertise’, observations and experiences that are unconfirmed by YouTube (ICG, 2019). The changelog is distributed to the ICG membership, which ranges between US\$75 and US\$500 per year. Although the Changelog promises a curatorial and *edited* resource, adding a layer of organisational sanction to pure unsanctioned gossip, it ultimately funnels individual observations of algorithmic events and changes to interested parties, contributing to a disseminated pool of unofficial and unsanctioned gossipy knowledge.

In interviews many beauty vloggers told me that they could not afford ICG membership fees, which are particularly untenable when YouTube channels are in their infancy. For example, Lucy, a lifestyle vlogger told me:

I haven’t paid because when it first started I had no money. I was a student and I wasn’t doing it full time so I was like ... sorry guys! ... I’m not a part of ICG, I don’t know anything about algorithm changes if they happen.

Vloggers without support negotiate algorithmic uncertainties through ad hoc communal spaces. In a typical approach, Amy, a part-time beauty vlogger, gleans information ‘mostly from disgruntled friends and acquaintances, either in person or on social media’, particularly in moments of algorithmic disruption as ‘YouTube’s stance is very much that it’s not an issue, it’s not happening’. I will attend to the level of antagonism with YouTube in the following section; for now it is important to acknowledge that many beauty vloggers gathered information about the algorithm through informal messaging and Facebook groups, which underscore the intimacy of algorithmic gossip in two ways. First, closed groups create the conditions for clandestine knowledge production as they are structured according to celebrity status and subscriber volumes. Access is often restricted to those who meet certain requirements. For example, Melanie, a popular UK beauty vlogger told me ‘we have got a Facebook group, which is really nice support, just with other YouTubers who kind of do full time stuff, and if we ever have a really big issue we can just go there’. It is important to note that attaining ‘full-time’ YouTube income necessitates a significant fan base, and often celebrity status. Cultural studies theorists have pointed out that ‘full-time’ influencers who make monetisable content tend to reinforce each other’s star status and skew towards White actors with myriad intersections of privilege (Bishop, 2018; Duffy, 2017). Gossip in such spaces, then, reinforces boundaries between insiders and outsiders (Waddington, 2012). Even Facebook groups for aspiring creators have protective requirements for those who want to join. For example, the London Small YouTubers Facebook Group is closed. Entry requires demonstrating evidence that participants live locally and have a regularly updated YouTube channel. The likelihood of acceptance, even for those fitting these requirements, also increases depending on being ‘known to’ the group and holding established social links to demonstrate one’s authentic YouTube status.

The second level of intimacy sustained by algorithmic gossip is how it operates as a form of test for ideas exchanged between compatriots, before they become formal pieces of information. Lifestyle vlogger, Astrid, described how vloggers use messaging groups to take the temperature of algorithmic visibility on YouTube, and to check in and assess if others are experiencing the same events or issues: 'YouTubers talk to each other a lot, and we'll be like, "are you having a terrible week too?".. and *so it's like OK*, and that's kinda how we talk to each other about it'. Vloggers draw from friendships and relationships to plot maps of individual algorithmic experiences among friends. Messaging groups are thus trial spaces where vloggers can post issues, experiences and articulate the success or failures of their recent videos. Adkins notes that gossip is useful as it helps us run a 'background check' on potential beliefs (Adkins, 2002: 224). Conversational exchanges in closed groups are used to diagnose experiences as either personal or platform-wide, as algorithmic changes implemented by YouTube can have significant effects for those reliant on the platform for income but are not announced or confirmed through official channels (Bucher, 2018). Of course, a methodological limitation of gossip is that it is closed, intimate and hard to track in nature. The closed nature of groups limits the ethnographers' exposure to intimate talk, beyond the snippets confided in interviews. Vloggers frequently shared their theories with me, which were often prefaced with cautionary precursors such as 'I feel like' and 'in my opinion'.

On occasion, temperature-taking conversations about algorithmic visibility can also take place in public forums, such as Twitter, among popular and connected vloggers. In one example of such a twitter exchange, lifestyle vlogger Sophie Eggleton announced that she had produced a high volume of YouTube videos in the last month, an announcement that was met by encouragement and compliments by other YouTubers, celebrating her work ethic. In a self-deprecating response, Eggleton (2016) tweeted that she was concerned her videos sustained 'quantity over quality'. Zoe London (2016), a popular UK lifestyle vlogger reassured her that this would not affect her channel negatively, responding 'there's something in the YouTube playbook about how the algorithm rewards you for uploading 15 min of content a week'. In the process of this public interaction, assumptions about what YouTube values, and what it requires of content creators, travels widely. This conversation demonstrates an opportunity for collaboratively building theories about algorithmic changes and alterations. Not only do vloggers share their theories between themselves (that YouTube rewards frequent posting), but with their broad following. Beauty vloggers also often commented publicly on what they perceived as algorithmic failures; in one example, popular vlogger Tanya Burr (2016) bemoaned her YouTube visibility in a tweet 'When you spend so much time making videos you love and are excited for people to see and then the YouTube algorithm messes it up'. Taking this tweet at face value, Burr is venting about her experiences of production as they are contingent on a social media platform's recommender algorithmic. However, as a self-branding exercise, this tweet, can also be read as public performance to curate a specific form of online attention, in other words a strategic example of 'visibility labour' (Abidin, 2016). For example, this tweet also serves as a public reminder to her fans to check on her YouTube videos, reminding them that the 'algorithm' will not always serve them easily. This tweet generated myriad responses from concerned fans and fellow creators, checking in and offering support.

Algorithmic gossip, knowledge requests and algorithmic auditing

Carly Rowena is a UK based full-time fashion, fitness and lifestyle vlogger. In an Instagram Story in 2018 she asked audiences to weigh in on the visibility of one of her recent YouTube videos. She asked, 'Was [this video] in your sub box?', offering two reply options: 'Yes!' or 'I didn't see it!'. The 'sub box' in this instance refers to a subscriber inbox, a dedicated space in which users can find videos from YouTuber channels that they are subscribed to. Previously, inclusion in subscribers' inboxes was guaranteed: YouTube content for subscribed channels was hosted here. However, at the outset of 2018 many believed that YouTube was starting to introduce algorithmic curation to this feature, meaning content creators could no longer rely on the subscriber inbox for video promotion. Crucially, no-one was sure. The idea that YouTube has poor communicative channels with creators is held by industry intermediaries. For the (then) Director of the Internet Creators Guild, Laura Cherinkoff, it was apparent that the lack of transparency has been a major concern for YouTube creators, 'in general creators, I think ... really don't understand why YouTube does certain things or have a say, or get their questions answered or their problems fixed'. Beauty vloggers, also, articulated how YouTube does not address creators' concerns: Amy remarked 'going to [YouTube] is about as useful as a chocolate teapot'. Another high-profile beauty vlogger told me in more absolute terms that contacting YouTube about algorithmic changes is useless 'they are absolutely insistent it doesn't happen. You can send them fucking screenshots'.

To address uncertainty on how frequently her videos were promoted to her subscribers' inboxes, Carly Rowena's employed a 'poll', a technical feature of Instagram stories that allows viewers to publicly 'vote' on numerous options. This is a savvy use of an Instagram affordance to crowdsource information about YouTube visibility. Her request for information is undercut by a specific performance of authenticity and amateurism. The background image of Carly Rowena's Instagram poll featured a blurred image of her dog being given a bath, supporting a reading of the post as intentionally authentic and everyday. References to banal moments and everyday life are used by content creators to neutralise professionalism overt or hawkish business strategy (Abidin, 2017). In this post, curated ordinariness supports algorithmic gossip; the everyday and the domestic are sites where gossip happens, where sense is made and shared.

Similarly, using another platform to probe uncertainty around YouTube's subscriber inboxes, sardonic American beauty vlogger Rachel Levin (2017) requested: 'Tweet me pictures of your subscription boxes from like 12 PM today if you're subscribed to me'. This tweet returned 41 fan images, many tangential from the initial request, for example 'It's my birthday'. Fans conversed back and forth in the tweet's replies, translating Levin's '12PM today' their own time-zones. Loose conversation here was mixed with snippets of data and algorithmic 'proof' as fans shared images are shared of their subscription boxes from multiple countries and cultural contexts. These screen grabs can serve as evidence of algorithmic tests and alterations. YouTube did not officially confirm the changes to subscription inboxes, yet, evidence of the alterations can be found nestled within fan images in response to Levin's tweets. The examples demonstrate how gossip patches holes in algorithmic

knowledge through intimacy and close connections, for example, from colleagues and fans. Requests for information hinge on a familiarity with the vlogger and their output. They are colloquial and conversational; they are presented as relaxed requests between friends. Rachel Levin did not qualify or justify her appeal for images.

Requests for information, and the responses given, are gossip. They are broadly interested, intimate and at the margins of sanctioned industry discourse: knowledge is shared about topics that are slippery and unconfirmed. If gossip is ‘about the absent’, algorithmic gossip is the strategic use of resources to piece together information in the absence of official platform communication (Adkins, 2002: 216). In practice, this is undertaken through the strategic use of secondary platforms to cross-reference and monitor algorithmic visibility for diverse audiences. Such approaches have roots in ‘algorithmic auditing’, which Sandvig defines as borrowing from ‘field experiments in which researchers or their confederates participate in a social process that they suspect to be corrupt in order to diagnose harmful discrimination’ (Sandvig et al., 2014: 5). Yet, for beauty vloggers and content creators more broadly, their participation in algorithmic culture is not an experiment and diagnoses are not undertaken independently, they are enlivened by social forces. They constantly monitor, share and source information to diagnose algorithmic recipes and patterns in the context of their everyday occupation. Vloggers levy intimacy and close ties with their audience to solicit data about algorithmic reach. Although technical knowledge becomes mixed up with exigent and ancillary remarks, for example from fans about their birthdays, talk can serve as key data that influences content and algorithmic optimization strategies.

Algorithmic gossip as subversive

Grace Victory is a mixed-race beauty vlogger with a direct yet warm conversational manner, informing her self-branding as the ‘Internet’s big sister’. On her channel, Victory has produced several videos discussing her frustrating and negative experiences with the YouTube algorithm. She argues YouTube’s algorithms prioritise and sustain the links between White users’ channels, reinforcing White visibility. In one video, entitled ‘Does YouTube Discriminate?’ Victory answers fan questions about racism on YouTube. Victory expresses her delight at a question asked by a fan about discrimination on YouTube, raising her hand and crying ‘Yes! Yes, yes, yes’. She explains:

If you look at the top 50 YouTubers ... the majority if not all of them are white middle class people. ... it’s just YouTube pushes them through the algorithms, and one person can make a video and the other recommended is people who look and talk like them. (Victory, 2018)

As exemplified in this answer to the fan question, race and social justice are key themes that are recurrent on Victory’s channel. She documents racism on YouTube through disclosing her personal affective responses to her everyday social experiences. In a typical example, Victory documents a trip to a local music festival in a video blog. In the latter half of the video she lies on her bed as she tearfully draws parallels between her work ethic and her lack of success. She informs her audience that her tears were prompted by bumping into other popular YouTubers at the festival, who had treated her

poorly. She theorises why she feels bad about this interaction; 'I work really hard... and it makes me think, like, is anybody going to make it whose like not already from like a well-off background... who's well spoken? Is it because I'm like *not white*'. Consistent with the 'algorithmic imaginary', Victory imagines the wider context of YouTube, including its algorithms (Bucher, 2017). She maps her experiences and makes sense of them through an affective lens. With the resources available to her, Victory cannot truly evidence that she has been discriminated against. She can only reflect on her experiences and how this feels.

Although Victory cannot prove discrimination, algorithms *do* often sustain bias towards marginalised people (Eubanks, 2017). Specifically, Safiya Noble (2018) argues, Google (YouTube's parent company) perpetuates algorithmic bias towards women of colour. For Noble (2018), prioritisation of commercial and advertising needs often conflicts with Google's positioning as a media, news and information source; ultimately, for Noble, 'marginalised people are exponentially harmed' (p. 28). In this vein, the lens through which Google's algorithms operate locate Whiteness as normality and thus Black women's representations, experiences and self-presentations become othered. The observations echo a nascent yet growing body of academic work that points out YouTube's tendency to disproportionately promote White content creators (Gaunt, 2015; Oh and Oh, 2017). To value Victory's work as *algorithmic gossip* means taking into account the how theories are built through everyday connections, questions, interactions and consultations. As Victory shares her observations, they can travel as gossip, which are discussed in the video comments. Through a reflexive rhetoric, she presents a convincing case, making visible the narrative contexts about *why* she believes in algorithmic discrimination on YouTube. Scola Donda a Black UK-based beauty and fitness vlogger articulates the challenge in making discrimination on YouTube visible to White audiences. She observes 'people who get opportunities or who get pushed on YouTube, and stuff like that, they all tend to be white creators. Now this is a tricky topic to talk about because *most people don't see it*' (Dondo, 2017).

Algorithm *gossip* has been selected as a framework, because gossip has long been a tool for countering power and facilitating resistance. Defining 'deep gossip', Ablove (2003) describes the value of underground talk as 'an indispensable resource for those who are in any sense or measure disempowered ... [touching] on matters hard to grasp or of crucial concern' (p. xiii). Gossip has long been strategically employed by oppressed groups: gossip columns were used to draw attention to murders of Black gay men in the 1980s (Holmes, 2015) or out closeted politicians who did not act on the AIDs epidemic (Potter, 2006). This type of subversive gossip, at the time it is uttered, is often dismissed for its unsanctioned and unverifiable nature. In this vein, reflecting on the power inequality between creators and YouTube means paying attention to how YouTube occupies the role of the rational and objective actor in discourse. An example of how this boundary around rationality can be found in the official video on the algorithm, published within the YouTube Creators Academy, an online pedagogical resource (YouTube Creators [Creator Academy], 2017). Using twee stop motion animation, 'the algorithm' is represented by two twirling spools of tape inside a vintage CRT computer, implying folksy simplicity. A narrator states 'how can I get the algorithm to like my videos? Pretty simple, get the audience to like your videos'. This

video's kooky branding acknowledges content creators' interest in algorithmic processes, yet diverts any question about how content is promoted to audiences *in the first place*. The video obscures the political economic complexity of social media platforms, for example, the complex role of YouTube as an advertiser-funded platform (Andrejevic, 2009) and the implication for preferred content genres, styles or formats (Bishop, 2018; Rieder and Sire, 2014). In this vein, YouTube positions their platform as reasonable through a 'meritocratic framework', the idea that 'talent will rise to the top' (Littler, 2013: 52). The video's pair of twirling tape spools represent a simple analogue system: they serve good content to relevant audience. The subtext is *not to worry* about the technical requirements of algorithmic visibility: just simply make *good content*. YouTubers who articulate experiences of racism and inequality thus risk being positioned as irrational, calcifying the 'boundary between those who are reasonable (read objective) and those who are unreasonable (overly agenda-driven)' (Adkins, 2002: 222). Those whose career on YouTube falls outside of this framework have gossip as one of the limited tools available to them.

As gossip counters official narratives, algorithmic gossip often explicitly negotiates or diverges with information provided by YouTube. In interviews with vloggers, theories and experiences ranged from positive to negative. However, positive experiences skewed towards the vloggers that were often the most privileged in my sample, often those who were White and middle-class. Melanie, a high-profile full-time vlogger told me that she had also been regularly featured on the homepage 'trending tab' and that she is often promoted alongside two of her friends and collaborators. Similarly, Amy, a part-time lifestyle vlogger, told me that an algorithmic update had been 'favourable' to her content and caused one of her videos to skyrocket to half a million views. This favourability was precarious, and she mused that the algorithm 'hasn't been so kind since'. Ultimately, beauty vloggers were also burdened with determining *why* successful content had been successful, in an analytical processes that went beyond accepting that they had made 'good content'. Such an approach can be seen as an informal take on the research technique of 'reverse engineering', which is defined as evaluating algorithmic input and output to determine how the 'recipe of the algorithm is composed' (Kitchin, 2017: 24). The imagined reasons for algorithmic visibility often went beyond the data-driven, or beyond the level of video production. One full-time beauty vlogger self-consciously told me she believed that she had been 'white listed' by the trending tab, or consistently promoted on the homepage. She said 'I have been told that the trending tab is completely algorithmic ... it's like smart, smart intelligence. But I think that they can blacklist certain channels and whitelist.' ... This vlogger believed her own success was in part due to the relationships that she had developed with YouTube, through participation within platform-based initiatives. All of those I interviewed monitored peaks and troughs in their algorithmic visibility, and questioned the sustainability of their life within the A List, wondering how long it would last.

Locating algorithmic gossip as method

I want to highlight the value of algorithmic gossip, even as it is (by definition) loose, interested talk. To make this point, I will demonstrate how algorithmic gossip can help

researchers piece together understandings of how the cultural implications of YouTube's algorithms. Herein, I draw from the work of Keith Negus (1999), who studies the relationship between economics and culture in the music industry, or 'the practices, interpretations and ways of life of musicians, fans and industry workers' (p. 3). Although Negus does not call out gossip explicitly, it is everywhere in his account of the relationship between genre and music industries. He observes culture is produced and reproduced through 'boardroom anecdotes' (Negus, 1999: 34), 'suggestions' from 'consultants' (Negus, 1999: 112) and 'widely held beliefs' (Negus, 1999: 118) that take place in the 'corridors, offices, desks, filing cabinets and boardrooms of the recording industry' (Negus, 1999: 178). Negus's work details how complex processes of cultural production get streamlined and wrestled into saleable and commodified genres through social interaction. Looking for similar gossip (and accounts of gossip) can fruitfully reveal relationships between algorithms and production for genre on YouTube – particularly demonstrated by the belief that YouTube rewards the production of beauty content. This belief is widespread and productive. Indeed, high-profile beauty vlogger Melanie told me in an interview that she had initially decided to make *beauty* video content on YouTube because she was told that it would become visible on the platform. She described starting her YouTube career by producing beauty content because she 'wanted to do any videos that were performing easy' through the platforms' algorithms. That creating beauty content would perform well was informed by talk – by conversations with friends, but also by the kinds of videos that became visible on YouTube that were produced by women. She said 'it's so weird, I've actually talked to so many girls who also agree with me ... even the likes of Hazel [Heyes, a filmmaker], she did fashion videos and stuff back in the day, and that's not her passion'. Although Melanie argues she had many other 'passions', it became apparent through analytical talk that beauty production appeared a strategic and rational pathway to a sustainable career on the platform. Such an approach must be considered as a process of 'rationalization', defined as normalisation in response to anticipation of risk in the success or visibility of cultural products (Negus, 1999).

Even content creators who vlog within other genres theorised the lucrative nature of highly feminised content. Astrid, a lifestyle vlogger who predominately produces vlogs about books, told me that she occasionally makes beauty videos to amp up her popularity and visibility. Although her videos are mostly unrelated to beauty, even occasional inclusion in the beauty universe is beneficial to her channel and boosts her video engagement significantly. In the quote below, Astrid is careful to explain that she doesn't dislike making this genre of content, but that she does employ it strategically, as beauty content often reaches an audience five times the size of her book and lifestyle videos:

- A: So I make the stuff in general that I want to make, I do it however I want to do it, and from time to time I do videos that I know will do really well ... that I will enjoy doing anyway ... but it's like a what's in my bag video ... a room tour video ... it's the stuff that I know has 5 x more views than anything else I do ... but it's sort of like seeing, like is there more content that I can do ... like it's not like I wouldn't want to make it, but I know that I will give it a little boost hopefully.

Me: And it's because people are searching for those?

A: And it like blends into the beauty community.

Astrid's experience, which cannot be supported by concrete evidence, is that videos along beauty themes are more lucrative than those about books, prompting an adjustment in her content production to this end. Astrid believes making regular beauty content is important. This not confirmed by YouTube, but it is informed by community observations and reflections on the audience reach of videos she has produced. The point is not that Astrid is incorrect in her analysis. Rather, her subjective experiences and research practices, shared among friends and bolstered by ideas of a stable beauty community on the platform, work to shape her content production. Her theories, imaginaries and gossip inform ideas about visibility on the platform, and shape the content she produces. Her candid statements make visible an ambivalent process of sense-making that is informed by the content that young women make on YouTube, and how they talk about it. However, they also could serve as data about the genres YouTube values, which in turn shapes the content that is produced for the platform.

Conclusion

To study algorithmic gossip is to track and take seriously the snippets that become surfaced about how algorithms work *as data*. Thus, this article has not argued for algorithmic gossip as a *separate* way of studying cultural production contingent to platforms, or as 'good for some things (read the trivial and personal), but unimportant in the grand scheme of things' (Adkins, 2002: 219). Indeed, to take algorithmic gossip seriously as a method explicitly rejects Paul Dourish's call to 'be careful about the bounds and limits of algorithms and their functioning' when we study them. Dourish (2016) calls for researchers to respect 'algorithm' as a 'members term' for 'computer scientist, software designers, and machine learning practitioners' (p. 2). To be clear, Dourish is not dismissing the study of how algorithms work 'within broader digital assemblages', he wishes to isolate the term algorithm from its 'others' such as data work and software engineering (p. 2). However, women especially are not invited to the members club in which computer-science-based definitions of algorithms are circulated (Marwick, 2013). A feminist perspective asks who has claim to expertise in such technology; who is an algorithmic professional? Algorithmic study through a feminist lens seeks to reframe the way that we think about algorithmic data and proof, and widen the sources that we can practically draw from when researching algorithms.

This article has defined algorithmic gossip as communally and socially informed, theories and strategies pertaining to recommender algorithms, shared and implemented to engender financial consistency and visibility on algorithmically structured social media platforms. In this vein, I have drawn from cultural industries research, which interrogates how the management of risk informs the rationalisation of cultural production (Havens, 2014; Saha, 2018). Vloggers share theories to mitigate risk and produce content that is complicit with YouTube. Gossip is productive: talk informs and supports practices such as uploading frequently and producing feminised beauty content to perform more effectively on the platform.

Algorithmic gossip is collaborative: creators who work on the same platforms impart their algorithmic experiences through formalised mailing lists (such as the Internet Creators Guild platform changelog), closed Facebook groups and through intimate requests for information from their fans. Gossip also can be considered as a tool for exposing platform discrimination and bias. This is particularly salient for beauty vloggers of colour, who publicly address personal experiences of racism. However, I have argued that the potential for social justice is limited, as gossip can risk being positioned as irrational (Adkins, 2002). Methodologically, gossip is challenging – it is arguably not static or reproducible, due to the changeable nature of YouTube’s algorithm. However, this article has argued for redrawing lines around viable methodologies to make room for gossip as proof of how algorithms work and have worked. Taking gossip seriously can present a valuable resource for revealing fragments of information about algorithms during particular algorithmic moments. It holds the opportunity to engage more meaningfully with talk at the boundaries of algorithmic systems, and to reflect on how these boundaries are constructed and reified.

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