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The Algorithm Dispositif (Notes Towards An Investigation)

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How can we speak of algorithms as political?

The intuitive answer disposes us to presume that algorithms are not political. They are mathematical functions that operate to accomplish specific tasks. In this regard, algorithms operate independently of a specific belief system or of any one system's ideological ambitions. They may be used for political ends, in the manner in which census data may be used for voter redistricting, but in and of themselves algorithms don't do anything political.

In recent years, with the development of a field of research generally referred to as "critical algorithm studies," the sense of the politically neutral standing of algorithms has been placed under suspicion. Scholars from diverse fields – including cultural, film, media, and literary studies as well as race and ethnicity studies, sociology, philosophy, and the law – have begun to explore the extent to which, as socially effective structures, algorithms aren't merely abstract recipes for task completion, but they also create and exacerbate extant conditions of inequality, exploitation and social domination. An algorithm contains within it a "cultural logic" (as David Golumbia has named it) that carries with it, in its coded programming, a social imaginary of how things ought to be classified, organized, and operationalized.[1] Taina Bucher, in her recent book *If… Then: Algorithmic Power and Politics*, also raises the issue of how algorithmic structures, once they are embedded in everyday life and practice, don't simply help us complete mundane tasks more efficiently, but also

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produce (and – crucially – *re*produce) everyday conditions of perceptibility and intelligibility.[2] In short, this growing area of research shows how algorithms are constituent participants in everyday life management. More than abstract practical instruments, they are life coefficients that, as the political geographer Louise Amoore has argued, are tasked with managing uncertainty through probability calculations and risk assessment. The end result is that not only present life, but future events too, may be managed and administered. As Amoore states, "the emphasis of risk assessment ceases to be one of the balance of probability of future threat and occupies instead the horizon of actionable decisions, making possible action on the basis of uncertainty."[3] The shift that Amoore notes is an ontological one: uncertainty used to be a reason not to act, both morally and politically. We would wait to act until we had all the facts. But now, thanks to the deployment of probabilism in everyday life, uncertainty is a legitimate justification for preemptive action. That is, we act when we are uncertain precisely so as to mitigate possible outcomes.

As a contributor to this area of inquiry and research, I wish to raise some issues regarding the difficulties and challenges of thinking about the politicality of algorithms. Specifically, I wish to consider *how* an algorithm is a medium (first) and a political medium (second). My very rudimentary and initial notes towards such an investigation stem from a general frustration that begins with the following question: are all media political in the same way? Here's what I mean by asking that question. One has the sense, when thinking critically about the status of algorithms in everyday life, that if they are to be considered a political medium, then they operate no differently than a microphone, or a television, or a film. That is, their status as a political medium is located in their ability to transmit information. And as

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instruments of transmission, they are "influence machines."[4] Thus, the effectivity and extent of their influence (otherwise imagined as their power of coercion) is what makes them political.

"Influence machine" is a term coined by the Viennese neurologist and psychologist Victor Tausk (1879-1919) who, prior to his work in the field of psychoanalysis, was a distinguished jurist and journalist. Tausk defines the influence machine as a "delusional instrument" that "serves to persecute the patient and is operated by its enemies."[5] Typically, patients describe such devices as possessing the following characteristics: 1. It makes individuals see pictures; 2. It manipulates the mind by inducing and removing thoughts; 3. It has physical effects upon the body that are beyond a person's control; 4. It creates strange and indescribable sensations – that is, new sensations that have yet to be named in language; 5. It produces physical and pathological maladies. According to Tausk, patients recount how these machines are immensely complicated, with many parts, and that they operate by means of obscure constructions. They are, to use modern parlance, "black boxes" – devices that operate effectively but are also fantastical. Finally, as Tausk accounts for it, the influence machine is perceived by the patient as a "hostile object"[6] or a "diabolical apparatus."[7]

When we consider algorithms critically and reflect on their status as political media, we tend to treat them as influence machines in the Tauskian sense. That is, the critical paradigms we deploy to analyze the status of algorithms carry within their critical imaginary an account of algorithms as influence machines, hostile objects that manipulate mind and soul, not to mention the body. Hence the indisputable persuasiveness of the "black box" metaphor. In part, this treatment of algorithms arises from a characteristic of the dominant critical apparatus throughout the

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humanities and social sciences, as well as critical legal studies, that considers the task of criticism to be one of negating various forms of structural domination through the exposition or the unearthing of the mystical operations of power that sustain and proceduralize practices of subjection. In this regard, the image of the Tauskian influence machine is both normatively and conceptually provocative and helpful to our critical investigations. This, because that image corresponds to our sense that domination operates through channels of coercive influence, as Thomas Hobbes reminds us in his *Leviathan* when he describes human psychology as inclined to limit the freedom of others for the purposes of self-aggrandizement.

In recent years, scholars have developed an alternative, and compelling, account of criticism that isn't reducible (but is also not adverse) to the view of criticism outlined above. This novel approach to criticism is more experientially focused – that is, it looks to activities, practices, and actions – rather than ideational specters. As the literary scholar, Toril Moi, accounts for it, "actions aren't objects, and they don't have surfaces or depths."[8] This view of criticism is less concerned with unmasking underlying structures of domination, and thus imagining that there exists a hidden world of power beneath the surface of experience. Rather, it considers experience as its starting point. In this respect, it is a radically empiricist mode of criticism that does not depend exclusively on the cognitive expertise of the critic to see things that others, uninitiated in the epistemic ambitions of a specific school of criticism, cannot.[9] If a task of criticism is to develop an understanding of what something does, and how, then treating the doings of technical objects as if they only perpetuate the operations of domination seems to go against the idea of an activity as an embodied practice. This doesn't mean that activities and practices, including the political effectivity of technical objects, are transparent or self-evident. It is, rather, to treat practices and activities as things done in the world and not merely as delusional,

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automated habits like those characterized by Tausk's influence machine.

What does this alternative approach to the practice of criticism mean for the political study of algorithms? It means that alongside our understandings of algorithms as complicit in ideological domination operating along the same lines, and within the same register, as other media like television or film, we also consider algorithms in terms of their technical milieu and, crucially for my purposes, we examine the forms of participation they enable, disable, constrain, and proliferate.[10] By "participation" I mean something like the ways in which algorithms take part in everyday life. In short, the political study of algorithms that I am proposing looks to the ways in which new forms of relationality are introduced in a specific lived context, and how extant or already existing modes of association are reproduced or rearticulated within that same context.

How might this be understood as a specifically political form of criticism? Politics (as I propose to analyze it – though, of course, not just me) isn't merely the exercise of domination (as it has been classically defined), but is fundamentally a pluralist activity for the creation of value through the forging and fomenting of relations between peoples, things, places, and times. Politics exists when things exist in relation to one another, and this fact of relationality is itself based on the sense that our individual and collective worlds are constituted by a plurality of beings, both human beings and non-human objects. This fact of pluralism – of there being not just something rather than nothing (as Plato had famously noted), but multiple somethings (or what the philosopher William James calls the pluriverse) – creates the possibility of relationality and hence, of things and people coming together and wrenching apart. In short, relationality creates worlds. As James affirms, "knowledge of sensible reality thus comes to life inside the tissue of experience. It is *made*; and

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made by relations that unroll themselves in time."[11]

In this respect algorithms are political because a fundamental function of the algorithm is to generate world-making relations, and what seems to me to be of central political import are the experiences of relationality that algorithms generate. Consider, in this regard, something as basic as a sorting algorithm like the purchasing recommendation algorithm on Amazon.com. Anyone who has shopped on Amazon has experienced both the frustration and the excitement of these recommendations. And clearly, there is an element of the influence machine built into these sorting mechanisms: through the correlational realist magic of artificial intelligence, we receive a suggestion about how to extend (or reproduce, or replicate, or alter) our experiential pluriverse. The algorithm sorts our previous views, purchases, and (crucially) our attentions (not just mine, by the way, but those of all who have attended to the same object) in such a way as to generate an expectation of future taste as invested in this other (perhaps previously unimagined … by me) object of enjoyment. That the magic of correlation functions within a capitalist climate of profit maximization is surely a contextual truth about the sorting algorithm, but that insight tells me little or nothing about the politicality of the algorithm. It simply confirms what I already know: that most everything created and operationalized in my world is done so for the purpose of augmenting the revenues of a particular organization – in this case, Amazon.com.

But there is something else interesting going on here with this sorting algorithm: by presenting its recommendations as it does, it articulates relations not just between me and another commodity of desire, but also between an expectation of taste (based on something I may have enjoyed in the past) and a future value. Now, regardless of whether this recommendation is accurate or not, worthwhile or not, or ultimately profitable or not for the company, the simple fact that a relation has been

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posited is a politically relevant fact about algorithms. And this is a politically relevant fact independent of (though not innocent of) the particular ideological context of its operation.

To treat an algorithm more broadly as a relational medium allows us to say this about them: algorithms exist in the human condition of separateness. They are technical media that have been invented in order to mediate separateness – of time, of space, of awareness, of attention. In short, algorithms intermediate the separateness of the in-between which is the condition sine qua non of human pluralism. And this radical empiricist insight helps get at a possible answer to the question, how do algorithms participate in politics? They participate by partaking in scenes of intermediation that exist in the in-between of peoples, places, things, and events. When we think of a sorting algorithm as an intermediator of separateness we begin to appreciate that the algorithm is political because what it is actively doing is participating in the arrangement of worlds. *Our* worlds. The worlds we experience in the here and now. The political matter for me, then, is not one of how algorithms constrain my freedoms. But, rather, how do algorithms participate in the formation of worlds, including the worlds within which I participate on a daily and hourly basis? Where "participation in the formation of worlds" stands as a short-form for a coming-to-understanding of the algorithm's powers of arrangement, association, and dissociation.

In this respect, I consider algorithms not simply as tools of domination but as "sentimental" media. Sentimental here is not synonymous with emotions and feelings (although emotions and feelings emerge out of a sentimental operation). By sentimental I refer to the ordering, structuring, and arranging of sensibilities: emotions and feelings (to be sure), but also perceptibilities and intelligibilities. In their capacities as sentimental media, algorithms first and foremost coordinate

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attention and awareness and make it so that we exist differently in relation to one another. An acknowledgment of the algorithm's claim on our all too human condition of separateness brings us face to face with their standing as political media. They are political because they arrange worlds. And out of these arrangements, intermedial power dynamics that may include (but aren't exclusive to) domination emerge.

It is for this reason, then, that rather than speaking about algorithms in general – or about any one specific algorithm – I prefer to think about the "algorithm dispositif." What is the algorithm dispositif? In part I have answered this question above. But a few words on this Frenchism might help clarify things further. "Dispositif" is a Latinate word that arrives to English from France and is typically untranslatable – though it has often been mistranslated as "apparatus." Elaborating the distinction between "dispositif" and "apparatus" must be deferred for another discussion, but the distinction more or less rests on the difference between an influence machine and an intermedial object. The term *dispositif* has its root in the Latin *dispositio* that refers to practices of arrangement and, to use a cognate English word, dispositions. More specifically still, the *dispositif* comes to us from the tradition of rhetoric – its classical sources are Aristotle's *Rhetoric*, Cicero's *De Oratore*, and Quintillian's *Institutio Oratoria*. The *dispositio* in rhetoric refers to the arrangements of the parts of speech in an oration, and how the order of ideas, of words, and of formulations, may be organized in such a way as to maximize persuasion. The *dispositio* is that part of an experienced oration that disposes the audience to attend to the speaker's words – not to listen, understand, or interpret them – but to *attend* to them, to lend them attention, to orient one's attention to them. Listening, understanding, interpreting may follow from this – indeed, usually do follow from this if the *dispositio* is successful. But the principal aim of the *dispositio* is not the transmission of an intention; this, because the *dispositio* is not a demonstrative proof.[12] It is,

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rather, oriented towards the disposing (in the sense of attuning) of one's perceptibilities and forms of intelligibility. Consider in this regard the first line of Mark Antony's famous funeral oration from William Shakespeare's *Julius Caesar*, "[f]riends, Romans, countrymen, lend me your ears." (Act III, Scene 2) To lend one's ears – the disposing of the ears towards speech – is the exhortation of the *dispositio*. What matters here is not language as expressing intention, but how what is said is posed (and poised) so as to call attention and bestow notice: *dispositio* is a modality of collective participation, an active placing upon of parts, one in relation to the other, resting between and among each other.

It's in this sense of *dispositio* that the algorithm dispositif is a sentimental medium. As the sentimental philosophers of the eighteenth century showed, David Hume chief among them, sentiments are the forces that connect us to one another, through technical media like language (i.e., promising) and contracts, and to political life as a whole. The sentimental, in other words, is a category of experience that is world making. As a sentimental medium, the algorithm dispositif arranges and disposes us to the world. In doing so, it organizes worlds by orienting relations of time and space, subject and object. This is what I mean when I say that algorithms exist in the human condition of separateness. Their dispositional powers operate in such a way as to coordinate and negotiate the in-between of separateness – just like a sentiment like sympathy is what organizes my separateness from other humans so that I may build something like social trust.[13]

To be clear, I'm not saying the algorithms are emotional devices, though there is much evidence to suggest that algorithms are emotion-triggering devices. What I am proposing is that the social and political study of algorithms proceed in a manner akin to how we understand the dispositional powers of the sentiments – powers that dispose us to move and extend ourselves within the in-between space of

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separateness that conditions human existence. The algorithm dispositif is political, in other words, because it operates in the intervening spaces of separateness and does so by a power of mediation that is dispositional. And this, I wish to say further, is substantially different from claiming that algorithms are structures of domination and that their political function is one of subjection. Humans dominate one another. Of this there is no doubt. But the work of arrangement in and of political societies is not reducible to domination.

The preceding offers notes towards the possibility of asking the following question: What are the conditions in and through which we can think the politicality of the algorithm dispositif? The ambition for broaching this question rests on what I take to be a unique impasse for the history of critical thinking that the algorithm dispositif affords. Much of our critical tradition rests on two important – indeed, essential – gestures. The first, inherited from Plato, is that to think critically about the politicality of technical experience requires the capacity to turn away (through reflection, cognition, rationalization) from the coercive operations of power implied or presumed in technical objects. The second is akin to the first: our sense or acceptance of the workings of a technical object rests on a reflective experience we may have of it. We experience a film by viewing it, a musical score by listening to it, a food morsel by eating it, a novel by reading it. The impasse that the algorithm affords our critical tradition challenges both these premises: the fact of algorithmic ubiquity in everyday life makes turning away an unavailable critical response; moreover, we don't experience algorithms. We experience inputs and outputs, data and data's mediation.[14] But we don't experience the technical medium of the algorithm, not in the way we appreciate our experiences of other, more established, media. At the interstice of these impasses in our critical traditions we may begin to reflect anew on the tissues of experience that the algorithm dispositif affords.

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