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# YouTube personalities as infrastructure: assets, attention choreographies and cohortification processes

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#### **ABSTRACT**

YouTube, the world's most popular online video sharing and social media platform, is filled with personalities. Lifestyle bloggers, hobbyists, self-styled newscasters and exercise instructors add flair to what they share, carving out a niche in a crowded field. Typically, personality is understood as something that belongs to its bearer. But how might it be possible to analyze YouTube, starting from the opposite proposition: that the 'YouTube personality' is not so much a property of the persons featured, as it is a property of the platform itself? This article argues that on YouTube, personalities become estranged from their ostensible bearers, becoming platform infrastructure. YouTube not only broadcasts personalities; it renders personalities operational. YouTube personalities act as assetization infrastructure, in that they continually compensate for the poor terms offered on advertising revenue, producing links within ecosystems of opportunities that extend beyond the platform. They also act as cohortification infrastructures, transforming the platform's surveillance-marketing logic of cohortification – the continuous placement of users into cohorts of similar users - into a participatory process.

#### **KEYWORDS**

YouTube; personality; infrastructure; cohort; addressivity; assetization; performance; FLoC

YouTube - the world's most popular video sharing platform - was founded in 2005 by ex-PayPal employees, and purchased by Google in 2006. Translating the heavy traffic YouTube generated into revenue was not initially straightforward for Google; however in recent years, YouTube's predominantly advertising-focused business model has proven a resounding success. The platform serves bumper ads (non-skippable ads before videos) overlays (ads placed within the lower 20% of the video frame), skippable and non-skippable midroll ads, and sponsored cards (clickable ads beside a video), among others, on its videos (YouTube Creators 2019). Advertisers bid for spots at auction via Google Ads, which services Google sites such as YouTube, Gmail and Google Maps, as well as approximately 2 million external sites, videos and apps included within the Google Display Network (Beattie 2021; Google Ads n.d.). Typically,

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advertisers only pay if users watch a full YouTube ad, watch to 30 s, or click an affiliated link. YouTube incurs the costs of hosting the videos, and pays a small fraction of You-Tubers to incentivize content creation. Those selected for the YouTube Partner Programme (YPP, launched in 2007) receive a share of the revenue their channels generate. They can also opt in to an ever-increasing range of other monetization tools (from which YouTube takes a cut), including Super Chat (paid live chat messages), Channel Memberships (channel subscription fees in return for bonus content access), YouTube Shopping (featuring channels' affiliated merchandise) and YouTube Brand Connect (which connects YouTubers with brands for sponsored campaigns) (YouTube Help n.d.a). As a heavy traffic generator, YouTube also collects vast amounts of user data, which benefits Google's ability to offer advertisers 'precision' targeted audiences across platforms.

In recent years, YouTube has continued its meteoric rise. Between 2017 and 2019, its parent company, Alphabet (formerly Google), saw its YouTube advertising revenue soar, from \$8.15 billion in 2017, to \$15.15 billion in 2019 (Armstrong 2020). Between 2018 and 2021, worldwide quarterly advertising revenues continued to increase sharply, from \$3.025 billion at their lowest (Q1, 2019), to 7.205 billion by Q3 in 2021 (Ceci 2021). Content uploads, too, have expanded exponentially. As of May, 2019, over 500 h of new content were being uploaded to YouTube every minute (compared with 37 h per minute in 2012), and 1 billion hours of video were being watched each day worldwide (Calabrese 2020). Within this ever-expanding field, the 'People and Blogs' content category has increased its percentage share. Rising dramatically beginning in 2013, this category accounted for 50% of all YouTube uploads by 2016, and has dropped only slightly since (Calabrese 2020). People and blogs - personalities and personalized content - proliferate. What roles do YouTube personalities play, in this expanding attention platform? What does YouTube make of personality, beyond its self-evident role of platforming vloggers' personalities?

This article argues that on YouTube, 'personality' becomes more than just a singular quality, belonging to its ostensible bearers: characterful vloggers, unboxers, dance teachers, self-styled pundits, makeup tutors, DIYers and the like. YouTube partially lifts 'personality' from its bearers, such that personality becomes a property of the platform itself. Indeed, personality becomes a platform infrastructure. Below, I make the case for treating the 'YouTube personality' as a key analytical category for the platform. On YouTube, I will argue, 'personality' is fundamental, not epiphenomenal, to the platform - since it is largely personalities who draw, shape and categorize attention: the platform's most important asset. 'Personality' is too structurally important - and too thoroughly operationalized - to be understood as simply 'content,' counterposed to the platform's 'form.' Nor can it be understood as an asset only for those who ostensibly bear the personality (the YouTubers themselves), when YouTube renders others' personalities operational within its attention economies, and revenue-generating for the platform more than for YouTubers themselves. The 'YouTube personality' is a complex category, partway between a YouTuber's person (their singular life); their performance as screened, circulated characters; and the platform. As an ambiguous assemblage of persons, performances, platforms and their techno-cultural artefacts (videos, 'likes,' etc.), the 'YouTube personality' is an open-ended, continuous construct that, in its flexibility, adaptability and ability to 'pull' attention, enables YouTube itself to

be flexible, adaptable and changeable as an attention-grabbing, attention-choreographing business proposition.

In what follows, I parse three coexistent senses in which the YouTube personality generalizes beyond itself, becoming medium, performance genre and platform infrastructure. While the former two were already established within older means of broadcasting personalities, such as television and video art, YouTube is a unique innovator in infrastructuralizing personality. YouTube puts personality to work, firstly, insofar as online personalities actively compensate for the platform's unsustainability, mitigating against its failure to produce a robust 'middle class' of content creators (Lanier 2014). YouTubers compensate for the paucity of YouTube's monetization offer, rerouting traffic away from YouTube, to augment its offered terms (for instance, by linking to donation and crowdfunding sites, such as Patreon and Ko-Fi). This makes the platform more robust by modulating its sustainability gaps, and prompting YouTube to produce its own, 'in-house' versions of such crowdfunding structures (such as its paid channel subscription service). Secondly, personalities draw, shape and choreograph traffic, translating cohorts (groups of separate, yet similar users) into communities. Personality infrastructures are crucial, if outsourced, components of a pervasive advertising-surveillance logic, which I call cohortification: the act of sorting mass online audiences into cohorts of similar users, who share interests and/or characteristics. While cohortification is central to surveillance-based advertising, the latter does not inaugurate the cohort as a prospective community. YouTubers, on the other hand, address cohorts as prospective collectives of 'people like you', who could engage with one another around their shared interests. They inaugurate cohortification as a participatory process, rather than one to which users are passively subjected.

## The YouTube personality

This article posits 'YouTube personality' as a category of analysis. Why? YouTube's previous strapline - 'Broadcast Yourself' (used mainly between 2006 and 2013) - hints at a YouTube's predilection for thinking of itself as a complex of broadcast personalities. Yet, personality is not the most obvious analytical category on which to base an analysis of YouTube. A more self-evident choice might have been the view, for instance, which Karin van Es describes as a 'structuring agent' of YouTube - a pervasive category, which orders and neutralizes hierarchies and inequalities, while naturalizing 'the view' as if it straightforwardly coincided with viewers' intentions and satisfaction (van Es 2020). While the view is certainly an important pervasive category, it is arguably equally important to consider not only what is pervasively counted; but that which draws views in the first place. Thus, platformed personality, too, must also be considered as a key analytical category - even if personality is messier and more difficult to define.

I choose the YouTube personality as an analytical category, firstly, to reflect the pervasive emphasis on performing 'personality' on YouTube, as evidenced by the large share of content that falls under the 'people and blogs' category. Of course, not all YouTube content substantially focuses on performing, projecting and circulating 'personality.' Still, there is significant enough emphasis on personality to warrant close attention to the roles the latter plays as a structuring force on the platform. The category 'YouTube personality' will largely refer to vloggers with their own channels in this article – those who seek to develop their own audience, by delivering videos on distinctive interests (such as politics, stunts, DIY projects, yoga classes or makeup tutorials) in a unique and singular fashion. However, the category extends beyond vloggers, who broadcast 'themselves,' to include the many other ways that personality is performed on YouTube: for instance, by those who perform personality minimally as preference, by 'liking,' viewing or commenting on others' work; and by brands, who project unique brand 'personalities' via advertisements or product placements. In an abstract sense, the category 'YouTube personality' refers to a platform-dispersed sense of the singularity of a person, construed as bundles of views, likes, interests and styles of self-presentation.

The YouTube personality is a construct suspended between the categories of character, person and platform. On this point, I draw from John Frow's exploration of the entanglements of character (primarily in the sense of fictitious character) and person (in the abstracted sense of being a unique person; and having personhood). Paradoxically, Frow writes, 'characters and persons are at once ontologically discontinuous (they have different manners of being) and logically interdependent' (Frow 2016, vii). He combines the formal study of character as an imaginary, modal form, with a 'sociological poetics, concerned with the social force of representations,' and attuned to 'the relation between the formal category and particular forms of life' (Frow 2016, x-xi). I will use 'YouTube personality,' here, as a shorthand for this intermingling of character and person - the sense that YouTubers (contrary to the company's former strapline) do not broadcast themselves, so much as construct and project implied, projected personalities and persons - personas, which are the basis of 'strategic' forms of communication (Marshall and Barbour 2015, 2). YouTube, however, also promotes a particularly close sense of affiliation between character, persona and person. It extends the sense in which television comprises a 'personality system,' and proffers a 'personality effect' (Langer 1997): a 'close identification between persona and role - thus giving the impression that the TV personality is just being "themselves" (Bennett and Holmes 2010, 66). On the one hand, YouTube democratizes this close proximity between person and role, such that anyone with access to a camera and the internet could, in theory, become a vlogger, 'just being themselves' on screen. On the other hand, precisely because of this partial democratization of the 'personality effect,' YouTube increases the drive to stylize the performance of personality, since the heavily over-saturated content field incentivises YouTubers to carve out a highly distinctive niche - a gimmick (Ngai 2020) - in order to garner attention.

Far from a neutral or self-evident category, the concept of the 'personality' – particularity that a person owns or possesses – has gone through a long series of historical transformations. As Marcel Mauss argued, the category of the human person – the idea of a 'self' who thinks, acts and possesses traits – has evolved over time across societies, 'from a "role" (personage) to a "person" (personne), to a name, to an individual; from the latter to a being possessing metaphysical and moral value; from a moral consciousness to a sacred being; from the latter to a fundamental form of thought and action' (Mauss 1985, 22). Delving into 'personality' as both legal construct and cultural form in Anglo-American societies, Jane Gaines reminds us that it was Locke and Hegel who cemented the relationship between personality, property and right. Locke aligned property with freedom, and 'the ownership of oneself and one's own labor'; one could own things because one owned oneself, and could therefore also own things that were 'the product of man's labor, which

he has "mixed" with nature' (Gaines 1992, 19). As Locke put it, property, 'being by him removed from the common state nature hath placed it in, it hath by his labour something annexed to it that excludes the common right of other men' (Locke 1947, 134). Labour annexes an aspect of nature to the person. Hegel, for his part, 'sets the stage for the rightsholding subject as we know it by conceiving of subject and right as simultaneous' (Gaines 1992, 19; Hegel 2012, 69). 'By tying rights to personality,' Gaines notes, 'Hegel can argue that abstract rights emanate from human beings; right becomes synonymous with individual self-expression, with the investment of personality, through will, in material objects. [...] The right has become an "attribute," even a characteristic, that "belongs to" every person' (Gaines 1992, 20). An idealist understanding of personality has long been entrenched in copyright law and cultural rights; for instance, France developed what Celia Lury has called an 'author's rights regime,' according to which a 'work of art could be legally defined as property because it was regarded as the creative expression of what the artist already owned: his self or personality' (Lury 2002, 24; see also Edelman 1979). Via her reading of the Soviet Marxist legal scholar Evgeny Pashukanis, Gaines shows that the idealist legal foundations linking personality to proprietary right bear a close relationship to commodity exchange. Indeed, 'the commodity form determines the legal form,' as the latter provides the conditions that allow the former to thrive (Gaines 1992, 20; Pashukanis 2017). Extending these lines of thinking, we might question how YouTube, by platforming personality, continues to 'evolve' the category of the personality, remapping it to meet the needs of an asset economy (oriented largely toward generating future revenue streams, rather than sales; we will examine assets in further detail below), rather than an economy based on commodity exchange. The YouTube platformed personality begins to become unhinged (not for the first time, although in new ways and on a new scale) from the idealist understanding of the personality as that which a person owns, because the circulation of personality as a socio-technically configured asset (which generates future advertising and subscription revenue, more than sales) does not require the same configuration of ownership and rights as did commodity circulation. Guaranteeing cultural rights with respect to commodities necessitated an idea of the 'imprint of personality' as a 'serviceable' legal concept (Gaines 1992, 47). For example, photographs could not be reproduced and sold without authorization, because they were legally imputed to bear the 'imprint' of the photographer's personality; this justified photographers' claim to monopoly rights over the use and sale of their photographs (Gaines 1992, 42-70). But unlike a commodity (which typically can be owned by either you or me, not both) some assets, including platformed personalities, can generate rent for many parties at once, without the need for an exclusive monopoly right. Reversing Locke's formulation, we might say that YouTube annexes others' personalities, inaugurating them as platform assets, precisely because the platform configures assetized personality as a non-rival good – that is, something that can, in theory, generate revenue for both person and platform, without its full potential to generate revenue being 'used up' by either party. (In practice, however, most YouTubers do not successfully assetize their personalities, although a few 'preferred' channels qualify to monetize, accessing often minimal returns; in this sense, YouTube annexes different platformed personalities to vastly different extents, according to their 'merits' as attention magnets.) It is not an aspect of nature that is annexed to the person, as in Locke; but rather, an element of personality that is annexed to the platform. An idealist echo - the persistent, common-sense

notion that one owns one's personality – naturalizes and neutralizes the substantial shift that the platformization of personality carries out: transforming personality into platform quality, platform asset and platform infrastructure.

That YouTube personalities are suspended between character, person and platform – and are partly annexed to the platform – leads to an understanding of the YouTube personality as a topological construct. The YouTube personality occupies a fluid and changeable field, retaining its key attributes - its recognizability as a distinct personality - in spite of being suspended somewhere between character and person, person and platform. As Lury, Parisi and Terranova argue, there is a widespread 'becoming-topological of culture,' such that 'contemporary culture is itself coming to display a proliferation of surfaces that behave topologically' (Lury, Parisi, and Terranova 2012, 8), via 'the setting up of spaces of different kinds of order and continuity in such a way as to enable deformation and change' (Lury, Parisi, and Terranova 2012, 8). Personality's ability to retain its legibility in changeable conditions arguably allows for the profound deformation of 'personality relations' the platform carries out.

As topological construct, personality inaugurates shared interests as personal traits. The YouTuber marries object, information and 'personality' in novel ways, instantiating a zone of indistinction between interest and trait. Often, YouTube channels (for example, DIY channels, yoga channels, or channels focused on the history of London tube stations) add 'personality' to expertise about a niche interest: a recognizable and distinct style of address. Viewers do not visit the channel solely to learn about said niche interest; they also come to be addressed in a certain way, which I'll call an 'I'm like you' addressivity: an address that inaugurates the audience as a collectivized cohort: a dispersed community of viewers, which shares the niche interest, and identifies with (or, at least, appreciates) the personality's style of delivery. (We will return to cohorts and cohortification below.) The platform inaugurates the group's shared interest (in both this particular topic, and that particular YouTuber's presentation style) as their shared trait: we are fans of Leslie Fightmaster's yoga classes; you are fans of Jago Hazzard's train videos. YouTube personalities make information more personality-like, presenting preferences for particular kinds of information as personality traits. The persistence of the intuitive, self-evident category 'personality' enables YouTube to profoundly reshape relations between character and person, person and platform, information and trait, while minimizing the apparent abruptness of these changes.

# The YouTube personality as ... medium, genre, infrastructure

Having established what the YouTube personality is, we must next consider what it does: how it dissolves distinctions between personality as a property of the person, and as a property of the platform. This section considers three ways to conceptualize how YouTube personality becomes a transpersonal property: as medium, as performance genre and as platform infrastructure. These three senses in which personality becomes transpersonal coexist on YouTube; while the former two are not unique to YouTube, YouTube is an innovator in operationalizing personality as a platform infrastructure. Let us begin with the YouTube personality as medium. Video has long been described as deploying subjectivity as a medium, of sorts. In her influential 1976 account of the then-emerging field of video art, art historian Rosalind Krauss argued that the medium of video art was narcissism. Krauss meant to erode the distinction between two different senses of the term 'medium': medium as in the material substrate of an artwork; and medium in the parapsychological, even telepathic, sense of 'a human receiver (and sender) of communications arising from an invisible source' (Krauss 1976, 52). Video might, indeed, be a technical configuration relaying light through lens, videotape and screens; but because of its mirror-like quality - its ability to bracket subjects between camera and screen - its medium seemed more like 'the human psyche used as a conduit' (Krauss 1976, 52). What happens to this mediumistic quality of psyche and subject on YouTube?

YouTube scholarship has debated what kind of medium YouTube might be for years. Early commentaries on YouTube drew attention to many of its key qualities, such as its unexpected continuities with television (Uricchio 2009, 25; Van Dijck 2013); its participatory culture and 'economy of contribution' (Stiegler 2009, 45); its aesthetic of 'multiple streams of patterning' (Vernallis 2013, 131); its 'playing along' practices (such as taking a video dance class), which envision broadcast performance techniques as 'relational infrastructure' (Hamera 2007, 19), bridging virtual and viseral experiences (Miller 2012, 2017); and the marked tension it produces between user-generated 'mashup culture,' and an understanding of culture still 'rooted in the old logics of ownership and profit' (Uricchio 2009, 25; see also Burgess and Green 2009; Snickars and Vonderau 2009). Thinking of the YouTube personality as YouTube's substantial medium might reorder such reflections. Whether strongly or weakly, YouTube videos are pervasively linked to personalities, in two senses. Firstly, in a sense closer to Krauss' account of the medium of video, many (although not all) YouTube videos, especially vlogs, place the broadcast subject as if in parentheses, positioning the personality as the image-stream incarnate, and envisioning video streaming as that which carries personalities to their audiences, suspended somewhere between camera and screen. Secondly, in a sense that departs from Krauss' framework, YouTube construes personalities as distinctive sets of shared interests. YouTubers create content around more or less distinct groups of interests; these could be very tightly focused (for instance, a channel devoted solely to lock picking) or more loosely focused (for instance, a channel with videos about historical buildings, train stations, gardens and London curiosities). The range of interests addressed form part of the channel's 'personality' – its unique perspective on the world, indexed by its singular range of not-so-singular interests. Equally, users' every like and view forms part of a composite, surveillant image of their personalities: their unique set of perhaps quite disparate interests. (User x likes makeup tutorials, particle physics shorts, horseback riding competitions and funny cat videos.) These data provide the platform with avenues for targeting advertising, and thereby monetizing attention, by understanding users' personalities as carrying disparate interests, which orient their willingness to give attention to various kinds of content. In this sense, personality is YouTube's medium in a sense adjacent to solvent. In chemistry, a solvent is a liquid that dissolves a solid. For instance, water (the solvent) breaks down salt (NaCl, or sodium chloride the solute) into Na<sup>+</sup> cations (positively charged socium ions) and Cl<sup>-</sup> anions (negatively charged chlorine ions), to create a solution: seawater. A solvent, such as turpentine, thins oil paint by chemically breaking down the oil; adding a medium such as linseed oil, on the other hand, increases the paint's fluidity and transparency, without denaturing the paint's constituent chemicals. Analogously, we might say that on YouTube, personality suspends disparate, distinct constituent attention-elements (interests, styles and views) as if in a medium - rendering them more fluid, while allowing them to retain discrete and unchanged.

### YouTube personality as performance genre

Another way to understand the YouTube personality transpersonally is to describe it as a particular genre of performance. Here, I will focus on genre, not as generalization about the concrete actions or styles YouTubers perform; but rather, as a generic form of address to an audience that YouTubers evoke. In his late essay 'On the Problem of Speech Genres,' the Russian literary theorist Mikhail Bakhtin argued that a genre can be defined according to its 'typical conception of an addressee' (Bakhtin 1986, 95). Each literary genre, for instance, carries its own 'special sense and understanding of its reader, listener, public, or people' (Bakhtin 1986, 98). Understsanding genre entailed analyzing what Bakhtin termed addressivity: an utterance's 'quality of being addressed to someone' (Bakhtin 1986, 95), or, as he puts it elsewhere, of 'turning to someone' (Bakhtin 1986, 99). Addressees might range from specific interlocutors in everyday speech, to more or less differentiated collectives, such as specialists in a given field, or 'like-minded people' (Bakhtin 1986, 95). Only looking at an utterance as a whole (rather than any of its constitutent parts) could capture what Bakhtin describes as 'the traces of addressivity and the influence of the anticipated response, dialogical echoes from others' preceding utterances, faint traces of changes of speech subjects that have furrowed the utterance from within' (Bakhtin 1986, 99, emphasis added). What happens, then, when we consider, first of all, the wholeness of YouTubers' addressivity as that which defines their performance genre? YouTube personalities pull audiences for platforms, and issue performative calls to cohorts of subscribers and viewers to come. They do not address already constituted audiences, so much as they collaborate with platform interfaces and algorithms, to produce, build, and *sort* audiences into niche interest groups – instituting belonging as belonging to a highly differentiated field of their kind of viewers, which, in turn, assists Google Ads algorithms in differentiating user interests for advertisers.

Now that we have considered the wholeness of YouTube addressivities, let us think further on how YouTube personalities furrow the utterance from within, situating their audiences within a field of dialogical echoes with other platformed personalities and users. This requires updating Bakhtin's list of addressees: 'reader, listener, public, people.' On YouTube, we might think, instead, of personalities addressing intimates, adversaries, platform algorithms and searching communities (those who type a search term into YouTube search, and hope to find some interesting results), as well as the aforementioned cohorts of subscribers and viewers to come. YouTubers regularly address their audiences as if they were their intimates: close associates, in an implied physical sense (the closeness of being 'in the same room,' via the screen, which punctuates the privacy of the home), and in a sense of being similar to - and inclined to agree with the performer. For example, the YouTuber ContraPoints produces feature-length video-performance-lectures, on topics such as gender and transgender issues, envy and online cancel culture. A former PhD student who dropped out to use YouTube as a political medium, she frequently combines academic materials (such as quotations from philosophers, or summaries of academic debates) with accounts of online controversies.

Her performances carefully foreground her complex position as a speaker-performer implicated in these controversies and debates, while also conveying intimacy with her audience. For instance, in 'Envy,' she wryly explains why she quit academia, in a costumed close-up: 'If I was a professor, I'd have to behave myself. And I don't wanna behave myself. I want to be bad. Do you wanna be bad with me? Let's be bad' (Contra-Points 2021). ContraPoints playfully addresses her viewership as if they were about to hang out together, while at the same time situating her project as one that 'de - and re-institutionalizes' her academic work - withdrawing from academia's affordances and strictures, and instead, grappling with YouTube's affordances and drawbacks.

Sometimes, YouTube personalities either directly or tacitly reference adversaries of some sort. The term adversaries, here, comprises competitors (for instance, beauty vloggers affiliated with competing beauty products) and enemies (those with whom one has openly hostile relations); these categories sometimes coincide. For instance, Contra-Points' video 'Cancelling' (ContraPoints 2020) recounts a prominent 2019 conflict, in which beauty vlogger Tati Westbrook 'cancelled' fellow beauty vlogger and former friend James Charles, posting a 43-minute video accusing him of sexually aggressive behaviour, and disapproving of his promoting a beauty brand that was a direct competitor of her own company on Snapchat. The controversy cost Charles millions of subscribers, while increasing Westbrook's subscriber counts by millions (Alexander 2019). This spat is far from unique; rather, it reveals a general pattern, whereby YouTubers fend off competition by cancelling enemy-competitors, using the controversy to garner attention. This 'Dramageddon' form of YouTube address sees vloggers vigorously protecting their brand 'territory', while probing the volatile asset value of broadcast social conflict (Rosamond 2020).

YouTubers also tacitly address platform algorithms. For instance, many YouTubers who seek financial returns on their channels try to second-guess what 'the algorithm' wants: which videos proprietary platform algorithms will boost, by recommending them to new viewers. In spite of substantial personal and psychological risks, many You-Tubers maintain a break-neck pace of production, appeasing 'the algorithm,' which appears to favour those who constantly upload content; and remaining 'always available and responding to their fans' (Parkin 2018). YouTubers address searching communities - those who use the search bar, hoping to find something interesting - as witnessed, for instance, in the choice of catchy, searchable titles. Ultimately, they address cohorts to come: calling into being a group of separate, yet similar people who share an interest or trait in common. Think, for instance, of an oft-repeated refrain: YouTubers ending their video by asking audiences to like, comment, share, subscribe, or donate to their channel. We might call these asks moments of institutionalization, in which YouTubers inaugurate themselves as 'channels' (akin to both broadcasters and people) which must 'perform - or else' (McKenzie 2001); their ability to monetize depends on their performance as an 'audience magnet.' We might say that YouTube reshapes Jon McKenzie's account of 'perform - or else' as the 'order-word of the emerging performance stratum' of power and knowledge (McKenzie 2001, 19), into: 'perform - or else your personality will not be your asset.' Appeals to like and subscribe reflect the contingency of YouTube personalities' status as assets for themselves on their performance - while, for its part, YouTube can generate revenue from all its platformed personalities that garner any attention at all, because it can serve ads on all content. The extreme difficulty of YouTube's self-assetization proposition adds urgency to YouTubers' appeals to like and subscribe, which double as the *platform's* appeal for attention. Asking viewers to like and subscribe sets and synchronizes expectations of audience participation, encouraging strong, ongoing engagement between audience and performer - which, in turn, might feed favourable metrics into platform algorithms.

#### YouTube personalities as infrastructure

The YouTube personality might well be described as a medium, and as a genre of personality-performance. But they are also platform infrastructures. Personalities are the platform's attention-grabbing force - a character-force that pulls attention in precise directions, sorting users into interest groups; furrowing the YouTube address from within. Given how central vlogging is to YouTube's current offer, YouTube personalities are far more than mere platform 'content' - or, indeed, 'content creators.' The former term too readily dismisses broadcast personalities as if they were incidental to a platform, which seems substantially to run on broadcast personalities. The latter term, 'content creator,' harkens back to debates on YouTubers as labourers (if, for the most part, poorly paid ones, operating within a largely 'amateurized' field). Such debates are important, and often reiterated (Caplan and Gillespie 2020; Fisher and Fuchs 2015; Mardon, Molesworth, and Grigore 2018; Raun 2018; Terranova 2000). Yet, while YouTubers certainly put a lot of (often poorly compensated) work into their videos, channels and audience relations, labour-focused critiques risk missing the foregrounded financial logic of assets, assetization and rent, which permeates the platform's tacit promise to its content creators: 'assetize yourself!' YouTubers are interpellated and contractually configured less as labourers, and more as speculators of the self, or portfolio managers of the self (Feher 2009): those who seek to transform their personality into a rent-generating asset. You-Tube's tacit call to its vloggers - 'assetize yourself!' - inaugurates personality as a crucial part of the platform's outsourced valuation infrastructure.

The field of infrastructure studies has greatly expanded in recent years. A wide range of analytical objects have been described as infrastructure, in the sense of that which is 'defined by the movement or patterning of social form' (Berlant 2016, 393). These include spatial 'multipliers' and 'dispositions' in urban planning (Easterling 2016), affects and intimacy (Wilson 2016), 'attention as infrastructure, as something that makes flow and delivery possible' (Rogoff 2020), visuality (Johnson 2018), support (Condorelli 2009), solidarity (Moten and Harney 2013), nature (Carse 2012) and eviction (Baker 2020), to name a few. Several scholars have explored digital infrastructures as distributors of information and subjectivity (Fuller and Goffey 2012; Goffey 2019; Harris 2017; Hu 2015; Parks and Starosielski 2015; Rossiter 2016). AbdouMaliq Simone's account of 'people as infrastructure' is particularly relevant for this study. In his account of the city of Johannesburg, Simone writes, 'African cities are characterized by incessantly flexible, mobile and provisional intersections of residents that operate without clearly delineated notions of how the city is to be inhabited and used' (Simone 2004, 407). Such cities produce regularities from processes of 'incessant convertibility - turning commodities, found objects, resources, and bodies into uses previously unimaginable or constrained' (Simone 2004, 410). This incessant convertibility demands an understanding of people as infrastructure: a 'process of conjunction, which is capable

of generating social compositions across a range of singular capacities and needs (both enacted and virtual) and which attempts to derive maximal outcomes from a minimal set of elements,' even when economies and support structures 'have mostly worn away' (Simone 2004, 410-11). YouTubers are infrastructure in a similar sense: they make do with minimal supports, compensating for the inadequacy of the platform's assetization structures, and the imbalances in its proposition to act as both surveillant and social space. Below, I will explore two distinct senses in which YouTube personalities 'make do' with minimal supports, and compensate for YouTube's otherwise dysfunctional offers: by acting as outsourced assetization infrastructure and cohortification infrastructure.

#### YouTube personalities as assetization infrastructure

YouTube personalities are assetization infrastructures, in that they continually compensate for the unsustainability of YouTube's offer of 'self'-assetization - 'making do' with the platform's changeable, less-than-ideal terms. A few, top YouTubers generate revenue in the tens of millions per year; however, less than 0.25% of YouTube channels meet even the first requirement necessary to qualify for monetization: having 1000 subscribers or more (Iqbal 2023; Spicer 2021). As a mechanism for assetizing personality, YouTube's terms vary greatly from one platformed personality to the next, and are generally far better for the platform than its personalities. Of course 'personality' was a potential asset long before YouTube - at least, for some. Television and film stars, for instance, could glean returns from their famous personalities, by securing brand endorsements and other perks. YouTube extends and partially automates this emergent cultural logic, awarding personalities access to assetization, not by pre-established celebrity, but by reaching required watch hours and subscriber counts - criteria that can be assessed automatically before reaching human review. The platform promises the possibility of 'self'-assetization to a wider range of people than ever before, even if a vanishingly slim portion of YouTubers make much, if any, money from their channels.

As Kean Birch and Fabian Muniesa argue, it is the asset form, not the commodity form, that grounds technoscientific capitalism, which finds new means to turns 'things' into 'assets.' They define the asset as:

... something that can be owned or controlled, traded, and capitalized as a revenue stream, often involving the valuation of discounted future earnings in the present - it could be a piece of land, a skill or experience, a sum of money, a bodily function or affective personality, a life-form, a patent or copyright, and so on. [...] Assets can be bought and sold, yes. But the point is to get a durable economic rent from them, not to sell them in the market today; here we use the term rent to mean the extraction of value through the ownership and control of an asset, which usually entails limiting access to it. (Birch and Muniesa 2020, 2)

'Affective personality' is one of many kinds of asset, which can generate rent when placed, for instance, on an advertising-funded streaming platform, in which the video is not purchased by its viewer, but rather, streamed to generate advertising or subscription revenue. Most of this 'personality rent' goes to the platform. Streaming videos and music, rather than selling them (for instance, as DVDs or CDs), orients the platform toward generating future revenue streams by controlling access to 'niche' cultural production and targeted audiences alike. Commodities can come into the equation – for instance, via YouTubers selling branded merchandise via YouTube Shopping - but it is secondary to the business model. Arguably, even the sale of branded 'merch' has been reoriented toward the personality as asset. The commodity sale lives in the orbit of the asset; it is based on the personality the fan wishes to identify with.

While theories of assets and assetization vary widely, many recent approaches share a concern with how the construction and ownership of assets contributes to wealth inequality (Adkins, Konings, and Cooper 2020; Pistor 2013; 2019). For instance, Brett Christophers analyzes the role of assets within what he terms rentier capitalism: 'an economic system not just dominated by rents and rentiers but, in a much more profound sense, substantially scaffolded by and organized around the assets that generate those rents and sustain those rentiers' (Christophers 2020, xviii). In particular, platform rentierism involves generating rent by intermediation – in other words, enabling others to trade (in the broadest sense of the term) smoothly and efficiently. Attention platforms deploy various revenue models (largely advertising, in YouTube's case) which are fundamentally rents on the ability to intermediate and target attention, Christophers argues (Christophers 2020, 179-98). Streaming-fuelled rentierism offers users the feeling of 'free' access to culture, but also comes at a substantial energy cost, with significant carbon emissions (Marks and Przedpełski 2022). YouTube newly enlists assetized personality as rentierized personality; rentierized personality, in turn, enables the sequestering of rents (to platforms and a few stars) and the outsourcing of risks: time and resource risks for aspiring YouTubers (most of whom will not achieve monetization) and climate risks for all, which could disproportionately impact the poor of the global south (Sen Roy 2018).

# **Imbalanced assetization imaginaries**

Alongside inaugurating assetized personality as rentierized personality, YouTube also mobilizes a 'self-assetization imaginary': a mythology around the promise of making one's personality rent-generating, which conveniently overlooks the role of platform rentiers. Sites such as StarStat and YouTubers.me, for instance, allow people to search for the estimated net worth of any YouTube channel. Thus, they popularize (and even fetishize) the idea of YouTube personalities as bearing 'net worth' and 'asset value.' For instance, a StarStat search displays a 'net worth' of \$35,822 for Jago Hazzard, a YouTuber who makes videos about historical buildings, train stations, gardens and London curiosities, among other things (Figure 1). As of January, 2022, his channel had 410 videos and around 144,000 subscribers. His two most popular videos, 'The Building that Lasered Cars' and 'Ronan Point: An Accident Waiting to Happen,' received 1.7 and 1.4 million views, respectively. Many of his other videos, such as 'Blackfriars: A Complicated Station' and 'Mudchute: The Worst-Named Station in London?' have view counts in the hundreds of thousands. StarStat breaks Hazzard's 'net worth' into approximated monthly figures, and offers stats on average weekly and monthly audience growth. Of course, the site only estimates Hazzard's own earnings; it renders YouTube's net earnings from Hazzard's channel invisible by omission. Instead of envisioning the YouTuber-to-platform rent relation, the site emphasizes comparisons between YouTubers' assets. It displays the net worth of

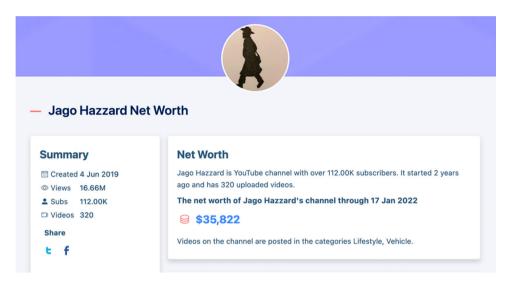


Figure 1. StarStat.yt, Jago Hazzard Net Worth, 16 January, 2022 (StarStat n.d.).

'similar' YouTube channels at the bottom of the page (Figure 2) – although it is not immediately clear in what sense, exactly, these channels are 'similar' to Hazzard's, as both the thematic focus of the channels and the displayed 'net worth' figures vary widely. If anything, the 'similarity,' here, is the fungibility of niche personality performances as such: the sense that one highly differentiated, platformed personality performance has been rendered comparable to all others. StarStat and similar sites act like a stock market index, of sorts, for YouTube personalities, envisioning and comparing personalities' relative and fluctuating worth. For the most part, these asset values remain rather modest, even for those with view counts creeping into the millions.

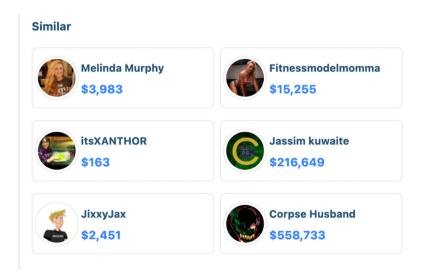


Figure 2. StarStat.yt, 'Jago Hazzard Net Worth,' 'similar' YouTubers, 16 January, 2022.

'Net worth' imaginaries popularized by StarStat and similar sites reflect estimated earnings derived from the YouTube Partner Programme (YPP), which allows qualifying YouTubers to monetize their channels. The programme is affiliated with Google Ads: Google's advertising programme specializing in auctioning ads on videos, on a perimpression or per-click basis. While YouTube can now serve ads on any videos it hosts (Koetsier 2020), very few YouTubers qualify for the YPP; in 2022, channels had to have more than 4000 valid public watch hours in the past 12 months, and at least 1000 subscribers to qualify (Google AdSense Help 2022), before being submitted for human review to determine suitability for advertisers. The process of qualifying for the YPP involves multiple agreements, training resources, qualification thresholds and ratings; Google continually updates these as the YPP evolves. As of 2023, prospective YPP participants are invited to consult Google's tips on how to establish a fanbase and qualify for monetization. They must agree to the YouTube community guidelines and meet the threshold subscriber and watch hours counts (now updated to either 4000 valid public watch hours in the past 12 months, or 10 million valid public 'shorts' views within the past 90 days). They must live in a country where YPP is available, have no active community guidelines strikes against their channel, sign up for 2-step verification and an AdSense account, accept the YPP Base Terms, link their AdSense account to their channel via YouTube Studio, and enter a human review queue (typical wait time: one month). If successful, they can then sign on to the various modules and monetization options YPP currently offers - each of which comes with its own terms. To 'maintain a healthy, active ecosystem of channels,' YouTube reserves the right to 'turn off monetization' on channels that have been inactive for six months or more (YouTube Help 2023b). Partners must review the 'Advertiser-friendly content guidelines,' which contain tips on how creators should self-certify their videos for advertiser friendliness. For each video, they must self-declare the levels of 'inappropriate language', 'adult content', 'shocking content' or 'hateful and derogatory content,' among other categories, according to YouTube's definitions. For example, under 'hateful and derogatory content,' the self-certification guide includes examples to help YouTubers distinguish between 'content referencing protected groups or criticizing an individual's opinions or action in a non-hurtful manner' (which can earn ad revenue), 'content that may be offensive to individuals or groups, but is used for education, news or in a documentary' (which may earn limited or no ad revenue), and 'hate or harassment towards individuals or groups' (which earns no ad revenue) (YouTube Help 2023a). As YouTubers continue to self-certify their videos, they are awarded a 'rating status,' meant to reflect the accuracy of their self-certifications (YouTube Help n.d.b). These complex and layered training, qualification, certification and rating processes constitute 'a new configuration of the exercise of power marked by the ongoing change of reality tests:' ritualized moments, such as recruitment processes and competitions, in which people's skills or qualities are 'evaluated and validated' (John-Mathews, Cardon, and Balagué 2022, 953, 947; see also Boltanski 2011, 133; Boltanski and Thévenot 1983). The ongoing, changeable nature of the YPP testing situation keeps YouTubers perpetually at risk of falling afoul of a guideline or losing revenue for a difficult-tofollow reason; yet it is couched in the 'friendly opacity' of the YouTube Help pages which give clear, step-by-step guides and tips for success, while still remaining fundamentally ambiguous about their free-floating combination of automated, contractual and 'human' evaluation processes. (For example: what might determine whether 'content that may be offensive to individuals or groups, but is used for education, news or in a documentary' would earn 'limited' or 'no' revenue, as each are specified as possibilities?) YouTubers have little recourse to contest YPP changes. In the 'Adpocalypse' events of 2017, for instance, major brands including Coca-Cola, the UK Government, and Dr. Pepper pulled or paused their YouTube advertising, because they were concerned about being paired with extreme content, such as terrorist videos. Around this time, Pew-DiePie, the YouTuber with the most subscribers at the time, shared anti-Semitic content, and lost his partnership with Disney as a result (Caplan and Gillespie 2020, 5). These events caused advertisers to lose trust in YouTube. In response, YouTube tightened its rules about what kind of content counted as 'advertiser-friendly;' gave advertisers simple ways to choose, in bulk, what kinds of videos they wanted to be associated with; and raised the watch hours and subscriber count thresholds, such that some small channels were no longer eligible for monetization. Raising such thresholds produces forms of 'tiered governance,' offering different YouTubers vastly different terms of engagement (Caplan and Gillespie 2020); it also threatens the diversity of content on the platform in the long term (Kumar 2019). In moments when top YouTubers' widely publicized missteps result in tightened YPP terms, the changes tend to hurt smaller channels far more than big stars - and do the most damage to those addressing important topics that have limited 'mainstream' pull (Levin 2018). The YPP's shortcomings lead many YouTubers to diversify their revenue streams: for instance, through Patreon subscriptions (Bonifacio, Hair, and Wohn 2021), Ko-fi donations and brand partnerships (McCorquodale 2021, 21). 'Variegated crowdfunding ecologies,' including donation and subscription-based crowdfunding sites, do not necessarily 'democratize' access to funding; in fact, as Langley and Leyshon argue, they 'largely replicate rather than disrupt the extant institutional and debt dynamics of funding practices' (Langley and Leyshon 2017, 1019). Nevertheless, YouTubers are among the experimenters within this relatively new field: forging connections between differently institutionalized personality-assetization practices within complex 'crowdfunding ecologies': making do with whatever chances present themselves; devising means to hedge their bets.

Of course, many YouTubers have no intention of pursuing monetization; purely 'amateur,' 'aspiring professional' and 'professional' practices coexist on the platform without clear demarcation. But those seeking monetization take substantial risks when setting up a channel; they could easily garner little to no return on a substantial investment of time and/or resources, if they fail to captivate a sizeable audience. This risk falls on 'failed' personalities - but it is arguably YouTube's outsourcing of its own content creation risks. YouTube transforms personalities into outsourced content testers, trialling new material, which may or may not garner much attention; meanwhile, YouTube succeeds as long as it can monopolize attention in general, whether or not any particular channel succeeds. It securitizes personality - assembling and controlling access to a hedged portfolio of personalities, as a means to diminish risk. As Ivan Ascher has argued, financial capitalism has come to rest less on the commodity form, as in Marx, and more on what he terms 'the security form of capital,' whereby securitization, or the pooling of risks, becomes a crucial regime of accumulation and 'capitalist mode of prediction', via modern portfolio theory (Ascher 2016, 15). YouTube's call to aspiring professional personalities - assetize yourself! - reflects an imbalanced assetization imaginary, through which YouTube outsources personalities' risks, while pooling personalities into portfolios: the 'security form' of platformed personality.

As assetization infrastructure, YouTubers continually compensate for these imbalanced terms. While the promise of transforming personality into a rent-generating asset draws many YouTubers to YouTube, poor returns and worsening terms (post-Adpocalypse) drive some to quit, or move to competing platforms, such as Twitch or DLive (Caplan and Gillespie 2020, 5). However, 'network effects' keep many creators on YouTube, despite discontent with YPP terms, since YouTube still offers creators the biggest audience (Caplan and Gillespie 2020, 6). YouTube's monopoly on attention encourages YouTubers to make do with poor terms, exploiting network effects as best they can, to find other means to assetize their personalities. They transform YouTube's monopoly on audience size into their own asset, as best can - even informing others about the poor terms YouTube offers, as they invite subscribers to fund them via other sites. In a video titled 'YouTube Without Compromise: Support Matt Lees on Patreon,' YouTuber Matt Lees, who runs the channel Cool Ghosts, addresses his supporters as follows:

Advertising revenues are incredibly tiny [...] It's a ridiculously weighted monetization system that only really rewards those who can climb to the top of the mound [...]

I was happy with the content I was creating, I was happy with the community that we built. But we couldn't leave it there; we had to keep getting the numbers to go up. [...] I came to the realization that the only way to continually expand those numbers was to either just focus on one type of popular content, or to just change my style entirely to suit a wider audience. I saw the way that the game worked, and I don't want to play that game. [...] It's a toxic system that promotes dull, cliché, and often cynical content. (Lees 2014)

Like Simone's city-dwellers, YouTubers make do with inadequate or broken systems. In doing so, their work actively transforms the conditions of assetization, by producing new opportunities alongside what the platform offers. At the same time, YouTube seems to take inspiration from such compensatory measures, modelling its own versions of what YouTubers have already been doing to compensate for their often-poor remuneration. Many of the newer monetization services it offers through the YouTube Partner Programme, such as Channel Memberships (whereby users can pay to become a member of a YouTuber's channel), Brand Connect (whereby YouTube connects YPP participants with brands for branded content campaigns), and YouTube Shopping (which allows eligible YouTubers to sell official merchandise via their channel's 'store') mimic the forms of revenue supplementation YouTubers and external platforms have already discovered - bringing these 'in house' so as to garner a share in the revenue generated. In this sense, YouTubers are platform infrastructure, insofar as their compensatory activities actively reshape YouTube's future terms, extending their range of platform rentier practices. There is room to expand extant debates on assetization, to acknowledge the infrastructural work that platformed personalities do, to augment the poor terms that platform rentierism offers, and help platforms continue to innovate as personality rentiers. YouTube personalities' continuous adjustment of offered terms enables the platform to adjust its understanding of where the 'pain points' might be (Palmås 2010), after which YouTubers will leave the platform - and to offer terms just good enough to keep them within the Google ecosystem.



### YouTube personalities as cohortification infrastructure

YouTube personalities also comprise what I will call cohortification infrastructure: infrastructure that sorts audiences into cohorts of users with a shared characteristic, preference or interest - and addresses these cohorts as communities. To explore this, it will first be necessary to differentiate between publics, communities and cohorts on YouTube. Many scholars have used phrases such as 'new public sphere' (Mazali 2011), 'online publics' (Abril 2018; Ban and Lovari 2021; Salter 2013), 'agonistic publics' (McCosker 2014), 'digital counterpublics' (Hill 2018), 'satellite counterpublics' (Brock 2019, 86) and 'networked public sphere' (Tufekci 2017, 6) to describe how the public sphere shifts with the advent of digital platforms. These terms both reference 'classic' accounts of the public sphere (in particular, Habermas 1989), and engage with critiques of such accounts - for instance, Nancy Fraser's critique of the implicitly white and male Habermasian public sphere (Fraser 1990); and LaClau and Mouffe's critique of deliberative democracy, which posits 'ideal' conditions of rational, moral debate and fails to recognize the power relations already embedded in the 'master signifiers' through which the debate is expressed (Laclau and Mouffe 2001; Mouffe 1999). It may be tempting to simply write off the possibility that online platforms can constitute a public, given private platforms' capacities to factionalize and polarize - and, thus, to render rational debate between groups ever more unlikely. However, Tufekci and others remind us of the need to acknowledge that significant public debates and activist interventions can and do take place online, despite platforms' many drawbacks (Jackson, Bailey, and Welles 2020; Tufekci 2017). In addition to addressing publics, YouTubers form communities: groups that share with one another, and might even, to borrow Jean-Luc Nancy's phrase, find themselves 'constituted by sharing, [...] distributed and placed, or rather spaced, by the sharing that makes them others' (Nancy 1991, 25). Nancy argued against the notion that community can be accessed through work. Instead, he envisions the inoperative community as expressive of a spontaneous propensity to come together, with no other purpose beyond itself. To extend Nancy's thinking on inoperative communities to YouTube channels necessitates recognizing that YouTube operationalizes even the 'inoperative,' blurring the distinctions between 'work,' 'leisure' and 'interests,' and making communities centred around any of these at least potentially rent-generating.

While publics and communities certainly persist on YouTube, there is a third category of convergence, too, which is not *necessarily* public – or community-oriented: the *cohort*. A cohort, quite simply, is a group of people with a shared defining characteristic. The word entered the English language in the fifteenth century, from the French cohorte; it was derived from the Latin cohortem, meaning 'enclosure' or 'enclosed yard' (Ayto 2006; 'Cohort, n.' 2021; Hoad 1993, 83). By the time the word entered English, this sense of an enclosed space had had shifted, to refer to the crowd of people gathered in such an enclosed space - specifically, 'a body of infantry in the Roman army, of which there were ten in a legion, each consisting of from 300 to 600 men' ('Cohort, n.' 2021). From there, the meaning generalized to mean any band of warriors. It took on a figurative meaning, as a company or band of persons with a common cause - and later, an assistant, colleague or accomplice. Of particular interest for this article is the emergence of a demographic meaning of the term in 1944, as 'a group of persons having a common statistical characteristic,' such as having been born in the same year ('Cohort, n.' 2021). In statistics, a cohort study is a type of study which follows samples (called cohorts) of separate, yet similar people over a period of time - for example, to identify the causes of disease, by analyzing what traits those who develop a particular disease share (Kandola 2021). In this latter sense, a cohort is a group with shared traits, without being a community.

# Cohorts as platform governance

In online platforms, the cohortification of users becomes a crucial aspect of surveillant accumulation, in this latter, demographic sense of cohort as a group of separate, yet similar people. Often, critics portray online surveillance for the purposes of advertising as a violation of individuals' privacy, and thereby freedom (Zuboff 2019). Although some online surveillance protocols (such as third-party cookies) can identify individuals, this is neither their 'point' nor their primary aim. Online advertising is arguably far more concerned with processes of cohortification: the continuous placement of users into cohorts who can be similarly advertised to. For instance, when I visit YouTube's homepage, its recommendation algorithms produce several viewing suggestions, including some videos I have watched before, and others I haven't watched, but apparently may find appealing. (These recommendations succeed if I spend more time watching, generating more user data and advertising revenue along the way.) The recommendations are personalized, in that they are based on my previous behaviours, and reflect something of my interests. Yet, viewed in another way, they do not so much express 'personalization' as such, but, rather, cohortification: I have been placed into various, overlapping groups of people like me. The recommendations reflect 'me' - my personality - as a collection of enrolments in overlapping cohorts: those who share special interest x; those who *like* YouTuber *y*; those who *enjoy* music style *z*.

Recently, the centrality of cohortification as a platform logic became even more apparent, in a fleeting, failed, yet revealing experiment. In 2021, YouTube's parent company, Google/Alphabet, trialled a new protocol on its popular Chrome browser, intended to improve user privacy, while still offering advertisers highly targeted audiences: Federated Learning of Cohorts (FLoC). As David Nield describes it, FLoC 'aims to give advertisers a way of targeting ads without exposing details on individual users, and it does this by grouping people with similar interests together: football fans, truck drivers, retired travelers, or whatever it is' (Nield 2021). Rather than individually tracking users, FLoC uses clustering algorithms to place users into anonymized cohorts. As Cyphers explains, 'FLoC is designed to help advertisers perform behavioral targeting without third-party cookies. A browser with FLoC enabled would collect information about its user's browsing habits, then use that information to assign its user to a "cohort" or group. Users with similar browsing habits - for some definition of "similar" - would be grouped into the same cohort' of 'at least a few thousand users' - large enough to make it difficult to identify a particular user within the group (Cyphers 2021). Part of Google's Privacy Sandbox initiative, FLoC was covertly trialled on a percentage of Google Chrome users in 2021 and early 2022, before being discontinued in early 2022 (Google n.d.; Electronic Frontier Foundation 2021). It emerged after competing internet browsers Safari and Mozilla Firefox pledged to discontinue third-party cookies, which track user behaviour across different websites, in order to serve more 'relevant' ads. Safari and Firefox's move pressured Google to follow



suit with Chrome; yet Google still wished to offer advertisers highly targeted audiences - a crucial pillar of its business model. Hence the Privacy Sandbox initiative.

Google Group Product Manager Chetna Bindra described FLoC as a 'privacy-first alternative to third-party cookies.' She explains: 'we started with the idea that groups of people with common interests could replace individual identifiers' (Bindra 2021). By clustering large groups of users with similar interests, she argues, FLoC 'effectively hides individuals "in the crowd" and uses on-device processing to keep a person's web history private on the browser' (Bindra 2021). Google Research & Ads' FLoC white paper tested SimHash clustering on publicly available datasets, including the Million Song Dataset (MSD), which contains 1 million songs, tagged by user IDs and categories (including musical categories, such as 'reggae' and 'pop,' as well as adjectives such as 'awesome'), with each user/song pair tagged by category, and by the number of listens. Using these data, SimHash was able to produce highly differentiated cohorts, whose shared musical preferences were then visually expressed through word clouds. The word clouds reveal the logic of cohortification by shared interest, of which Google is an active proponent.

Federated learning (a type of machine learning that trains algorithms across multiple decentralized nodes, each of which holds its own data sets, without sharing any of that data with a central server) is a substantially new development - and a promising one, in that it eliminates the need for users' data to be stored in centralized servers. However, FLoC's emphasis on the cohort as a category is arguably no departure at all from Google's prior surveillance operations. If anything, FLoC more clearly reveals what was already a long-standing logic of cohortification in advertising surveillance. Critics of the online advertising-surveillance industry have welcomed the move away from third party cookies, but have criticized FLoC for perpetuating many of the worst aspects of cookie-based surveillance, such as predatory targeting (for example, advertising high-interest loans to 'subprime' borrowers) and discrimination (Cyphers 2021). FLoC could add further levels of opacity to how online users are already being identified (how are users to know in which cohorts they have been placed?), while still leaving users vulnerable to being identified - for instance, by combining 'anonymized' cohort IDs with IP addresses or Personally Identifiable Information (PII) data (Rescorla and Thomson 2021). As Cyphers remarks, FLoC could enable interested parties who intercept cohort IDs to learn 'general information about demographics or interests. Observers may learn that in general, members of a specific cohort are substantially likely to be a specific type of person. For example, a particular cohort may over-represent users who are young, female and Black; another cohort, middle-aged Republican voters; a third, LGBTQ+ youth' (Cyphers 2021). Cohorts leave Google's long-standing goal of classifying users by behaviour intact (Langheinrich 2021), and repackage a long-established protocol of 'surveillance as social sorting:' sorting people into categories, assigned 'worth or risk, in ways that have real effects on their life-chances' - which make surveillance 'not merely a matter of personal privacy but of social justice' (Lyon 2003, 1). By 'optimizing' technological protocols for such classification, FLoC further entrenched the possibility that advertising surveillance could discriminate (by race, class, gender, age, sexuality, etc.) indirectly, under the sign of cohortification. Cohortification erodes the distinction between 'likeness' as an identity category or shared characteristic (a shared age, race, or gender, for example); likeness as behavioural similarity (clicking on similar things,

acting in similar ways); and likeness as preferential category (liking the same things, sharing interests). This comingling of different senses of 'likeness' perpetuates the possibility that a complex, socially constructed and heavily entrenched identity category, such as race, might remain as an 'absent presence' in the cohort: something that is 'irreducible to the particular components of the installation,' yet nevertheless persists, 'through the spaciotemporal ordering of disparate components that are drawn together' (M'charek, Schramm, and Skinner 2014, 461). In this sense, FLoC extends a long-established tendency to segregate users into 'networked neighbourhoods,' troublingly extending histories of segregation and marginalization (Chun 2018, 2021).

As it turns out, FLoC will remain but a fleeting experiment. While it is not clear exactly why Google axed the protocol, widespread privacy concerns may have been a factor. FLoC has been replaced by another technological protocol, Topics, which focuses on assigning users 'topics' (such as 'fashion,' 'travel' or 'fitness') based on their 'browsing behaviours' (Clark 2022). Although it prevents cohorts from being freely 'learned,' as they were in FLoC, and reduces the chances that users could be identified based on their assigned 'topics' (Karlin 2022), it remains less than a complete departure from the logic of surveillance as 'social sorting' (Lyon 2003). Although fleeting, the FLoC experiment reveals cohortification as a widespread, long-established platform logic with particular clarity. Given the admixture of online social life and targeted online advertising on platforms such as YouTube, cohortification processes raise a fundamental question about the instrumentalization of online community and public life: what is the relationship between online communities and online cohorts?

#### Youtubers as cohortification infrastructure

Long before Google's FLoC experiments, YouTube personalities served as platform cohortification infrastructures. YouTube vloggers 'socialize' cohortification practices – inaugurating online communities around shared niche interests, in ways that complement surveillant cohortification processes. They serve as the platform's means of eroding the distinction between community, on the one hand - a group of users that can envision itself as a 'we', and could interact with one another – and *cohort* in the statistical sense, on the other – a group of isolated individuals who share a common trait, but who have no way of knowing with whom they might have been grouped. Being algorithmically placed in a group of similar users without one's knowledge - for example, a subset of YouTube users who receive some of the same video recommendations - typifies cohortification without community. The 'we' of the cohort is disguised within the 'you' of the user, receiving 'personalized' recommendations. YouTube's home page, for instance, is tacitly filled with cohorts: groups of people who might like music video x, or sitcom clip y, or hobbyist video z. However, these cohorts remain silent, save for the view counts underneath each video - 4.7 K views, 648 K views, 3.4M views - which hint at the cohorts who watch, and 'count' as a result. The numbers 'structure social practice as [platform] assets,' as Adrian Mackenzie puts it (Mackenzie 2018, 36), and intimate the veiled 'presence' of cohorts as an alienated from of pseudo-sociality. They indicate a networked, singular/plural 'YOU' that precludes a communal 'we' (Chun 2015) that acts together, as opposed to simply being separate, yet similar. Apart from what its personalities accomplish, YouTube can only address cohorts in the singular – as sets of isolated users, who share statistical traits (you might like to watch x; *you* may wish to buy *y*).

YouTube vloggers, on the other hand, *address* cohorts as communities – as intimates, as an 'us' ('let's be bad'). YouTubers inaugurate cohortification as a participatory process – as something users do. They improve the platform's ability to 'sort' audiences into shared interest groups. As Taina Bucher has observed, some YouTube users regard those who put considerable effort into their channels as 'human algorithms,' who know how to give viewers exactly what they want (Bucher 2018, 104). For instance, one user Bucher interviewed felt that YouTube celebrities' understanding of their audiences was 'more accurate than an automatic algorithm, because computer algorithms don't really understand human preferences or traits like actual humans do' (quoted in Bucher 2018, 104). YouTube personalities sort audiences 'better' - and allow these better-sorted cohorts to become active communities. By becoming a personality - a broadcast character - the You-Tuber becomes the singular, yet shared interest of their cohort. Their character constitutes a communal quality – a lure that works on this set of people – that ameliorates the profoundly anti-communal character of cohortification within advertising surveillance. Thus, we might understand YouTube personalities as early 'federated learners' of cohortification: the platform's decentralized means of sorting audiences.

#### Addressing cohorts

YouTubers also experiment with the addressivity of cohortification – with how cohortified sociality must find new generic means to address users. YouTube tends to present social sorting in the second person - you might like this video - even as it produces cohorts, evading the question of the cohort as a social form. YouTubers, however, address audiences as both cohorts and communities. In this sense, YouTube personalities constitute the platform's key addressivity infrastructure for cohorts. They actively experiment with ways to transform surveillance-based advertising's cohortification practices into participatory processes of address - by interacting with audiences around 'niche' interests, moderating disputes between channel subscribers, or wielding catch-phrases to cultivate audience engagement, for instance (Castillo-Abdul, Romero-Rodríguez, and Balseca 2021). YouTube personalities imaginatively 'de-alienate' surveillant forms of cohortification, which extract value from social sorting, while failing to provide the basis for community. They activate and calibrate the desire for cohorts to become communities that interact around shared interests. The desire to come together only by virtue of similarity might, indeed, be factionalizing and polarizing (Chun 2018). Nevertheless, addressing cohorts as communities is a fundamental, if outsourced, aspect of platform infrastructure, crucial for producing consent for - and subjective investment in - surveillant cohortification practices. Drawing further attention to YouTube personalities' roles as inventors of cohort addressivities could nuance debates on how cohortification protocols contribute to online polarization more broadly (Bessi et al. 2016), via the broadcast personality as platform infrastructure.

# **Choreographing cohorts**

YouTubers draw attention, sort attention and choreograph cohorts. Extending insights from critical dance studies, we might consider YouTube personalities as attention choreographers, of sorts: as platform devices whose movements orchestrate and organize others' attention; who draw and differentiate streams of platform traffic. This orchestration of attention is at least potentially choreopolitical - dance scholar André Lepecki's term for holding open the possibility of discovering ways to move freely and politically, even if these means are not yet known. Lepecki opposes choreopolitics to *choreopolicing*, or controlling subjects by controlling their movement: for instance, a police officer instructing a crowd to move along - there's nothing to see here (Lepecki 2013). YouTubers are always audiencing - creating audiences; attracting, sorting and moving attention. They are attractive infrastructures, helping YouTube produce, sustain, and differentiate profitable, cohortified attention-flows. Typically, their cohort choreographies do what the platform 'wants.' YouTubers are outsourced choreopolice, speaking the platform's choreo-command (which could, in theory, benefit both YouTuber and platform): keep attention flowing in. And yet, YouTubers also demonstrate an awareness of something at least desiring (if not approaching) the choreopolitical: the ability to direct movement otherwise, as a political practice. For instance, Matt Lees' video (above) openly critiques the poor terms YouTube offers its content creators, and invites viewers to move away from YouTube, onto Patreon. This is an almost-choreopolitical attention choreography. Because YouTube is 'too big to fail', such attention counter-choreographies do not hurt it much; if anything, YouTube directly operationalizes them, recuperating the critique as inspiration for its new, in-house monetization tools (such as YPP paid channel memberships). Still, such acts raise the question: for what choreopolitical attention counter-choreographies to come might such small acts of (as yet, recuperated) resistance serve as a rehearsal?

#### **Conclusion**

On YouTube, personalities are curiosities, lures, attention-sirens studding platform-capitalist infrastructure. They are attention's circuitry: they make attention into a currency (or even better, a current), because they structure and streamline attention into cohortified attention streams. They are why attention circulates, and how cohorts could become addressable as communities. Drawing and sculpting attention, YouTubers take attention away from other things. Their personalities are the medium, the genre, and the infrastructural efficacy of the platform: its means of grabbing and sorting attention; its experimental infrastructure for addressing cohorts; its means of inaugurating cohortification as a performative process, and not only as an alienating process - as something people do.

The YouTuber, as streamed personality and platform infrastructure, inaugurates the cohort (in the statistical, surveillant sense) as a form of sociality, or pseudo-sociality. YouTubers inaugurate sharing niche interests – whose medium is personality – as the basis for cohortified community. They address channel subscribers as cohort-communities: cohorts, at their outer edges, of those who 'just watch'; and communities, in the inner circle, of those who comment and engage. The cohort-community shares common interests, and likes similar personalities. Each member has answered the call: the YouTuber's call, extended by recommendation algorithms, news coverage, reposts and many other mechanisms, that interpellates users as cohort-participants (Althusser 2009; Lovink 2016).

YouTube personalities serve as the *platform's* address to its users, as well as their own. They are the platform's means of compensating for imbalanced assetization offers, and for addressing cohorts: treating cohorts, not only as surveillant classifications, but also as an emergent form of pseudo-social organization: a group of people like me. YouTube personalities inaugurate the choreographing and crafting of desires-to-watch as platform infrastructure - not to mention as carbon emitter and climate change driver. In 2019, YouTube emitted about 10 million metric tons of carbon dioxide into the atmosphere - roughly the same as a city the size of Glasgow (Kobie 2019). Given such entanglements, the social, economic and ecological consequences of online personalities (conscripted, to various degrees, within the wider, accidental political projects of polarization, increasing wealth inequality, and climate catastrophe) are far from straightforward. Paying attention to the infrastructural roles that platformed personalities play can nuance discussions of assetization and the relationships it inaugurates between cohortification, community and planetarity. It could also form the basis for a larger project I call platformed personality capitalism: the direct operationalization of socio-technically configured personalities into platform rentier regimes.

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