

BLACK TWITTER? RACIAL HASHTAGS, NETWORKS AND CONTAGION

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Abstract *This essay foregrounds how technocultural assemblages - software platforms, algorithms, digital networks and affects - are constitutive of online racialized identities. Rather than being concerned with what online identities are in terms of ethno-racial representation and signification, we can explore how they are materialized via the technologies of online platforms. The essay focuses on the micro-blogging site of Twitter and the viral phenomenon of racialized hashtags - dubbed as 'Blacktags' - for example #onlyintheghetto or #ifsantawasblack. The circulation of these racialized hashtags is analyzed as the transmission of contagious meanings and affects, such as anti/racist humour, sentiment and social commentary. Blacktags as contagious digital objects play a role in constituting the 'Black Twitter' identities they articulate and interact with. Beyond conceiving Black Twitter as a group of preconstituted users tweeting racialized hashtags, Blacktags are instrumental in producing networked subjects which have the capacity to multiply the possibilities of being raced online. Thus, ethno-racial collective behaviours on the Twitter social media platform are grasped as emergent aggregations, materialized through the contagious social relations produced by the networked propagation of Blacktags.*

Keywords Twitter, race, assemblages, networks, contagion

Race itself has become a digital medium, a distinctive set of informatic codes, networked mediated narratives, maps, images, visualizations that index identity.¹

There is a growing body of research exploring issues of race and ethnicity in digital environments. Social networking relations, modes of online communication and digital identities have been revealed to be far from race-neutral.² Research has raised questions concerning how extant racial segregations and inequalities have spilled over into the virtual realm, highlighting the creation of *new* kinds of digital divides. The oft-cited, iconic 1993 *New Yorker* cartoon by Peter Steiner announcing 'On the Internet, nobody knows you're a dog' captured the apparent freedom of a blossoming World Wide Web. However, the original cyberspace promise of 'leaving the meat (body) behind' has done little to withstand the racialization of online spaces. The internet has always been a racially demarcated space and today the plethora of online communication platforms (instant messaging, email-

1. Lisa Nakamura and Peter Chow-White, 'Introduction - Race and Digital Technology: Code, the Color Line, and the Information Society', in L. Nakamura and P. Chow (eds), *Race After the Internet*, London, Routledge, 2012, p5.

2. See for example, Beth Kolko, Lisa Nakamura and Gilbert Rodman (eds), *Race in Cyberspace*, London, Routledge, 2000; Wendy Chun, *Control and Freedom: Power and Paranoia in the Age of Fiber Optics*, Cambridge MA, MIT Press, 2006.

3. Lisa Nakamura, *Digitizing Race: Visual Cultures of the Internet*, London, University of Minnesota Press, 2007.

4. Geert Lovink, *Networks Without Cause: A Critique of Social Media*, Cambridge, Polity Press, 2011, p13.

5. danah boyd, 'White Flight in Networked Publics: How Race & Class Shaped American Teen Engagement with MySpace & Facebook', in L. Nakamura and P. Chow (eds), *Race After the Internet*, London, Routledge, 2012, pp203-222.

6. Eszter Hargittai and Eden Litt, 'The tweet smell of celebrity success: Explaining variation in Twitter adoption among a diverse group of young

lists, blogs, discussion forums and social media) continue to exhibit varying degrees of identity marking and racialized segregation.³ The internet, in other words, is a manifold set of sociotechnical practices, generative of digital privileges and racial ordering.

It has become apparent that online race is complex and mutable. This picture supports Geert Lovink's declaration that: 'The idea that the virtual liberates you from your old self has collapsed. There is no alternative identity'.⁴ That digital media should be understood as merely an adjunct to the 'real' world is, then, an increasingly tenuous standpoint. But this should not be taken to mean that there is a static replication of 'off-line' identities *online*, far from it. Online racial inclusions and exclusions are dynamically transforming, augmented by the explosion of 'Web 2.0' social networking sites, and modes of access (broadband and mobile phones). For instance, the rise of social networks witnessed the 'white flight' of users from MySpace towards Facebook.⁵ And variations in the adoption of social media by different ethno-racial groups have become more visible.⁶ The hype of Web 2.0 celebrating user participation and content generation has obscured the racialized *protocols* that circumscribe our online interactions.⁷

Web studies exploring race and ethnicity have principally conceived identity as a 'lived' social construction or hegemonic mode of representation. The relationship between communication platforms and identity practices is difficult to unravel, particularly as research in this field risks essentialising online activity in relation to supposed ethno-racial designation. The rapidly expanding digital landscape poses a further challenge to researchers, as the 'real-time' speed, propagation and irruptions of race online create a presentism that seemingly resists critical analysis.⁸ Modalities of race wildly proliferate in social media sites such as Facebook, Youtube and Twitter: casual racial banter; race-hate comments, 'griefing', images, videos and anti-racist sentiment bewilderingly intermingle, mash-up and virally circulate; and researchers struggle to comprehend the meanings and affects of a racialized info-overload.⁹

The complexity of online racial formations raises the question of whether adequate attention is being paid to the significance of the online environments that race exists in: how are both race and digital networks transformed in their mutual encounter? This essay offers an analysis which centres upon exploring the technosocial production of race. Digital networks are generative of race and can be grasped by an approach attentive to the operations of online platforms. My contention is that a move to a materialist understanding of digital media and networks¹⁰ opens up new possibilities for rethinking how race *works* online. Lisa Nakamura and Peter Chow-White intimate that 'race itself has become a digital medium'; thus the materiality of both race and the digital can prompt an alternative approach and method, beyond the mantra of race as a social construction. Rather than only being concerned with what online identities are in terms of their ethno-racial signification, we can explore

adults, *New Media and Society*, 13, 5 (2011): 824-842, <http://doi.org/cnfgkb>

7. cf. Alexander Galloway, *Protocol: How Control Exists After Decentralization*, Cambridge MA, MIT Press, 2006.

8. 'Presentism' refers to how social researchers are being governed by the real-time nature of contemporary media culture, unable to undertake deep analysis; see Emma Uprichard, 'Being stuck in (live) time: The sticky sociological imagination', Les Back and Nirmal Puwar (eds), 'Live Research Methods', *Sociological Review Monograph*, 2012, pp124-138.

9. See the darkmatter project 'race mashup' experiment which highlights a saturated racialized discourses based on news and blogs searches, user posts, bookmarks, 'likes' and ranking: <http://www.darkmatter101.org/site/mashup/> (accessed 12 January 2012).

10. See for example, Marianne van den Boomen *et al* (eds), *Digital Material: Tracing New Media in Everyday Life and Technology*, Amsterdam, University of Amsterdam Press, 2009; Jussi Parikka, *What is Media Archaeology*, Polity Press, 2012; Wendy Chun, 'Introduction: Race and/as Technology; or,

How to Do Things to Race', *Camera Obscura*, 24, 1 70 (2009): 7-35.

11. Marianne van den Boomen *et al*, *ibid*.

12. Ganaele Langlois, 'Meaning, Semiotكنولوجies and Participatory Media', *Culture Machine*, 12 (2011): 1-27.

13. Arun Saldanha, *Psychedelic White: Goa Trance and the Viscosity of Race*, London, University of Minnesota Press, 2007.

their 'digital materiality'.¹¹ That is, how 'technocultural assemblages'¹² - digital networks, communication platforms, software processes - are constitutive of online racialized subjectivity and activity. Pursuing a materialist approach also leads to re-conceiving race as an 'assemblage':¹³ encountering race as an emergent force in digital media *vis-a-vis* its networked connections, informatic flows and affects.

To situate the discussion of a *digital-race assemblage*, this essay explores the social media micro-blogging site of Twitter. More specifically, I focus on the phenomenon of 'Black Twitter' that has become evident, principally in relation to the relative magnitude of Black (especially African-American) activity, and in particular the creation of certain kinds of 'hashtags'. A key feature of Twitter has been the practice of user-defined hashtags for identifying and propagating messages in the network, with special attention to popular trending hashtags which can impact on wider media culture beyond the Twitter-sphere. Popular hashtags have transformed into media-friendly monikers for appearing to (momentarily) capture the *zeitgeist* of the online world. Notably, the phenomenon of *racialized* hashtags - for example, *#ifsantawasblack* or *#onlyinthegetto* dubbed as 'Blacktags' - virally circulate through the Twitter network, and on occasions *unexpectedly* appear as top trending topics. These short-lived internet memes, often in the form of ambiguous racialized humour have fuelled the notion of 'Black Twitter'. Both Black Twitter and Blacktags have attracted discussion amongst bloggers and news sites, yet they have received almost no academic scrutiny. The phenomenon has largely elicited identity-based explanations, dwelling on the idiosyncratic behaviour of African-American users (re-tweeting particular hashtags until they 'trend' on Twitter). This kind of identitarian understanding animates the limits of approaches that continue to centre user identity and behaviour as the key site of analysis. By doing so, it fails to effectively address the significance of the digital materialization of race.

The phenomenon of Black Twitter affords an opportunity to interrogate Blacktags as racialized digital objects in relation to the technocultural assemblages they are produced in. In this essay it will be maintained that *the network structures of Twitter*, its *trending algorithm* and *hashtags as machinic replicators*, play a critical role in the emergence and viral circulation of Blacktags. The analysis presented locates Blacktags in terms of the transmission of meanings and affects (such as anti/racist humour and social commentary). As digital objects, Blacktags reveal the contagious effects of networked relations in producing *emergent racial aggregations*, rather than simply representing the behaviour of an intentionally acting group of Black Twitter users. Moreover, it will be argued Blacktags have the capacity to interrupt the whiteness of the Twitter network.

The significance of exploring Black Twitter and Blacktags does not hinge on claiming a radical online anti-racist practice, nor by naively identifying a politically progressive 'hashtag community'. The aim of the essay is to

open up a new way of thinking about the entanglement of race and digital networks. This task requires a direct engagement with the technosocial processes of online media, enabling us to locate the emergence of a digital-race assemblage.

TWITTER

Since launching in 2006, the micro-blogging service Twitter has unexpectedly become a key player in the colonization of the internet by corporate social media. Its 140 character limit for sending short messages (tweets) mimicked SMS, enabling users to post from mobile phones, in addition to the twitter.com web interface and other third-party clients and applications. Twitter's current 140 million active user-base dwarfs by comparison with Facebook, yet it has become the 'real time' of the digital media landscape because of the precipitous speed of its propagation of messages, information and 'news'. Moreover, the ability of any registered user to follow (or address) another user without permission or reciprocity, has led to Twitter being exemplary as a 'masspersonal' communication platform, appearing to collapse the historic distinction between mass and interpersonal communication.¹⁴ As Shaomei Wu *et al* highlight, individuals - including celebrities and other prominent figures such as politicians, commentators or 'experts' - rather than only (traditional) media agencies and governmental organisations, can communicate instantly and directly with potentially millions of followers.

Twitter has spawned modes of communication practices that were not necessarily envisioned by its original design, or its tag-line question: '*What are you doing?*' One of the first large-scale studies of Twitter by Aksay Java *et al* identified at least four types of communication uses: daily chatter; sharing information and URLs; reporting news; and conversations.¹⁵ Twitter is a 'noisy environment' due to the frequency and speed of tweets being posted,¹⁶ and users can find navigating the Twitter-sphere challenging. Particular communication conventions emerged soon after Twitter's launch. The earlier openness of the software platform enabled users to influence the development of the architecture of the system. For example, the @user-name emerged as a convention of addressivity to direct a message or reply to a user, or simply to reference another user (for example, a celebrity, without the expectation of a reply).

Many of the emergent Twitter communication conventions stemmed from existing Internet Relay Chat (IRC) practices particularly the use of the hashtag (#).¹⁷ In IRC networks, hashtags originally identified channels and topics, or they marked a message for a particular group. The symbol # prefixes a term to identify the hashtag, for example #obama or #humantrafficking. The inclusions of hashtag keywords or concatenated terms as part of a tweet were technically adopted by Twitter a year after its launch. Hashtags are circulated on Twitter by a user creating a message which also includes the unique hashtag,

14. Shaomei Wu *et al*, 'Who Says What to Whom on Twitter', *WWW*, ACM, March 28 - April 1, (2011): 705-715.

15. Aksay Java *et al*, 'Why We Twitter: An Analysis of a Microblogging Community', in H. Zhang *et al* (eds) *WebKDD/SNA-KDD 2007*, LNCS 5439, 2009, pp118-138.

16. Courtenay Honeycutt and Susan C. Herring, 'Beyond Microblogging: Conversation and Collaboration via Twitter', *Proceedings of the Forty-Second Hawai'i International Conference on System Sciences (HICSS-42)*. Los Alamitos, CA, IEEE Press, 2009.

17. In the USA hashtags are also referred to as the 'pound' symbol.

18. A re-tweeted message can be an exact copy of the original message, or a user can amend the content of message though include the same hashtag. There also can be iterations of similar hashtags - a new hashtag being created in response to an existing one. As with folksomies, there is no single individual or group controlling a hashtag or its iterations.

19. Axel Bruns and Jean Burgess, 'The use of Twitter hashtags in the formation of ad hoc publics', in 6th *European Consortium for Political Research General Conference*, 25-27 August 2011, University of Iceland, Reykjavik, p3.

20. Michele Zappavigna, 'Ambient affiliation: A linguistic perspective on Twitter', *New Media and Society*, 13, 5: 788-806, <http://doi.org/dx3px2>

21. Axel Bruns and Jean Burgess, op. cit., p6.

22. Michele Zappavigna, op. cit., p801.

23. Romero *et al* (2011) refer to common English words concatenated together as 'Twitter Idioms' which 'serve as a marker for a conversational theme'.

24. These tweets

or sending a new message incorporating an existing hashtag; or simply re-tweeting ('forwarding') the original message with the same hashtag.¹⁸ Beyond IRC networks, hashtags identifying a specific topic are not unique to Twitter, as tagging is a principal component of Web 2.0 user-generated metadata or 'falksomonies' for categorizing content; for example in blogs, bookmarking and photo-sharing services. Nonetheless, Axel Bruns and Jean Burgess point out that the Twitter hashtag,

has proven itself to be extraordinarily high in its capacity for 'cultural generativity'... and has seen a proliferation of applications and permutations cross millions of individual instances - ranging from the coordination of emergency relief ... to the most playful or expressive applications (as in Twitter 'memes') or jokes ... to the co-watching of and commentary on popular television programs [and] the coordination of ad hoc issue publics ...¹⁹

The high profile adoption and use of hashtags by politicians (e.g. *#obama*), celebrities (*#ladygaga*), social movements (*#Arab_spring*, *#Occupy*) and emergency events (*#Fukushima*) have led to hashtags becoming integral to the viral circulation of tweets. The seemingly unruly practices of tweeting are afforded a semblance of organisation as hashtags are able to relate together potentially thousands of individual messages across the Twitter network. Hashtags are used as a powerful utility for finding significant tweets. Searching for messages via popular hashtags enables the content of tweets to be readily discovered and followed (as hashtag searches can be saved). Furthermore, hashtags are now a principal functionality of Twitter via the identification of 'Trending Topics' (introduced in 2008). The ranking of the most popular hashtags - Trending Topics displayed via global or national location - appear both on a user's homepage and Twitter's main search page. Top trending hashtags elevate a topic to acquire a massively increased visibility, particularly in relation to the frenetic landscape of social media.

In contrast to other Web 2.0 tagging practices, the separation of form from content is effectively collapsed within Twitter because hashtags operate as 'inline metadata'.²⁰ Twitter hashtags are unique because rather than merely categorising content, they enable users to intensify their engagement by 'organising' content and facilitating participation in conversations. The formation of 'hashtag communities' are not bounded groups but exist in emergent, 'permeable meso-level spaces which overlap both with the macro-level flow of messages across longer-term follower/followee networks and with the micro-level communicative exchanges conducted as @replies between users who may or may not have found one another through the hashtag itself ...'²¹ Not only are hashtags generative of ad hoc communities, they function as means of *amplifying* the significance of a collection of messages and render them more readily visible and findable. Michele Zappavigna

identifies the hashtag as being formative of a 'new kind of sociality where microbloggers engage in ambient affiliation ... in the sense that the users may not have interacted directly and likely do not know each other, and may not interact again'.²² Nevertheless, because of the different communicative practices found on Twitter, we should be cautious not to over-generalize the social characteristics of hashtag community formations.

HASHTAGS AS 'BLACKTAGS'

'Blacktags' are a particular type of hashtag associated with Black Twitter users (mainly African-Americans), because the tag itself and/or its associated content appears to connote 'Black' vernacular expression in the form of humour and social commentary. Blacktags take the form of concatenated American-English words and slang, expressive of everyday racialized issues and concerns. Examples of popular Blacktags (between 2010-12) include: *#cookout*; *#wordsthatleadtotrouble*; *#wheniwasslittle*; *#inappropriatechurchsongs*; *#ifsantawasblack*; *#atablackpersonfuneral*; *#onlyinthehetto*; *#hoodhoe*.²³ And the following group of tweets are indicative of the kind of humour-laden provocations and social critique associated with the hashtag *#onlyinthehetto*:²⁴

#onlyinthehetto can a game of dominoes turn violent
#onlyinthehetto your idea of a fancy restaurant is kfc
#onlyinthehetto will yu hear gunshots and instead of running yu guess which gun made that sound
Hoes dat kno they ain't shit but act stuck up #onlyinthehetto
#onlyinthehetto will your TV cost more than your house

What is seemingly remarkable is that Blacktags on occasions become *trending* topics on Twitter, which appears to belie their vernacular expression and racialized specificity. This phenomenon has garnered both negative and positive attention across online media. A short-lived website *OMG! Black People!*²⁵ in July 2009 documented racially-charged tweets against a perceived Black Twitter. The site revealed messages from white users disparaging how trending topics - Blacktags in response to the *Black Entertainment Television* (BET) Awards - were being dominated by 'black' themes and users. On the other hand, Choire Sicha, an editor of the topical AWL website, admitted to being fascinated with Blacktags: 'I cannot keep quiet about my obsession with Late Night Black People Twitter, an obsession I know some of you other white people share, because it is awesome'.²⁶

The visibility of Blacktags is integral to instantiating the notion of 'Black Twitter',²⁷ which has been also reinforced by a number of internet demographic usage studies. The widely cited PEW 2009 survey reported that adult online African-Americans disproportionately accounted for 26 per cent of all users of Twitter (and other online updating services).²⁸ Notwithstanding the

were collected by the author during 2011. Either the same message is tweeted with the hashtag, or there can be a number of different messages associated with the same hashtag. What will be of interest is the intense *repetition* of Blacktags.

25. OMG! Black People! <http://omgBlackpeople.wordpress.com/> (accessed 15 September 2011).

26. Choire Sicha, 'What Were Black People Talking About on Twitter Last Night?', *AWL*, November 11, 2009, <http://www.theawl.com/2009/11/what-were-Black-people-talking-about-on-twitter-last-night> (accessed 20 October 2011). There is an explicit assumption that only Black people are involved in tweeting Blacktags.

27. Kimberly C. Ellis, 'Why "They" Don't Understand What Black People Do on Twitter', *Dr Goddess*, 12 Aug 2010, <http://drgoddess.com/2010/08/why-they-dont-understand-what-Black-people-do-on-twitter/> (accessed 18 June 11); Chase Hoefburger, 'The demystification of Black Twitter', *Daily Dot*, 9 March 2012, <http://www.dailydot.com/society/Black-twitter-dr-goddess/> (accessed 5 April 12).

28. Susannah Fox, Kathryn Zickuhr and Aaron Smith,

'Twitter and Status Updating', 2009, <http://www.pewinternet.org/Reports/2009/17-Twitter-and-Status-Updating-Fall-2009.aspx?r=1> (accessed 15 May 2010). The PEW survey also found that there are relatively more female Twitter users amongst African Americans.

29. Patrice J. Williams, 'Black Twitter: Trending Topics Paint the Wrong Picture', *The Root*, 18 January 2011, <http://www.theroot.com/views/Black-twitter-trending-topics-paint-wrong-picture> (accessed 20 May 2011).

30. Farhad Manjoo, 'How Black People Use Twitter', *Slate*, 10 August 2010, http://www.slate.com/articles/technology/technology/2010/08/how_black_people_use_twitter.html (accessed 12 October 2011).

31. Patrice J. Williams, *op. cit.*

32. Danielle Belton, cited in Sam Sanders, 'How Black People May Or May Not Use Twitter', *npr*, 16 August 2010, <http://www.npr.org/blogs/alltechconsidered/2010/08/16/129235517/how-Black-people-may-or-may-not-use-twitter> (accessed 12 March 2012).

33. Tami, 'Rejecting the notion of "Black People Twitter"', *What Tami Said*, 18

methodological limitations of accurately identifying the ethnic background of registered members, a report of 'Twitter users in America' by the marketing company *Edison Research* in 2010 boldly claimed that 'many of the "trending topics" on Twitter on a typical day are reflective of African-American culture, memes and topics'.²⁹ The title of Farhad Manjoo's prominent *Slate* article 'How Black People Use Twitter' also reinforced equating a homogeneous 'Black Twitter' with Blacktags, even though the author went on to discuss that while these hashtags appear to be associated with a sub-grouping of young working-class African-Americans, they can involve other ethnicities and socio-economic groups.³⁰ The significance of Black Twitter has raised concerns amongst critics and bloggers in relation to Blacktags mis-representing or self-stereotyping the 'Black community'. Patrice J. Williams writing for the African-American news site *The Root*, lamented how (mis)sygonistic hashtags such as #hoodhoe or #itaintrape can trend, while 'serious' topics such as Haiti earthquake are relatively marginalized.³¹ Arguably, the moniker of *Blacktag* is somewhat of a misnomer. The articles by Sicha and Manjoo provoked a range of critical responses from some African-American commentators, accusing the bloggers of fetishizing the behaviour of Black people by highlighting a relatively insignificant phenomenon; Danielle Belton points to its banality: 'It's like a Black person on a bike - I've never seen that!'.³² It is hardly surprising that essentialist notions of 'Black Twitter' have been vociferously challenged: 'Watching Black folks on Twitter tells no more about African American culture than watching the forums at Salon or Gawker reveals about white culture ... [A]ttempting to assign deep cultural meaning to trending topics like #hoodhoe is a reflection of racial bias'.³³

The discourse concerning Blacktags has focussed on the demographic distribution and supposed behaviour of (a sub-set of) African-American users. While it raises contestations over what counts as 'Black Twitter', this discourse is ostensibly predicated upon an understanding of Blackness as an *a priori* identitarian category, and largely ignores the properties of the networked online environment that Black users act in. An influential example of this approach is surprisingly found in a presentation by the eminent data visualization researchers Fernanda Viegas and Martin Wattenberg, at the Personal Democracy Conference (2010).³⁴ These researchers examined sets of one hundred Twitter users - *categorized via their profile pictures* - and identified distinct differences in what 'Black' and 'White' users were tweeting via different types of hashtags. Viegas and Wattenberg report discovering a very high ratio of Black users associated with tweeting #cookout for example, and in comparison, a high proportion of White users associated with (BP) #oil spill. While not stated, the racialized implication is that Black users of Twitter are predominantly preoccupied with trivia and banal chatter, and white users are significantly more involved in engaging with serious social issues. The presentation by Viegas and Wattenberg is exemplary for (unintentionally) propagating a reductive understanding of Black Twitter via its associated

hashtags and user profiles. More generally their approach exemplifies the limitation of understanding race in identitarian and representational terms. It eschews considering the technocultural environment that materializes racialized aggregations and networked affects, to which I now turn.

WHAT'S 'BLACK' ABOUT BLACKTAGS?

The dilemma for empirical researchers working in the field of race has been to name and identify ethno-racial subjects, but to avoid the trap of racialized classification and ascription. In the case of social media such as Twitter, while user profile data typically records sex and age, ethnicity is not requested. For Viegas and Wattenberg, it leads to utilizing the profile pictures of Twitter users to identify their ethno-racial background. Notwithstanding the problem that some users may employ fake identities or alternative profile images,³⁵ researchers resorting to determining the ethno-racial background of social media users via phenotypical characteristics can effectively reproduce practices of racial profiling. Frantz Fanon compellingly argued that the colonial visual regime has been fundamental to operations of racial categorization and racism, and how 'racial intelligibility is manifest to us immediately in perception'.³⁶ The visual regime - 'Look, a Negro!' - seeks to tell us the *truth* about racial being.³⁷ The institutional and cultural practices of the white gaze have worked alongside a 'racial-epidermal schema' that has naturalized a 'Black essence'. Fanon's 'fact of Blackness' registers the impasse of those phenotypically marked as Black to escape from their pathological racial designation. It is not difficult to admonish Viegas and Wattenberg for employing racially suspect visual methods, though their approach is symptomatic of the larger epistemological problem of 'how is race known?'.³⁸ Along with Viegas and Wattenburg, many researchers can be caught relying on problematic visual schemas if wanting to identify the racial background of social media users. Moreover, even if user-generated ethno-racial data was collected or self-reported, it does not necessarily overcome identitarian modes of racial classification.

Nevertheless, the point would not be to deny identifying the presence of Black users or their involvement with tweeting Blacktags. To dismiss race because it is 'already racist' ignores how race *works* as an assemblage.³⁹ In contrast, as Wendy Chun urges, we can try to 'make race do different things'.⁴⁰ The challenge is to develop an alternative account which moves beyond simply attempting to evade valorising Black users, or resist ascribing racialized cultural characteristics to their online behaviour. Moreover, common strategies in the social sciences and humanities that seek to avoid essentializing racialized groups champion the intersectional recognition of other differences, such as those of class, gender or sexuality. However, valorising multiple identities does little to escape the limits of the discursive representation of race as a problem of knowledge.⁴¹ The remainder of this

January 2011, <http://www.whattamisaid.com/2011/01/rejecting-notion-of-Black-people.html> (accessed 2 April 2012).

34. Fernanda Viegas and Martin Wattenberg, 'PdF 2010 | Fernanda Viegas and Martin Wattenberg', *YouTube*, 22 June 2010, <http://www.youtube.com/watch?v=zeVODwQAYT8> (accessed 18 January 2011). These researchers were involved in developing the *ManyEyes* data visualization platform, and more recently, *Flowing Media*.

35. Twitter, unlike other friends/relationship based social media such as Facebook, Google+ and LinkedIn does not insist on real identities being used.

36. Dilan Mahendran, 'The Facticity of Blackness', *Journal of the Sociology of Self-Knowledge*, Special Double-Issue, 2007, p192.

37. Frantz Fanon, *Black Skin, White Masks*, NYC, Grove Press, 1991.

38. Arun Saldanha, Reontologising race: the machinic geography of phenotype, *Environment and Planning D: Society and Space*, 24 (2006): 9, <http://doi.org/dm3vcd>

39. Ibid.

40. Wendy Chun, 2009, op. cit., p28.

41. Jeffrey Nealon, *Alterity Politics: Ethics and Performative Subjectivity*, London, Duke University Press, 1999.

42. Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: capitalism and schizophrenia*. London, Athlone Press, 1987.

43. Arun Saldanha, 2007, op. cit.

44. Ibid., p190.

45. Gilles Deleuze and Félix Guattari, op. cit., p257.

46. Marianne van den Boomen *et al*, 'Introduction - From the virtual to matters of fact and concern', in M. van den Boomen *et al* (eds), *Digital Material: Tracing New Media in Everyday Life and Technology*, Amsterdam, University of Amsterdam Press, 2009, pp9-10, <http://doi.org/dtd9rc>

essay aims to overcome the shortcomings of race thinking governed by a logic of identity and representation, by offering an alternative framework for analyzing how race operates in online environments. The discussion that follows focuses on Twitter and is organised by two key concerns: firstly, *how* Blacktags virally trend on Twitter; and secondly, *why* Blacktags circulate across the social network. Responding to these concerns addresses the materiality of race in online networks by advancing a concept of a *digital-race assemblage*.

In the work of Gilles Deleuze and Félix Guattari, the concept of 'assemblage' explores the processes by which heterogeneous elements are arranged and brought together in particular sets of relations, relations that constitute forms of territory and expression.⁴² Assemblages are dynamic because they are constantly being made (or territorialized) and unmade (or deterritorialized), and connecting to other assemblages. Understanding race as an 'assemblage' acknowledges the oppressive force of racial categorization and the violence of racism, yet seeks to activate the potential of race to become otherwise. Arun Saldanha has innovated this kind of radical rethinking of race in machinic terms.⁴³ Rather than only as a problem of representation or embodied difference, race is discovered in its emergence through *connections* between bodies, and other entities and processes: 'From a machinic perspective, race is not something inscribed upon or referring to bodies, but a particular spatiotemporal disciplining and charging of those bodies themselves. Bodies collectively start behaving like situationally distinct aggregates - racial formations, racial clusters'.⁴⁴ What is identified or known as re-presentable racial identity is when the potential of race is arrested, and difference becomes stratified and bounded via social mechanisms of power. In reality, the boundaries of racial identities are fuzzy and messy, entangled with other differences, constantly being made and unmade. To grasp what race is necessitates first discovering how it functions; 'what it can do' and how it connects to other assemblages.⁴⁵

A digital-race assemblage can be understood by considering how race *works* in online networks. That is, how race is manifested in social media platforms involves addressing its own digital materialization in relation to the materiality of these online spaces. Marianne van den Boomen *et al* elaborate a notion of 'digital materiality' as 'configured by human actors, tools and technologies in an intricate web of mutually shaping relations ... [T]he lines separating objects, actions, and actors are hard to draw, as they are hybridized in technological affordances, software configurations and user interfaces'.⁴⁶ Their account highlights the fact that user identities, representations and meanings in online spaces are produced by material processes vis-a-vis complex technological assemblages. Participatory social media proliferate online identities, interactions and meanings at speeds and magnitudes which appear to defy conventional hermeneutic approaches. A materialist approach interrogates the networked environment which make possible these representations and meanings. As Ganaele Langlois critically contends:

Rather than asking the question: ‘who speaks?’, it is better to ask the question: ‘*What kind of technocultural assemblage is put into motion when we express ourselves online?*’ ... We have to take notice not only of what users are saying at the interface level, but also of the involvement of different types of software processes in sorting and ranking information; not only the content of a message online, but the *informational logics* that make such a content more or less visible ...⁴⁷

47. Ganaele Langlois, op. cit, pp3-4, emphasis added.

Thus, the phenomena of Black Twitter and Blacktags are not simply social representations or *a priori* racialized categories. They are ‘real’ in the sense their materiality emerges through how the bodies of particular groupings of users machinically connect with the technocultural assemblage of Twitter, constituted by the informational logics of: user names and profile pictures, hashtags and trending algorithms, software interfaces and processes, data flows and networked relations, inclusion and exclusion, racial dis/ordering, contagious vernacular humour, meanings and affects, etc. When ‘Black users’ enter into a Twitter assemblage, their subject formation can be both territorialized (made) and deterritorialized (unmade) because racial identities are not constituted prior to their discursive representation.⁴⁸ Connecting with another assemblage - whether another body, aggregation of users or a network - offers the creative potential of entering into a process of *becoming*: ‘the action by which something or someone continues to become other (while continuing to be what is)’.⁴⁹

48. Sanjay Sharma, *Multicultural Encounters*, London, Palgrave MacMillan, 2006.

49. Deleuze and Guattari, cited in Paul Patton, *Deleuze and the Political*, London, Routledge, 2000, p78.

ALGORITHMS, NETWORKS, DIFFUSION

If we return to the presentation by Viegas and Wattenberg, it is remarkable that the highlight of their discussion visualizes a list of popular hashtags, yet there is no mention of the *process* of how Twitter discovers trending topics. Perhaps because the inner-workings of Twitter’s trending algorithm - which determines the ranking and display of popular topics - remains a proprietorial secret, the researchers avoid addressing its complex operations. After all, deploying a computer algorithm to parse the linguistic composition of more than 400 million new messages per day (over 4630 per second)⁵⁰ is an enormous undertaking. However, ignoring the significance of the algorithm in determining popular topics can result in *naturalizing* the existence of racialized hashtags, and further obfuscating the technocultural processes involved in their production as popular topics in the Twitter-sphere.

50. Tomi Geron, ‘Twitter’s Dick Costolo: Twitter Mobile Ad Revenue Beats Desktop On Some Days’, *Forbes*, 6 June 2012, <http://www.forbes.com/sites/tomiogeron/2012/06/06/twitters-dick-costolo-mobile-ad-revenue-beats-desktop-on-some-days/> (accessed 10 July 12).

Twitter’s algorithm for identifying trending topics has mutated over time. The original version appeared to rely on the sheer frequency of tweets for a particular keyword, and was relatively insensitive to time. This resulted in specific hashtags to be trending for lengthy periods, producing tiresome static rankings (for example, those associated with vacuous teen-celebrities such as Justin Bieber). Twitter updated its algorithm in 2010, indicating that a

trending topic was not simply based on overall popularity (total tweets), but in terms of the *velocity* of a conversation over a shorter time-frame in relation to other conversations over an average day.⁵¹

A cursory explanation of the short-lived trending of Blacktags has been forwarded in terms of users ‘gaming the system’;⁵² that is, the possible manipulation of trending topics by young Black users intensely (re)tweeting a particular hashtag over a relatively short-period of time. This kind of explanation appears plausible, because ‘gaming the system’ is not especially unique to African-Americans. Various iterations of Justin Bieber hashtags continue to appear as popular trends because of the seemingly purposeful (re)tweeting actions of his loyal teenage fans. And corporate marketing strategies regularly attempt to trend particular brands to increase their visibility and feed multimedia advertising campaigns. However, any explanation relying on users manipulating Twitter trends requires further unpacking; or else we can be left with reductive assumptions that characterize algorithmic processes as readily determined by human agency, and attribute to users particular kinds of consciously co-ordinated behavioural characteristics.

Computer software algorithms are deeply embedded in many info-capitalist electronic and data analysis systems, such as stock markets, marketing trends and advertising analytics. For instance, Google’s page rank (which determines the position of search results), or Facebook suggesting new ‘friends’, or Amazon’s book recommendation system all rely on sophisticated algorithms which exploit user input (and increasingly employ data-mining techniques to predict user behaviour). As algorithms become ubiquitous in Web 2.0 platforms, the complex real-time calculations they perform on massive user-generated data remains opaque to observers. It appears credible to consider algorithms in the technically neutral terms of computer science: executing lines of code, independent of platform or external context. However, a software studies critical standpoint stresses that code is imbricated with relations of power-knowledge which articulate wider social processes, mediating everyday culture and producing material effects.⁵³ As Chun maintains, it is not possible to separate code from its execution, *yet* algorithms continue to operate as ‘hidden magical processes’, particularly for users of social media. Andrew Goffey characterizes algorithms as performing ‘logic + control’, exhibiting a ‘hierarchizing power’ that authorizes or impedes the production and circulation of information; algorithms ‘do things, and their syntax embodies a command structure to enable this to happen’.⁵⁴

Since Twitter updated its algorithm, it has been subject to scrutiny for apparently ‘censoring’ newsworthy items, identified by hashtags such as *#wikileaks*, *#occupywallstreet*, the Gaza-bound *#flotilla* and the notorious killing of Black teenager *#TroyDavis*. These issues received significant Twitter activity and widespread mainstream (off-line) media attention, yet failed consistently to trend on Twitter.⁵⁵ However, the private company has shrewdly characterised itself as a key player in supporting information diffusion of

51. ‘To Trend or Not to Trend ...’ *Twitter Blog*, 8 December 2010, <http://blog.twitter.com/2010/12/to-trend-or-not-to-trend.html> (accessed 23 November 2011).

52. Jessica F. Carter, ‘A response to Farhad Manjoo’s “How Black People Use Twitter”’, 2011, <http://jessicafayecarter.com/a-response-to-farhad-manjoods-how-black-people-use-twitter/> (accessed 2 February 2012).

53. Matthew Fuller, *Behind the Blip*, Brooklyn NY, Autonomedia, 2003; Wendy Chun, *Programmed Visions*, MIT, 2011.

54. Andrew Goffey, ‘Algorithm’, in M. Fuller (ed), *Software Studies: A Lexicon*, London, MIT Press, 2008, p17.

55. Tarleton Gillespie, ‘Can an algorithm be wrong? Twitter Trends, the spectre of censorship, and our faith in the algorithms around us’, *Culture Digitally*, 19 October 2011, <http://culturedigitally.org/2011/10/can-an-algorithm-be-wrong/> (accessed 19 June 2012).

‘progressive’ political issues, which explains Twitter’s attempts to publicly elucidate why significant hashtags may not on occasions trend. There is also evidence to suggest that the company does not actively censor politicized hashtags.⁵⁶ The rapid ‘real-time’ circulation of messages in the Twitter-sphere encourages a focus on the temporal characteristics of information diffusion with respect to the identification of trending topics. This has become more significant due to the trending algorithm becoming relatively insensitive to topics propagating through the network over longer periods of time. Twitter has endeavoured to identify key factors involved in identifying popular topics: ‘Trends should privilege terms that spike, terms that exceed single clusters of interconnected users, new content over retweets, new terms over already trending ones’.⁵⁷ Nonetheless, the *exact* operations of Twitter’s *value-laden* algorithm remains hidden by the company, and studies attempting to discover or model its inner-weighting and statistical calculations reveal highly complex computational processes involved in determining which terms trend.⁵⁸

Nevertheless, it is possible to interrogate trending topics in relation to the significance of the *structure* of user networks and the kind of hashtag *content* being circulated. The identification of popular Blacktags by Viegas and Wattenberg was devoid of a discussion about the structure and formation of ad hoc hashtag communities, and the types of topics associated with these. On the other hand, Manjoo⁵⁹ - notwithstanding the critical reception of his article - did usefully draw on network research, which points to the likelihood of Blacktags trending because they originate in tightly-clustered groups (with higher than average follower-followed reciprocal relationships), often a characteristic of ‘minorities’ in social networks. From a social network analysis perspective, the diffusion of Blacktags can be accounted for by a model of ‘simple contagion’. Damon Centola and Michael Macy point out that the phenomenon of the ‘strength of weak ties’ suggests that within a highly clustered network - a ‘small world’ with strong in-group ties - information may rapidly spread to other parts of the network, because only a few ‘long’ ties are needed to make distant (bridging) connections and create larger network effects.⁶⁰ The authors highlight that in Mark Granovetter’s original work, network ties between people have been characterised as being *relational* and *structural*. The relational element refers to a channel of information in terms of influence and trust between people. The structural element facilitates linking, diffusion and integration into the network. Granovetter’s ‘strength of weak ties’ thesis implies that a network which is ‘structurally weak’ can be ‘relationally strong’.

However, Centola and Macy demonstrate that this phenomenon is not generalizable to all types of networks when examining information flow and diffusion. Contagious modes of collective behaviour can occur on the basis of differing processes of diffusion. In the case of trending Blacktags, they *may* originate within a relatively small cluster of highly connected African-American users, and the rapid diffusion of these hashtags to *other* branches

56. Gilad Lotan, ‘Data Reveals That “Occupying” Twitter Trending Topics is Harder Than it Looks!’, *SocialFlow*, 12 October 2011, <http://blog.socialflow.com/post/7120244374/data-reveals-that-occupying-twitter-trending-topics-is-harder-than-it-looks> (accessed 20 June 2012).

57. Tarleton Gillespie, op. cit.

58. Jean-Baptiste Chaubet, ‘Detecting Trending Topic on Chatter’, MSc Dissertation, Information and Communication Technology, Royal Institute of Technology, School of Computer Science and Communication, Stockholm, 2011; Fang Fang *et al.*, ‘Detecting Twitter Trends in Real-Time’, Proceedings of the 21st Workshop on Information Technologies and Systems, *WITS* 2011, pp49-54

59. Farhod Manjoo, op. cit.

60. Damon Centola and Michael Macy, ‘Complex Contagions and the Weakness of Long Ties’, *American Journal of Sociology*, 113, 3 (2007): 702-734. The authors draw on the pioneering work of Mark Granovetter, ‘The Strength of Weak Ties’, *The American Journal of Sociology*, 78, 6 (1973): 1360-1380.

of the network via long bridging ties ('simple contagion') - particularly via re-tweeting - points to the involvement of other clusters, including other (ethnic) groups. Jessica Carter rightly points out that 'no one wants to do the work of understanding these [hashtags] as multicultural particularly when they fit neatly into the stereotypes about Blacks'.⁶¹

61. Jessica Carter, op. cit.

62. Daniel M. Romero, Brendan Meeder and Jon Kleinberg, 'Differences in the Mechanics of Information Diffusion Across Topics: Idioms, Political Hashtags, and Complex Contagion on Twitter', *International WWW Conference*, 2011.

63. Blacktags are not explicitly referred to in the study by Romero *et al*, though arguably could form a sub-set of Twitter *idioms*. However, Blacktags may not neatly fall into the schema developed by Romero. Moreover, the label of 'political' hashtags should not suggest that 'idiom' hashtags do not have a politics.

64. Romero *et al* appropriate the term 'stickiness' away from its more popular 'marketing' usage (e.g. Malcolm Gladwell), and instead offer a more precise definition to characterise a mode of information diffusion.

65. *Ibid*.

66. Sitarum Asur *et al*, 'Trends in Social Media: Persistence and Decay', *Proceedings of the Fifth*

Moreover, the mechanisms of information diffusion in social networks are multifarious, and the research by Daniel Romero *et al* draws attention to variations over how *different types* of hashtag spread through Twitter.⁶² The researchers develop a typology for categorizing hashtag topics; for example, *political* hashtags (which refer to political figures, discussions, controversial issues), and *idioms* hashtags (conversational themes represented by concatenated terms, such as Blacktags).⁶³ Elaborating upon the work of Centola and Macy, Romero *et al* find that there are *distinct* mechanisms of information contagion for different kinds of hashtag - based on the variation of 'stickiness' (likelihood of information spreading) and 'persistence' (exposures from multiple sources). *Stickiness* refers to a piece of information (or idea) spreading from one person to another which can be attributable to the number of exposures an individual has to that piece of information.⁶⁴ High *stickiness* means a greater likelihood of information diffusion. *Persistence* refers to 'the relative extent to which repeated exposures to a piece of information continue to have significant marginal effects on its adoption'.⁶⁵ High persistence points to 'complex contagion' which relies on multiple exposures from different sources (e.g. reinforcement from different people) via stronger and 'wider' ties before a topic can successfully spread across the network. This differs from the model of 'simple contagion' which involves single exposures via 'weak' or longer ties for information diffusion.

Political hashtags are found to have a high persistence (complex contagion), and in comparison, conversational idiom hashtags have high stickiness though low persistence (simple contagion). This account can affirm that trending (idiom) Blacktags exhibit high diffusion rates through the Twitter network with weak ties over a relatively short period of time; and these types of hashtags are more likely to exhibit clusters of tightly-knit users. In contrast, trending political hashtags rely on multiple exposures likely to involve a broader range of users across different parts of the network. In this respect, returning to Viegas and Wattenberg's identification of hashtags *#oill spill* (political; white users) with *#cookout* (idiom; Black users), merely correlating these respective hashtags with the racial identities of users is flawed if we are properly to grasp this phenomenon. The relative number of white and Black users associated with particular trending hashtags can be dependent upon specific mechanisms of contagion, not actual numbers or correlation between race and a particular topic. The researchers stumble upon the phenomenon of distinct hashtag diffusion by visualizing apparent differences in user groups associated with political or idiom hashtags. Yet they fail to explain adequately these differences beyond reductively displaying racially categorized Twitter

profile identities. The effect is that an implicit assumption about racialized user dispositions prevails. Furthermore, in relation to hashtag *content*, the study by Sitaram Asur *et al* specifically examined factors influencing trending on Twitter, and discovered that the content being shared (via retweets by other users) is the most significant, and not the attributes of users (their number of followers or tweet-rate).⁶⁶ These findings are not necessarily generalizable to all types of hashtags,⁶⁷ but they can problematize any simplistic impression of Blacktags *personifying* Black users in relation to possessing specific kinds of hashtagging behaviour. Blacktags can operate beyond their perceived racialized characteristics.

An alternative consideration of race as a digital assemblage enables ‘identities’ of users to be explored in relation to how they are formed and connected vis-a-vis the technocultural processes of Twitter. Rather than pre-constituted racial subjects merely acting on Twitter, racial aggregations or clusters emerge in relation to dynamic network structures of interacting users, and these are articulated by systemic software processes (that is, other assemblages) such as the trending algorithm, where the morphology of different hashtags and their distinct modes of contagion plays a significant role in determining what trends. That is, popular Blacktags are not only attributable to the idiosyncratic behaviours of a sub-set of African-Americans – they arise from the array of machinic networked relations, algorithmic operations and differential information flows of Twitter.

RACIAL CONTAGION: IMITATION, REPETITION, DIFFERENCE

The discussion of Black Twitter highlights that the morphology of Blacktags influences how they diffuse within Twitter. While it reveals the significance of network structures and the emergence of racial aggregations, it tells us little about *why* Blacktags are intensely shared.⁶⁸ Blacktags are distinctive because they curate and virally propagate racially charged messages expressing social critique through a particular acerbic style of humour which has been associated with elements of African-American culture.

One way of explaining the apparent contagious qualities of Blacktags is in terms of the memetic characteristics of hashtags: they are effectively online (micro-)memes.⁶⁹ The concept of a meme has acquired widespread usage for highlighting the rapid circulation of any popular cultural phenomena. The geneticist, Richard Dawkins coined the term ‘meme’ in his book *The Selfish Gene*, as a ‘unit of cultural transmission, or a unit of imitation’.⁷⁰ Examples of memes can range from ideas, melodies, catchphrases, fashions or architectural styles. Essentially, analogous to genes, memes are *pattern replicators*, and *imitation* ‘is how memes replicate’. Memes are supposedly in a neo-Darwinian competition to survive in human minds, and there are three principal characteristics of successful memes: *copying-fidelity* (qualities that enable reproduction, such as memorability); *fecundity* (relevance and speed of

International AAAI Conference on Weblogs and Social Media, 2011, pp1-4.

67. See Albert-Laszlo Barabasi, *Linked*, London, Plume, 2003. Barabasi identifies ‘influential hubs’ diffusing information across ‘scale-free’ networks. For example, the viral misogynistic hashtag *#aintitrape* was initiated by the comedian Liv Duval, who has a large number Twitter followers. However, numbers of followers does not simply secure ‘influence’, see Jonah Berger and Katherine Milkman, *Social Transmission and Viral Culture*, Wharton School, University of Pennsylvania, 2010.

68. Cf. Jonah Berger and Katherine Milkman, *ibid*.

69. Jessica Carter, *op. cit*; Karissa McKelvey *et al*, ‘Visualizing Communication on Social Media’, arXiv:1202.1367v1, 2012; Oren Tsur and Ari Rappoport, ‘What’s in a Hashtag? Content based Prediction of the Spread of Ideas in Microblogging Communities’, Proceedings of the fifth ACM international conference on Web search and data mining, 2012, pp643-652.

70. Richard Dawkins, *The Selfish Gene*, Oxford, OUP (second edition), 1989, p171.

71. Susan Blackmore, *The Meme Machine*, Oxford, OUP, 1999.

72. Limor Shifman, 'An anatomy of a YouTube meme', *New Media and Society*, 14, 2 (2012): 187-203, <http://doi.org/c36vss>

73. <http://www.cheezburger.com/>

74. <http://boards.4chan.org/b/>

75. Irina Papuc, 'Does 4Chan Reflect Our Culture's Morals When No One Is Looking?', *Techli*, 15 June 2012, <http://techli.com/2012/06/warning-not-safe-for-work/> (accessed 20 June 2012).

76. Keith Ansell Pearson, *Viroid Life: Perspectives on Nietzsche and the Transhuman Condition*, Routledge, London, 1997, n3, p13.

77. See Susan Blackmore, *op. cit.*

78. For example, Michele Knobel & Colin Lankshear, 'Online Memes, Affinities, and Cultural Production', in M. Knobel & C. Lankshear (eds), *A New Literacies Sampler*, Oxford, Peter Langford, 2007; Limor Shifman, *op. cit.*

79. Jussi Parikka, 'Contagion and Repetition: On the Viral Logic of Network Culture', *Ephemera*, 7, 2 (2007): 287-308;

replication); and *longevity* (length of time present for reliable reproduction). Predictably, the Web is considered the prime propagator of memes because of its ease of digital reproducibility and rapid diffusion of information.⁷¹ The viral circulation of popular online phenomena in the form of linguistic expressions, images and videos are commonly dubbed as internet memes.⁷² The website *Cheezburger*⁷³ hosts a range of online media for both tracking and *creating* memes. And the infamous *4chan* discussion board,⁷⁴ a generator of racially provocative and ambiguous memes, has been described as a 'viral incubator'.⁷⁵

The internet meme concept has ironically become a meta-meme in contemporary media culture, an everyday moniker for any kind of viral online phenomenon. Although, the utility of meme theory remains contested within academic discourse, especially concerning its ontological rendering of culture as a unit of transmission in a Darwinian competition for survival. Memes seemingly possess an autonomous agency, with passive human brains as mere vehicles for their propagation. Keith Ansell-Pearson argues that Dawkins' theory '... reifies the processes of cultural evolution since it has no insight into how such processes involve technical and social mediation. The idea that culture develops in terms of a process of self-replication analogous to genetic evolution is an assertion at best and completely unfounded'.⁷⁶ This has not prevented ambitious deployments of the meme concept to account for human behaviour and 'infectious' contemporary cultural phenomena by psychologists such as Susan Blackmore.⁷⁷ In contrast, media culture researchers have utilized the meme concept as an 'analytical tool' for studying the transmission of digital culture.⁷⁸ And more critically, materialist media theorists, Jussi Parikka, Matthew Fuller and Steve Goodman have heuristically engaged with memes for interrogating contemporary viral cultures.⁷⁹ While the study of memes seeks to explore how populations are susceptible to the *contagious* transmissions, meme theory has been found to be deeply problematic for relying on notions of genetic evolution as a basis of cultural evolution.⁸⁰ In particular, materialist media perspectives characterize meme theory as fundamentally flawed for its mechanistic neo-Darwinist account of human desire and social invention.⁸¹

An alternative line of inquiry has revived the work of Gabriel Tarde by valorizing *imitation* for exploring contagious collective behaviour.⁸² In particular, the rediscovery of Tarde's key text, *The Laws of Imitation*⁸³ has been influential for the development of (Deleuze inspired) work concerning the contagious characteristics of networks in relation to the boundaries between the individual and 'the crowd'.⁸⁴ Tarde's contemporary appeal is located in the rejection of an intentional sovereign individual and conversely, the determinism of social collectivities à la Durkheim.⁸⁵ When Tarde declared '*Society is imitation, and imitation is a kind of somnambulism*',⁸⁶ he aimed to sidestep the dichotomy of the consciously acting individual and the unconsciously driven crowd. Breaking down the division between apparent voluntary

(individual action) and involuntary (crowd behaviour) leads to appreciating variation in forms of imitation as ‘a matter of difference in *intensity*’ rather than type, according to Jakob Arnoldi and Christian Borch.⁸⁷ It implies that imitation is an emergent quality, rather than simply attributable to individual or group behaviour.

The characterization of the potential force of collective group behaviour has a long history, and a range of politically charged terms have arisen to describe this phenomenon, for example, ‘the mob’, ‘the crowd’ and ‘the multitude’. Gustave Le Bon has been authoritative for his fearful characterization of the *contagious* power of the crowd. ‘According to Le Bon, crowds jeopardize the organism of the population and it is therefore crucial, he believed, to fight mass behaviour’.⁸⁸ As Borch contends, Le Bon’s classic account of crowd theory implicitly advanced ‘a racist biopolitical program’. It should be of little surprise that group behaviour in social media can similarly raise the fear of the pack-like acting mob, which has been used to characterize online taunting or bullying; or more specifically in relation to the presence of Blacktags, the propagation of misogynist racialized humour. Nevertheless, Borch contests classical crowd theory (and follows Elias Canetti), by maintaining that the crowd has the capacity to generate democratic transformations. Rather than suppressing the individual, crowds are sites through which the freedom of the ‘individual’ can be realized.

Analytically we can characterize hashtag propagation as formative in structuring Twitter as an *imitative* network, that is, both as a social network made up of ‘intentionally’ acting individuals *and* as a ‘crowd’ of affective contagions.⁸⁹ A (Black) subject ‘gaming the system’ to trend a hashtag is thus neither an autonomous agent imitating others, nor dissolved into an aggregation without agency. Rather than reduce society to an aggregation of autonomous agents, the ‘individual’ can be situated as emerging at a ‘threshold’. Andrea Brighenti suggests that beyond the threshold are not groups of individuals, but a *crowd*. The crowd is manifest through movement and encounter, constituted by a Deleuzian *multiplicity* which,

has at least two fundamental dimensions ... the dromological (composition of relative speeds and slownesses) and the affective (capacities of affecting and being affected) ... The crowd is thus a composition of relative speeds ... It is through its own dromology that the crowd becomes capable of affecting other social entities and being affected by them.⁹⁰

Thus, racial aggregations can be conceived in terms of the properties of a crowd. Groupings of Black twitter users are formed by networked interactions via their dromological and affective capacities in relation to the propagation of Blacktags. The formation of racial aggregations on Twitter can be located in machinic terms: Black ‘collective’ activity in the production of Blacktags is not over-determined by an idiosyncratic set of ethno-racial dispositions;

Matthew Fuller, *Media Ecologies*, London, MIT, 2005; Steve Goodman, *Sonic Warfare*, London, MIT, 2010.

80. Hans Bernhard Schmid, ‘Evolution by Imitation, Gabriel Tarde and the Limits of Memetics’, *Distinktion, Scandinavian Journal of Social Theory*, 9, 2 (2004): 103-119.

81. Teresa Brennan, *The Transmission of Affect*, London, Cornell University Press, 2004; Tony D. Sampson, *Contagion Theory Beyond the Microbe, CTHEORY*, (2011), www.ctheory.net/articles.aspx?id=675

82. See for example, Tony D. Sampson, *Vitality: Contagion Theory in the Age of Networks*, Minnesota, University of Minnesota Press, London, 2012.

83. Gabriel Tarde, *The Laws of Imitation*, New York, Henry Holt, 1903. http://openlibrary.org/books/OL7240797M/The_laws_of_imitation

84. Jakob Arnoldi and Christian Borch, ‘Market Crowds between Imitation and Control’, *Theory, Culture and Society*, 24, 7-8 (2007): 164-180; Andrea Brighenti, ‘Tarde, Canetti, and Deleuze on crowds and packs’, *Journal of Classical Sociology*, 10, 4 (2010): 291-314; Tony Sampson, *op. cit.*

85. Bruno Latour, 'Gabriel Tarde and the End of the Social', *multitudes*, 2005, <http://multitudes.samizdat.net/Gabriel-Tarde-and-the-End-of-the> (accessed 18 April 2010).

86. Gabriel Tarde, op. cit., p87.

87. Arnoldi and Borch, op. cit., p169, my emphasis.

88. Christian Borch, 'Body to Body: On the Political Anatomy of Crowds', *Sociological Theory*, 27, 3 (2009): 272.

89. cf. Arnoldi and Borch, op. cit.

90. Andrea Brighenti, 'Tarde, Canetti, and Deleuze on crowds and packs', *Journal of Classical Sociology*, 10, 4 (2010): 291-314, 304.

91. Gabriel Tarde, cited in Vito Campanelli, *Web Aesthetics*, Rotterdam, NAi Publishers, 2010, 78.

92. The creation of *new* Blacktags can also be another repetitious call-and-response to existing Blacktags.

93. Baratunde Thurston, 'SXSW 2010: How to be Black', *Youtube*, 2010, <http://youtu.be/c6luK6u97Ug> (accessed 16 September 2011).

94. Dexter B. Gordon, 'Humor in

rather it is an emergent array of qualities and connections vis-a-vis the technocultural assemblages of Twitter. To put it another way, the question of 'what makes Blacktags Black?' is refigured towards how the dromological and affective qualities of Blacktags render them as imitative and contagious digital objects. Let us see how.

Tarde noted that 'Repetitions are also multiplications or self-spreading contagions'.⁹¹ A key characteristic of hashtags is that they operate as *replicators*, spreading via repetition. Hashtags make available the re-tweeting of the whole message they embody, or the tweeting of a new message via the existing hashtag. Either way, to (re-)tweet a hashtag continues its propagation through the Twitter network, and increases the potential for contagious affects to take hold. Blacktags similarly have this duality of function, though they appear unique for the *intense repetition* of the embodied messages that propagate vernacular styles of caustic jokes and social commentary.⁹² For example, the popular hashtag of *#atablackpersonfuneral* propagated tweets such as:

... *The other gang members stand beside the casket planning the revenge.*

... *the momma of the deceased ALWAYS scream, "LAWWWWD! THEY TOOK MY BABYYYY!"*

... *someone almost always tries to jump into the grave.*

... *ppl take cell phone pics of the body.*

... *there is always at least one white person who feels completely out of place.*

A director of *The Onion* website, Baratunde Thurston has highlighted that Blacktags express a 'call-response' form of exchange associated with African-American culture, and the structural addressivity of Twitter facilitates this particular modality of communication.⁹³ Moreover, he points to the linguistic play of Blacktags expressing the bitter humour of 'the dozens'.

'Playing the dozens,' one of the more popular African American language games, is also a strategic survival tool ... These games are part of the humour that continues to fulfil the need for a sense of power in the midst of misery, the need for both a morale booster and amusement in Black culture ...⁹⁴

Manjoo has contested Thurston's characterization of Blacktags as 'the dozens', because not all of these hashtags express this humorous mode of addressivity, and 'non-Black' online exchanges can also take a similar anti-phonical form.⁹⁵ However, the point is not to essentialize Blacktags as embodying an exclusive vernacular form, but to draw attention to the machinic significance of their *repetition*. James Snead observed that repetition has been an 'organising principle' of elements of African American culture, 'the thing that is there to pick up', enabling participation, interruption and improvisation.⁹⁶ There is no teleological goal to repetition (or the 'cut' as Snead describes it); repetition

creates the space for encounter, movement and difference to emerge. The 'repetition with a difference'⁹⁷ associated with African American culture marks the variation in the *intensity* of imitation.

It is important to consider briefly the politics of Blacktags, though it is not possible simply to identify their anti-racist determination. This does not mean that Blacktags are merely ambiguous signifiers possessing multiple meanings, simultaneously progressive or reactionary. Blacktags propagate an ambivalent social humour in which 'lurks the spectre of tragic reality',⁹⁸ *reiterating* the marginalized condition of Black life. Yet, the networked emergence of Blacktags activates the possibility of race to exceed itself by multiplying its connections. The repetitious intensity of Blacktags can occur with 'an important difference...to create a deterritorialization, a line of flight for African American Culture'.⁹⁹ Jeffrey Nealon reminds us that deterritorializations are not in themselves liberatory. Blacktags activating a 'becoming-Black' is a *site-specific* transformative movement: 'there are only specific, more or less forceful imbrications of form and content that can respond to - disrupt and reinscribe - existing norms'.¹⁰⁰ Thus, 'Black Twitter' is not in opposition to a 'white Twitter' space (and neither of these are fixed or homogeneous). The intensive, imitative repetition of Blacktags has the potential to interrupt the whiteness of the Twitter network. In this respect, Black Twitter can be more than an aggregation of Black users manifested as a stratified racial group. That is, it can form a becoming-Black block - a deterritorializing crowd - fashioned by a series of technocultural processes and practices. The affects and meanings of Blacktags are produced through the digital-race assemblage of Twitter, which I have examined in this essay. The politics of Blacktags arise in relation to the interventionary force of their becoming-Black, temporally occurring in the networked spaces of Twitter. It is only by exploring the digital materiality of race on Twitter can we begin to grasp the significance of Blacktags and Black Twitter.

Twitter and other corporate social media (Facebook, Youtube, Flickr etc.) are circumscribing the Web. The original design of the World Wide Web utilizes a series of protocols to access the internet. However, the rise of social media (and search engines) are creating 'walled gardens', delimiting access and ostensibly regulating its 'open' architecture. The emergence of a *participatory* social web presents the potential of creativity and collaboration, yet the corporate colonisation of the public internet is exploiting online activity and accumulating massive identity profiling data, beyond the reach of academic researchers.¹⁰¹ More specifically, how online identities are being transformed by a ubiquitous informatic-capitalist social media and whether new racial ordering and segregations are emerging has become a compelling issue. Nonetheless, it has been contended that focussing exclusively on ethno-

African American Discourse: Speaking of Oppression', *Journal of Black Studies*, 29, 2 (1998): 258.

95. Farhod Manjoo, op. cit.

96. James A. Snead, 'On Repetition in Black Culture', *Black American Literature Forum*, 15, 4 (1981): 150.

97. Amiri Baraka, *Blues People: Negro Music in White America*, London, Harper Perennial, 2002; Henry Louis Gates, *The Signifying Monkey: A Theory of African-American Literary Criticism*, Oxford, OUP, 1989.

98. Gordon, op. cit., p.256.

99. Jeffrey Nealon, op. cit., p121.

100. Ibid., p136.

101. Ron Deibert, 'Social Media, Inc: The Global Politics of Big Data', *World Politics Review*, 2012, <http://www.worldpoliticsreview.com/articles/12065/social-media-inc-the-global-politics-of-big-data> (accessed 12 July 2012)

racial identity and the discursivity of race, while not paying attention to the technocultural operations of digital media leads to inadequately perceiving the production of new forms of racial coding, interaction and emergence.

This essay has explored 'Black Twitter' and its associated Blacktags as a means to grapple with the question of how race is manifested online. The analysis moves beyond the logic of identity and representation, which can limit race to either being a signifier to be semiotically deconstructed, or an embodied difference to be overcome. Alternatively, advancing race as assemblage enables a tracing of its *emergence* in online networked relations. The potentiality of race to become otherwise in digital networks - such as in the case of Blacktags - is neither positive nor negative. Rather, the possibility that race can do different things opens towards new understandings of how it functions. It is worth stressing that a materialist approach to analysing race and digital networks resists jettisoning the significance of meaning and representation, or erasing the (racialized) subject. Its point of departure discovers and interrogates a *digital-race assemblage* by offering an alternative methodology, which attends to the materiality of digital objects. Blacktags analyzed as digital objects necessitate developing novel methods for conceiving the online viral production and circulation of race. Pursing a technocultural perspective expands our grasp of racialized meaning by taking into account the conditions and regimes of its production, 'constituted by a range of heterogeneous representational and informational technologies, cultural practices and linguistic values'.¹⁰²

102. Ganaele Langlois, op. cit., p1.

Critical race researchers ought to confront how online computer-based technology actually *works* - it cannot remain obfuscated as a 'black box'. To come to terms with the complex technological and political operations of new online platforms, both existing social science virtual methods and race-thinking need to evolve. The recent developments of 'digital humanities', 'social computing' and 'software studies' recognise the significance of engaging with the technosocial processes of the internet and new media. This essay contributes toward what can be identified as a *digital-race method*¹⁰³ for exploring race as an emergent online relation, articulated by systemic software processes and informatic connections. It is a method which seeks to understand the multiplicities of race in digital networks. As corporate social media unrelentingly colonise online life, developing digital-race methods and interventions will become imperative for committed researchers and net-activists.

103. cf. Richard Rogers, *The End of the Virtual: Digital Methods*, Amsterdam, Amsterdam University Press, 2009.