

Algorithmic Accumulation: YouTube, Digital Work and the Future of Art

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Abstract:

Media giants are utilising trackers, targeted advertising and personal information in combination with sophisticated algorithms for the purposes of generating more user-friendly content. However convenient, this severing of the link between human input and cultural output could have a profound impact on societal values.

Traditionally, art has been best produced from the bottom up. Great artists are able to formulate expressions from a perspective outside of the prevailing norms, unbridled by the rigid status quo of contemporary society. There then comes a point when these artworks are valued enough — either culturally or monetarily — that they are appropriated for the purposes of accumulating capital. Managers of capital are best at reproducing and mass marketing trends originating from critical artists, but are usually unable to generate the creativity themselves.

These managers of capital, especially through film studios and television networks, have dictated much of the direction of popular culture over the past century. The scope of political and ethical views are all narrowed to reflect what these actors believe the prevailing opinions of society are or ought to be. But times are changing. Increasingly, it is not through polls, focus groups and screen testings that social temperatures are taken; but through computational software that collects billions of data points to automatically generate an image of what both individual and collectively, users enjoy.

One of the companies that has been at the forefront of this technology has been YouTube, which has over the past decade and a half become

an online entertainment juggernaut. Behind Facebook, YouTube is the most popular social networking platform in the world (Statista, 2021). The website boasts over two billion user visits (Iqbal, 2021) each month, and through pioneering algorithms is able to keep its users consuming a staggering one billion hours of video *each day* (TubeFilter, 2021) in a market where attention is currency.

This has translated into US\$20 billion in revenue in 2019, with the company valued at US\$160 billion (Sandoval, 2018) — higher than IBM or Disney — galaxies away from the US\$1.65 billion Google paid to acquire the company in 2005 (Sorkin & Peters, 2006). YouTube's evolution and the techniques used to propel its meteoric rise tell us a story about the new age of consumption, production, socialisation, and culture.

Idealistic Beginnings

Much like early Internet utopianism, YouTube was first conceived of and viewed as an emancipatory tool for freedom of expression and the empowering of online communities (Rotman & Preece, 2010). It offered a platform to harness the power of mass media but for amateur content creators in an emerging 'participatory culture'. This, it was hoped, would lead to the fragmentation of media oligopolies, democratising and decentralising media content in the process.

From small beginnings as a tech start-up formed by ex-PayPal employees, YouTube was acquired by in 2005, from which point the platform quickly became a target for media conglomerates chasing copyright royalties and revenue shares (Kim, 2012). The following few years would see a backlash from YouTube's early adopters and organic community who opposed the creeping

control of big media companies and corporate interests.

“In participatory culture, media businesses’ capacity to produce value relies on the support of co-creative users. In fact, platform providers like YouTube are no longer only in the ‘media’ business; they are also in the social network business.”

(Burgess and Green, 2018: 14)

YouTube’s structure has been reluctant to develop features which enhance community-oriented features. It has instead developed towards the priorities of scaling and mass-consumerism, which has alienated many early users from the community-spirited ethos characteristic of the early years. This signalled the shift from ‘user-generated content’ to ‘professionally generated content’, which was driven increasingly towards attracting corporate sponsorship and maximising ad-space value (Kim, 2012). This shift went some way to resolving the tension since Google’s acquisition between YouTube as a broadcaster and YouTube as a social space. This has created ‘prosumers’ — those who both produce and consume content — have subsequently become atomised agents functioning within the market of the attention economy (Duncum, 2011; Andrejevic, 2009). For YouTube, the key metric in this market is viewing duration and the platform must adequately incentivise the production of desirable content.

YouTube maintained this trajectory and has become a tool of capital domination and exploitative innovation, with user-generated labor — both the content produced and uploaded to the website as well as the data which users generate through consumption — used for a new kind of capital accumulation (Nixon, 2015a; 2015b).

“...a short history of YouTube repeats the history of the internet. YouTube has evolved from personal to public to commercial. When media conglomerates invest in a rising medium, institutionalization begins in the form of commercialization and legalization.”

(Kim, 2012: 65)

The theme of emancipation present at YouTube’s inception is still invoked, but now to highlight the lucrative financial opportunities available through

production on the website. YouTube ‘creators’ have access to comprehensive analytics to boost their viewership and engagement, a ‘Creator Academy’ complete with online courses for subjects such as ‘content strategy’ and ‘channel optimization’; as well as a ‘Partner Program’ (YouTube Creators, 2019; Google, 2021) which allows eligible channels to monetise their videos. This offers amateur producers the opportunity to build an income stream and career by developing skills designed to enhance the quality of their content.

As with gig economy platforms like Uber, Deliveroo and Fiverr, the centralisation and connectivity between consumer and producer is incredibly lucrative. It also serves to shift liability almost entirely onto the individual under the pretense of entrepreneurialism and flexible work.

Capital accumulation and micro-celebrity managers

YouTube works by ‘capitalising on cultural consumption’ in a ‘social factory’ which sells screen time to advertisers. The fusion between production and ‘play’ has refined a mechanism whereby the act of consumption and enjoyment has become ‘digital work’ and labour value for capital accumulation (Postigo, 2014).

Sharing in YouTube’s growing income and global reach, successful YouTube creators have been catapulted into wealth, with top stars earning an estimated \$20 to \$30 million in 2020 alone (Berg & Brown, 2020). Some have even transitioned into mainstream celebrities — names like Jake and Logan Paul, KSI, and PewDiePie. Along with ‘reaction videos’ and video game gameplay, ‘vlogging’ (video blogging) has become a widely adopted format for these YouTubers to transform their subscriber base into consistent monetary value. The technique and styles used seek to present an authentic and personal relationship with their audience in contrast to conventional celebrity culture and more transparently commercial entertainment (Cunningham and Craig, 2017; Burgess & Green, 2008).

Vlogging creates ‘micro-celebrities’ who create niche, specialised and personalised content (Marwick, 2018; Senft, 2013). These techniques have also been successful in attracting viewers to reactionary and extremist content, highlighting the centrality of personality in YouTube entertainment (Lewis, 2019). This could be because social anxiety has been found to be a predictor of ‘parasocial’ (asymmetrical non-reciprocal) relationships with YouTubers and YouTube addiction (De Bérail, Guillon, & Bungener, 2019). This power dynamic is in part why channel owners can be viewed as managers, because they transform their viewer base into earnings, adopting a range of strategies to maintain, increase and most profitably use this base (Postigo, 2018: 13-4).

“The subscriber is the basic currency in this system. Their recruitment and retention translate into revenue for YouTube ... In that sense, those YouTubers with large subscriber bases are a management class harnessing (into channel views) and maintaining (retention and channel growth) the value of subscribers which function as the basic currency and labor within the digital labor architecture.”

(Postigo, 2018: 13-4)

A battleground for capital, visibility and cultural reproduction

Increasingly, parallel to processes of cross-sector financialization, YouTube channel management through multichannel networks indicates a shift towards adopting models of traditional media industry systems like in Hollywood (Vonderau, 2016). It appears then that YouTube, despite all of its emancipatory rhetoric, is simply replacing traditional media formats of television and film with an online alternative. And much like these formats, YouTube’s power to suspend, demonetise or permanently ban channels it deems inappropriate or not in accordance with its Partner Program guidelines mirrors the concentrated editorial power of television networks. While the former exerts this power through the automated and manual censoring of videos, the latter can cancel programs or limit

funding to exert influence over the kind of content produced.

In addition to vertical power constraints, there are horizontal forces influencing the content of YouTube creators. Controversy, hostility and drama between content creators is so common that a sub-industry of commentary channels have attracted large audiences while popular YouTubers regularly ‘react’ to ongoing feuds as a simple way to generate content. Much of this industry has evolved into a kind of interactive tabloid magazine where content, relationships and behaviour of stars are endlessly dissected with ‘exclusive interviews’ and tell-alls. Channels like ‘DramaAlert’ and ‘Phillip DeFranco’ boast a combined eleven million subscribers, and are typical of the genre. They combine entertainment news with opinion and social commentary to mimic the style of gossip magazines. The level at which YouTube’s development has mirrored the development of television speaks to the strength that advertising has on standardising artistic formats.

Many of these stars, emerging in the last half-decade or so, were able to commodify their personal brands and monetise their videos into large income streams. In early 2017 however, YouTube creators were abruptly reminded of their position as labour in intrinsic conflict with capital. For the first time, the power that the company’s leadership, business model, and algorithmic programming had over their content came into focus.

In response to reports that advertisements were accompanying and therefore enabling the monetisation of extremist content, hundreds of large advertisers threatened to boycott YouTube. To reassure advertisers, YouTube responded emphatically.

Temporary measures — which were later institutionalised as permanent policies — restricted eligibility for content monetisation, expanded content moderation, and extended control for advertisers over what categories of content they could select as suitable (Kumar, 2019). Because of the broad and loosely defined categories used to target potentially non ad-

friendly content, many YouTube channels which spoke about, commented on, or referred to controversial content were also negatively impacted by the policy changes.

These sweeping changes, known popularly as 'Adpocalypse', were partly triggered by backlash from a video where PewDiePie — one of YouTube's biggest creators — used the website Fiverr to hire men to display controversial messages to the camera (Romano, 2017). This incident, on top of previous reports that terrorist groups were using YouTube to promote terrorism, was the breaking point for advertisers already concerned with the compatibility of loosely moderated content and global brands.

All hail the mighty algorithm

More importantly though, Adpocalypse and the effects of advertising selectivity on YouTube reflects the power of algorithmic moderation on the labour of YouTube creators. YouTube's algorithmic selection also has a strong influence over the kind of content that is produced. For advertisers, YouTube offers the option to automatically select suitable content based on its own categorising system.

"As the experience of creators on the platform shows, this process is far more likely to punish the riskier and diverse types of content that push the boundaries of mainstream discourses thus disincentivising their production and sharing and functioning to 'suppress content creators' freedom'..."

(Sangeet, 2019: p. 4)

The algorithm rewards channels which establish themselves with one type of content and don't **deviate from it**, especially personality driven channels. Because of this, stereotypes and societal roles are reinforced by Youtube's algorithm. 'Self-optimization', which by virtue of the structure nature creators exist within, involves perpetuating conventional conceptions of gender, identity and societal dynamics (Bishop, 2018). Although there is a potential for content creators to challenge dominant societal stereotypes and roles, radical voices are constrained by the necessity of

participating in the capitalist structures which exploit and govern them.

This demonstrates the power of algorithms to govern and shape individual's behaviour, both the interaction with social media platforms and interactions with one another. For example, the 'threat of invisibility' of Facebook's algorithm, broadly applicable to YouTube too, creates a disciplinary mechanism by which certain behaviours and interactions are incentivised and rewarded and a reality is presented in which other users are abiding by this ruleset enabling hierarchies of power to emerge (Bucher, 2012).

"...becoming visible is to be selected for by the algorithm. Inscribed into the algorithmic logic of the default News Feed is the idea that visibility functions as a reward, rather than as punishment, as is the case with Foucault's notion of panopticism."

(Bucher, 2012: 1174)

More tangible than Facebook and YouTube's invisible algorithms, Netflix's entry into the film and television market as a financial backer presents the possibility (or current reality) that culture — through the production of art and expression — is generated and shaped by non-human actors in the form of algorithms analysing user-data and predicting elements necessary for successful ventures, what is referred to as 'algorithmic culture' (Hallinan, 2014). In other words, because the algorithms implemented by social networking companies are somewhat removed from human intervention, they are classifying and ranking interactions and content, in the process creating a hierarchy shaping the culture of its participants.

Up until very recently in human history culture has been a mixture of mother nature, feelings, interactions, beliefs, languages, events, history, and an element of randomness. This messy mixing bowl is what most groups of people hold as valuable in life. It determines the ontological reality of societies, and therefore the relationships and commonality with which events are experienced.

But this human condition is becoming an algorithmic condition which less and less people

are involved in. Artists have become managers of capital who are now giving way to software engineers who develop self-propelling algorithms. When detached from pre-capitalist culture individuals become more responsive consumers, conditioned and calculated to boost revenue. The shared experiences become media, discourses and narratives developed by investment funds and algorithms. Value in life becomes synonymous with economic value, market participation and consumption 'choices' rather than any deeper cultural attachment. The capacity for human

inspiration is diluted and restricted by the oppressive fusion of capital accumulation and technology. And common references and interpersonal interactions are subsequently mediated by a culture entirely subsumed and directed by the force of capital.

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