Introduction to Algorithmic Antagonisms:
Resistance, Reconfiguration, and Renaissance for Computational Life

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> "Fuck the Algorithm!
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The chant of hundreds of UK school students echoed across the streets in front of the UK's Department of Education. Students, livid, were protesting their chances of university entrance being snuffed out or otherwise manipulated by 'the algorithm'. The exasperation focussed on the Office of Qualifications and Examinations Regulation's automated process for estimating marks for final exams that were cancelled due to COVID-19: 'the algorithm' deployed had taken predictable biases (Noble, 2018) and delivered inflationary marks to private school students, while deflating the marks (and dreams) of students at government schools and of lower socio-economic status. This example from 2020 is just one that shows how problematics of algorithmic governance pervade society. Yet the focus here on algorithmic antagonisms is not meant to comment on being oppressed by algorithms, or resisting their power through protest, or even being resigned to their effects.

Instead it asks what happens when energy is put into fucking *with* algorithms to produce political movement within societies that are increasingly governed by them? Specifically, this introduction and the papers that follow in the special issue turn the critical study of data to consider algorithms' antagonistic and tactical uses. Examples of what we mean to explore can be simple and mundane, for instance logging in at www.facebook.com/?sk=h_chr to force your Facebook timeline to display posts chronologically via the "h_chr" command, as opposed to having Meta use its own attention maximising algorithm to prioritise emotionally divisive content. There are many popular examples of fighting structural power with algorithms that do not require users to code and offer a quite polished experience.

Consider allthemusic.info, DoNotPay.com, and Zoomescaper.com, each showing in different ways how antagonistic algorithmic practices can offer disruptive tactical politics. Riehl (2020) describes his work at Allthemusic.info as a project against rigid and expensive music copyright regimes that is operationalised by code designed to 'by brute force [generate] all mathematically possible melodies and write them to MIDI files' and then dedicate these files' legal rights to the Creative Commons Zero intellectual property regime. This algorithmic practice is designed to subversively make visible and upend complex copyright norms and an industry reliant on lengthy legal processes that Riehl believes limit creative song writing.

Zoomescaper.com offers its own playful personal politics against the Work From Home

regime common to white collar workers in the early 2020s. Users visiting the website operate a web-based dashboard that inserts sounds into their Zoom meeting audio. The website's interface affords interactive modification of audio including manufactured echoes and feedback, a choppy connection, and splicing in sounds of an upset baby, dogs, construction, urination, or even a 'man weeping'. The service is described by its makers as enabling users to 'self-sabotage your audio stream, making your presence unbearable to others' (Lavigne 2021). The computational audio insertions play off the expectations and experiences of Working From Home in hopes of breaking the structural hold Zoom has over everyday life and manufactures an algorithmic dissent to allow new forms of human politics. The capacity for these features to translate into an antagonistic new Luddism (Mueller 2021) vis-a-vis autonomy in digital work will continue to play out, one 'weeping man' at a time.

Meanwhile, DoNotPay.com advertises that users can 'fight corporations, beat bureaucracy and sue anyone at the press of a button' (2021). The site claims to dissect and then provide automated guidance through various byzantine bureaucratic pathways common to low level civil regulations and business dealings. As we explore in more detail below, what it offers citizen-users is an evolving low-intensity and irregular set of tactical algorithmic responses to common frustrating institutional social structures.

Each of DoNotPay, Allthemusic and Zoomescaper employ computational algorithms to productively interfere with a set extant governing structure. Rather than resist algorithmic ways of life, they explicitly leverage computational affordances to tactically shift power dynamics within specific computational systems. Their algorithmic media practice reframes algorithms from governing black boxes to deployed tools that explicitly 'mediate emerging distributions of power often too nascent [or] disconcerting to directly acknowledge' (Thomas et al. 2018: 1). Our description of algorithms and their antagonistic use incorporates the embedded nature of algorithms in wider socio-technical assemblages (Kitchin, 2017), while encouraging novel practices seeking justice within these assemblages.

We introduce algorithmic antagonisms found in these projects to forecast the work of the diverse authors found within this special issue, but also to convey a concept worthy of further consideration in its own right (see Crawford 2016). Together the editors and the authors of this issue survey globally diverse antagonistic responses of algorithmic media practice to consider if and how these might be useful to map and conceptualise a form of politics practiced via tactical algorithmic media.

Antagonistic algorithmic media practices tactically subvert, manipulate, or obviate extant power relations much like their analogue of tactical media in a previous age. Consider that some digital media - like social media for instance - seem focussed on enabling connection and attention - working through traits of persistence, visibility, spreadability and searchability (boyd, 2008). The traits and focus of tactical algorithmic media differ. Tactical algorithmic media leverage traits in computational automation for disruptive political ends. More than media decentralising networks of solidarity for resistance, we are interested here in how tools focussed on an adversarial agonistic democratic spirit (Mouffe, 2005) might configure in code (cf. Crawford, 2016). These configurations contest current conditions, defined in part through structures of surveillance capitalism (Zuboff, 2019) and oppressive techno-social regimes (Noble, 2018) that algorithms themselves are well known for.

As such, algorithmic antagonism implies resistance not only through the technical algorithm. Critical algorithm studies has shown how algorithms are actually better understood as sociotechnical issues, formed by a "composite of human-algorithm relations" (Amoore, 2020) located within social, economic, and political conditions of creation and use (see Dourish, 2016; Seaver, 2017). Algorithmic antagonism must acknowledge the many

different ways activist interventions can operate in such broad "stack"– e.g., where algorithms come from, the data from which they are constituted, the problems they solve, but also the harms they may cause as they are institutionalize forms of automation (see Azar et al, 2021). As such, algorithmic antagonism is not just about "code" *per* se, but also about antagonizing how algorithms emerge and operate in society more broadly.

The remainder of our own introductory intervention to algorithmic antagonisms opens discussion in three ways. First, it considers how practices that use algorithmic media tactically can be politically contextualised and accurately defined. Second, it provides some exemplars of such practice, breaking down politically disruptive modes of aesthetic, amplification, and data queering to provide some indicative empirical insights to how algorithmic antagonisms can produce tactical politics. Finally, by way of conclusion, we explore how each of the curated papers that follow - and make up the remainder of this special issue - delve into unique aspects, cases, and contexts of antagonistic algorithmic practice.

Critical Data Studies and Antagonistic Algorithmic Practice

Our focus is how to build from well-developed corpus of critical data studies[1] (boyd & Crawford, 2012; Fuller, 2006 Noble, 2018; Pasquale, 2015) to consider what a politics of tactical media might be and how this is being expressed in an algorithmic age. We feel acknowledging such a concept need not be utopic nor focussed on a tech-exceptionalism that calls for or derides solutionism. It instead, we hope, enables reflection on how algorithms are and can be practiced as part of everyday life. So how can critical data practices take an antagonistic turn to focus on ways to actively employ algorithms for everyday, social, and political agency, influence, or resistance?

We understand critical data studies to consider how algorithmic control exists within an age of big data and work out what to do about it. Control reflects how combining computational breadth with deep automated analysis make meaning claims that exhibit a new aura of truth - despite the limits of the construction of knowledge and divides in who can know (boyd and Crawford, 2012). Moreover, algorithmic truths are often not evenly distributed. They tend to follow or even amplify incumbent structures of inequity and oppression (Noble, 2018). Indeed, much critical scholarship tied to algorithms focuses on their ills or the ways in which a normativity can be developed around an ethical, equitable or fair expression of computation via design (see ACM FAccT). This is because mediated life is now fully wrapped *within* black boxed information societies (Pasquale, 2015) that focus important forums of power relations in algorithmic terms (Noble, 2018).

In response to how these black boxes stack inequity, Costanza-Chock (2020) maps a complex matrix of socio-technical mechanisms that lead to those outcomes, and suggests parallel streams of radical and pragmatic design work to avert current system outcomes. Other responses include consideration of critical practices that advance data science in ways that identify and create social and organizational arrangements necessary for a more ethical data science (Neff et al. 2017) and other design processes focussed on justice (Dencik et al. 2019, Taylor 2017, Johnson 2014). Within this context, Zuboff (2019) among others has pointed out how the hegemonic surveillant capitalist politics that computational data relies on creates a certain set of politics; any political-economic structural forum has its own forms of politics.

Here, we consider: What might political forms of the digital age - via tactical uses of algorithms - offer in the disruption of such structures? How can critical data practices take an

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[1] It is not our goal to untangle the emerging and productive fields of critical data, algorithm, software, and platform studies and use 'critical data studies' here to reference these contributions and their connections.

antagonistic turn by actively employing algorithms for everyday, social and political agency or influence? And how may such practices learn from, and fit into, critical data studies more broadly?

At this more tactical level, radical designers have lent an adversarial approach to design. This includes making artefacts that "function to prompt recognition of political issues and relations, express dissensus, and enable contestational claims and arguments" (DiSalvo, 2012: 12). These adversarial designs function as a tactical form of antagonistic democratic politics. This means designing a politics not of consensus, but of agitation. In the language of democratic theory, we can draw on radical democratic agonism to foreground the productive process of struggle in agitating away from authoritative ideals and fixed universals. Here the tactical nature of agonistic struggle becomes easy to see: agonistic democratic practice is not a strategic design for control, but an admission of the contestability of one's own politics (Mouffe, 2005). It accepts claims as contingent and thus creates adversaries not enemies for a productive continual struggle for justice (Chambers, 2001). Thus the democratic utility of antagonistic algorithms acknowledges and indulges in conflict not to make enemies or silence others, but to make visible adversarial structures that might have otherwise gone unnoticed where humans and algorithms engage (Crawford, 2016).

An interesting early analogue of adversarial algorithmic practice can be found in Ochigame's (2020) exploration of 20th Century Cuban informatics. As the revolutionary regime sought to critique both western and soviet theories of information, Cuba's information scientists explored a library informatics that reflected 'the social complexity and the historical contingency of informational regularities' in a form of algorithmic induced knowledge autonomy. Specifically, the redistribution of informational wealth (via library circulation) was guided by a novel formula that tried to consider social contingency and context over previous 'laws' of informational impact or effectiveness that were hegemonic in Soviet and American systems respectively. Ochigame's Cuban example shows how an antagonistic algorithmic practice may tactically subvert, manipulate, or obviate extant power relations. Further, they did not seek fairness, consensus or even transparency as a goal. They offered a *tactical algorithmic media* that sought to show there is none.

Tactical Algorithmic Media and their Politics

This section offers two insights to further our introductory discussion on the tactical political nature of antagonistic algorithmic media practice. The first is that we believe that an antagonistic turn of critical data studies must consider the posthumanist assemblages of humans, code, and technological artefacts that shape reality (Kalpokas, 2019), but also include what is missing from previous theorisation of algorithms – namely moving past acknowledging various normative relations to enabling media to foment new ones. That is to say, lessons from tactical media seem to be more applicable than ever in constantly shifting datalogical ground (Treré, 2018; Velkova and Kaun, 2019).

As the media of crisis, criticism and opposition (Garcia and Lovink, 1997), Tactical Media remain difficult to define as they are 'constituted through and as practice' (Garrin in Kluitenberg & Garcia, 2017) that upends or provokes extant structures through mediated acts. As Kluitenberg and Garcia add, 'Tactical Media as a concept exists to emphasise not itself, but the (nomadic) practices that constitute it' (2017, p. npn). This opens a productive engagement with a set of algorithmic practices that seem to be antagonistic to the very networked information structures that otherwise constitute, sustain, and signify relationships among people and data (Ananny, 2016). To explore this political opportunity, we frame tactical algorithmic media practices not as a general resistance or opposition to algorithmic

governance. Rather, this concept enables experiments with media practices that compute political shifts through algorithmic means.

Any such shifts are often small. The rhetorical frame previously put to tactical media suggests that within the largely cemented structures of datalogical life, contingent and adversarial knowledge claims are more easily channelled to 'smaller ambitions of tactical response' (Cubitt, 2006: 39) and must be to acknowledge their adversarial politics. In increasingly datafied life, grand revolution *from* algorithmic politics seems unknowable. As such, we find the lens of tactical media useful to productively engage evolving algorithmic practices that seem to be antagonistic to the same network information structures that constitute and sustain social relations among people and data.

Traits of Tactical Algorithmic Politics

The second insight we offer is to open discussion on *how* tactical algorithmic media go about making their politics. In other words, we begin to consider how antagonistic algorithmic practices allow the world to be mediated in new ways that make new tactical politics possible. We introduce three disruptive 'traits' available within tactical algorithmic media: aesthetic, amplification, and queer(ing) data. These traits are not meant to be representative of all antagonistic algorithmic practices, or even present a taxonomic structure. We offer them as open observations to provoke ways of thinking about what politics are offered by tactical algorithmic media, and how these come about. Our thinking here is meant to mirror previous critical studies of emergent digital platforms and their affordances by focusing on what was previously impossible (see Treem and Leonardi, 2012; boyd, 2010), and how new affordances (Davis, 2020) for politics come about in context (Costa, 2018; Heemsbergen 2019).

Finally, we feel the three traits of aesthetic, amplification, and queering of data that are introduced in exemplar cases below begin chart the politics of tactical algorithmic media and are reflected in the detailed empirical and theoretical work of the authors' contributions in this special issue. We warmly point out that the diversity of authors and cases included in the larger issue have already surpassed the forms of politics introduced here in quality and quantity, and encourage work that continues to create new knowledge at the intersection of tactical media, algorithmic governance, and democratic theory.

First, we consider disruptive aesthetics. The claim is that algorithmic practices can be used to tactically alter the 'modes and the means by which reality is sensed and presented publicly' (Weizman, 2017: 94) in ways that were previously unavailable to artists, advocates, and activists. This quote is taken from Eyal Weizman, who with Thomas Keenan coined the term 'forensic architecture' to show how in human rights investigations a forensic aesthetic shifts aesthetic concerns from being illustrative of investigative work to instrumental to it. Weizman describes the academic discipline of forensic architecture as 'the production and presentation of architectural evidence—relating to buildings, urban environments—within legal and political processes' (Forensic Architecture, 2021). Key for Weizman in this process are computational constructions of environments. Algorithmic modelling allows "operative models" to not only represent but construct evidence and assemble a forum around it in ways that were previously unavailable, and then interface these political artefacts that mediate reality into socio-political structures such as law. Here judges, lawyers and the state see algorithmic media being used to not only shape reality (Kalpokas, 2019) but tactically foment new realities (Raley, 2009).

Forensic Architecture – a linked research agency based at Goldsmiths - offers its

methodological categories of work to include 3D modelling, audio analysis, cartographic regression, data mining, fluid dynamics, Geolocation, ground truthing (testing of digital models to real world data), image-data complex (combining visual evidence within a digital architectural model), pattern analysis, machine learning, Photogrammetry, shadow analysis (time measurement), and situated testimony (enabled by digitally generating 3D space in real-time with witnesses). Many of these categories combine in projects that are dependent on multiple digital aesthetic processes and practice.

For instance, in 2021 cartographic regression and fluid dynamic models were used to create compelling accounts of how petrochemical companies in Louisiana developed over historically black 'free town' community lands in ways that created ill-health effects for current residents and led to the erasure or degradation of hundreds of known or now evidenced burial sites (Forensic Architecture, 2021). Other examples of disruptive aesthetic in the human rights space, include the group VFRAME, which creates computer vision tools to scour open-source media (eg. social media videos) for *materiel* linked to war crimes. VFRAME has trained its computer vision software to identify the RBK-250 Russian cluster munition (vframe.io/research), as well as experiments with how synthetic datasets might enable identification of other munitions common in the Syrian conflict, thus improving the efficiency of scouring videos for objects of interest through content-based scene summary algorithms.

Note that Weizeman subtitles his 2017 book on forensic architecture 'Violence at the Threshold of Detectability'. We can infer how the algorithmic turn of this tactical mediation of reality enables a new form politics. Tactical algorithmic media reconfigure how and what violence is detectable and knowable; they afford new thresholds of political knowledge, expression, and action. Forensic Architecture - both the discipline and research firm - are using algorithmic antagonisms to create new forms of politics: they make the political available to people in new ways. By reconstructing a contested reality through computation logics that offer visual-material insights to disrupt power structures, these tactical algorithmic media lean on 'objective' material knowledge being combined in novel ways to form novel mediations of reality that disrupt hegemonic aesthetic understandings.

Moving on from aesthetic, we can also consider the amplifying power of tactical algorithmic media. Here we do not mean signal amplification, as per the amplification of voice experienced with the fall of broadcasting models to networked society (Castells, 2007) via peer to peer and more corporate social media economies of attention. Instead of amplifying signal, we are interested in the amplification of computational techniques to navigate, cope with, and compete in a computationally saturated social world. In short, we note how tactical algorithmic media can provide an amplification machine for individualised politics at scale in the digital age. Notably, the efficacy of amplification seems to correlate with this application of tactical algorithmic *politics* sitting at the edge of novel tactics and these tactics being subsumed into larger structures of digital media practices. What is politics and political blurs.

Our example of amplification considers in more detail the work of the DoNotPay ecosystem. DoNotPay works by combining thousands of simple programmed software bots that perform Robotic Process Automation (RPA) into specific human-readable permutations to solve an array of bureaucratic problems. These problems include, for example: contesting parking tickets; independently suing Equifax for its 2017 data breach; and automatically booking *better* airline tickets. As a whole, DoNotPay hopes to offer a programable legal-computational engine that amplifies consumer rights. It often does so through low-stakes tactical means. For instance, when users click-to-sue Equifax, the RPA bots process inputs to create outputs that target specific county courts for small-claims damages, obviating the need

for expensive class-action legal teams. DoNotPay's benefactors and commentators see the organisation as a 'start-up' in market terms. The pitch is framed as computational consumer protection via an 'operating system' for algorithmic life. Forbes' reporting (Daso, 2021) on DoNotPay's founder Josh Browder digs into a family lineage of vision: Browder's grandfather was the General Secretary of the Communist party of the United States, who in later life wrote about the freedom needed for workers through transformative factory automation (in Whitman, 1973). The story of automating the automated two generations later provides a cultural cache for DoNotPay's politics, which are toted as weaving a 'tapestry of consumer rights protection into our commerce, one automated dispute at a time' (Daso, 2021). While students of law consider the politics and ethics of automated AI lawyering (Simshaw, 2018; Nunez, 2017), our example here blazes ahead with the abandon found in both activists and a generation of entrepreneurs that have been trained to move fast and break things.

It is important to note how the DoNotPay ecosystem is situated within and leverages the interoperability of algorithmic late capitalist data structures - both technically and culturally as it has evolved since 2015. At one level, DoNotPay amplifies extant data flows into new forms of tactical 'wins' for consumers swimming in an otherwise murky sea of data. For instance, in the US, DoNotPay offers a flight service that tracks prices for 24 hours *after* you purchase tickets, and then rebooks you on better routes or prices if they become available, all simply by responding 'yes' to a text message. What is at work here is knowledge of a Federal regulation that allows flights to be refunded for 24 hours after purchase and DoNotPay's RPA's scouring *both* the internet and your own Gmail account to link purchased tickets to available flights. Gmail's APIs allow access to 3rd party services (in this case, DoNotPay) to scour your email for certain message senders (e.g., online travel agencies and airlines). If a ticket email is found, the algorithms search the net for better options that match time and destination. All this algorithmic scouring turns into a simple text message. Respond yes and DoNotPay automatically purchases a new ticket, cancels your original flight, and sends you the refunded difference. This is your personal algorithm fighting the algorithms of the airlines. The fight is at the margins of surveillance capitalism, tactically diverting funds and information flows that keep the machine running to change its outcomes. This example shows how DoNotPay has evolved from an assortment of tactics to upend or provoke extant structures (parking downtown!) to incorporate and be incorporated by larger media structures themselves – here DoNotPay shows a collection of practices that form politics, not a political disruption (Mouffe 2005).

The hybrid nature of DoNotPay and other such tactical algorithmic work - between engaging capitalism and protection from it - is now explicit and venture capital funded. The DoNotPay experience has morphed from a free service to a subscription model of software as a service that lets users better navigate their automated lives for $12USD every three months. Taking note of this model, in 2021 Andreessen Horowitz and other venture capital firms in Silicon Valley invested in DoNotPay and valued it at $210M USD (Tan, 2021). Venture capital makes the contradictions between what tactical media were in relation to the practices against the systems fought and tactical algorithmic political practices expressed through DoNotPay quite visible. Yet, DoNotPay - without irony - offers a glimpse into the evolving political needs to pay for an AI retainer in order to navigate more just outcomes in an algorithmic world. The strange business model these tactical algorithmic practices engender shows at the same time an integration and repudiation of datalogical cultures. As an exemplar of this Janus-faced mix is DoNotPay's set of RPA's titled "robo revenge". This feature guides individuals to give out temporary – DoNotPay-financed – credit card numbers to robocaller scammers, then have the scammers charge the cards, which makes visible the company making the charge request, and

allows DoNotPay to sue the company on individual users' behalf. Automating the scamming of an automated scam shows how algorithmic cultures and structures can be well suited for tactical political work, even as we cannot escape the algorithms through revolution (Automated Communist or otherwise).

As a coda to DoNotPay, consider that it recently enabled subscribers to sue brokerages that disabled buying and selling highly shorted 'meme stocks' like Gamestop. The irony here is that digital brokerage cum app Robinhood, which was very active in the meme stock craze of 2021, was itself tactical algorithmic media that had one foot in disruption of the stock market and one foot in its computational infrastructure. Robinhood provided free trading for individuals by forwarding their actions to high-frequency trading firms that beat prices by nanoseconds to make the market, and produced profit for Robinhood and the firms via received payment for order flows aggregated from individuals that were tactically fighting the system.

Finally, we consider the algorithmic tactics of 'queering data' in a variety of forms. This conception of tactical algorithmic politics can be found in AI generated drag shows or making global search structures visible. Here we mean to evoke those characteristics of tactical algorithmic media that queer data or offer a queer reading that challenges heteronormativity or more broadly, actively positioning against normalization and its binaries (Barnett and Johnson, 2014; Soon & Cox, 2021). In this case, the tactical media legacies are apparent in that tactical algorithmic media practice queers data, but also "what would be considered to be the normative conventions of software and its use" (Soon & Cox, 2021, p. 168). One could consider Searchatlas.org (Ochigame and Ye, 2021), which questions the normativity of search results by making the 'information borders' that search engines produce visible, where they otherwise would not be. This tactical data practice remediates the bordering of Google's mission to organize the world's information by showing the hidden normalisation of Google's model across regions and languages. The example given by the researchers is how searching for God produces thematic tapestry of images that mirrors geographies.

For a more explicit case, consider Jake Elwes Machine Learning Porn (2016), which 'reverse engineered' Yahoo's explicit imagery dataset to learn what the algorithm would consider the most pornographic and then create art that morphs between 'the yonic and the phallic [with] images [that] are not gendered in a binary sense. They flow through the queer spaces between identity, gender, bodies and sexuality' (Elwes 2016). Elwes subsequent work, *The Zizi Show* (2020), creates deepfake drag performances that agitate normativities around sexuality and the objectivity of video through a novel algorithmic perfomativity. Zizi queers drag as much as it queers the algorithms in question by offering interactive Deepfake versions of songs from multiple and blended performers at zizi.ai/. As Elwes puts it "As an artist, I'm so interested in when these [computational] systems break down…in seeing these algorithms not do what they were intended to do" (Elwes, 2021). Or, as the morphing deepfake performer suggests campily mid-show,

AI systems often inherit the bias that the cis-white heteronormative patriarchy that controls our society, but here at Zizi show we plan to disrupt their dataset by flooding it with a myriad of marvelous queer drag bodies! (In Elwes, 2021)

That proclamation by AI drag queen shows the tactical nature of these algorithmic practices of media activism. They are 'media of crisis, criticism and opposition' that are forged with the tools at hand to create experimental aesthetics of 'poaching, polymorphic situations,

tricking, joyful discoveries, poetic as well as warlike' (Garcia and Lovink, 1997). As the tactics themselves spread and morph, Lovink reminds that this type of media activism is about practices that 'appear, strike, and disappear again' (in Sholette and Ray, 2008) from what is available.

In this article, we have introduced how an algorithmic age of tactical media might offer new ways to strike through aesthetic, amplification and queering of data. But these appearances might just as easily disappear from tactical playsets as they are subsumed by larger computational structures and expectations as seen above in DoNotPay. Below, we shift focus to how a new set of researchers and subjects diverse in geography and demographic focus and interpret their own unique tactical strikes of algorithmic media use.

Issue Contributions

Kapsch (2022) starts off the special issue with work that contextualises algorithmic knowledge in the classroom by probing the ordinary ways that savvy media users identify and respond to algorithmic influence in daily media use. Here the focus is on how an innovative assortment of methods - that include workshops, self-tracking, and vlog making - can make mundane algorithmic interactions an opportunity for reflective learning of tactical acts. Results suggest that while participants characterise engagements with algorithms with varying amounts of speculation and uncertainty to what they provide as outputs, the in-class explorations could lead to a provisional feeling of being in control. Even small and seemingly mundane acts of algorithm engagement can function as a primary gateway for participants to exercise their personal agency through algorithmic manipulation for tactical gains.

Wiehn (2022) continues consideration of the everyday to focus on what it means to be intimate with algorithms that surround us. She utilises cases of artistic practice that clearly foreground the potential to critically engage with algorithmic forms of governance. Yet, at the same time, the work discusses how the technological and social complexity with which algorithms pervade society limits capacities to engage critically, offering a complex set of challenges, ambivalences, and potentials of algorithmic antagonisms. Wiehn's use of intimacy theory as a lens to challenge datafied truths, provides a compelling tactic to antagonise algorithmic relations while acknowledging how intimate algorithms have become in governing our political, personal, and private lives.

Milioni and Papa's (2022) contribution complements the above introduction by expanding the accuracy of how to think about affordance and algorithmic agency in a datafied world – and showing how novel tactical modes of algorithmic engagement are destined to appear and disappear by their nature. They use the language of oppositional affordances to suggest how data activists provide power in previously unavailable ways, and how such affordances mediate the perception and experience of corporate platforms. Seven activist projects are surveyed via a discursive interface analysis that shows how and with what implications norms for technologies and their users are produced. These practices of data power enable new autonomies, but also enable the continuation of an expectation of individualised responsibility - tactical responses are required by users who *should* take action to protect themselves against an extant structure of corporate actors eroding their privacy and violating their rights.

Sued et al.'s (2022) collective of scholars shifts focus to a regional study of how Latin

American feminist public expression has gained algorithm-mediated visibility via a cross-platform analysis of Twitter, Instagram, TikTok, and YouTube. Across two important case studies, abortion rights and violence against women, their work maps how activism and algorithm shape discourses in social media in Latin America. The work identifies two complementary configurations for obtaining algorithmic-mediated visibility in Latin American feminism: a mode of visibility which relies on the quantitative and capitalistic logic of the platforms themselves; and the contrasting possibility of using algorithmic resistance tactics for the reappropriation of platform vernaculars.

Magalhães (2022) focuses on the productive power of disengagement as an antagonistic algorithmic practice for Facebook's algorithmic visibility regime in Brazil. Specifically, he considers how definitions of tactical media practice can subtly stretch if algorithms are seen to be socially situated in posthumanist assemblages that shape reality. This allows to consider how ordinary Brazilians have – since 2013 – experienced a political coming of age of sorts on and through Facebook and the antagonistic responses available. The empirical work finds a mismatch between how participants understand themselves as citizens and the political participation rules that Facebook's visibility regime imposes on them. In this context, while Magalhães affirms that refusal and disengagement are not new political tactics for the digital age, they can be viewed as tactical responses to citizens' own role in algorithmic discourses and socio-technical structures that pervade national politics in Brazil.

Ganesh & Moss (2022) reflect further on testing new tactical limits of refusal in algorithmic terms. This work considers how harms and harm mitigation are conceptualised in the algorithmic age by diverse. From their lived experiences in FAccT activist practices and Big Tech influences, they consider "Fair Machine Learning", ethical AI, and bias concerns to not only be dominant frames to critically discuss algorithms, but also validate only particular types of harm and reinscribe the concerns of firms to their Big Tech empires. In other words, while Big Tech is seen to respond to algorithmic harm and by doing so define it, the authors point out how activist, artistic, and cultural practices related to data and technology offer unique tactics, scales, and practices through which to exist within and alongside vastly asymmetric informational systems. The authors offer new luddite, feminist, and decolonial approaches with examples as ways to antagonise these algorithmic norms.

Yu, Treré & Bonini (2022) consider how riders working for Chinese food delivery platforms collectively act on algorithmic power. Their article provides a detailed account of the gamification ranking and competition techniques deployed by delivery platforms to drive the riders to achieve efficiency and productivity gains. Then, it investigates how the riders manage to domesticate their platforms within daily work routines, drawing on private WeChat groups of hundreds of Chinese riders. Inter-algorithmic tactics allow riders new forms of agency and rely on evolving tactics of "gaming" the platforms' algorithm, together with forms of collective organization established through private chats. The article sheds light on the ways in which Chinese riders incessantly forge new tactics and develop hidden transcripts to resist the algorithmic control of digital platforms. At stake politically is a move away from the competitive *ethos* encoded in the algorithms of the Chinese apps, and towards collective survival and the development of new forms of solidarity in the age of algorithms.

Finally, Pereira et al. (2022) round out the contributions by suggesting we've always been antagonistic. They develop this provocative analysis of algorithmic antagonism by drawing

onto a longer history of algorithmic media practice in Brazil. Their work traces the regional historical constituents of artistic and activist tactical approaches to technology in a way that can strengthen approaches to current practices against algorithmic oppressions. Through bridging historical and contemporary perspectives on computation, they frame tactical algorithmic media in a way that breaks from dominant Global North canon and introduces our readers to some exceptional activists and their works. Their suggestion that contemporary forms of algorithmic antagonism are not entirely novel thus broadens the ways we can think about algorithmic antagonistic practice today, but also enriches our discussion of such current issues.

Together these works open multiple courses of tactical algorithmic practice that seek to upend, disrupt, or agitate extant and prolific computational structures. The work shows a turn of the critical study of data to consider algorithms' antagonistic and tactical uses in disruptive tactical politics. The diverse antagonistic responses presented here and within the issue speak to forms of algorithmic media practice in ways that consider if and how these might map to and conceptualise a form of politics practiced via tactical algorithmic media.

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