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What Is Cultural Studies?

### What is cultural studies?

What and where is cultural studies today? What is it becoming? What should or could it become? What is its meaning? What is at stake as we assess the ongoing development and maturation of cultural studies as field? The International Journal of Cultural Studies is soliciting provocative answers to these and related questions, from a range of scholars internationally. We will publish their responses as an ongoing series, across multiple issues.

# Postdigital cultural studies

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### **Abstract**

What should a postdigital cultural studies look like? Identifying economies of attention is central to the study of media and culture. Calling for renewed focus on attention as power, this article pairs three long-established lessons of cultural studies with three examples of contemporary digital immersion: deepfakes and manipulated media; algorithmic culture; and, the digital afterlife industry. In doing so, the critical questions that drive cultural studies emerge as ever relevant in a postdigital, post-truth landscape.

### **Keywords**

algorithmic culture, attention, cultural studies, deepfakes, digital afterlife industry, everyday theory, postdigital studies

# Postdigital cultural studies

The study of *attention* in a postdigital, post-truth world is an urgent and political act for which cultural studies remains uniquely suited. In the early years of the Birmingham school, many projects implicitly took up attention through analyses of class and

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knowledge-building – *Learning to Labour* (Willis, 1977) – or in critiques of gendered visibility such as *Women Take Issue* (Women's Studies Group, 1978). In particular, *Policing the Crisis* (Hall et al., 1978) is a book about noticing what kinds of attention are paid to whom in a given historical moment, and how certain modes of attentiveness proliferate. Stuart Hall, Charles Critcher, Tony Jefferson, John Clarke, and Brian Roberts use Britian's mugging panics to show how "an image and set of relations" become condensed and redistributed in the formation of "real" crime (Horton, 1979). The preconditions of a mugging panic were formed in where attention was given (British law enforcement's interest in publicity), by whom (an eager press), how attention traveled (the square peg of urban, racialized American social relations fit into the round hole of Britain's differently racialized and colonialist overtones), and how some populations have less control over unwanted or un-vetted attention (British black youth).

Cultural studies is charged with identifying the relations between cultural practice (both ordinary and exceptional) and the structures of influence and control in any given historical conjuncture (Turner, 2003). By the time this non-field was enough of a formation to warrant a measured critical reflexivity, Hall (1992) had already rejected the idea that *British* cultural studies – or any cultural studies – was the "keeper of the conscience" of a field. Resistance to canon aside, there is consistency among the scholarship held up as defining texts: they are concerned with the careful or careless nature of how attention is built, targeted, managed, re-directed, or co-opted. Media researchers have long understood attention as a scarce commodity. Attention has *always* fueled social life, economic progress (both individual and institutional), and political movements. Yet it is generally accepted that the conditions of production, distribution, and access in a postdigital landscape change the nature of how attention is made, given, shown, circulated, and received. At this juncture, the mechanics of attention and its fraught politics – that attention is limited and competitive, fluid and constantly mobile, segmented, hyper-personal, automated, and decentralized – are key to understanding how everyday digital mediation grant visibilities.<sup>2</sup>

In my cultural studies, then, the objective is old and need not change: to critique power as *relations of attention*, and to identify these relations embedded within culture as a way of life. Below I engage three lessons of cultural studies alongside three examples of digital media that make new demands on our attention, as scholars and audiences.<sup>3</sup> Digital culture is a world with which cultural studies has unsettled relations, to borrow a useful term from feminist theory. With a tendency toward ephemerality, acceleration, confusion about materiality, and multiple layers of signification (infrastructure, interface, content), digital media can seem at odds with a non-field that takes seriously "what we wear, hear, watch, and eat" (Turner, 2003: 2). But now more than ever our attention is guided by digitalities: what we wear is responsive to our tracked, mobile bodies; what we hear is intimately personal; what we watch is guided by software keyed to our individual tastes; and, what we eat is served by gig economies and smart crockpots.

# Lesson #1: Seeking the deep in deepfake; or, Truth has never been something to be assured of, and It never will be

Critical media scholars spend much of their time unpacking the relationship between reality and representation. Amid fears of the dissolution of widely held social standards

for measuring veracity – the alleged arrival of a post-truth world – there is no better time to use this body of knowledge. Putting aside for a moment the audacity of the term *post*, cultural studies is a discipline built on assessing how truths are formed in and through representation. By truth, I mean the forces at work that guide relations of attention, those keywords we return to again and again: articulation, interpellation, interpretation, and identification. Ours is a field built on the calling out of constructed truths – audiences as ways of seeing, polysemic texts, news as a floating signifier. This muscle memory must guide us in critique of the countless ways attention and truth have become dangerously linked in familiar but new ways, through politicians who tweet with abandon, fake news factories in Macedonia, and the particularly sinister focus of this first lesson, the deepfake.

In fall 2019, Facebook launched a Deepfake Detection Challenge, a global call for collaboration to "accelerate development of new technologies for detecting deepfakes and manipulated media" (Pesenti, 2019). The deepfake uses artificial intelligence to synthesize human images on to source video in order to make individuals say or do virtually anything. Bodies of well-known public figures are fused, making the video's personification recognizable; upon closer examination, the human-ness is blurred at the edges. This puppet mastery has been used to generate videos of everything from a fake interview with Putin to major TV spoilers to baiting tech CEOs into admitting to hoarding their users' data. While still relatively detectable to the discerning viewer (for now), the deepfake is an alarming example of a type of truth that circulates online; it is representation as a series of uncanny cuts and crops that mimic trusted voices, facial expressions, patterns of speech, and familiar background environments.

Manipulation is part and parcel of media storytelling. The deepfake is principally video editing technology that is certainly not without historical precedent. The illusion of cinema was made possible by editing. Broadcasting's relationship to liveness mythologized a framing of the world meant to be regarded as objective and centered. Photography – literally, the capture of a likeness – is an inherently obedient art (cut, crop, blend, brush). And like its contemporary, fake news, the deepfake is symptomatic of a kind of representation that circulates in the postdigital era, one that starts with the intention to deceive. Because deepfakes aim to obscure the real, or at least replace one reality with another, they create entirely different possibilities for interpretation. If broadcasting's troubling relationship to representation was its suggestion of an objective truth, the deepfake's is its willingness to make objective whatever Truth you're looking for.

Facebook's Deepfake Detection Challenge (DDC) is a call to fight intelligence with intelligence. By building databases that detect what is real and what is not, teams combat "tampered media" with verisimilitude: "to detect the slight imperfections in a doctored image and expose its fraudulent representation of reality" (Torralba, cited in Schroepfer, 2019). While the DDC surely intends to reach software engineers with their incentivized challenge, if cultural studies scholars were on the front lines of this epic battle against misinformation, what lessons might they first provide?

The goal of the DDC is to focus on the *fake* in deepfake, but what if the focus was on the *deep*? Following André Brock's (2015) and Lori Kendall's productive exchange about the politics of studying *deeper* data, deep is an agreement to consider the underlying ideological processes at work that affect the mobility, impact, and nuances of digital

mediation.<sup>4</sup> Similar to Clifford Geertz's (1973) thick description, deep calls attention to the nature of the text, the depth of its travel, and the complex possibilities of its reception. In doing so, it strikes at the heart of media literacy and the questions of veracity, circulation, and audience that are the "known known" of cultural studies (Srinivas, 2019).

The deepfake's danger is not so much in its counterfeit quality but in its frenetic routes of dissemination and unpredictable interpretation. Released into the wild of ephemeral, rapid-refresh news and social feeds with split-second quantified measures of impressionability, the deepfake is an artifact symptomatic of much of digital culture's presentation and willing reception of truths. By this I mean that the deepfake caters to relations of attention that are strikingly subjective, weaponized, and contingent. In a post-COVID 19 world, the magnitude of misinformation is quite literally a matter of life or death. If a 21st century global pandemic has taught us anything, it is that disseminating one's truth is somewhat akin to screaming into the void. Mercifully, a focus on the deep re-centers critical study around what drives our relationship to truths: among other things, it is a complicated interplay among strategies of survival, economic necessity (i.e. teens in developing countries building deepfakes with salable truths as a means to an end), and the validating possibilities of reception (i.e. finding in a video what one hopes to be true).

In short, one need not know the technical specificities of how the deepfake is produced to study how its framing and delivery expose old familiar questions. Rather than "Can you spot a fake?" the questions cultural studies should ask: can you spot where truths are vulnerable (hint: it's always in the eyes and mouth); where will this version of truth travel and land; and, who sees their truth represented, steeped in the "specter of typifications" (Gates, 2018) that linger and guide meaning?

# Lesson #2: Algorithms are the new jeans; or, critique still requires loving and/or needing your object

A mainstay of cultural studies is the ordinary, the everyday, the popular. We examine the embedded and taken-for-granted authority the ordinary holds in guiding routinized existence (Turner, 2003: 2). Two challenges we face in studying the everyday and/as the popular have long been subjected to theoretical and methodological criticisms: first, the banality of the objects studied and their subsequent ability to speak to power; second, the critical positionality of the scholar and proximity to their objects. Can we study something we are so close to, so dependent upon, and occasionally, so enamored with? In a postdigital world, few cultural objects seem more ordinary than the algorithm. YouTube videos and tech thinkpieces exclaim algorithms are everywhere – hidden, pervasive, biased, and powering innumerable aspects of daily organization. We blame and praise the algorithm, we presume its discursive and material existence as the cornerstone of the internet, and we empower it with a deterministic authority when technological processes are black boxed or beyond popular understanding ("it's the algorithm!").<sup>5</sup>

Fueling the recommendation engines of popular streaming platforms, algorithms succeed when they monstrate (Dayan, 2013), when they offer users utterances of knowing. We entrust platforms with the act of commendation; in turn, we exclaim at the wonder of being properly (and improperly) hailed. Some write of this phenomenon as creepy, while others point to an encounter of fulfillment, the satisfying recognition when Netflix knows

me "better than I know myself." Recommendation systems give expression to how our affects are harnessed to the computational processes of what Robert Prey (2018) calls algorithmic individuation. Like many intimate relations of attention, the more one gives, the more one receives. As we supply more data, the discourse of discovery is deployed by media platforms to explain the magical quality of this attentiveness.

How might we study this now-ordinary object? In cultural studies, jeans have long been a symbol of how individuals negotiate the liberties and limitations of popular culture. Jeans stand in for many everyday objects that demonstrate how we participate in cycles of complicity and resistance subject to class, taste, labor, economics, and affect. Similar to how we still purchase jeans ripped, high-waisted, and wearable in our own image, we invite into our lives the algorithm's banal functionality. Committing to a platform's recommended-for-you film is a vote of confidence that the algorithm will fit. Thus, the questions we would ask of any popular object can be applied: how does this cultural artifact fit the body, and which bodies find themselves with a recognizable fit? How are algorithms made meaningful and how does this compete with the efficiencies they must attend to – as commodities and as signifiers of class, race, and age?

While both jeans and algorithms have intimate connections to bodies and identities, they operate differently. With more wear, jeans fade and become softer, no matter the style of excorporation; with more use, algorithms become sharper and more fitted to the self, or at least some version of a self, what John Cheney-Lippold (2018) asserts to be the "measurable types" of algorithmic visibility. Of course, not everyone is made to feel seen in the representations on offer by algorithms, or comfortable with the uses to which they are applied. The algorithm is symptomatic of a digital everyday in which attention feeds and energizes datafied existences. Algorithms do not just respond to our attention, they actively team up with us to generate new objects by assessing the shape of our attentiveness. An algorithm's generative power is often dependent on the attention it is given by the user. Unlike jeans, then, this co-creating relationship complicates cycles of excorporation and incorporation and prompts new questions and modes of study. How do we study the ordinary when we are active participants in both the shape of its helpfulness and the shape of its probable oppression?

To return to the challenge of critical positionality: resistance, in the form of scholarly critique, means being close to, or maybe even loving and needing, your object. Banal or not, users help generate algorithmic power and, in doing so, actively participate in systems of authority and control. If cultural studies is to continue to approach the ordinary, it cannot avoid this complicit immediacy, the required presence in one's life of something in order for it to be studied. This tension between what should be resisted and the opportunity and desire to resist is a foundational critical observation that cultural studies insists upon.

Perhaps now more than ever, this proximity to our objects is a distinct advantage. The great irony of the algorithm, in all its generative wonder, is in how it inverts the fannish into the empirical. The intimacy and dependency developed in daily algorithmic engagement is the very interaction that engenders new and different questions – not questions that lead to celebration or damnation, but questions of how attention is messy and contains the dualities of survival and negotiation. Like algorithms, most processes of immersive digital mediation support experiences that are at once moments of care and

carelessness. Thus, that which scholars should responsibly resist – for instance, the data collection implicit in algorithmic processes – is also necessarily present in the pleasures and pragmatics of the leisure world, the mundane spaces where, as Janice Radway (1988) notes, meaningful identity takes shape.

The attention we give, as humans, as data, as datafied humans, might be ok and might even be necessary to our critical positionality. When John Fiske asked his students about their love of jeans, he interpreted their responses as subtly contradictory: jeans make me feel like myself; and, everyone is wearing them (an activist solidarity of sorts). Similarly, the algorithm is a powerful mechanism through which we "situate individual differences within communal allegiance" (Fiske, 1989: 2). Indeed, at the risk of taking it one technical step too far, this dialectical relationship between hailing the mass and hailing the individual is a close approximation of how collaborative filtering models drive the recommendation engines of media streaming services.

The privileged capacity of cultural studies is in fact the identification of this messiness; or as Hall insisted, "the enormously productive metaphor of hegemony" (1992) that is imperative to the study of society and culture. In a moment in which digital media are the subject of cautionary tales of surveillance, privacy breaches, apathy, and narcissism, cultural studies is a commitment to produce something else entirely, to reject reductionist arguments of bottom-up agency or top-down determination. As Lomborg and Kapsch (2019: 2) urge: "If we cannot open the black box itself, we *can* study the relationships that people experience with algorithms, and by extension how and to what extent these experienced relationships become meaningful and are interwoven with users' reflections of power, transparency, and justice."

# Lesson #3: What counts as life in the digital afterlife industry?; or, the material and the symbolic remain necessary bedfellows

Despite its reputation for resisting disciplinary closure, cultural studies does insist on "thinking questions of culture through the metaphors of language and textuality" (Hall, 1992). In recent decades, interdisciplinary calls for attention to materiality have attempted to ground, or at least sidestep, the struggle to close the "infinite semiosis" that belies meaning. When we can't pin down language, we seek firmer resolutions hidden in the code and its consequences, the object and its affordances. Debates abound about how to deal with a longing for materiality in relation to the privileged place of discursivity and constructivism in studies of culture (Sterne, 2014).

For the careful scholar, though, language is but half the formula for how power functions, the other half being how signifying practices are in tension with the phenomenology of lived experience as it takes shape within and against social networks and institutions. Cultural studies has always acknowledged the material and the symbolic as an uneasy but ultimately secure marriage, a shared partnership that shapes the possibilities of agential life. As Jonathan Sterne (2014: 121) notes, the dimensions of materiality are formed through, and entirely contingent upon, "the relational character of reality". (For how the relational character of reality takes shape, return to lesson #1). Postdigital

life is increasingly comprised of durable examples of this interdependence and its effects. Look no further than cloud computing and its misunderstood materialities to appreciate the mess of signification and physicality that anchors daily digital life. Both vital in the construction of one's reality, the material and the metaphorical are co-constitutive in relations of attention and mattering, and will always differently affect intersectional bodies.

Consider the digital afterlife industry as a way to make sense of these contemporary entanglements. As early as 2009, Facebook began memorializing accounts and many social platforms followed suit. What began as a way to moderate social expressions of grief, remembrance, and trolling evolved in to the digital afterlife industry (DAI). Today, the DAI is a burgeoning marketplace of businesses that aggregate information trails from "departed" internet users and transform them into commercial opportunities. More often than not, this means assembling material commodities for the living out of the symbolic remainders of the dead (e.g. posthumous messaging services). Embalmed in data, the *essence* of you – or rather, the you represented in a lifetime of choices about digital self-expression – is finally preserved. I can't help but wonder if *Mad Men*'s Don Draper could surpass his iconic Kodak Carousel pitch with material this rich.

A robust industry reliant upon living humans' longings to stay connected with humans no longer living is an entirely different new materialism; or, new material posthumanism? Yet the very questions that guide our study of culture as dynamic, living, and everyday — who constructs and manipulates attention, to what end, for whom, and through what range of interpretation — can be applied both to the represented data-bodies of the deceased as well as the calls to participate through which their kin are hailed.

Many of us in digital studies are already enmeshed in the constant negotiation between how infrastructures guide attention versus how content does. The DAI provokes new questions that point toward the inevitable configurations of humans, machines, data, and emotion that arise in postdigital life. What new relations of attention emerge in this assemblage of bodies, data, and livelihoods (both animate and economic)? What physical spaces will departed users' commodified data occupy in sprawling global cloud storage that threatens Earthly existence? Dead users are still nodal (Karppi, 2013), so what bridges collapse in social networks when they are removed?

So, the material and the symbolic take on new complexities that reinforce the need to study their interdependencies. For the ordinary user, death is the final loss of agency to attend and be attended to, yet datafied corporalities linger on in attempts to milk extended forms of posthumous attention. Companies like NowSayIt.com or Virtual Eternity (now both defunct) offered users the opportunity to email friends and family after death, prodding users to work harder to cultivate a participatory enough life to leave datatraces for loved ones. And yet, for cultural studies these are not even the most urgent questions. What is to be made of a thriving industry that capitalizes on desires to attend to *dead folks* when we do yet not recognize living bodies of color, of migration, of diaspora and dis/ability?

# **Post Script**

I have left for last my use of the terms *post-truth* and *postdigital*. Use of the *post* is fraught, as queer, feminist, and critical race scholars caution. At best it gestures toward a

historical shift in social attitudes toward a thing; at worst it is a sign of ignorance, a flattening of the realities of global experiences, or a performative yawn at an intellectual trend. The redeeming quality of the post, however, is in how it highlights the compulsory nature of whatever it describes. In this case, having moved far beyond *new* or *emergent*, the post gestures toward the digital's inescapable consequences on culture, economics, and the environment. In the fields of art, architecture, and design, postdigital often signals a return to prioritizing the human. Postdigital and post-truth draw critical attention to contemporary mediation as a vital entanglement, to immersive digital cultures that operationalize, and are operationalized by, the mundane. Having acknowledged its omnipresence, what new resistances can be uncovered by focusing on the uneven, situated, and differential human experiences of this mediation?

There is a tendency to treat post as *after*, but post also means *beyond*, and "to situate, to position." More than a few have critiqued cultural studies as an approach historically averse to change. But interestingly enough, the *post* points to a self-evidence in the field that has long remained stable – the questions we ask and the objects we approach have everything to do with situated-ness, with visibility through positioning and attention, and what's beyond the frame. We know, for example, that the *other* always already exists in a post-truth environment. Certainly, the digital afterlife industry brings new corporal meaning to the articulation of post and digital, just as the deepfake and the algorithm prompt fresh thinking about how truth is situated.

What cultural studies should be, in my estimation, is what it already is: the opportunity to approach whatever social or institutional process one studies – in my case this is everyday digital mediation but in your case it might be legislation, healthcare, art, gender, film, or education – with long-established questions aimed at understanding power as relations of attention.

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#### **Notes**

- See, for example, Raymond Williams, Marxism and Literature (1977) or Charlotte Brunsdon, "On being made history" (2015). Cultural studies' indebtedness to European (post-)structuralism (Barthes, Foucault) and Marxism (Gramsci) is based on shared questions of how power is built and sustained through relations of attention.
- Two exceptional examples of how attention grants visibilities in postdigital life are Safiya Noble's Algorithms of Oppression (2018) and Virginia Eubanks' Automating Inequality (2018).
- 3. Audience and attention share the same etymological roots.
- 4. My thanks to Megan Ankerson for highlighting the connections between deeper data and deepfakes.
- 5. General misunderstandings of algorithms and their precise roles in computational processes reinforce this empowerment. I am concerned here with written sets of instructive code that incorporate automated machine learning and, in doing so, are programmed to adjust their objectives based on how users interact with them.

6. Entertainment media are a convenient example, but algorithmic sorting and recommendation substantiates plenty of daily processes, from the presentation of aggregated news headlines and online shopping to traffic and route planning, food purchase and preparation, and sleep cycles.

- 7. Fiske's assertions about incorporation and excorporation are often criticized for this exact concern: they are simplistic or reductionist. For the reasons outlined above, the algorithm's messy relationship to agency and structural power is an opportunity to complicate and move on from this criticism.
- 8. Those wishing to question the place of phenomenology in cultural studies will not find that debate here.
- 9. A 2013 episode of the Channel 4-turned-Netflix science fiction anthology *Black Mirror*, "Be Right Back" (dir. Owen Harris) exposed many to the digital afterlife industry. It remains one of the only contemporary popular texts to specifically represent this flourishing industry.

#### References

Brock A (2015) Deeper data: A response to boyd and Crawford. *Media, Culture & Society* 37(7): 1084–1088.

Brunsdon C (2015) On being made history. Cultural Studies 29(1): 88–99.

Cheney-Lippold J (2018) We Are Data: Algorithms and the Making of Our Digital Selves. New York: New York University Press.

Dayan D (2013) On whose terms are you shown? In Couldry N, Mirca M and Pinchevski A (eds) *Ethics of Media.* London: Springer, pp. 161–177.

Eubanks V (2018) Automating Inequality. New York: St. Martin's Press.

Fiske J (1989) Understanding Popular Culture. New York: Routledge.

Gates R (2018) *Double Negative: The Black Image and Popular Culture*. Durham, NC: Duke University Press.

Geertz C (1973) The Interpretation of Cultures. New York: Basic Books.

Hall S (1992) Cultural studies and its theoretical legacies. In Grossberg L, Nelson C and Treichler P (eds) *Cultural Studies*. London: Routledge.

Hall S, Critcher C, Jefferson T, Clarke J, and Roberts B (1978) *Policing the Crisis: Mugging, the State, and Law and Order.* London: Macmillan.

Horton J (1979) Review of *Policing the Crisis*, by Stuart Hall, Charles Critcher, Tony Jefferson, John Clarke, and Brian Roberts. *Crime and Social Justice* 12: 59–63.

Karppi T (2013) Death proof: On the biopolitics and noopolitics of memorializing dead Facebook profiles. Culture Machine 14: 1–20.

Lomborg S and Kapsch P (2019) Decoding algorithms. *Media, Culture & Society*, online: https://doi.org/10.1177.0163443719855301 (accessed 4 April 2020).

Noble S (2018) Algorithms of Oppression. New York: New York University Press.

Pesenti J (2019) Deepfake Detection Challenge launches with new data set . . . Facebook A.I. Research Blog, 11 December. Available at: https://ai.facebook.com/blog/deepfake-detection-challenge-launches-with-new-data-set-and-kaggle-site/ (accessed 6 January 2020).

Prey R (2018) Nothing personal: Algorithmic individuation on music streaming platforms. *Media*, *Culture & Society* 40(7): 1086–1100.

Radway J (1988) Reception study: Ethnography and the problems of dispersed audiences and nomadic subjects. *Cultural Studies* 2(3): 359–376.

Schroepfer M (2019) Creating a data set and a challenge for deepfakes. Facebook A.I. Research Blog, 5 September. Available at: https://ai.facebook.com/blog/deepfake-detection-challenge/(accessed 6 January 2020).

Srinivas SV (2019) After English: What do we teach when we teach literary and cultural studies? *Artha – Journal of Social Sciences* 18(3): 1–24.

Sterne J (2014) "What do we want?" "Materiality!" "When Do We Want It?" "Now!" In: Gillespie T, Boczkowski P and Foot KA (eds) *Media Technologies: Essays on Communication, Materiality and Society.* Cambridge, MA: MIT Press.

Turner G (2003) British Cultural Studies: An Introduction, 3rd edn. London: Routledge.

Williams R (1977) Marxism and Literature. Oxford: Oxford University Press.

Willis P (1977) Learning to Labour: How Working-class Kids Get Working-glass Jobs. Farnborough, UK: Saxon House.

Women's Studies Group, Centre for Contemporary Cultural Studies (1978) Women Take Issue: Aspects of Women's Subordination. London: Hutchinson.

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