THE ALGORITHMIC APPARATUS OF NEO-COLONIALISM: OR, CAN WE HOLD "OPERATIONAL IMAGES" TO ACCOUNT?

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"What do I have against images? Perhaps it is that they all have the same flaw: euphoric amnesia. They no longer remember what they signify, where they come from, who they are related to, and yet none of this bothers them." —Maria Stepanova

Images made by machines for machines are void of an aesthetic context. They are part of a machine-based operative logic and do not, in the words of Harun Farocki, "portray a process but are themselves part of a process."¹ Defined by the operation in question rather than their referential logic, and following Farocki's formulation, such images are commonly referred to as "operational images." Structurally, they are not propagandistic (they do not try to convince), nor are they instructive (they are not interested in directing our attention). They are not, moreover, content-based, inasmuch as they exist as abstract binary code rather than pictograms. Void of anthropological or aesthetic intention, the practical process-based functionality of "operational images" effectively anticipates the obsolescence of "perception" as a human-defined activity.

Although "operational images" would seem to be largely understood in negative terms (based as they are on insular and closed procedures), they have a purposiveness that is revealed in their real world impact-the way they are used, for example, in surveillance technologies and in the establishment of autonomous models of warfare. This recursive and yet purposive functioning of "operational images" foreshadows the opaque architecture of "black box" technologies and the artificial intelligence (AI) systems that underwrite contemporary structures of data gathering and aerialbound forms of warfare. Needless to say, the technologies that commandeer and exploit airspace are demonstrably detrimental to those who are subject to their autonomous apparatuses, which raises a crucial question: how do we conceptualize the threat associated with both the opacity of "black box" assemblies and the all-too-real impact of air-bound technologies that, to a large extent, remain beyond the purview and control of the vast majority of the world's population?

In order to more fully understand the logic of apparatuses that produce present-day realities, through cartographic, photographic, and digital means, we need to observe the degree to which "operational images" and surveillance systems-in terms of their organizational structures, taxonomic methods, and conceptual foundations-found purchase in the racially deterministic discourse of colonisation. The will to calculate, measure, and qualify the other-the ambition to "fix" the other as an objectified, calculable and thereafter commodifiable entity-is the link between the deterministic rationale of colonial discourse in the 18th and 19th centuries and the biopolitical re-inscription of the algorithmically quantifiable other through the technologies of surveillance employed by neocolonial powers today. The history of drone warfare and satellite surveillance-predicated by and thereafter powered through "operational images"—is, in sum, irredeemably linked with the history and technologies of colonization.

The will towards bio-political control and the reductive, calculating determination of life and death that are algorithmically programmed into autonomous surveillance and weapons equipment reveals the operative, utilitarian, and extractive logic of colonisation. This logic of appropriation and annexation, not to mention the violence involved in the summoning forth of resources, was all too amply captured in Aimé Césaire's succinct phrase: "colonisation = thingification." Through this resonant formulation, Césaire highlighted both the inherent processes of dehumanisation practised by colonial powers and how, in turn, this produced the docile and productive-that is, monetized and commodified-body of the colonized. As befits his time, Césaire understood these methods primarily in terms of wealth extraction (raw materials) and the exploitation of physical, indentured labour: "I am talking about societies drained of their essence, cultures trampled underfoot, institutions undermined, lands confiscated, religions smashed, magnificent artistic creations destroyed, extraordinary possibilities wiped out."² The exploitation of raw materials, labour and people, effected through the violent proficiencies of western knowledge and power, was a process of dehumanization that deferred, if not truncated, the quantum possibilities of future realities.

Whereas colonisation was first and foremost preoccupied with wealth and labour extraction through occupation, neocolonisation, while furthering such ambitions, is indelibly implicated with forms of data extraction through surveillance that establishes and, increasingly, pre-determines if not controls the future. Both effect an epistemological and actual violence on communities and individuals, and both reveal the extractive technologies of (neo)colonial imperialism. The line connecting the two involves both the epistemological violence of applied knowledge and the actual violence of applied data effected through the operative logic of the algorithms that power aerial surveillance systems and drone warfare.

If "operational images" are wholly disinterested in human agency, apart from the initial programming process and the occasional calibration of their operative status, then our input into these forms of "image" production and their real-world impact—consider how drones use algorithmically trained "data sets" to target and eliminate subjects—remains circumstantial at best.³ Realized through machine-led forms of image-production, interpretation and empirical deduction, this apparatus of machine vision—given its often binary and exponentially algorithmic functioning—advances the historically deterministic reasoning, if not racial determinism, of the imperial strategies we associate with the rationalizing procedures of colonization: reality (the actual) must be fixed if it is to be exploited in the name of exercising a command over a region and its people.

We might want to probe further here and enquire into whether the moment of visualizing these activities effects a form of engagement that can re-conceptualize the military-industrialcorporate entanglements of airspace and, in so doing, productively hold such technologies to account? What would a counteroperational image look like? Can the mise-en-abyme of blackbox-like technologies be negotiated with or, indeed, moderated by methods of envisioning its operative logic—and, if so, how might this be achieved? How, that is to enquire, can we hold "operational images" to account?

All of which returns us to our original question, with a supplementary twist: What are the real-world implications of "operational images" in an age where we have devolved responsibility for, and our responsiveness to, their impact on communities who have long lived under the objectifying, calculating realities of unaccountable (neo)colonial power? Has the recursive, unaccountable "black box" logic of "operational images" and their role in presaging the operative logic of algorithms given additional license to the racially determined parameters of what legally, ethically and politically defines human *being* (ontology) in the world as opposed to what constitutes their calculable, measurable (ontic) realities? Thereafter, we must consider that any ontological crisis in the production and reception of images is likewise an existential crisis in what constitutes the value of being and, perhaps more profoundly, the significance of *not* being in the world.

If Berkeley's historical adage—*esse est percipi*; or, to be is to be perceived—has any leverage in our post-digital age, then we must ask a parting question: What forms of *being* are brought forth if the event of "perception," if not the formal actualization of humanness (*being*), is performed by a machine? What forms of *being* are eradicated or rendered null and void (value-less) by such calculations? Have we disavowed our responsibility for and responsiveness to the work of "operational images" precisely because they autonomize the rationalizations of neo-colonial exploitation? Finally, do these affordances of image production and digital technology render extractive forces relatively palatable while also, more cynically, placing them beyond the purview and oversight of political and ethical considerations regarding the human right to life?

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- 1 Farocki used the phrase "operational images" to describe images made by machines for machines, the full implications of which he explored throughout his three-part film Eye/Machine I, II, III (2000–3). These machine-oriented images are not produced in relation to representing either subjects or objects; rather, they are part of an operation.
- 2 Aimé Césaire, *Discourse on Colonisation* (New York, NY: Monthly Review Press, 2000; orig. 1950), 42-43; emphasis in original.
- 3 A recent United Nations Security Council Report, published on 8 March 2021, observed that a Turkishmade Kargu-2 drone may have acted autonomously in selecting, targeting, and possibly killing, militia fighters in Libya's civil war. See: https://documentsdds-ny.un.org/doc/UNDOC/GEN/N21/037/72/PDF/ N2103772.pdf?OpenElement. If this is proven to be the case, it would be the first acknowledged used of a weapons systems with artificial intelligence capability operating autonomously to find, attack, and kill humans. For a fuller account, see https://www. nytimes.com/2021/06/03/world/africa/libya-drone. html?referringSource=articleShare.