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TikToking the Black Box

Abstract: This article reports on the individual and collective digital strategies of two Indigenous sexuality diverse Australians as they navigate TikToks governing algorithms, looking at how algorithms drive political online activism. Through their online tactics, content, and collective moments of political digital mobilisation, popular TikTokers Tilly and Q reveal how they challenge racist discourses that are perpetuated through algorithmic bias and counter-code transphobic discourses found in mainstream media. They also expose how users strategise their online activism to force realignments of the TikTok algorithm by collectively resisting experiences of algorithmic oppression and machine moderation. Drawing from in-depth qualitative interviews and the theory of the Cultural Interface, this article exposes the structural ways that racism is embedded within the TikTok platform and conversely, the ways that its algorithms promote queerness. It also demonstrates how, through user resistance and mobilisation, platforms, and their systems, can be alternatively coded, however concrete, or temporary.

Keywords: *Indigenous*, *gender*, *sexuality*, *TikTok*, *algorithm*, *digital activism*

1. Introduction

Digital spaces provide new possibilities, and an arena for unique engagements for Indigenous peoples.[1] Indigenous peoples utilise technological affordances to challenge settler colonial hegemonies through individual and collective activism efforts,[2] and to create contemporary and dynamic forms of community and cultural expression.[3] Mikaela Jade, a Cabrogal Aboriginal woman, for instance, designed an augmented reality mobile application package that ethically digitises and translates knowledge and culture from Aboriginal and Torres Strait Islander landscapes.[4] The *Indigital* storytelling app uses new media technologies, such as augmented and virtual realities, HoloLens, and four-dimensional mapping software and image recognition, blurring the boundaries between humans and non-humans.[5] Once installed, the app employs augmented reality to recognise traditional cultural sights. After scanning a landscape, a video of oral history plays; "elders come forth in holographic

[1] Bronwyn Carlson, et al., "Trauma, Shared Recognition and Indigenous Resistance on Social Media", *Australasian Journal of Information Systems*, 21 (2017), 1-32; Bronwyn Carlson and Ryan Frazer, "They Got Filters. Indigenous Social Media, the Settler Gaze, and a Politics of Hope", *Social Media + Society*, 6.2 (2020), 1-11.

[2] Bronwyn Carlson and Ryan Frazer, "Indigenous Activism and Social Media. A Global Response to #SOSBLAKAUSTRALIA, in Anthony McCosker, Sonja Vivienne and Amelia Johns, eds., *Negotiating Digital Citizenship*. *Control, Contest and Culture* (London, United Kingdom: Rowman and Littlefield International, 2016), 115-130; Ryan Frazer and Bronwyn Carlson, "Indigenous Memes and the Invention of a People". *Social Media + Society*, 3.4 (2017), 1-12.

[3] Bronwyn Carlson, "The 'New Frontier'. Emergent Indigenous Identities and Social Media", in Michelle Harris et al., eds., *The Politics of Identity*. *Emerging Indigeneity* (Sydney: University of Technology Sydney E-Press, 2011), 147-168; Bronwyn Carlson and Ryan Frazer, "Social Media Mob. Being Indigenous Online", (2018), https://research-management.mq.edu.au/ws/portalfiles/portal/85013179/MQU_SocialMediaMob_report_Carlson_Frazer.pdf, accessed 5 November 2022.

[4] Daniel Cooper and Nina Kruglikova, "Augmented Realities. The Digital Economy of Indigenous Knowledge", in Ariell Ahearn et al., eds., *Indigenous Peoples and Climate Change*. *Emerging Research on Traditional Knowledge and Livelihoods* (United Nations: International Labour Organisation, 2019), 107-119.

[5] Ibid.

format and tell us their story", Jade explains.[6] She asserts, "The concept is to allow Indigenous peoples to share our stories in the digital economy in the way we want to share them".[7] Additionally, *Indigital* generates employment opportunities on Country, such as for Elders who contribute as traditional owners. As well, it has an educational component that is used in school environments.[8]
Similarly, although distinctively, developing research also reveals the significance of digital platforms for Indigenous gender/sexuality diverse people.[9] Andrew Farrell, who is Indigenous and queer, reveals that Aboriginal and Torres Strait Islander gender/sexuality diverse peoples utilise social media to make themselves seen, heard, and understood by asserting their own standpoints and lived complexities online, for example.[10] However, social media engagements for Indigenous gender/sexuality diverse people can be particularly complicated.[11] Positive outcomes are continuously negotiated alongside the adverse effects of online spaces such as experiences of racism, rejection, abuse, fetishization.[12]

Complex and potentially negative experiences online are not solely shaped by users' appropriations of platform affordances. Social activity on platforms also depends powerfully on platform design and governance,[13] both of which are being increasingly scrutinised in academia for their implications, for example, their ability to entrench injustices.[14] Concerns over the operation of algorithmic systems and their consequences, particularly for those who already experience marginalisation, have become particularly pertinent in these discussions.[15] Across literature which is largely concerned with the social power of algorithms, is a lack of research that explores the algorithm-user relationship.[16] For example, how algorithms are experienced by individuals and collectives in the public domain or how algorithms shape, and provoke, user protest is largely left absent.[17]

Therefore, informed by Farrell's research,[18] this article draws on Nakata's theory of the "Cultural Interface",[19] on research which explores the non-neutrality of platform design and governance, and on qualitative interviews with Indigenous sexuality diverse TikTokers Tilly and Q, to explore their individual tactics and collective digital mobilisations enacted to resist and/or manipulate TikToks operating systems. In doing so, it contributes to the small but growing body of literature which articulates the online experiences of Indigenous gender/sexuality diverse people, the body of literature

[6] Jacqueline Breen, "Apple Rejection of Indigenous App Described as Symptom of Digital Colonisation", *The ABC* (2016), https://www.abc.net.au/news/2016-11-17/apple-drops-indigenous-app-creator-warns-of-digital-colonisation/8032904, accessed 5 November 2022.
[7] Ibid.
[8] Cooper and Kruglikova, "Augmented Realities".
[9] See Andrew Farrell, "Archiving the Aboriginal Rainbow. Building an Aboriginal LGBTIQ Portal", *Australasian Journal of Information Systems*, 21 (2017), 1-14.
[10] Ibid.
[11] Ibid.
[12] See Bronwyn Carlson "Love and Hate at the Cultural Interface. Indigenous Australians and Dating Apps", *Journal of Sociology*, 56.2 (2020), 133-150; Andrew Farrell, "Feeling Seen. Aboriginal and Torres Strait Islander LGBTIQ+ Peoples, (In)Visibility, and Social-Media Assemblages", *Genealogy*, 5.2 (June 2021), 1-11.
[13] Adriana Matamoros-Fernández, "Platformed Racism. The Mediation and Circulation of an Australian Race-based Controversy on Twitter, Facebook and YouTube", *Information, Communication & Society*, 20.6 (February 2017), 930-946.
[14] See Jessica McLean, *Changing Digital Geographies. Technologies, Environments and People* (Cham: Palgrave Macmillan, 2020), 1-267.
[15] See Sasha Costanza-Chock, "Design Justice. Towards an Intersectional Feminist Framework for Design Theory and Practice", in Cristiano Storni et al., eds., *Design as a Catalyst for Change* (Design Research Society, 2018), 528-540.
[16] Martina Skrubbeltrang Mahnke, "Please Leave my News Feed Alone", in Mette Mortensen et al., eds., *Social Media Materialities and Protest Critical Reflections* (London: Routledge, 2019), 1-29-141.
[17] Ibid; see also Tiana Bucher, "The Algorithmic Imaginary. Exploring the Ordinary Affects of Facebook Algorithms", *Information, Communication & Society*, 20.1 (2017), 30-44.
[18] Farrell, "Archiving the Aboriginal Rainbow".
[19] Martin Nakata, "The Cultural Interface", *The Australian Journal of Indigenous Education*, 36 (2007), 7-14.

which explores algorithmic workings and their consequences. Additionally, this article expands recent work which discusses the rapid emergence of "Indigenous TikTok" which begun in 2020.[20]

TikTok is a short-form video-sharing platform which exploded onto the social networking service scene in 2019, becoming the world's most downloaded app in the two years that followed.[21] TikTok is particularly popular among Indigenous youth globally,[22] who use the app to maintain connections with others. They produce content using cultural practices, humour,[23] and educational content that deliberately targets and informs non-Indigenous audiences about issues of importance to them.[24] Despite TikTok being popular amongst Indigenous users, the platform faces continual accusations of unjust and inequitable racialised platform design and governance.[25] This article explores how algorithmic inequalities are astutely and collectively negotiated and resisted by Tilly and Q and their online "communities". Comparatively, this article also discusses the role the TikTok algorithm plays in the amplification of queer voices as expressed by Tilly and Q. In doing so, it reveals some of the disparities and freedoms of the TikTok platform. Namely, the algorithmic silencing of Indigenous standpoints and algorithmic promotion of queer voices, which has unique implications for Indigenous gender/sexuality diverse people.

2. Positionality

It is important that I locate myself before continuing. I am a non-Indigenous White heterosexual researcher conducting research on sensitive and complex topics across community groups to which I do not belong: the "Indigenous communities" and the "gender/sexuality diverse communities". Acknowledgement of my outsider status continually evokes questions over my capability to engage in this research. However, I hold strong belief in the possibilities of cross-cultural research partnerships to bring about reverence for broader ways of knowing, understanding, and doing, now and in the future. Integral to my partnerships and research processes are my own self-evaluations and self-transformations which change and deepen over time as I listen purposefully and respectfully to the expertise of Indigenous peoples. I acknowledge that having this choice to enter and exit this terrain is a privilege. My own critical reflections and the vital appointment of the wider projects Aboriginal Reference Group, that is comprised of three Indigenous gender/sexuality diverse people are enacted in attempts to ensure Indigenous priorities are realised and to acknowledge, interrogate, and navigate my own problematic settler subjectivity.

3. Background

3.1 *Hybrid Arenas of Human and Machine*

Algorithms that are used to govern, gatekeep, guide, facilitate, distort, and delete social activity in online spaces are frequently understood to be calculation engines that make autocratic, neutral, or

[20] See Bronwyn Carlson and Ryan Frazer, *Indigenous Digital Life. The Practice and Politics of Being Indigenous on Social Media* (Palgrave Macmillan, 2021).
[21] John Koetsier, "Top 10 Most Downloaded Apps and Games of 2021. TikTok, Telegram Big Winners", *Forbes* (2021), https://www.forbes.com/sites/johnkoetsier/2021/12/27/top-10-most-downloaded-apps-and-games-of-2021-tiktok-telegram-big-winners/?sh=4311694f3a1f, accessed 5 November 2022.
[22] Carlson and Frazer, *Indigenous Digital Life*.
[23] Ibid.
[24] Jessie Loyers, "Indigenous TikTok is Transforming Indigenous Knowledge", *Canadianart* (2020), https://canadianart.ca/essays/indigenous-tiktok-is-transforming- cultural-knowledge/, accessed 5 November 2022.
[25] Todd Spangler, "TikTok Blames 'Technical Glitch'".

objective decisions.[26] However, algorithms are human values, prejudices, decisions and so on expressed in code.[27] Consequentially, those who program algorithms intentionally or unintentionally code their values and bias into the technological systems in which they help build.[28] Created herein is a symbiotic relationship between society and technology wherein social practices, ideologies, and norms play a constitutive part of technical design and the outcomes and impacts such designs reproduce.[29] Problematically, the role and accountability of humans in this relationship is often minimised or forgotten because their presence is perceived as passive, and is obfuscated by the technology[30] and, often hidden under laws in relation to IP design and contracting.

Noble, for example, illustrates how algorithmically crafted search engines can represent marginalised groups in stereotypical, erroneous and even pornographic ways.[31] In 2015, Google's auto-tagging and facial recognition software automatically tagged African Americans as apes and animals. Noble argues that this is a form of "algorithmic oppression" that is not just a one-off glitch in a near-perfect system, that it is fundamental to the creation and operation of the web.[32] Similarly, Ruha refers to these "glitches" as a type of "default discrimination" wherein programmers who are designing databases can both protect and reinforce their world views through coding them within technical systems.[33] Ruha poignantly states that "robots learn to speak the coded language of their parents" which includes both programmers and all other contributors to online datasets from which Artificial Intelligence learn.[34] In this way, technology in not objective or neutral, it can amplify and (re)produce existing prejudices, often without public accountability.[35] Further, it is multi-agential - there is a complex interweaving of human and machine agency that are always acting in relation to each other.[36]

Algorithms that are used to make decisions, are also often deployed as "gate-keepers" that shape the contours of public discourse online.[37] Tufekci uses the term "algorithmic gatekeeping" to refer to the ways in which algorithms dynamically filter, highlight, supress, "or otherwise play an editorial role—fully or partially—in determining information flows through online platforms".[38] Similarly, Crawford, describes algorithms as being "governing agents" that are selecting between competing, and occasionally conflicting data objects.[39] One consequence of this gatekeeping or governance is that information is organised through strategic algorithmic sorting and assembling to privilege, or algorithmically promote, some people, content, and publics over others.[40] "Trending" algorithms found on Twitter, for instance, start with a measure of popularity;[41] friending and following functions also

[26] Jordan Crandall, "The Geospatialization of Calculative Operations. Tracking, Sensing and Megacities", *Theory, Culture & Society*, 27.6 (2010), 68-90
[27] Safiya Noble, *Algorithms of Oppression. How Search Engines Reinforce Racism* (New York: New York U.P., 2018), 1-256.
[28] Benjamin Ruha, *Race After Technology. Abolitionist Tools for the New Jim Code* (Oxford: Polity, 2019).
[29] Ibid.
[30] Jordan Crandall, "The Geospatialization of Calculative Operations".
[31] Noble, *Algorithms of Oppression*.
[32] Ibid.
[33] Ruha, *Race After Technology.*
[34] Ibid., 41.
[35] Ibid.
[36] David Beer, "The Social Power of Algorithms", *Information, Communication & Society*, 20.1 (2017), 1-13.
[37]Zeynep Tufekci, "Algorithmic Harms Beyond Facebook and Google. Emergent Challenges of Computational Agency", *Colorado Technology Law Journal*, 13.2 (2015), 208.
[38] Ibid.
[39] Kate Crawford, "Can an Algorithm be Agonistic? Ten Scenes from Life in Calculated Publics", *Science, Technology, & Human Values*, 41.1 (2016), 85.
[40] Tarleton Gillespie, "Regulation of and by Platforms", in Jean Burgess et al., eds., *The SAGE Handbook of Social Media* (London: SAGE Publications, 2017), 254-278; José van Dijck, "Twitter and the Paradox of Following and Trending", in José van Dijck, eds., *The Culture of Connectivity. A Critical History of Social Media* (New York: Oxford U.P., 2013), 1-26.
[41] Crawford, "Can an Algorithm be Agonistic?".

derive from the same popularity principle that underpins the online economy of social media.[42] The algorithmic work of evaluating and determining who or what information "wins" and why, is invisible to us.[43] While trending algorithms promise insight into what may be popular and of interest, they are also engaged in calculated deliberations and the enactment of moral evaluative judgements "about appropriate and legitimate knowledge".[44]

For instance, Gillespie notes how particularly tricky discussions have erupted around the (in)visibility of race, and "a subpopulation of Twitter users commonly referred to as *Black Twitter*".[45] Topics of importance to this online public will only occasionally be deemed "popular" enough to be recognised by Twitter's algorithm; when acknowledged, negative reactions have been elicited such as xenophobia and racism.[46] Not dissimilarly, Tufekci found that in 2014, Facebook's News Feed algorithm suppressed content of the Ferguson protests, which were triggered by a police officer murdering an African American teenager.[47] The demonstrations, that later sparked nation-wide protests about racial inequalities, Tufekci argues, were deemed by Facebook's algorithmic "agent" to lack the criteria for "relevance" resulting in an information black out on Facebook.[48] Thus, despite claiming to facilitate all voices equally, and despite algorithms that inform these practices being propagated as "neutral", social media platforms apply filtering mechanisms to weigh, select and promote certain users and content over others.[49] Herein, algorithms create and sustain a hierarchical structure of users whereby some select opinions are automatically assigned value, while others are deemed less important or irrelevant.[50]

These examples illustrate how algorithms can restrict, curate, or amplify certain public discourse. This has "implications for the way in which diverse content can be seen and shared".[51] It also detrimentally impacts on "our opportunities to access content which prioritises communities who are already on the periphery".[52] Further, they demonstrate how algorithms operate in contested human spaces, wherein their decision making is always a contest, one that is frequently deciding between counter-posed perspectives.[53] In this information contest, alternative standpoints can be further marginalised by algorithms, that devalue them due to lack of engagement from users.[54] Remembering too, behind most algorithms there are human and institutional choices that structure the speech and human activity they host, and which decipher who and what deserves representation.[55] Therefore, platform owners and their developers/architects are producing agents that hold great social and political power - they can deploy their technologies to change or sustain existing hierarchies, for example.[56]

[42] van Dijck, *The Culture of Connectivity*.
[43] Ibid.
[44] Ibid., 86
[45] Tarleton Gillespie, "#trendingistrending. When Algorithms Become Culture", in Robert Seyfert and Jonathan Roberge, eds., *Algorithmic Cultures. Essays on Meaning, Performance and New Technologies* (London: Routledge, 2016), 54.
[46] Ibid.
[47] Tufekci, "Algorithmic harms", 208.
[48] Ibid.
[49] van Dijck, "Twitter and the Paradox of Following".
[50] Ibid.
[51] Farrell, "Archiving the Aboriginal Rainbow", 57.
[52] Ibid.
[53] Crawford, "Can an Algorithm be Agonistic?".
[54] Farrell, "Feeling Seen".
[55] Crawford, "Can an Algorithm be Agonistic?".
[56] José van Dijck, "Engineering Sociality in a Culture of Connectivity", in van Dijck, *The Culture of Connectivity,* 1-23.

3.2 *Platformed Racism*

Matamoros-Fernández coined the concept "platformed racism" to describe how the modes of platform governance can reproduce (but also address) social inequalities.[57] Additionally, the concept is used to describe the way that online platforms can act as amplifiers and manufacturers of racist discourses through platform design and algorithmic shaping of sociability and how user's appropriate platform affordances. Matamoros-Fernández analyses how Adam Goodes, an Adnyamathanha and Narungga Football League star, was harassed, ridiculed, and vilified online, for example, being represented through images of chimpanzees on social media. Relevantly, platform metrics were found to give relevance to racist discourses – the more engagement racist content received, the more Facebook's and YouTube's recommendation algorithms produced like content. Additionally, racially prejudicial content was cloaked in "humour" which is protected as a form of speech on Facebook and Twitter.[58] Akin occurrences of 'platformed racism' have recently been recognised by scholars who document the racial vilification, threats of violence and hate speech Indigenous peoples can experience when engaging online.[59]

Algorithmically driven socio-technological systems impact almost everyone, although unevenly through a racialised lens. As evidenced, they can have particularly negative implications for marginalised persons who can experience attacks and constraints on their agency as a direct result of engaging with these systematically biased systems. For instance, the harassment campaign on social media targeting Goodes forced him to take time away from the Football League, until he covertly retired in September 2015. Less than a year later, Goodes deleted his Twitter account.[60]

The following section provides three brief examples of the ways in which users interact with socio-technological systems in attempts to alter them to their benefit.

3.3 *Forcing Algorithmic Revision*

While dominant values are typically enmeshed in technological systems, they can be modified to encode alternative value systems.[61] Costanza-Chock, for example, documents how members of the LGBTQ+ community on Facebook successfully mobilised to force the platform to modify its real name policy.[62] Many gender/sexuality diverse people use divergent usernames across different platforms, for various reasons, including to maintain distinctive identities, safety, and privacy.[63] Facebook systematically flagged and suspended accounts of people it presumed were going by a false name, which significantly affected drag performers whose names are tied to their careers and artistic practices.[64] In response, those affected abandoned Facebook for competitor platform Ello. This abandonment, which was also enacted by several prominent drag performers, compelled Facebook to modify its "real name" policy. Facebook revised its real name flagging and dispute process, instituted new options for displaying gender identity and pronouns, and enabled users to control who is (and is not) privy to these changes.[65] Dijck, while noting that most user protests are "highly individual", foresees that collective, communal, and systematic protest, like the Facebook boycott described above,

[57] Matamoros-Fernández, "Platformed Racism".
[58] Ibid.
[59] See Carlson and Frazer, *Indigenous Digital Life*.
[60] Matamoros-Fernández, "Platformed Racism".
[61] Costanza-Chock, "Design Justice".
[62] Ibid.
[63] Benjamin Hanckel et al., "'That's Not Necessarily for Them'. LGBTIQ Young People, Social Media Platform Affordances and Identity Curation". *Media, Culture & Society*, 41.8 (2019), 1261-1278.
[64] Costanza-Chock, "Design Justice".
[65] Ibid.

has the likely potential to force platform operators to alter their ways. Dijck asserts that this is because "consumer metrics are one of the biggest currencies in the platform economy".[66]

3.3.2 *'Gaming' the System*

Users who wish to overcome algorithmic power asymmetries online can attempt to "game" the algorithm.[67] Gillespie, for example, uses the term "algorithmically recognisable" to describe how some users are engaged in strategies of visibility to make themselves recognisable to information algorithms, who have the job of discerning between the relevant and irrelevant, amid shifting bids to appear so.[68] This requires users to orient themselves toward these algorithmic systems in the hopes that they will be amplified by them.[69] Orientation towards algorithms often requires experimentation with a systems workings to grasp an understanding of how to potentially manipulate them in one's favour. These tactics can be performed individually or collectively, with differing goals and outcomes.[70] Bucher, for illustration, examines user's personal stories about the Facebook algorithm.[71] Some of Bucher's respondents reported being engaged in activities of data obfuscation. Participant Lena reported attempting to manipulate content she engages with to control her Facebook "suggestions", while participant Jessa endeavours to confuse the algorithm by liking conflicting content.[72]

3.3.3 *Formulating Subversive Counter Codes*

Lastly, erroneous and offensive representations engineered through algorithmic code and their human programmers such as Googles racist Gorilla tags of African Americans can offer an "occasion for the creation of subversive countercodings".[73] The hashtag phenomenon utilised on social media platforms, for instance, allows people to astutely and collectively decode and recode misrepresentations.[74] Indigenous peoples globally have frequently utilised hashtags as a tool of activism,[75] including as a mechanism to protest and counter-code racist narratives.

In Australia, the hashtag #IndigenousDads for example, was employed by Indigenous peoples to campaign against a racist and vile cartoon published in the newspaper *The Australian*. The cartoon depicted a police officer returning an Aboriginal boy to his father "who is holding a beer can, and asks the police officer, *yeah, righto, what's his name then?*"[76] To counter the cartoon, hundreds of Indigenous users shared content that documented "tender moments of love, intimacy, and joy with their fathers, all linked through the #IndigenousDads".[77] This is one example, among many, where Aboriginal and Torres Strait Islander peoples have taken advantage of platform affordances to

[66] José van Dijck, "Governing a Responsible Platform Society", in José van Dijck et al., eds., *The Platform Society: Public Values in a Connective World* (New York Oxford U.P., 2018), 15.
[67] Tarleton Gillespie, "Algorithmically Recognizable: Santorum's Google Problem, and Google's Santorum Problem", *Information, Communication & Society*, 20.1 (June 2017), 63-80.
[68] Ibid.
[69] Ibid.
[70] Bucher, "The Algorithmic Imaginary".
[71] Ibid.
[72] Ibid.
[73] Ruha, *Race After Technology*, 81.
[74] Ibid.
[75] See Nicholet Parkhurst, "Protecting Oak Flat. Narratives of Survivance as Observed Through Digital Activism", *Australasian Journal of Information Systems*, 21 (July 2017), 1-18; Sheelah McLean et al., "The Whiteness of Redmen. Indigenous Mascots, Social Media and an Antiracist Intervention", *Australasian Journal of Information Systems*, 21 (July 2017), 1-19.
[76] Carlson and Frazer, *Indigenous Digital Life*.
[77] Ibid., 181.

effectively counter-code racist narratives and negative characterisations offered in dominant public discourse.

In consideration of the presence and consequences of powerful and prejudicial governing algorithms online, and users' efforts to modify, game, and counter-code them, this article explores the individual and collective digital strategies of Tilly and Q as they navigate algorithmic workings and machine moderation on TikTok.

4. Methods

This article is part of a larger doctoral study that explores the lived experiences and online engagements of Indigenous gender/sexuality diverse people, looking also, at how these interrelate with experiences of Social, Cultural and Emotional Wellbeing.[78] The participants in the larger study are Aboriginal and/or Torres Strait Islander and identify as gender and/or sexuality diverse.

Participants were purposively identified through trawling the social networking sites Instagram and TikTok. Purposive selection was applied to fulfil the research objectives and to ensure that those selected contribute content relevant to areas being addressed in this research project.[79] All identified and invited potential participants self-identified publicly and proudly with their Indigeneity and gender/sexuality diverse identities on their social media profile/s.

I individually contacted the selected social media creators through the direct messaging affordance on their social media account/s through my own personal social media account and/or through contact email addresses which are publicly available through their social media account/s and invited them to collaborate with me in the project.

Drawing from two separate semi-structured, in-depth, qualitative "elicitation interviews",[80] which were conducted through the online meeting platform 'Zoom' with bisexual participant Tilly Langford (TikTok handle: @Tilly.gov.au) whose ancestorial home is Gumbaynggir nation on the Mid North Coast of New South Wales, and pansexual/bisexual participant 'Q' whose ancestorial home is concealed for anonymity purposes. The pseudonym – Q for Queer – was self-selected by the participant to protect her identity. She will be referred to throughout the article as Q. Additionally, I will use her chosen pronouns she and/or her. Tilly and Q were the only participants within the larger study who are "TikTokers".

"Elicitation interviews" are conversations wherein participants are shown pre-existing "documents" or are required to create a document of their own which directs, supports, or acts as a stimulus to the discussion.[81] Ahead of the interviews, Tilly and Q self-selected up to ten of their own social media posts which they then used to lead the discussion while we explored their interpretation of their elected documents. This method made the interpretive process more equal by enabling Tilly and Q to exercise their own expertise and agency, and to take an increasingly active role in the research.[82] [83] Q's interview went for a duration of 3 hours, 26 minutes, and Tilly's, 1 hour, 48 minutes. A letter of informed consent was sent during recruitment processes. The consent letter was verbally restated and agreed at the beginning of each interview. Interviews were audio and video recorded. Audio files

[78] See Karen Soldatic, "Social Exclusion/Inclusion and Australian First Nations LGBTIQ+ Young People's Wellbeing", *Social Inclusion*, 9.2 (April 2021), 42-51.
[79] Alan Bryman, *Social Research Methods*, Third Edition (Oxford: Oxford U.P., 2008).
[80] Aimee Grant, *Doing Excellent Social Research with Documents* (London: Routledge, 2018), 144-164.
[81] Ibid.
[82] Keith Barton, "Elicitation Techniques. Getting People to Talk About Ideas They Don't Usually Talk About", *Theory and Research in Social Education*, 43.2 (2015), 179-205.
[83] Helen Pain, "A Literature Review to Evaluate the Choice and Use of Visual Methods", International *Journal of Qualitative Methods*, 11.4 (2012), 303-319.

(only) were sent to an online transcription service where they were processed by human transcriptionists.

I conducted a contemporary qualitative content analysis of the interview transcripts. Qualitative content analysis is a research technique employed to analyse the content, contextual meaning and embedded or inferred message/s of text data[84] through the systematic classification process of coding and identifying patterns and themes.[85] The particular approach I used is a "conventional content analysis" as conceptualised by Hsieh and Shannon[86] to analyse the interview transcripts of Tilly and Q. This is a distinct "inductive" approach, meaning that I did not start the analysis using preconceived ideas. Instead, I derived ideas inductively throughout data analysis. The advantage of this is that knowledge generated from the content analysis is based on the unique communications and perspectives of participants without the imposition of potentially presumptuous researcher categorisations.[87]

In the first stage of content analysis, I read through the transcripts to open up the text, identifying similar (and unique) online and offline realities, and broad themes that lead to more in-depth examination. Individual transcripts were read line by line to identify and classify individual experiences as well as recurring themes and common conceptual groupings. I then thematically coded the findings where possible through a qualitative coding process using the software program NVivo – initially each participant had a separate code book so that their individual content and distinct lived experiences could be acknowledged, understood, and respected. In the final stage of the analysis, I drew together the findings from participants through the NVivo program. I used the triangulated findings and the theory of the Cultural Interface[88] (detailed below) to conceptualise and understand the online engagements of participants, including to examine how platform design and governance influences some of these engagements.

Most importantly, this approach to analysis is enacted to ensure I accurately and respectfully maintain the integrity of the original interviews with Tilly and Q, both in interpretation and presentation of findings. Nonetheless, I acknowledge that I have undoubtably played a role in shaping the data. My capacity to hold, produce, and share knowledge is informed and shaped by my social, political, and cultural position as a white, straight, cis-gendered female on the colonised lands of Aboriginal and Torres Strait Islander peoples. My subjectivity requires me to be dedicated to ongoing self-reflexivity (on my social position, power, and oppression),[89] as well as accountable to this project's collaborators and committed to honouring their communications. Nothing has been included in this article that was not clearly consented to by Tilly and Q. Tilly and Q's data (interview transcripts, individual 'code books', this publication and quotes used within) was returned to them digitally giving them multiple opportunities to revise their stories, give, retract, or remove their consent, and to disagree or agree with my framing of their experiences. This was done in acknowledgement of their ownership and control of their own stories

Lastly, Nakata's theory of the "Cultural Interface"[90] is used as a framework to conceptualise and understand the data produced by Tilly and Q. Nakata's Cultural Interface Theory posits that there is a:

[84] Shanyang Zhao, "Content Analysis of Facebook Pages. Decoding Expressions Given Off", in *SAGE Research Methods Cases Part 1* (London: SAGE Publications, 2014).
[85] Hsiu-Fang Hsieh and Sarah Shannon, "Three Approaches to Qualitative Content Analysis", *Qualitative Health Research*, 15.9 (November 2005), 1277-1288.
[86] Ibid.
[87] Ibid.
[88] Nakata, "The Cultural Interface".
[89] Bronwyn Carlson and Ryan Frazer, "Allies", in Carlson and Frazer, *Indigenous Digital Life*, 213-236; Ruth Nichols, "Research and Indigenous Participation. Critical Reflexive Methods", *International Journal of Social Research Methodology*, 12.2 (March 2009), 117-126.
[90] Nakata, "The Cultural Interface".

"multi-layered and multi-dimensional space of dynamic relations … that inform, constrain, or enable what can be seen or not seen, what can be brought to the surface or sutured over, what can be said or not said, heard or not heard, understood, or misunderstood, what knowledge can be accepted, rejected, legitimised or marginalised".[91]

Farrell argues, Indigenous gender/sexuality diverse people operating through online spaces are "decolonising agents" at the Cultural Interface.[92] This is largely because Indigenous gender/sexuality diverse people are utilising the affordances of digital spaces to respond to erasure, exclusion and silencing by articulating, reclaiming, and asserting ancient gender/sexuality diversities as self-defined and contemporary. In doing so, they are agents of change and provocation "though making themselves visible, known, heard, understood, and legitimised".[93]

Thus, Nakata's theory of the Cultural Interface, informed in part by the work of Farrell, presented as an appropriate framework. It can describe the ways that Indigenous gender/sexuality ideas "filter through complex terrains of knowing and unknowing – influencing how we see and know ourselves and others". And it enables acknowledgement and understanding of how Indigenous gender/sexuality diverse standpoints are conditioned by the complex relations that exist at the Interface, as well as the positive and negative potentials of these sites.[94] Additionally, it is also chosen because I am cognisant of my own positionality and of the importance of valuing Indigenous research paradigms, knowledges, and standpoints.

Prior to submission, this article was reviewed by the NSW Aboriginal Health and Medical Research Council's Human Research Ethics Committee who approved the project (Ref. 1825/21) on 21 September 2021. All quotes used were verified and cleared for publication with Tilly and Q in acknowledgement of their ownership and control of their own stories.

5. Findings

5.1 *Promoting Queerness*

Both Tilly and Q perceive TikTok to be a relatively safe platform to express gender/sexuality diversities, as well as being an arena that fosters sociality and solidarity, and produces 'relationality' between other black and gender/sexuality diverse people. The concept of Indigenous 'relationality' posits an intricate web of relatedness and connection that envelopes all human and more-than-human (animal, plant, spirit) kin.[95] This relational reality is configured around, and balanced and bound by, responsibility and reciprocity with all interrelated entities.[96] Tilly, for example, voices that, "on TikTok, the black community is so queer ... everyone's really open and accepting", while Q describes the platform as being "a weird safe space for people to explore their gender identity". Tilly believes that positive queer navigations are possible because TikTok "promotes queerness more" than other platforms through its algorithmic workings. Tilly explains that when she discusses her queer experiences through TikTok videos she knows "it's going to hit the algorithm better" which increases her "reach and support". While Tilly acknowledges that "there's always going to be arseholes", such

[91] Ibid., 199.
[92] Farrell, "Archiving the Aboriginal Rainbow".
[93] Ibid., 11.
[94] Ibid., 10.
[95] Lauren Tynan, "What Is Relationality? Indigenous Knowledges, Practices and Responsibilities with Kin", *Cultural Geographies*, 28.4 (2021), 597-610; Patricia Dudgeon and Abigail Bray, "Indigenous Relationality. Women, Kinship and the law", *Genealogy (Basel)*, 3.2 (April 2019), 2-11.
[96] Ibid.

as homophobes, she describes this algorithmic promotion[97] of queer content as "more validating [because] it's easier to reach that broader audience and have that positive experience".

Differently, Q claims "I never know which video is going to do well when I post it". However, during the peak of the J.K. Rowling transphobia controversy in 2020, which was caused by Rowling using her famed platform to push her dangerous transphobic rhetoric, Q decided to upload a video "to counteract this [Rowling's transphobic discourse] with radical, aggressive support". Q's video featured her "aggressively and humorously yelling" at Rowling. Q further explains what prompted her to counter-code Rowling's discourse: "As a queer person and as a cis queer person, I'm very aware that trans people are the part of our community we need to be looking after the most currently.... At least for the 30 seconds or whatever that they saw my video, they know that there's at least one person out there in their corner". Q's comment illustrates how she uses the affordances of TikTok and her interpersonal ties to the queer community to engage in relational practices of care[98] in efforts to 'look after', protect and support trans community members. She describes this practice as a 'need' signifying an ethic of responsibility and obligation to act in support and defence of the trans (and queer) collective.[99]

Q continues by describing the response the video received, "[there were] so many trans people in my comments being like, *Thank you. I really needed this* and *I love you. Adopt me. This is hilarious*". Q perceives the success of this video to be due partly to J.K. Rowling "trending" at the time, causing the algorithm to recognise the video as being relevant, popular, and "worthy" of visibility.[100] Q also believes that the video never "reached people on the other side of TikTok who might have had a problem with it". Q continue, "For some reason that video just happened to get put in the right algorithm on TikTok, and everybody who saw it was also like, gay and against J.K. Rowling". While acknowledging the potential for queer content to draw attention from homophobes or to reach the "other side of TikTok", both Tilly and Q describe experiences wherein their diverse sexualities and associated content is prioritised and amplified by TikToks governing algorithms.[101] Unfortunately, however, the same is not always true for content which outwardly expresses their Indigeneity.

5.2 *The #july31stwalkout*

In 2020, Nich Richie, an Indigenous non-binary creator, invited their followers to mobilise with them in a unifying digital protest which threatened to boycott the TikTok app for one day, and rate it one star in the App Store "to basically start forcing TikTok to start looking at the way that they moderate things", says Q. Through a TikTok video, Richie instructed their audience to collectively post a video containing the following information: "Stop Silencing Indigenous Voices" and "Bring Back Human Moderators", including the caption "#july31stwalkout". The threat: if TikTok does not replace machine moderators with human moderators, protesters will "walk out" on the app on 31st of July 2020 and negatively influence its App Store rating. Richie urged their audience to re-share their original post which detailed the instructions or to make a post of their own that communicated the same. Q opted for the latter. While it is unclear how many users enacted the boycott through App deletion and rating manipulation, the #july31stwalkout has been viewed over 5500 times.

Q details why digital protesters were appealing for human moderation: "The main problem is, say an Indigenous creator gets a racist comment on a video, if they report that comment, it will not go against community guidelines. If they [Indigenous creators] reply to that comment with a video, that

[97] Gillespie, "Algorithmically Recognizable".
[98] Tynan, "What Is Relationality?".
[99] Ibid.
[100] Gillespie, "#trendingistrending".
[101] Crawford, "Can an Algorithm be Agonistic?".

video will get taken down for [breaching] community guidelines because the slur is now sitting in the video". Q goes on to explain the consequences that follow. "Then those videos won't get [successfully] appealed, they'll just be deleted and then the [Indigenous creators] account gets shadow banned" which evidences the algorithms lack of ability to ascertain contextual differences due to the rigidity of its mode of processing the data.[102] Further, Q's explanation illustrates how Indigenous peoples' attempts to resist and counter-code racism on TikTok,[103] are being undermined by the uneven application of community guidelines and the governing algorithms that implement them. The deployment of platform "guidelines" in this way illustrates how they do important discursive work beyond simply guiding enforcement – they can make visible or invisible some issues and can be deployed when helpful or sidestepped when constraining.[104]

5.3 *Shadow Banning Black Voices*

Shadow banning on social media platforms is the act of hiding or restricting the publicity of select content resulting in noticeable declines in engagement without explicitly informing the creators of that content of the suppression. Due to the nature of the concept, however, it is hard to substantiate its occurrence. For Q, the most impactful instance of alleged shadow banning she has experienced online, "is when the Black Lives Matter (BLM) hashtag got shadow banned on TikTok. And people lost their minds internationally, and that prompted them to change it". The BLM content suppression came amid ongoing protests sparked by the killing of George Floyd while in police custody. Although many TikTok users assumed the "ban" was an intentional act of censorship, TikTok executives claimed it was a "technical glitch" resulting in a "display issue".[105] While impossible to discern the truth, it is conceivable that this "glitch" is an example of "algorithmic oppression" [106] whereby algorithms or human moderators chose to censor public discourses surrounding the BLM movement for whichever determining reasons to which we can only infer.

There is evidence, however, that this may not be an isolated incident, that it is instead a systemic problem with TikTok's algorithmic moderation system – as Q's commentary on the #july31stwalkout might suggest. Tilly provides further impetus to this thought when she expresses that "if you #Aboriginal or #Inidigenous, or anything like that, I think TikTok picks up that a lot of those videos get hate comments or inappropriate comments so they [moderators] shadow ban a lot of those videos". Thus, instead of effectively removing racist content and shadow banning or deleting accounts driven by racists, TikTok seemingly elects to hide or block accounts and hashtags where racist attacks occur, and where racism and dominant discourses are being resisted and counter-coded as explored in this article through individual videos and Indigenous specific hashtags.[107] Inevitably then, these decisions impact Indigenous users' opportunities to distribute and access content which prioritises their communities.[108] The evidence provided by Tilly and Q points to how Indigenous standpoints can be further marginalised by algorithms,[109] even if Indigenous content suppression is operationalised in apparent attempts to "protect" against racism.

[102] Bucher, "The Algorithmic Imaginary".
[103] Ruha, *Race After Technology*.
[104] Gillespie, "Algorithmically Recognizable".
[105] Todd Spangler, "TikTok Blames 'Technical Glitch' for Suppressing View Counts on #BlackLivesMatter, #GeorgeFloyd Videos", *Variety* (2020), https://variety.com/2020/digital/news/tiktok-suppressed-view-counts-blacklivesmatter-georgefloyd-videos-1234622975/, accessed 5 November 2022.
[106] Noble, *Algorithms of Oppression.*
[107] Ruha, *Race After Technology*.
[108] Farrell, "Feeling Seen".
[109] Ibid.

Q echoes the thoughts of Tilly above, saying that her content associated with the #july31stwalkout, received very little engagement (0 comments, 91 likes) considering her large following (30,000 at the time of the protest), which according to her is "proof it was not going anywhere". Q believes this is because of the hashtags she selected to use such as #IndigenousAustralian. She explains, "I think what happens sometimes, if there are enough reports or community guidelines violations to do with videos under certain hashtags, those hashtags start to get shadow banned as well". Q suggests that this technique of platform governance, which algorithmically demotes the individual and collective discourses and activist efforts of certain people, could have played a role in the BLM content ban as well.

Q does not believe that the #july31stwalkout "achieved anything concrete". Perhaps it might have if the hashtags that were used in attempts to create solidarity were not reportedly hidden. However, Q feels empowered by that fact that "there was a community that was very ready to sacrifice their source of entertainment to make a statement and stand up for something. It's one of those instances of being validated in your feelings that this is wrong, and it is something that you should stand up for, and that other people on the internet also see that and agree with you". Through this comment, Q gives primacy to her collective and relational reality,[110] which is fostered through the TikTok platform, comprised of other marginalised users. The relationality between these users is harnessed as a source of unity and resistance against practices of inequitable racialised control on the platform.[111]

Evidently, algorithmic oppression/suppression of Indigenous content is being enacted on TikTok. While under the guise of 'protection', its deployment effectively reproduces settler colonial power relations that continue to devalue, silence, erase, and further marginalise Indigenous standpoints. Moreover, through its platformed racism, TikTok reinforces inequitable and oppressive social relationships by penalising Indigenous users, for example, through shadow banning them, as opposed to acting against users involved in racist attacks.

5.4 *The 'Black Out'*

In a fight against the alleged suppression of the BLM content, and assertions from black and Indigenous TikTokers that their videos are being censored, international users mobilised digitally to bring awareness to the issue and to amplify the voices of those being silenced. "There was a big movement called *The Black Out*", Q explains, "where basically people agreed not to post for a whole day, unless you were a black creator. And it was just to try to collectively realign the algorithm. And it worked for like, a month. Half of the content that I saw was from black creators. And then suddenly it slowly declined again". Q's brief recount of *The Black Out* is evidence of the pervasive ways in which algorithms can control public discourse, determining who and what deserves representation and when.[112] *The Black Out* is also illustrative of how users refuse to stand silently or singularly during the recurrence of injustice in an enduring fight against racism and inequality. Instead, practicing their relationality to one another, they stood in solidarity through digital protest, and forced the platform to modify its algorithm. As Q states though, "the problem is them [the humans and machines operating TikTok] committing to it being fixed".

[110] Tynan, "What Is Relationality?"; Dudgeon and Bray, "Indigenous Relationality".
[111] Ibid.
[112] Crawford, "Can an Algorithm be Agonistic?"

5.5 *'Being on a Tightrope'*

Both Tilly and Q express the difficulties and joys of navigating the TikTok space, particularly its algorithmic workings. Tilly discloses that she has learnt a few agential "hacks" along the way. 'Agential *hacks*' refers to Tilly's orchestrated tactics she enacts in an attempt to manipulate the algorithm and in turn, her audience, often to circumvent experiences of racism. For instance, "one of the things that I have learnt to stifle racism in my comments - because you know, it does get pretty full on; is to not say straight away, *I'm Aboriginal*". If Tilly does choose to mention her Indigenous identity directly, she does so at the end of her videos or she "leaves it in the language", for example, saying "we" when talking about Indigenous peoples. Tilly does this because "racists don't care about being educated, so they just keep scrolling". This way, "those who actually want to learn, who actually care, are going to engage with it" she says.

However, Tilly does not always enact this language tactic and she explains why. "This is the thing though, the racist comments do boost your video, cos' if you're getting comments, it means people want to engage with it. The algorithm will be like, *Oh, awesome. Let's go for it*". By the algorithm "going for it", Tilly is referring to way that increased engagement is noticed by the algorithm leading to that video being algorithmically promoted.[113] Problematically, Tilly says that this type of promotion can cause the video to get on "the wrong side of TikTok [because] if the first few comments are from racist people, it might get pushed [by the algorithm] onto the "For You" pages that they have". The "For you" page is a customised collection of videos that TikTok algorithmically curates to meet individual user's interests. Unsurprisingly then, Tilly describes her engagements on TikTok as "balancing on a tightrope because getting a couple of racist comments are actually good for the video. Getting a bunch is dreadful for yourself".

Thus, Tilly must make the difficult decision. Does she suppress her Indigeneity to lessen the likelihood of encountering racism costing her visibility? Or does she orient herself towards the algorithm by posting content that she knows will incite racists, but that will be made "algorithmically recognisable"[114] due to engagement being prioritised regardless of its harmfulness.

6. Conclusion

The #July31stwalkout and *The Black Out* are each relational, collective, and unifying digital activism movements of resistance enacted in response to the algorithmic injustices Indigenous and black TikTok users have experienced when engaging with the platform. The #july31stwalkout was a movement of resistance against the inequitable application of platform governance resulting in the algorithmic suppression of Indigenous standpoints as opposed to the elevation of racist rhetoric in the comments. This suppression, which often affects Indigenous TikTokers attempting to counter racist online abuse, is enacted through techniques such as video deletion and the shadow banning of users and culturally specific hashtags. Similarly, *The Black Out* was a global political digital mobilisation responding to the suppression of the BLM content which successfully, albeit temporarily, forced a realignment of the TikTok algorithm wherein the voices and content of black and Indigenous users were privileged for a duration of time.

Therefore, both the #july31stwalkout and *The Black Out* are fuelled by the demands of marginalised groups for alternative standpoints, which challenge and resist dominant settler colonial discourses, to be seen, shared, and valued as opposed to being algorithmically silenced, devalued, and/or erased entirely by TikTok. While these moments of political digital mobilisation are certainly

[113] Gillespie, "#trendingistrending".
[114] Gillespie, "Algorithmically Recognizable".

worth celebrating for their collective resistances, for their fostering of new relational ties and practices of care therein,[115] for their countering of dominant discourses, for their holding of TikTok accountable, and for their provisional successes, the experiences of platformed racism that prompted these mobilisations are concerning. They illustrate how Indigenous gender/sexuality diverse people, and other marginalised peoples' knowledges can be subjugated, and routinely silenced through the engineering and governance of digital platforms. This is a new technology of structural racism[116] hidden within the "black box" of algorithmic workings[117] which requires further interrogation.

In some small recompense, Tilly tells me that mid 2021 TikTok appointed an Indigenous Liaison who she contacts anytime something "serious" happens such as "really racist videos or death threats to Aboriginal people or doxing". Through the appointment of the liaison, Tilly feels that "life [on TikTok] has got a lot easier". Evidently though, there remains the need to address the regimes of racial control occurring through the infostructure and governance of TikTok because these processes are (re)producing and amplifying aspects of settler colonisation. Namely, platform metrics are giving relevance to racist discourses, and they are contributing, at least at times, to the ongoing suppression, silencing, and devaluing of Indigenous standpoints.

Contrarily, TikTok is providing and promoting a digitised space for queer visibility through its governing algorithms. Herein, people who identify as gender/sexuality diverse or questioning can explore and consume relatable queer content through their "For You" pages, foster queer connection and solidarity, assert their own standpoints and diversities,[118] and have their own experiences validated. It would be remiss, however, not to acknowledge the potential of being algorithmically sorted onto "the wrong side of TikTok" and the negative consequences of this, such as being exposed to transphobic content and abuse. Moreover, Indigenous gender/sexuality diverse TikTokers may not always enjoy the same queer content promotion as non-Indigenous or White queer users given TikTok's technologically embedded racism. Nonetheless, as Tilly and Q reveal, they equip themselves with agential "hacks" and engage in moments of political digital mobilisation and resistance to try to ensure that their standpoints are seen, heard, and ultimately, valued by TikTok at large.

[115] Tynan, "What Is Relationality?".
[116] Ruha, *Race After Technology*.
[117] Frank Pasquale, *The Black Box Society* (Cambridge: Harvard U.P., 2015), 19-58.
[118] Farrell, "Archiving the Aboriginal Rainbow".