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Visualizing YouTube's comment space: online hostility as a network phenomena

Abstract

This study examines YouTube's comment space. By focusing on responses to the provocative musical group, Das Racist, we offer an innovative analysis of online racialized expression as a networked phenomenon. A blend of social network analysis, qualitative coding, and thick data descriptive methods are used to interpret comments posted on the five most viewed Das Racist videos. Given the dearth of literature exploring YouTube's comment space, this study serves as a critical means to further understand race and the production and consumption of YouTube comments in everyday online encounters. We visualized networked antagonisms, which were found to be significantly racialized, and entangled with other expressions of hostility. YouTube comments are often perceived as individual, random insults or only generalized expressions of 'hate'. Our study provides probes deeper and discovers that racialized expressions also involved networked interactions, where hostile ideas, passed through multiple parts of the comment network, both intra-/inter- video.

Keywords: Networks; Comments; Racism; Trolling; YouTube

1. Introduction

YouTube is one of the most visited websites on the internet with one billion users (Covington et al., 2016), who watch 'hundreds of millions of hours of videos' daily (YouTube, 2017). However, YouTube has not escaped controversy concerning the kind of video material appearing on its site, such as copyright infringement, pornography, defamation, 'terrorism' recruitment, Holocaust denial, and the propagation of 'hate' speech. Moreover, the quasi-anonymous comment space of YouTube enabling viewers to respond to video content has become *notorious* for online trolling, flaming and abuse, often expressed via forms of racist, homophobic and misogynistic language (Strangelove, 2010).

The mainstream media representation of the YouTube platform portrays its comment culture as a *toxic* environment, averse to any kind of intelligible or worthwhile discussion (Grossman, 2006; Harry, 2014; Owen & Wright, 2009). The representation of YouTube as an unregulated space of hostility is exemplary of how social media platforms in general are increasingly constructed as antithetical to online civility (Foxman and Wolf 2013). However, such a perspective does little to grasp the complexity of how social media racism is manifested online, and nor does it adequately identify the differential modes of racialized expression. Theorists such as Gilroy (2012) and Nakamura and Chow-White (2013) highlight that the Web has become a trenchant site of public conversations and expressions about race. And that the medium itself needs to be taken seriously for spawning neoteric forms of racism. Moreover, there is a paucity of academic studies exploring YouTube's comment space. While this space is represented negatively, users actively posting comments remains a key mode of engagement on YouTube (Schultes, Dorner, & Lehner, 2013).

This article seeks to address the lack of understanding about how antagonistic *racialized* discourses operate on the Web, and specifically the social media platform of YouTube. We present a unique approach for conceptualizing and analyzing social media racism, which remains an under-researched area of study. Our central research question examines the formations and modes of racial antagonism manifested on YouTube. We identify and characterize how racialized expressions are manifested and circulate in the comment space of YouTube. The YouTube comment space is explored from a standpoint that does not simply

dismiss user comments as offensive or banal trolling, or collapse different kinds of antagonism (for example, racism, homophobia and misogyny) in a nebulous notion of 'hate'.

This article aims to move beyond limitations of existing research that tend to frame the problem of racialized expression as flashpoints of incivility, rather than address the systemic and networked manifestations of online racism. We break new ground in developing an account of social media racism by advancing three key interventions. Firstly, we maintain that depicting antagonism in YouTube's comment space as essentially a site of flaming or abuse, fails to realize that users can be engaged in purposeful discussions entangled with a multitude of forms of hostile expression. Such forms of dialogue are often unusual, both face-to-face and online, where homophily and echo chambers often inhibit oppositional/divergent 'cross-talk'. Furthermore, a generalized notion of flaming flattens out identifying different modalities of antagonism; in particular obfuscating the presence of racist expression, and obscuring developing an apposite understanding of online racism (cf. Nakamura, 2013). Secondly, we innovate a methodology that reveals YouTube comments as operating in a *networked* environment. This approach attends to aspects of the sociotechnical affordances of the platform, focussing on the interactions and networked responses between commenters. Thirdly, by considering how racialized discourses are propagated as a networked phenomenon, we present analyses of YouTube's comment space that visually and discursively maps the often inaccessible, multifarious exchanges between users, and identifies different kinds of racialized expression. Furthermore, our networkbased approach helps render visible the rather obscure 'meso space', where users comment across multiple videos. This interstitial space enables a persistence of inflammatory discourse that regularly spreads hostility across the video network like a contagion. Overall, this article advances an approach that grasps the multiplicity of online racism while locating its specificities in relation to the YouTube platform.

The examination of YouTube's comment space is undertaken via a case study that focuses on user responses to the music videos of the band *Das Racist*. The Brooklyn, New York-based band 'Das Racist' formed in 2008 was comprised of Cuban-Italian-American Victor Vazquez ('Kool AD'), and Indian-Americans Himanshu Suri ('Heems') and Ashok Kondabolu ('Dapwell')., They achieved both critical acclaim and public visibility. Das Racist engage with 'subtle' and quixotic forms of racism, which white consumers can licentiously 'enjoy', alongside the minorities who have faced it. This follows similar patterns of critical selfexoticization by South Asian musicians (Murthy, 2007; Sharma, 1996). Moreover, Das Racist interrogate everyday racialized culture through 'name dropping' figures such as the postcolonial theorist Gayatri Spivak and the renowned Punjabi poet 'Shiv Kumar Batalvi'; rather than explicit exposés of anti-racist efforts or racist incidents. While the band split in 2012, they have been selected as a case study because their musical output is charged by an ambiguous racialized politics and their online content elicited substantial levels of comments. Das Racist remain contemporary in an era of 'post-racial' politics through which accounts and practices of racism are increasingly rendered abstruse (Goldberg 2015). Through a genre of 'slacker' hip-hop, Das Racist playfully and provocatively explore everyday racial frictions and antagonisms. Unlike most content on YouTube, their music videos incite a wide range of user commentary, which offers a compelling focus for analyzing racialized interactions on YouTube. While Das Racist received critical acclaim, their oeuvre elicits responses from both their fans and detractors, providing a valuable case study for understanding racialized discourse on social media more broadly.

2. Literature Review

Over the last two decades, research exploring internet racism has focused on rightwing/neo-Nazi discourses (Daniels 2009; Meddaugh & Kay 2009). With the rise of social media platforms, there has also been attention paid to other spaces and modes of online antagonism. The field of digital racism studies is still nascent, which aims to conceptualize the specifities of technologically mediated racism (see for example, Brock, 2018; Daniels, 2013). Nonetheless, the majority of work investigating social media frames racism as a type of incivility and 'hate speech', alongside online misogyny and homophobia (Augoustinos & Every, 2007; Foxman & Wolf, 2013). It is notable that YouTube receives significant attention concerning the intensity of hostility present on this platform.

YouTube Comment Cultures

Characterizing the nature of YouTube has challenged researchers because of the scale and multifarious functionality of the site. Burgess and Green (2013, p. xvii) highlight that it is a 'high volume website, a broadcast platform, media archive, and a social network'. These authors (2013, p. 69) maintain that YouTube is 'a communicative space and a community', which exemplifies online participatory media with its potential for creativity and civic exchange.

YouTube differs from other social media sites, in as much its 'community' is less cohesive and not centred on the individual profile page. While YouTube is primarily seen as a site for sharing video content, there are a range of other embedded forms of interaction and communication between users. For example, responses to existing videos can occur by uploaders producing their own videos. In addition, each video page has a space for responses via open-ended textual comments. This can involve interactions between the uploader and viewers, and includes the capacity to 'up- or down-vote' comments, in addition to reporting abuse or spam.

Nonetheless, YouTube has relatively limited social networking features in comparison to other platforms such as Facebook, Instagram, and Tumblr. The apparent lack of social connections that facilitate more involved interactions on the site has led to researchers such as Rotman et al. (2009, p. 45) to conclude: 'Comments – whether textual or visual - create, at best, an interaction that culminates in 2-3 exchanges...'. Furthermore, the space itself is not considered straightforward to navigate or analyze for researchers (Authors, ND). YouTube's architecture appears as rather anarchic, and is awkward for users attempting to track and participate in discussion threads.¹ Burgess and Bruns (2015) see these types of data as 'hard' rather than 'easy' data, necessitating more advanced data collection and analytical methods. Ultimately, like blogs and news articles, YouTube attracts anti-social forms of behavior (Coe, Kenski, & Rains, 2014) and is frequently singled out as notorious

¹ YouTube now defaults to displaying 'Top Comments' (sorted by those which have been most up-voted by users). While this may reduce encountering hostile responses, it does not necessarily improve the overall navigation of the comment space.

space for users expressing hostile comments in the form of insults, flaming and abuse (Rundle, 2012).

YouTube as a hostile space?

YouTube's (2016) 'Community Guidelines' proscribe abusive or threatening content and behavior, yet racism, homophobia and sexual harassment remains present on the platform (Strangelove 2010). There is no consensus amongst researchers as to why anti-social behavior is prevalent on YouTube (or social media platforms more generally). Nonetheless, as Rundle (2012) highlights, the 'law of big numbers' with respect to the magnitude of users and their activities on the YouTube platform makes policing and moderating offensive video content or inflammatory comments a difficult task. Moreover, YouTube's implementation of a 'community'-based monitoring system has failed to stem what users differentially experience as spaces of antagonism on the site (van Zoonen et al 2011). Furthermore, existing research claims that YouTube allows users to hide behind pseudonyms, producing disinhibited behavior that fuels flaming and abuse on the platform (Cho & Kwon, 2015, p. 364). In response, Google in 2011 restricted the comment feature to only users logged in with their 'real name' Google+ accounts. However, it was withdrawn after three years for being ineffective (MacKinnon & Lim, 2014).

There has been little research specifically examining the prevalence of *racialized* discourse within the YouTube comment space. van Zoonen et al. (2011, p. 1291) discovered that the comments network was replete with disinhibited and agonistic behavior, and contained '... flows that look like shouting matches between angry people aiming to silence each other'. The study by Spiker (2012), to-date the most comprehensive investigation of YouTube's racialized comment culture, found that expressions of *hostility* (ad hominem attacks, threats of violence), *overt racism* (including racial slurs and epithets), and *stereotyping* were the most common forms of racialized discourse on the platform. The use of racial terms was cardinal to the escalation of antagonism during exchanges between users.

While there may not be a consensus on the specific causes of the prevalence of online hostility on social media platforms, there certainly is widespread concern and moral condemnation of how abuse and 'hating' are creating a 'toxic' online culture (Harry, 2014). However, despite the laudable efforts to highlight that abuse is an everyday experience of participatory social media, there are at least three limitations to these kinds of mainstream accounts which valorize online hate.

Conceptualizing Racism

Firstly, racism (and other forms of exclusion) is often implicitly conceived as an *exceptional*, socially aberrant phenomenon, operating against prevailing norms. Ignorant or pathological individuals and crowds are held responsible for exploiting online communication technologies to express and spread hate. Yet this kind of perspective fails to grasp that racism is not outside of normative culture; rather it pervades social relations – both off- and online - and has been deeply embedded in the formation of Western modernity and technological innovation (McPherson, 2013). Furthermore, as Daniels highlights: "...race and racism persist online in ways that are both new and unique to the Internet, alongside vestiges of centuries-old forms that reverberate both offline and on" (2013, p.696). Secondly, mainstream accounts either (i) tend to blame pathological users for spreading 'hate', or conversely, (ii) hold the medium itself as responsible for propagating abuse online (c.f. Nakamura, 2013). Racism is reductively conceived as either existing outside of the Web, or is epiphenomenal to the Web. There is a failure to acknowledge the imbrication of racism *and* social media.

Thirdly, accounts of a toxic online culture, invariably fail to distinguish between different types of online antagonism such as direct insults and name-calling, *ad hominem* attacks, flaming, trolling, griefing and via other modes of discriminatory language. This can lead to erasing or flattening out specific histories and modalities of discrimination. Furthermore, online harassment, and more specifically racism is composed of a range of behaviors, by different groups, with discrepant motivations (Shepherd et al., 2015). What makes online racism challenging to research is that it may be manifested differently on different platforms.

Modes and expressions of racism can vary across YouTube, Facebook, Twitter, Reddit, discussion fora and gaming sites (Nakamura and Chow-White 2013).

The *affordances* of online platforms play a significant role in shaping the visibility and articulation of online racisms. Gilroy (2012: p. 381) considers that the 'high tempo and ease of transmission' of what he terms 'digitalia' helps render visible 'routine acts of racist commentary and violence from new angles and in unprecedented ways'. Moreover, we specifically invoke the notion of 'imagined affordances' (Nagy & Neff, 2015) which 'emerge between users' perceptions, attitudes, and expectations; between the materiality and functionality of technologies; and between the intentions and perceptions of designers' (Nagy & Neff, 2015: p. 5). This account pays attention to the expectations of communication technologies, and the complex sociotechnical relationships between mediation, materiality and affect. Thus, we conceive online racism as an *emergent* socio-technical 'event' (Authors, NA). This 'materialist' way of thinking about race and racism opens up how it can be studied online as an assemblage vis-à-vis imagined affordances: 'Race is...a precarious, open-ended achievement constituted through diverse relations and connections between material and conceptual elements...' (Swanton, 2010, p. 7). It facilitates an understanding of the emergence of racialization in online spaces, and the networked sociality and affects it generates.

A challenge facing researchers is conceptualizing online racialized expression that avoids framing it merely as individualized phenomenon of (prejudiced) individuals, or conversely, as wholly determined by societal conditions. These accounts respectively frame racism in either 'micro' or 'macro' terms. Arguably, they both fail to adequately grasp the complexity of how racism *emerges* online. An alternative, assemblage way thinking pursed in our article, highlights a 'meso' level analysis which stresses the *interactions* between individual agency and social structures (Reid, Sutton, & Hunter, 2010). A meso level analysis focuses an approach that dwells in the 'middle space', between the 'micro' (individual racist talk) and macro (societal racism) *(cf. Stengers et al., 2008).* It prompted us to explore YouTube racism as a *networked* phenomena.

The multiplicity of online racism in the meso space is manifested through the entanglements of a range of different forces, interactions and affects. Racism fixes, differentiates and excludes certain identities. It can materialize when emotions such as anger, fear or disavowal become *attached* to language, stereotypes, encounters, identities, bodies, laws, institutions, etc. (Ahmed, 2004). Racism is a complex and variegated phenomena and its digital manifestations can be examined by exploring its entanglements in everyday online encounters. In this respect, our choice of the band Das Racist as a case study to explore racism on YouTube is salient, because this group articulate the contestations of contemporary race and racism.

3. Methods

Data Collection

The case study of Das Racist investigated how the comment space of YouTube is racialized. We generated a series of visualizations of the comment exchanges of users responding to the band's most popular videos. All YouTube comments for the five most viewed videos – *Combination Pizza Hut And Taco Bell, You Oughta Know, Who's That? Brooown!, Ek Shaneesh* – tracks from Das Racist (2010), and *Michael Jackson* (Das Racist, 2011) were collected using a custom developed PHP script which directly called the YouTube API. Importantly, if a comment was directed at another YouTube user (denoted by the reply feature within YouTube), that user's ID was recorded as well. Specifically, the data was organized as a two-mode network in which commenter, comment recipient, and video being commented on were all recorded. All comments from the five videos were collected, which totaled 7,224 comments and all were categorized chronologically. This reflects a reasonably high comment to view ratio of .0015 (7,224 comments from an aggregate 4,710,947 views).

Coding and network methods

Our coding schema creates a typology for analyzing the collected YouTube comments. Following our previously developed open coding methods to classify tweets (Authors, 2017), this schema was developed iteratively with the authors regularly engaging in 'digital ethnographic' fieldwork within the comment space of the videos. Specifically, we empirically explored the dataset by following grounded theory's method of taking phased fieldnotes to develop an initial scheme. This enabled us to produce basic visualizations that indicated potential areas to pursue. This led to a more nuanced characterization of the dataset, and iteratively refining the coding until we arrived at the current schema (see Table 1). Our schema was not abstractly invented, but inspired by 'abductive' reasoning as a creative inferential process. "The attraction of abductive analysis is that it elicits theoretical innovations precisely through a double engagement with existing theory and careful methodological steps" (Reichertz, 2007; Timmermans & Tavory, 2012).

Following methods developed by others (Abdul Rahim & Sulaiman, 2015), we conducted network analysis using both UCINET and NodeXL to leverage their particular affordances and best examine the data both as a two-mode network (i.e. a network consisting of commenting YouTube users and Das Racist videos), and as a one-mode network (i.e. a network consisting of commenting YouTube users). Specifically, UCINET was used for the two-mode analysis (users and videos) to study the intra-video network (illustrated in Figure 1). And NodeXL was used for visualizing complex one-mode networks to study specific networked interactions in detail (illustrated in Figures 2 - 4). The large number of isolates and dyadic islands (i.e. individuals and pairs not connected to the 'giant network' of users directly) were removed, which reduced the comments dataset to 844 made by 542 unique users and allowed us to focus on networked exchanges rather than isolated monologues/dyadic exchanges. These comments were individually read and each comment was tagged on a 10-point scale from exhibiting no racial bias to exhibiting explicit racism – see Table 1. Additionally, the targets of any inflammatory or racist comments were also tagged (including sexist and homophobic comments).

During the coding rounds discussed above, no intercoder reliability testing was done as our schema were developmental. For the finalized coding rubric, all comments were double coded by both authors and intercoder reliability was measured using Krippendorff's Alpha, which was 0.89. This indicates that our derived, final coding schema was robust and enabled us to reliably code YouTube comments, despite their often-challenging content.

Parent Code	Child Code	Sub-Code	Description	Code
None			Post removed/spam	0
Non- inflammatory	Constructive		Either informative or adds to dialogue	1
	General		Other type of general comment/reply	2
	Anti-racist		Anti-racist comment non- inflammatory	3
Inflammatory	Non-racialized	homophobic	Hostile homosexual terms	4
		misogyny	Hostile female terms	5
		other	Other kinds of non-racial hostility & slurs	6
	Racialized	hostility	Ad hominem attacks, threats	7
		overt	Racial slurs, name calling, stereotyping	8
		anti-racist	Opposes anti-black/minority racism via inflammatory racialized expressions	9
	Sarcasm		Sarcasm or trolling (as difficult to distinguish)	10

Table 1: Coding Schema

The dataset raised the complexity of identifying (coding) racialized expression, not only because it is challenging to judge whether a user comment is racist or not (Augoustinos & Every, 2007), but also the degree to which it is racialized. Furthermore, racialized comments were frequently entangled with other expressions of hostility, whether it be homophobia, misogyny or a more generalized kind of antagonism. Drawing on an abductive approach, we aimed to acknowledge the *multiplicity* of racism online, and that there is not necessarily an

archetypal expressive form. This ultimately allowed us to be able to sort comments into reliable categories.

An initial set of visualizations highlighted the networked comment space, which led to identifying key areas of concern for further analyses and deploying 'thick data' interpretation, wherein ethnographic methods are used to richly discern 'our own constructions of other people's constructions' (Boellstorff, 2013), rather than 'thinning' data down for convenience. The interactions were selected because they were 'charged' (Saldanha, 2007) by race and echo the dissonances, entanglements and exclusionary forces of racism which the band Das Racist provocatively expound in their music.

5. Networked Racism in the YouTube comment space

The analysis, presented in three parts below, highlights the presence and diffusion of racialized discourse in YouTube's comment space. It focuses on three sets of exchanges within the dataset. Part one presents a set of visualizations of the comment space (Figures 1 and 2) that identifies/maps the networked *meso space* of interactions amongst users across the Das Racist videos. Our network-based approach was critical to the identification and characterization of user exchanges, and notable types of interactions to be singled out and explored in greater depth in parts two and three. The analysis is developed further by examining specific sets of user exchanges within the dataset (Figures 3 and 4), by focusing on *racial entanglements* with other types of antagonisms, and an exploration of the *affective economy of online racism*.

Though network density is low (0.003), which is to be expected in a public comment space on YouTube, average degree is 2.782 indicating multiple interactions by some users. (Density would be even lower if we had studied our initial, larger dataset). Additionally, 31.9% of users have an indegree of 2, which indicates these users have at least two comments directed at them; this signals there are interactions between users in the comment space. 10% of the users we coded have an indegree of 4, signaling more than a passing interaction. About 2% of users have an indegree of 10, a small, but important group of users who have a high frequency of comments directed at them.

(i) Meso space

The approach developed for analyses of comment responses to popular Das Racist YouTube videos focuses on the interactions between users. The flat-like architecture of the YouTube comment space, as highlighted in the Literature review above, seemingly elicits trite statements and encourages flaming and trolling because of the lack of social connectivity amongst users. By mining the comment space for networked interactions, a more nuanced, empirically-grounded understanding can be developed. A starting point of our analysis focuses on a visualization of the comment space as a two-mode directed network that illustrates interactions between commenting YouTube users and the Das Racist videos they are commenting on (see Figure 1).

Both videos and commenters are displayed as nodes (with videos represented as red dots and users represented as blue squares). The edges (represented as lines) indicate comments and users they are directed to. It is evident that there are a discernable set of users commenting and responding to more than one Das Racist video. They occupy what can be considered as a 'middle' or 'meso' (Reid et al., 2010) networked space that is found in the central area of figure 1. The large numbers of inbound edges in this space indicate significant engagement amongst users. Furthermore, applying our coding schema

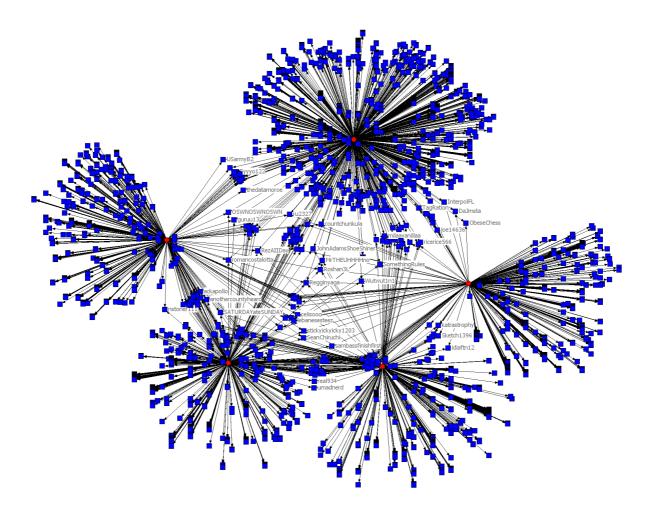


Figure 1: Visualization of the Das Racist YouTube comment space (red circles represent Das Racist videos, and blue squares represent commenting YouTube users; arrows indicate which videos are commented on).

reveals that a sub-set of users proffer comments that are odious in nature (especially racist, homophobic and/or misogynistic). And approximately half of these antagonistic users in the networked space express specific forms of *racialized* hostility in their comments. A particularly active hostile user, stickyicky1203 generated the following kinds of antagonistic exchanges amongst other users:

stillnotlovinnpolice: "SICK OF ARGUING WITH WHITE DUDE ON THE INTERNET" LOLZ STORY OF MY LIFE. sadly

stickyicky1203: @stillnotlovinnpolice White dudes built America from scratch, and since our population has declined in the last 10 years due to the influx of shit skins, this country has fallen into the shitter. Look at California, it's a giant shit hole because of the balkanization it's undergone. So fuck you you liberal faggot!

suboi27: @stickyickyi203 WOW, i didnt know red necks used big words like balkanization . I guess I was wrong for buying into that stereotype ...

Imchepasable: @stickyickyi203 I can't think of one Das Racist song where they say anything along the lines "We hate white people.": ...they're trying to get people to stop treating issues of race so seriously. Their name is even a dig at people of all races who cry "racist!"... in the politically correct world....

CrowSenjiDSMK: @stickyicky1203 I saw you on another Das Racist video and you were also hating. LOL you have no life.

It is particularly notable that the user CrowSenjiDSMK exposes stickyickyicky1203 as 'hating' across *other* Das Racist videos, part of what we are terming 'networked racism'. While YouTube does not possess strong social networking features, hostile users operating in the 'meso' space, such as stickyicky1203, arguably are central in fomenting and 'normalizing' users experiencing a racially antagonistic comment space. Research exploring comments on YouTube focuses on intra-video user responses, and tends to ignore *inter*-video comment exchanges. Furthermore, this kind of meso space may account for the popular perceptions of YouTube commenting practices spaces as being (racially) inflammatory and hostile (Lange, 2014; Williams, Oliver, Aumer, & Meyers, 2016).

Neglecting the meso space can produce an analysis that limits grasping how the articulation of racist expression on YouTube is a *networked* phenomenon. Our approach considers online racism as an overdetermined and affective force, emerging and materializing as a multimodal 'event' in social media spaces. Almost all the comments in the above interactions are replete with insults and abuse. Nonetheless, users replying to stickyicky1203 also articulate responses that attempt to contest and derail this user's racist discourse, including calling out meso-level interaction (i.e. by CrowSenjiDSMK). We shall discover in the discussion presented below, that the comments concerning Das Racist are simultaneously entangled with intelligible discussion, bombastic and excursive talk, alongside intense expressions of racist (and misogynist and homophobic) vitriol, abuse and hostility. It has been noted by others, such as Schultes, Dorner and Lehner (2013), that YouTube comment spaces can be replete with both meaningful and hostile responses. However, existing research has not specifically explored these as *racialized* sites of articulation. To offer an analytically productive account of YouTube's racialized comment space involves acknowledging its unruly complexity, and abstruse 'norms' spawned in the meso space.

The importance of the meso space can be investigated in greater depth by visualizing part of the comment space network as a one-mode network – see Figure 2 depicting interactions between commenting YouTube users. The nodes represent users and the relative sizes indicate the number of edges (comments and responses) connected to a user. The edges represent the type of comment (coded by a number) and its direction (see Table 1 for the coding schema). The opacity of the nodes and edges represent either an anti-racist comment (coded as 3), or a type of hostile comment (coded 4 - 9). The less visible nodes and edges (coded 1 - 2) signify non-hostile comments. Moreover, by contrasting the differing opacities of the network, the visualization reveals a highly active comment space charged with propagating hostilities, that includes expressions of racialized antagonisms (codes 7 - 9).

The visualization indicates that often non-hostile and hostile comments are *entangled* in user responses.² It is tempting to conclude that these are distinct phenomena; that is, non-hostile comments have meaningful dialogic intention and content; in contrast, hostile expressions are ostensibly monologic, irrational and destructive. However, as raised in the Literature Review, the problem with this kind of thinking is that it conceives racism as exceptional or anomalous, aberrant to social norms. It fails to acknowledge that racial logics are embedded in and pervade societal norms and practices (Goldberg, 2015). Racist expression on YouTube appears 'extreme' due to its intense degree of vitriol and hostility. Nonetheless, to render the phenomena as exceptional denies the historical and affective force of racism and its sociotechnical (re)production (Nakamura & Chow-White, 2013). The entanglement of non-hostile/hostile expression is symptomatic of everyday encounters which may readily become racially charged (Swanton, 2010), particularly in response to the oeuvre of Das Racist.

Figure 2 also highlights what appear to be 'flash-points' of hostility (represented by the clustering of user interactions). These wheel-like ('star') structures (Houghton et al., 2006) in

² For more detailed examples of user talk, see the discussions below Figures 3 and 4.

the network indicate certain user comments eliciting several (individual) hostile responses. As noted by existing research, this pattern of abrupt limited exchanges amongst antagonistic YouTube users appears as a common occurrence (Lange, 2014). However, figure 2 reveals that these interactions can be *bridged* by hostile users commenting across the network. Arguably, as in the case of the meso space discussed earlier, these users play a pivotal role in 'diffusing' forms of hostility and creating a particular racially antagonized 'culture' of communication. Nevertheless, contra to popular accounts of YouTube comments (e.g. Grossman, 2006), we find that that the comment space is not simply replete with random insults being flagrantly hurled around. Rather, it needs to be conceived as a racialized networked space; wherein the 'weak', nonetheless significant, social connections amongst users affect other users across the network. The comment space should not be read as flat or fragmented, but partially a product of discursive racialized social interactions. By only highlighting the apparent phenomenon of abrupt and episodic hostile exchanges, it '...leaves in place and unaddressed the underlying structural conditions that provide the conditions of possibility for such racist expression. It also obscures the relatedness, qua racist expression, of one outbreak to another' (Goldberg, 2015, p. 129).

When undertaking empirical research on communicative interactions within online platforms, it can lead to valorizing individual comments, at the expense of locating these in the wider social dynamics they are a part of. In this respect, our analysis follows Nakamura and Chow-White (2013, p.5) when they attest to how 'Race has itself become a digital medium...a distinctive set of informatic codes, networked mediated narratives...'. Race-talk on YouTube, and on the internet more broadly, needs to be situated in terms of the complex relationship between online media, techno-sociality and the motility of racism.

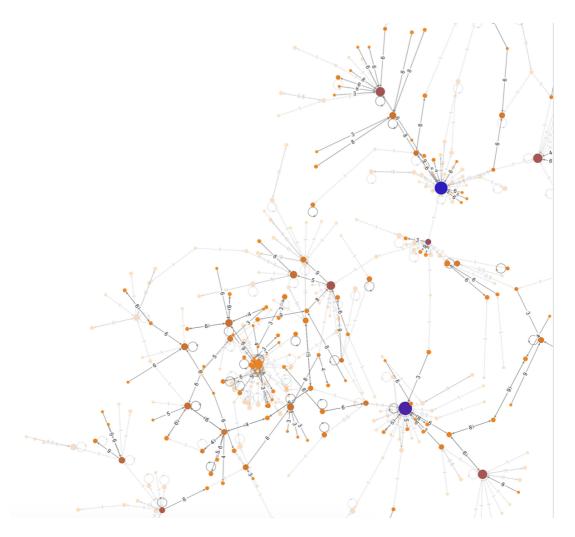


Figure 2: Das Racist comments with codes 3-9 (which include anti-racist to inflammatory comments); Table 1 lists all code values.

(ii) Racial Entanglements

The social connections of YouTube users are frequently characterized as rather lacking and seemingly enervated, in comparison to other social media platforms. From a user point of view, the comments elicited are typically characterized as devoid of me*aningful* dialogic interaction. Yet such a perspective obscures an understanding of how hostile modes of communication can ensnare, circumscribe, and articulate purposeful responses. To develop

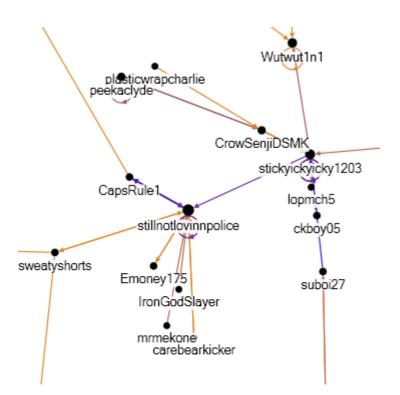


Figure 3: Excerpt of whole network around 'stillnotlovinnpolice'. Shades of purple indicate inflammatory comments; orange indicates anti-racist and non-inflammatory comments; shades in between are inflammatory comments (e.g. rust)

the analyses further, a whole network graph was generated indicating identities of the nodes. This visualization enabled particular sets of interactions between users to be identified and studied, and have been used to qualitatively 'drill down' to the actual conversational exchanges.³ Figure 3 is an extract of the larger whole network graph. As we have seen above, the user stillnotlovinnpolice expresses an 'anti-racist' stance against stickyicky1203. Although, our focus here is on antagonistic exchanges involving stillnotlovinnpolice with other users, particularly CapsRule1. An extract of the discussion between these users is reproduced below.

stillnotlovinnpolice: @CapsRule1 WHY ARE YOU SUCH AN IGNORANT FUCK???????

CapsRule1: @stillnotlovinnpolice [...] anybody can get away with anything when it comes to white people, leave them alone.

stillnotlovinnpolice: @CapsRule1 look, im not going to sit here an argue with an ignorant white person. i'm more interested in being critical about white supremecy in the US. [...] i will say whatever the fuck i want about white people so stop wasting your time trying to tell people what to do on the internet...

³ Due to the size and detail of the whole network graph, it is not possible to reproduce it here.

CapsRule1: @stillnotlovinnpolice im not white. i didnt make any commands whatsoever either. people should have more respect for whites though, without them, this nation would be nothing

stillnotlovinnpolice: @CapsRule1 first of all, yes you are white. second of all, white people used slave to build this nation, so i think without black people, this nation wouldnt exist.

CapsRule1: @stillnotlovinnpolice im not white you dumb motherfucker, and slavery was used for cultivating crops...

stillnotlovinnpolice: @CapsRule1 yeah you are white. and what do you think fuels our economy? [...] dumb mother fucker.

[...]

Carebearkicker: @stillnotlovinnpoliceyou guys are seriously arguing over youtube? lol some people have way too much pride to defend

[...]

stillnotlovinnpolice: @CapsRule1and yes, IM SICK OF ARGUING WITH WHITE DUDES (OR FEMALES FOR THAT MATTER) ON HE INTERNET.

The above exchanges reveal notable characteristics about YouTube's racialized comment spaces. And in some respects, the ambiguous anti-racism of Das Racist may incite dissonant racialized discourses when played out on the YouTube platform. The trading of insults alongside attempts of a 'purposeful' discussion makes it almost impossible to disentangle 'constructive' and 'non-constructive' dialogue in the comments above. Nonetheless, it is productive to consider that these modes of interaction can mutually co-exist, and is symptomatic of protean 'trolling cultures' of exchange on YouTube.

Trolling incorporates a range of anti-social behaviors which has generally operated as a 'subculture' of the internet (Phillips, 2015). Trolling behaviors are generally seen as being facilitated by anonymity (Hardaker, 2010), enabling users to post offensive comments that they know will provoke. Its mainstreaming has led to interactions on social media platforms becoming influenced by a range of trolling practices focused around creating flashpoints. As Phillips contends, trolling behaviors need to be considered as emblematic of the wider dominant culture and vociferate its abject 'values'. Thus, it is not incidental that trolling has 'weaponized' language, 'existing tropes and cultural sensitivities' (Phillips, 2012). While the motivations behind trolling are multifarious – hostile flaming, mockery, sarcasm, the 'lulz' etc. – it has fueled everyday expressions and exchanges to be *charged* with a vexatious affective force. In the exchanges above led by stillnotlovinnpolice, this user seeks to legitimately 'call out' the whiteness of the position of CapsRule1 concerning the history of American slavery. The denial of being white, yet 'defending' white people by CapsRule1 appears incongruous to stillnotlovinnpolice's assailing anti-racism. The discussion rapidly degenerates into hurling epithets and mocking the 'intelligence' of the user, which is found to be a common pattern of exchange on YouTube (Spiker Jr, 2012).

Moreover, it is possible to detect users' 'imagined affordances' of the YouTube platform. The type of contentious 'anti-racism' expressed by stillnotlovinnpolice may be particularly afforded by the nature of the YouTube platform. The comment space of YouTube is functionally limited, and users' horizon of expectations may be similarly circumscribed. Nonetheless, there is a degree of *investment* in the making of comments, even if these users do not necessarily believe they are engaging in a civil dialogic exchange towards a mutual understanding; or for that matter, to even to hold a 'serious' conversation as the user Carebearkicker facetiously highlights. Notably, stillnotlovinnpolice ends the exchange by shouting: 'IM [SICK OF ARGUING WITH WHITE DUDES (OR FEMALES FOR THAT MATTER) ON HE INTERNET'. On the one hand, this seemingly exposes the whiteness of social media spaces (c.f. Daniels, 2013); yet on the other hand, the simultaneous reference to females reveals an inimical 'anti-racist' standpoint. Ultimately, however, we can distinguish evidence of dialogue in examples such as this, providing a more nuanced account of racialized YouTube comment spaces, beyond troll-induced flashpoints of antagonism.

Figure 4 is a further extract of the whole network visualization, which highlights how a single (hostile) comment by the user Jacisherosick spawns a series of further comments and replies. Notably, the structure of the interactions – as multiple conversations – are more complex than the typical characterization of YouTube exchanges as fleeting dyadic flash-point.

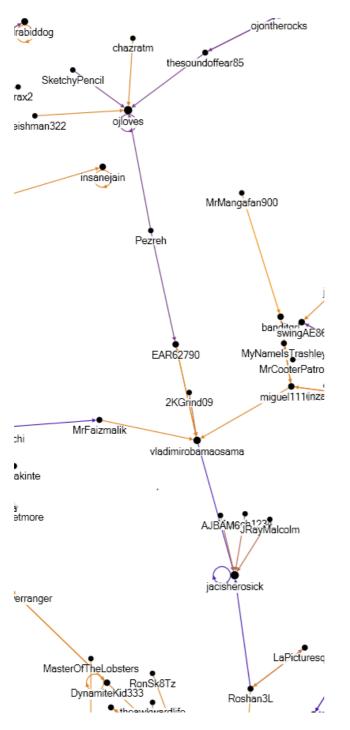


Figure 4: Excerpt of commenting YouTube users. Shades of purple indicate inflammatory comments; orange indicates anti-racist and non-inflammatory comments; shades in between are inflammatory comments (e.g. rust)

(iii) Affective economy of racism

An extract of comments between Jacisherosick and a series of other users (illustrated towards the bottom right quadrant of figure 4) is also reproduced below. The exchange highlights that an initial trolling insult by Jacisherosick caustically (or jokingly?) acknowledges

Das Racist's talent - "damn these terrorists have their shit together" – which results in generating hostile exchanges due to the use of the racialized term 'terrorists'.

Jacisherosick: damn these terrorists have their shit together

Mrpoch1234: @jacisherosick shut up, dude

JRayMalcolm: @jacisherosick das racist!

AJBAM6: @jacisherosick Hey Das Racist

Vladimirobamaosama: @jacisherosick too bad their indian......

EAR62790: @vladimirobamaosamaladimirob

Pezreh: @EAR62790 This ain't no grammar class, take that shit to school dude.

Vladimirobamaosama: @EAR62790people who spell check on the Internet and just people who can't think of good comebacks...

miguel111093: @vladimirobamaosama Actually the one with the beard is puerto rican.

2KGrind09: @vladimirobamaosama too bad your muzik need racism

MrFaizmalik: @vladimirobamaosama what do u mean too bad?

SeanChiruchi: @MrFaizmalik Someone said damn these terrorists .. and this guy vladimirobamaosama.. said Too bad their indian.. Which mean Indian are NOT terrorists but Pakistani people are.

Roshan3L: @jacisherosick your mum is a terrorist at night

LaPicturesque: @Roshan3L That was weak. The dude's comment was a joke.

Roshan3L: @LaPicturesque Alternative, Hip-Hop, Indie ??? SHOO HAHA HIPSTER FAGGOTS world needs to be cleansed with peace

Ojloves: this is the worst fucking piece of shit song i've ever heard in my life. if you like this song, you're an uneducated dumb fuck.

thesoundoffear85: @ojloves I think it's great; I'm well educated thank you.

Several bombastic, meandering, and hostile responses occur after Jacisherosick trolling comment. While the visualization of the exchanges (Figure 4) illustrates how multiple conversations take place, following and comprehending the actual comments and responses becomes more arduous as the discussions unravel (and loop back to earlier messages). Furthermore, these exchanges are often littered with homophobic vitriol (e.g. 'HIPSTER FAGGOTS world needs to be cleansed'), which can include responses challenging users who denigrate Das Racist. On face value, the content of the exchanges are typical of the abusive and banal nature of conversations present on YouTube. Spiker (2012, 41-2) has proposed 'that overt racism becomes more frequent as a space becomes more public and anonymous [... ; but,] it is important to note that YouTube also provides a space for racial minorities and anti-racists to talk back against such marginalization, opening channels unavailable in older forms of media'.

It is apparent that the band Das Racist – whose subject matter is frequently about race – elicit a multitude of 'public' racialized responses from users on YouTube. When perceived as a public site, the presence of *overt* forms of racism on YouTube is condemned by mainstream discussions of social media, particularly in relation to the breaching of normative boundaries of acceptable speech. However, following Picca and Feagin (2007), rather than believe the waning of overt modes of societal racism, its public (off-line) articulation has been mostly consigned to the 'private backstage', generally hidden from visible scrutiny (the 'public frontstage'). Nonetheless, online communicative practices and the imagined affordances of social media platforms, often blur and problematize the boundaries between public/private spaces and front/backstage performances (Brooker, Barnett, Cribbin, & Sharma, 2016). The disruption of the public/private in YouTube comment spaces is suggestive of an 'affective economy' (Ahmed, 2004) of racialized expression. That is, not only are there are emotional investments in the making of comments, these are also animated and charged by racial antagonisms that *connect* users to networked spaces of communication.

Furthermore, there is evidence of 'talk[ing] back' against marginalizing and discriminatory messages. Although in the context of Das Racist videos, the YouTube comment space is so affectively charged, 'anti-racist' responses are rarely unequivocal and are frequently laden with hostility. The trolling-like culture of YouTube generates an environment that is replete with antagonisms. We discover that while some responses in the comment space are overtly racist, other responses are more cryptically racialized, and some 'anti-racist' responses are entangled with other homophobic or misogynist insults.

One of the challenges of studying the YouTube comment space is to be able to distinguish between different kinds of 'hate', and avoid reductively concluding that the trading of insults between users make them all equally culpable for the effects of online antagonism. To adequately conceive and analyze racism – and desist from flattening or repudiating its force – involves acknowledging the significance of racialization in relation to how it creates or reproduces structures of domination. Hate 'circulates as an affective economy' on YouTube, but 'its affect is a clustering effect...Hate, then, is organised, rather than random' (Ahmed, 2001, p. 363). Anger and hostility not only animate the language of exchange on this platform, it becomes attached to *specific* identities and bodies (Das Racist members and fans), or epithets (for example, 'terrorist') via racialized affective expressions.

Thus, to understand racism online more broadly, we need to explore its *specific* manifestations, and analyze it as an 'event' which unfolds via its affective networked interactions. It is difficult to make the claim that our findings are generalizable beyond the case study of Das Racist. Nonetheless, our approach and analysis suggests it is crucial to develop an account of racism that eschews conceiving it as a socially aberrant phenomenon, that is casually expressed by individual users. Alternatively, by considering online racialized expression as a networked sociotechnical phenomena, we can begin to fathom the complexity of its public articulations.

6. Conclusion

This study of YouTube's comment space employed social network analysis, qualitative coding, and thick data descriptive methods to interpret a corpus of 7,224 comments posted on the five most viewed videos of the provocative musical group Das Racist. Given the dearth of academic literature exploring YouTube's comment culture (with even less investigating race), we undertook a unique research study to interrogate the racialization of the YouTube comment space.

We found there is clear evidence of *networkea* racialized hostility. By networked, we mean both in terms of (i) racial hostility expressed by YouTube users on multiple videos, creating a networked 'meso space' between videos, where hostility is the norm, and (ii) and an affective economy of racialized affects that influence commenting behavior. Our findings reveal that antagonistic comments were far from simply random insults. They were partly attributable to networked interactions, where hostile ideas, for example, passed through multiple parts of the comment network, both intra- and inter-video. As expected, trolling-like inflammatory and racially hostile comments encouraged a 'wheel-like' formation around the original poster, where a slew of comments are directed towards this original poster. Our account stresses that it is important to avoid totalizing descriptions of social media comments spaces, despite temptations to label them as vitriolic dens seething with hate. By focusing on Das Racist whose music is charged by race, a particular context of YouTube's racialized comment space was studied.

It can be difficult to judge the rationale and intentionality of YouTube users posting and responding, and to disentangle troll-like constructive/destructive, humorous/offensive and serious/banal commentary. Identifying and interpreting racialized commentary becomes a challenging task in online spaces. The *forms* of expression can be apocryphal or ambivalent, and entangled alongside other antagonistic and non-antagonistic commentary. Nonetheless, an iterative, abductive methodology was developed in this study, which attempted to engage with the complexity of online racialized expression. Our analyses indicated that there were instances of 'meaningful' conversations, despite hostility often being completely entangled. This may be partially attributable to this specific case study of Das Racist, given their musical contestation of race. Moreover, our study raises the question of the value of online dialogue around often taboo themes such as race/racism. Specifically, individuals may fear or desist from discussing race in offline spaces outside of comfortable echo chambers. Ultimately, this case study provides evidence that YouTube users are simultaneously conforming and challenging mainstream notions and practices of YouTube's comment space.

Studying racism on social media platforms involves developing an approach that can capture the multiplicity of how racialized expressions are articulated, beyond being characterized as generalized expressions of 'hate'. This study innovated an approach, that rendered visible online racism as an entangled, networked phenomena. Critical to such an undertaking is to situate the manifestations of online racism not as exceptional, but symptomatic of dominant culture. Thus, to begin to tackle online racism involves acknowledging the comment spaces of social media platforms are *integral* to the (re)production of everyday life, which continues to be charged by race.

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