User Tactics and Algorithms: A Digital Humanities Approach to YouTube and Tumblr

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Introduction

When in 2013 Tumblr tried to ban pornography, users were concerned. Some obvious hashtags, like #porn, yielded no results. However, Tumblr had also banned search terms that they considered related, like #gay and #bisexual. Other sensitive hashtags like #depression and #selfharm were banned as well (Romano 2013). This was the first time that the platform had so actively engaged in censorship of hashtags and their related content. Tumblr users were quick to address these issues, upon which the company announced: 'The solution is more intelligent filtering which our team is working diligently on. We'll get there soon. In the meantime, you can browse #lgbtq—which is moderated by our community editors—in all of Tumblr's mobile apps. You can also see unfiltered search results on tumblr.com using your mobile web browser' (Tumblr 2013).

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This controversial decision was influenced by Apple, which set rules about explicit content for the apps that it provides in its stores (Greenfield 2013; Gillespie 2018, 183). Censoring hashtags, however, has drastic implications for users. As Gillespie (writes: 'By blocking specific hashtags from its search results, Tumblr ensures that no (tagged) porn accidentally makes it through its app to the eyes of its gentle user. However, it also hides adult content from those who actually want to see it.' Such a decision effectively erases particular online subcultures and sexual minorities. A hashtag such as #lesbian, for instance, may be used in diverse ways—by members of the subculture to promote events, in a public debate about gay marriage or by fans depicting queer content related to *Xena: Warrior Princess*.

This Tumblr policy is just one example out of many. Platforms are increasingly engaging in content moderation and censorship. Instagram, YouTube, TikTok and many other social media platforms have policies to moderate and censor content, including entire user taxonomies and hashtags. When hashtags are changed or erased, specific debates, content and communities become harder to find. Instagram, for instance, has also been known to censor tags regarding queer and feminist content. Poledancer Elizabeth Blanchard warned its users in a post on Facebook (19 July 2019) that Instagram had censored hashtags such as #poledancing and #poledancer. She stated: 'The sad part is that these are many of our most popular hashtags and an integral part of OUR community!' In their responses to this post, users offered alternative hashtags. They also expressed their worry and outrage over the censorship of this specific sport while other forms of fitness were not blocked by Instagram. While a spokesperson apologized on behalf of the company, some tags were still blocked in August (Rodriquez 2019).

As these examples show, content moderation can have an enormous backlash. While moderation is supposed to protect users, it also disempowers them when content that meets the guidelines is suddenly censored. Moreover, users are "de-platformed" in a sense that they suddenly cannot search for their community and peers. However, what these controversies also tell us is that users search for ways to take control over their data flow and find ways around the platforms. When policies change, new hashtags are introduced and information is cross-posted on other platforms. Many users are becoming aware of how social media platforms moderate.

As this study will show, users are gradually interested in uncovering, criticizing and influencing hidden parts of platforms, including content moderation. In the digital humanities, we often speak highly of data as a unit of analysis and we often understand this data as something that we can mine and structure. However, frameworks and approaches in the digital humanities need to be more flexible and complex to account for the complexity of today's interfaces, platforms and user behaviour. The internet is not just a place where data is simply uploaded but a myriad of platforms that filter, guard, alter and moderate content. Tumblr and Instagram are just two examples in this introduction that illustrate that platforms are not neutral tools. These platforms are determined by culture, business and politics. This also poses an important question in a time when data studies and digital humanities are booming. How can scholars study that which is not uploaded, which is filtered out, or adapted to a platform?

Specifically, this chapter is a combined case study of how users respond to filtering, moderation and algorithms. I analyse how users responded to the change in policies and algorithms on Tumblr (2018) and YouTube (2019). I argue that these cases are illustrative of how content moderation, through new policies and algorithms, can affect user cultures. Still, users are not passive audiences in this process and identify tactics to cope with these changes. By deploying different methods to study these platforms and their user cultures, including data visualization and close reading of posts, I show that a combination of traditional humanities and theory with digital methods is especially fruitful. By adding qualitative research and theory to digital methods, we can dive deep into specific posts to see how users experience platforms, adjust their communication and invent new tactics to keep their communities and content visible.

Thus, the aim of this study is to provide new insights on platforms, their moderation and user cultures. Now that content moderation is increasingly automated, how do users deal with the filtering and visibility of their posts?

Studying Data, Tactics and Platforms

Early internet studies often framed the web as a powerful tool for citizenship. It was democratic, was open and facilitated cultures of participation (Baym 2000; Jenkins 2006). However, increasingly scholars agree that inequality has been prominent online from the start, not just in terms of access and technical skills but also in terms of participation and

community-building. Hierarchy, power and censorship have occurred on the internet since the beginning and have shaped what users upload, how they communicate and how their content is monetized (see Schaeffer 2011).

While the web has been a for-profit and privatized venture for a long time, the more recent platform culture of web 2.0 has amplified these concerns. Platforms, such as Facebook, are not neutral technologies but business models and key players in the global economy. In a detailed study on platforms and their cultures, Van Dijck (2013) shows that platforms are constructs, or assemblages, that operate in a socio-economical context. She argues: 'Platform owners and app developers are producing agents and social forces. They can exercise economic and political power to change and sustain hierarchies and deploy their technologies to do so' (p. 18).

While platforms are businesses, they hide behind the logic of democracy. Gillespie (2018, 5) argues that platforms pretend to be open, but that this is largely a visage. He notes that: 'The fantasy of a truly "open" platform is powerful, resonating with deep, utopian notions of community and democracy—but it is just that, a fantasy. There is no platform that does not impose rules, to some degree. Not to do so would simply be untenable.' Platforms take decisions in what to include, filter or censor. Part of this may be done automatically, through algorithms that are built on data and rules.

Emergence is a key factor here since algorithms can have unintended consequences. In her study on algorithms and social bias, Noble (2018) draws attention to the social consequences of algorithms and platforms. She notes that platforms, driven by algorithms, are deeply related to society but hide behind technology. Noble summarizes this discourse as follows: 'Digital media platforms are resoundingly characterized as "neutral technologies" in the public domain and often, unfortunately, in academia. Stories of "glitches" found in systems do not suggest that the organizing logics of the web could be broken but, rather, that these are occasional one-off moments when something goes terribly wrong with near-perfect systems' (p. 6).

Still, users are not merely at the mercy of new media, as many internet studies have shown. In a study on Tumblr, Gledhill (2018) analyses how users of Tumblr rely on hashtags to structure their communities from the bottom up. This also relates to the interface itself, which lacks the hierarchies that other platforms have: 'The official Tumblr microblog for a star actor or television show production team engages on the same terms as any other actant, as they have limited control as to where their content

ends up in the stream, what juxtapositions are made between their post and the next in any user's feed, and what tags and responses their content collects as it circulates' (5.3).

Similar to Tumblr, the architecture of YouTube can be seen as bottom up, considering that there is a particularly rich participatory culture around user-generated content as well (Burgess and Green 2009). Users interact through comments, favourites and playlists amongst others. However, in YouTube users have fewer restrictions over what they see, since the platform will recommend videos actively and even use auto-play if users have the option turned on. This has also led to much negative critique of YouTube's algorithm, which, for instance, recommends gruesome, remixed animation to children based on similarity of search terms (Bridle 2019).

On platforms such as Tumblr and YouTube, hashtags and search terms are key. In the Tumblr architecture, hashtags are a vital way of creating user communities, and if hashtags are altered, communities disappear (Hoch 2018). Gledhill frames Tumblr users as "bricoleurs", who makes use of existing material (e.g. other user posts) to circulate, annotate and remix. However, the figure of the bricoleur is not exclusive to Tumblr. Deuze (2006) argued that bricolage is a central principle of emerging forms of digital culture and platforms. After all, bricolage is about remixing existing pieces of content and making do with the available tools and interfaces. Users of YouTube and Tumblr make do by using specific tags and terms to increase the findability of content and communities.

In other words, users are not fully dependent on a platform but may deploy tactics to shape it. The concept of tactics is best understood through the work of De Certeau, most particularly his famous *Walking the City* (1984). De Certeau coins "strategies" and "tactics" as a way of analysing the role of power and discourse in culture. His work shows that the city is produced by strategies (structures of power), which create a unified whole, but consumers can choose to act with or against these strategies. These tactics are associated with the pedestrian in Manhattan, who navigates the city in a tactical way. For instance, this walker may choose shortcuts and may choose to ignore the grids of New York.

Platforms evoke similar tactics as cities, in which users find workarounds to deal with systems, guidelines and algorithms. De Certeau's framework has in fact been applied to new media, such as games (e.g. Nakamura and Wirman 2005). Strategies and tactics are lenses which can be applied to many cultural processes. Consumers are always influenced by structures

which are outlined by others but never fully determined by them. In short, this study probes the tactics that users apply to specific types of online systems.

Digital Humanities and Methodology

With the emergence of digital media and platform studies, a renewed interest in the humanities has resurfaced under the methodology "digital humanities". This broad term includes different types of internet, user and platform studies that engage with humanities theory, concepts and methods to study data sets and interfaces. van Es and Schaeffe (2017) write: 'These days, the most ambitious of digital humanities practitioners see computation as an opportunity to profoundly transform cultural criticism, and humanities research more broadly.' Digital humanities can imply different methodologies, from data visualization and design (Rogers 2019) to virtual types of ethnography, such as "netnography" (Kozinets 2010).

The difficulty with data studies, including the digital humanities, is the tendency of making technology and data into something deviant, new and innovative. By merely revealing the data and its connections on online platforms, researchers may miss out on important context. While such inductive reasoning, which lets the data speak for itself, is attractive, Kitchin (2014) argues against the trend of "new empiricism". In data studies, data is framed as something that can readily be studied and visualized and needs no context. However, data is always a sample and a representation. Moreover, focusing solely on large data sets means a neglect of user practices and how users push back against a system. For instance, a user might deactivate or clean their account regularly, which will not show up in the data set or will appear only as a glitch (Ellison and boyd 2013).

Moreover, data is shaped by theories, training, testing and frameworks, and therefore is never free from it. Kitchin (2014) also adds that there is a clear social component:

> Making sense of data is always framed—data are examined through a particular lens that influences how they are interpreted. Even if the process is automated, the algorithms used to process the data are imbued with particular values and contextualized within a particular scientific approach. Further, patterns found within a data set are not inherently meaningful. Correlations between variables within a data set can be random in nature and have no or

> little causal association, and interpreting them as such can produce serious ecological fallacies. (p. 5)

The danger of approaches celebrating big data, in particular, is that the internet is made into a unique tool, and not historicized. The internet is not an exception to other media, even though there may be some medium-specific qualities to certain platforms. Scholars still journey into these spaces and familiarize themselves with a culture and the ways in which people structure their lives. It is important to look at these technologies from a framework of social constructivism. Technologies, such as platforms, do not produce certain effects but are given meaning by the social groups that operate them.

In other words, technology is not a neutral tool but is always given meaning by the users themselves. The internet is but one example of how people have constructed social and cultural patterns around a new technology. It stands out in its diversity though: the wide range of applications and media that it inhabits. As mediated spaces, online platforms are best understood in combination with other qualitative methods and offline spaces. In specific instances, traditional qualitative research may even be the only option. For instance, methods such as ethnography or in-depth interviewing help us reach groups that are not active online or have no access. For a holistic picture of technological use, for instance, it is also important to analyse non-users (Wyatt 2003) or consider hidden data, which was never uploaded. Through traditional methods, such as interviewing, we can study those who do not leave a digital footprint and are excluded from participating in these spaces.

Traditional methods, however, can provide a full picture of media use. Interviews, for instance, can paint a lived picture of what is behind the data crumbs that users leave behind—the pictures, comments and archives that we can scrape on platforms such as Instagram. Such method also allows us to overcome the problem of access, which is a fundamental technological and ethical problem in data-driven studies. Platforms change their rules and interfaces often, restricting the use of data for research purposes.

The most fruitful approaches from the digital humanities seem to be those that combine the close reading of small data sets and distant reading of large data sets (Moretti 2013). Manovich (2011), in similar fashion, argues for the combined analysis of large data sets ("surface data") and small qualitative samples ("deep data"). In this chapter, I am inspired by

their approaches and use a similar framework, which combines data visualization and close reading.

For the first case on Tumblr, I visualize the discussions on Twitter, where users uploaded content that the Tumblr algorithm had filtered out. Moreover, I close read user posts on the changing guidelines on Twitter and Tumblr. For the second case study on YouTube, filtering and algorithms, I analyse different video tutorials that unpacked the YouTube algorithm. Users shared tips and tricks, as well as worries about YouTube's algorithm.

Tumblr and Filtering

Since the social networking site Tumblr was launched in 2007, it had become a site for diverse subcultures to express themselves. Activists and sex workers used it as a blogging tool to express themselves (Martineau 2018). Fans used the platform to upload different types of fan art, including mature content. Tumblr, however, had also been targeted by bots. Unwanted accounts were pushing ads and posts with porn to the entire user base. As a result, the platform had been banned in Apple's App Store and needed to quickly change its policies.

By introducing a new algorithm, Tumblr hoped to make its platform safer. However, the algorithm was a tough gatekeeper. When it suddenly started flagging baking tutorials, pink art and characters hugging as sensitive, users knew that its new algorithm was not working properly (McKnight 2017). For instance, when user Voraxna tried to upload a mug of Quark (a character from *Star Trek: Deep Space Nine*), she was stopped. Tumblr identified the two frontal lobes of the alien as breasts.

Users criticized the algorithm and related policies quickly on Tumblr and other platforms, such as Twitter. They started cross-posting the user-generated content that Tumblr had prevented them from uploading, such as baking tutorials and selfies with their *Star Trek* mugs. There were two main problems in this cultural and technological debate. First, the algorithm did not work properly and often flagged things as "sensitive" which were not. Even though the results were hilarious, it also meant that users could not upload their content.

Moreover, Tumblr was one of the very few platforms that allowed for mature content. Its policy insisted on removing it but could not truly break down what it was. The recent policies around mature content, from 2018, have again created controversy. The policy was not a neutral one

but a cultural one. In the statement, Tumblr defined adult content as: 'Adult content primarily includes photos, videos, or GIFs that show real-life human genitals or female-presenting nipples, and any content—including photos, videos, GIFs and illustrations—that depicts sex acts' (Tumblr.com 2018).

Even though "female-presenting nipples" is supposed to be an inclusive term, in this context it implies that female nipples are always sexual, in whatever context. This is of course not the case, and a culturally sensitive topic. A nipple can represent a historical artistic nude or a woman breast-feeding. A nipple can belong to a transgender woman. A male-presenting nipple can also connote sexual behaviour. Many users responded to the "female-presenting nipples" statement and ridiculed it on Tumblr and other social media. Both #male-presenting nipple and #female-presenting nipple are now common search terms on Tumblr that I explored for this research.

Filtering is not a neutral phenomenon—that much became clear to users all over the world. Scholars of internet, platforms and fandom were also quick to respond to the controversy, and its implications. In a series called *Tumblrpocalypse* (Fanhackers.tumblr.com 2019), Jordan T. Thevenow-Harrison for instance writes: 'I learned more about identity through queer & POC teens on tumblr than in any other context. A lot of the defining work in queer communities was done on tumblr, often in response to some suggestive or horny art. All the threads that contain this work are going to disappear.'

Considering the immense role that platforms have for particular communities, research on Tumblr is much needed. Since the application program interface (API) of Tumblr is closed, scraping and visualizing content or relationships within the platform in a direct way is not possible. However, users did cross-post their data on other platforms, such as Twitter. A Twitter network analysis gave insights into the debate and even revealed some "Tumblr data that never was".

For the purpose of this study, I scraped the network via Netlytic with the general hashtag #tumblr, which was trending at the time. This revealed the tweets responding to Tumblr's new policy when it was just released (1000 posts, retrieved on 05 December 2018). Within Netlytic, I made use of the network analysis tool and created a name network, which I imported in Gephi (Fig. 1).

This is a visualization of the overall network of different communities on Twitter discussing #tumblr and its new NSFW (not safe for work)/

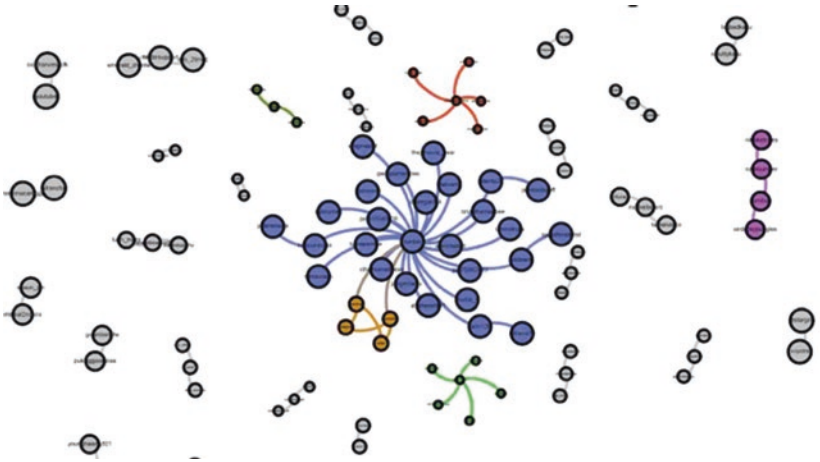

Fig. 1 Name network of #Tumblr sorted by modularity in Gephi

adult policies. In the inner dark gray circle you see Tumblr's own Twitter account, which is tweeted at primarily by users criticizing the new guidelines or making jokes about it, displaying their unease. Topics that come up in the other circles are as follows: moving erotic fan content to Twitter, Pornhub or Instagram (Top node in the centre in dark gray, bottom nodes on the left), joking about the death of Tumblr (light gray nodes, right of the central map) (Fig. 2).

In this close-up, the graph is sorted on modularity, meaning by density of the network, which allows researchers to visualize different subcommunities and subcultures within selected hashtags or keywords. This graph reveals that there is not one discussion around Tumblr but rather different public discourses or spheres.

Some of the subgroups are just retweeting popular content (e.g. screenshots of funny flagged content that should not have been flagged by the algorithm). The banning of adult content in general is joked about often. Fans call Pornhub a more "fan-friendly" platform than Tumblr. For example, users retweeted a post by @Dragonspleen, who remarked: 'That awkward moment when Pornhub is a more decent and artist-friendly site than Tumblr, YouTube, twitch and Amazon' (05 December 2019). Most tweets joked about the death of Tumblr but also connected it to cherished fan moments and videos. Some users clearly celebrated the good times

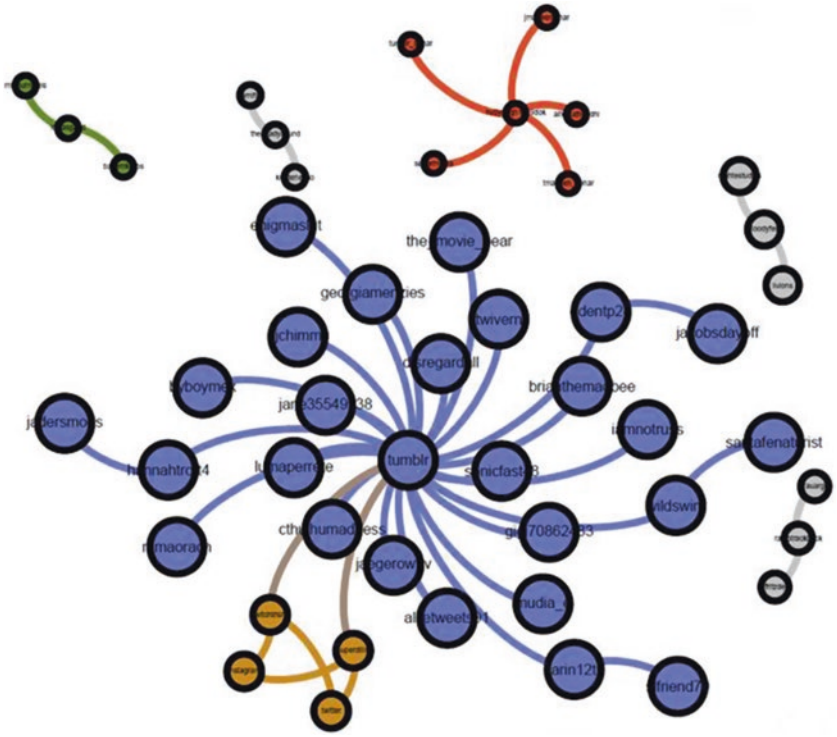

Fig. 2 Close-up of a #Tumblr discussion on Twitter

that (anime) fans had on Tumblr. On Twitter, fans upload anime gifs, for instance from the boys of *Yuri on Ice* (2016–ongoing), to display their fandom.

Still, visualizing this data on Twitter gives us only a fragmented picture of the debate. It is one of the few platforms to which we can apply data visualization too. Analysing Twitter gives us a picture of the data that users could never upload on Tumblr, because the algorithm flagged their content incorrectly. However, to fully understand what is going on, it is best to dive deep into Tumblr. While users may struggle with the new policy and filters, and see their community changing, they also blog about that. While we cannot scrape Tumblr, we can do netnography on the platform and dive deep into the community for a while. I went into the platform when the new rules were announced.

Since Tumblr was one of the few platforms that still allowed mature content, this was a problem for users, and they were quick to compare across platforms. Users speculated about the death of Tumblr, business decisions, and how the algorithm was being trained on both Tumblr and Twitter. When LiveJournal changed its policies in 2007 and 2009, users migrated in bulk to Dreamwidth and Tumblr (Schwedel 2018). In the first weeks when the policy was announced, users were afraid that entire archives, blogs and posts would disappear.

Many of the posts formulate their critique of the platform in memes and jokes. A post by user fromthemotionpictures shows Samantha from HBO's *Sex and the City* (1998–2004) lamenting: 'The days of "pussy" and "fuck" are gone.' Amongst its tags are #rip Tumblr, #tumblr is dead and #tumblrpocalypse. One post by user raesputin shows a *Cards Against Humanities* card that jokes about the end of the world, which she responds to with "female-presenting nipples". The hashtags include #tumblr update and #let me be funny one last time. Many users also post negative or sarcastic posts on #december 17, revealing that they dread the date on which the update will be fully implemented. Others combine these tags with #staff to readily address Tumblr as a company and its employees.

Tumblr's update was a sensitive one since it speaks to the essence of what being, for instance, a fan is. There was existential unease and the fear of losing the platform, as related hashtags reveal (#riptumblr, #tumblrpocalypse, #tumblr purge, #tumblr exodus). Users wonder: Will my account with semi-erotic drawings be banned? Where can I take my fandom now? Will I lose my online friends and connections?

There is severe social unease and mental anxiety around such processes, and it brings up the term "post-object fandom" as well (Williams 2015). Williams frames post-object fandom as heavily related to media production. For instance, when shows are discontinued, fans may find ways to engage with the story world in their own communities, nonetheless. Such types of fandom may also relate to the platforms themselves. If fans lose these as communication tools, cultures run the risk of disappearing, and fans need to find new ways to continue. Online videogames are perhaps the best example of online cultures that sometimes cease to be, for instance because servers are closed down or games become less popular. While communities may find themselves anew in a different game, this cultural migration is not an easy process, as Pearce's ethnographic study (2009) of the former *Myst Online* community shows.

Even though Tumblr in fact did not delete posts in hindsight, and many users remained loyal to the platform, this debate made a lasting impression on the platform and its culture. To my surprise, many users stayed more loyal and dependent on the platform than expected, perhaps also because alternatives were limited. It is surprising that when push comes to shove, users keep their accounts and stay. Facebook, for instance, was also under fire in 2018 but still managed to maintain a large part of its global user base.

Such incidents say a lot about the meaning of accounts and profiles. Leaving is a difficult, affective choice and implies the erasure of an online identity and much-visited site. Perhaps, like with any public space, citizens would rather change it from the inside out.

YouTube and Algorithm Tactics

Tumblr is not the only platform on which users actively debate algorithms. YouTube is another example in which user practices are shaped by the platform's technology and culture. On Quora and Reddit, one can find countless posts where users ask each other how to edit videos on YouTube in such a way that the algorithm recognizes their content and hopefully even makes it go viral. By combining methods from the humanities, such as critical thinking and close reading, scholars can truly reveal the sentiments, posts and culture of the YouTube users. The metadata itself does not reveal their tactics and their ways of speaking up against the platform. Instead, it is better to watch the videos, and their related comments, to reveal sentiments about the YouTube platform and the tactics of its users.

When searching for "YouTube algorithm" on the platform itself, the top results feature a video by popular vlogger Markiplier (23,089,463 subscribers on 31 January, Markiplier 2019). *YouTube Is Broken and Here's Why* was uploaded on 28 October 2018 and since then has been watched well over one million times (1,668,385 views on 31 January 2019). He relates this to the shutdown of Google Plus, which had gradually been embedded more and more in YouTube's code, and creators were forced to work with it: 'You had to tie your YouTube channel into Google Plus no matter what.' In the video, Markiplier shows how pages do not load anymore, how suggestions are broken and how some of his videos do not work.

In the video, the vlogger is critical of the platform and the ways in which it does business: 'The sad thing is that we are called partners with

YouTube, but we are not partners—we are less than employees. […] They rely on code and algorithm instead of real people interacting with real people who are making content on this platform.'

However, users are not just at the mercy of the algorithm, as the top result videos show. One video, *YouTube Algorithm 2019: For Views* (Brian G. Johnson TV 2019), unpacks the "hero ritual" method that a vlogger applied to use the algorithm to his advantage and get the most viewers. 'Hero video strategy, this is something that I developed in 2018. […] First we have got to have a goal, to publish a long-term winner.' He unpacks the statistics in his dashboard, which also features suggestions for appropriate length, but his viewers watch longer than regular ones. He recommends having a clear content strategy with several subtopics and "stacking the deck in your favor" before you create your hero video.

By branding channels and videos in a certain way, users have a higher chance that their videos go viral. Johnson emphasizes that keyword strategies are very important for the algorithm, as well as launching a video at the best time slot. He recommends using tools such as Morning Fame (https://morningfa.me/), which allow users to analyse how well their videos did during the time they were posted. Johnson suggests: 'Make an estimated guess where your viewers live and when they will be watching your video.' He emphasizes that watch time metrics are key. He calls it the "fuel" that powers the video. It comes from the audience attention and their retention. 'It's the watch time metrics that fuel the video. [..] They have the ability to keep the audience watching.' In his other videos, Johnson unpacks these different data strategies.

Another video called the *YouTube Algorithm EXPLAINED (7 Insider Secrets)* (Neil Patel 2018) emphasizes that YouTube marketing is not rocket science. It also emphasizes using keywords that drive traffic and appropriate tools such as AdWords. A great title is needed. The vloggers emphasize that YouTube works in random ways. People often reach your video via the recommendations or the auto-play: 'Most of your traffic isn't search traffic.' Patel also emphasizes:

> The more engagement you get, YouTube is similar to Google, just normal, you know, their search algorithm, in which they're looking at the overall authority of your channel, similar to how Googles looks at the overall authority of your website. So, if you have a lot more videos that are doing well, it boosts the overall authority of your whole channel, and all your videos will start doing better.

Other channels are clearly aimed at monetizing the YouTube platform and its user base. *How to Get 1K REAL YouTube Subscribers in 1 week [Algorithm Hack]* by the appropriately named user Making a Millionaire (2018) guarantees its viewers "real engaged subscribers". He suggests finding popular YouTubers in your niche, subscribe to them and turn on the bell notification. The minute they upload a new video, you comment. 'The key is to get your comment to the top of your video.' Don't promote your own video too clearly but show that you are inspired by this user. That draws attention to your page.

But many algorithm tactics go beyond metrics, predictive analytics and search engine optimization (SEO). They guess how the algorithm works, and what titles, images or content attract viewers. In an article on YouTube ranking (2018), Stelzer summarizes the tactics of known YouTubers and zooms into the algorithm:

> Creating clusters of videos and integrating them with your YouTube playlist are great tactics for organizing content for your audience. Also, clusters and playlists organize the content for the algorithm. You have a better chance of showing up in your own and others' suggested videos because the algorithm relates that cluster of videos together. There are just so many benefits.

In a way this tactic oversells the clustering function of YouTube. Whether clustering really helps your videos go viral is certainly up for debate, and there is no way we can truly know this. At the very least though, it has the potential of keeping viewers on your channel. In that sense, it is an interesting "algorithm hack".

What becomes clear from this analysis is that users do not just use platforms. In fact, they debate their tactics against the platform and its rules all the time. On YouTube vlogs and elsewhere, the algorithm is debated as broken but with possible workarounds. This is a system that they can "cheat" or "hack" but is also a necessary evil. The illusive nature of the algorithm, and the uncertainty of how it works and organizes content, has real effects on creators. Filters are stressful, because creatives, gig workers and developers do not understand them.

Platforms, their rules and algorithms change continuously but such changes are not always announced, as Markiplier's video for instance showed. Vloggers can only speculate. In an in-depth article on YouTube creators and burnout, Parkin (2018) discusses the life of YouTube professionals, who engage on invisible labour and feel at the mercy of the

algorithms: 'Algorithm-led content curation makes creators feel disposable, challenging them to churn out videos in the knowledge that there are younger, fresher people waiting in the wings to replace them. For YouTubers who use their daily lives as raw material for their videos, there is added pressure, as the traditional barriers between personal and professional life are irreparably eroded.'

Within the different hacks and tactics, one popular video also stands out: *IGNORE THE ALGORITHM. How YouTubers Blow Up For "No Reason"* by jade darmawangsa (2019). She goes into several YouTubers that went viral unexpectedly, like Emma Chamberlain. The algorithm takes on almost mythical proportions in this video:

> The YouTube algorithm blessed Emma's soul because of how… I don't even know. Wait. The only assumption, the ONLY thing—because Emma you are literally a magician, we want your subscribers, we want your talent—the target audience is very narrow. […] Millennial teenage girls love it when girls do things that they cannot do. She is herself unapologetically. […] She tried a lot of things, and that's why she didn't need the algorithm.

In the video, the vlogger simultaneously treats the algorithm as a rigid system, while also acknowledging that great content for specific audience is the key to becoming a successful YouTube vlogger. Algorithms, then, are often characterized by YouTube users as a system that can be understood and worked around, as well as a game of chance. What fuels such discourses is the fact that YouTube is not particularly open about its strategies and the ways in which its technology works. As a result, users take an educated guess, create tutorials for each other and even mystify the algorithm as an entity beyond their reach.

Conclusion

The first wave of internet studies frequently celebrated social media and apps as tools of democracy (e.g. Baym 2000; Jenkins 2006). Since the web offered countless opportunities for sharing content and knowledge, it was conceptualized as open, participatory and social in scholarship. Though many framed the internet as a tool of empowerment, some scholars were critical of the business model and participation on platforms early on (Schaeffer 2011). Others asked the question who participated and profited from the web, considering that there was a digital divide between

those that had the required access and skills and those that did not. By now, marginalization is a key point in many studies, with recent works also drawing attention to the increase of toxic culture online (Scott 2019).

While platforms are not neutral tools, users find ways to deal with these platforms, criticize them and work around them. When updates on the algorithms happen, users do not idly sit by but instead address the issues by using hashtags such as #staff on Tumblr or creating vlogs about YouTube's culture. Users try to understand changes, work through the algorithm and use it to their advantage. Even when policies change in ways that do not fit a community, users do not easily leave platforms. Rather, they turn to other platforms, such as Twitter, to express their critiques and post evidence of what Tumblr censored.

In terms of methodology, scholars of media and platforms need to stay critical and weary of algorithms and guidelines that shape their data sets. Are there ways to apply digital methods while also being critical of platforms and their interfaces and policies? Considering that platforms filter so heavily, does it still make sense to focus on the content that users engage with the most? A multi-modal approach is equally crucial. Often, it is the hashtags and the implied messages in memes that reveal the real content, not the text or the picture per se. It is this combination that also makes close reading of posts so essential. Scraping the surface levels of posts on Tumblr, for instance, means information goes missing.

Data is not a holy grail. Optimists may present data as the new oil or electricity, but data is deeply human and cultural. Data is not a fossil that we simply mine but a footprint that is created by people and eroded by the weather. Data is dialogue, but the dialogue is uneven. Sometimes the algorithm speaks louder than the users. Sometimes users need to adopt tactics of their own to stand out and work around the silence. Our methods, including our close readings, should be humble and diverse enough to account for these groups. Content moderation, for instance, implies that some groups might be silenced, cannot upload or are filtered out of the system.

The future of the digital humanities is an interdisciplinary one. It is essential that we combine various methods, strive for diverse and deep data sets, and consider also what cannot be researched. This requires taking up an immersive stand as a participant as well as a critical mindset. The data that we can retrieve online is never a complete picture. Scholars should be mindful of how they sort, classify and obtain data. The ways in which social scientists and media scholars find and search data are not

neutral. In this sense, algorithmic biases are a component not only of user data but also of scientific methods which may have blind spots.

While internet studies as a discipline has existed for many years by now, it is important to keep developing. In this process, reflection and self-awareness is key. How can we research not just those who are productive but also those who are edited, filtered or even silenced?

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