Thinking with a genealogy of the algorithm as protocol in this essay, I want to offer a reflection on what it might mean to dwell in the gap between digital and non-digital modes of colonialist computation, sorting, and classification. Turning away from an approach that would position the digital as superseding, wholly distinct from, and eclipsing the non-digital, then, I think with two potentially unexpected databases. The first is the US military’s large-scale biometric databasing campaign to achieve “identity dominance” in counterinsurgency (COIN) operations in Afghanistan. Then, I focus my attention on the Phoebe A. Hearst Museum of Anthropology at the University of California, Berkeley, where more than 10,000 Native American skeletons are boxed, bagged, and stacked beneath the swimming pool of the Hearst Gymnasium, a collection that has grown in recent years despite the Native American Graves Protection and Repatriation Act of 1990. I consider these very different databases as emerging through practices of biometric extraction and protocological racialization, where protocological indicates the practical life of algorithms, or protocols, that pervade policing practices for the US nation-state (Galloway 2004). Placing these two databases alongside one another, I argue that we must attend to algorithmic governance not as a unitary concept that is transportable or durable across space and time but, rather, as a concept that emerges differentially through entanglements of practices (Mol 2003).

1 I both build from Alexander Galloway’s use of the term protocological to describe how “protocol modulates, regulates, and manages the interrelationality between vital systems” while expanding the term to gesture to algorithmic practices that exceed Galloway’s reading, which locates the protocological within the provenance of Deleuze’s “control societies” and as a technic of Foucauldian biopower (Galloway 2004: xviii, 12).
In this way, practices of governance produce enactments of the algorithmic that might be simultaneously recognizable as such while necessarily incommensurable and never only algorithmic.

As I prepared my remarks for the “Algorithmic Governance” panel session at the 2016 American Association of Geographers Annual Meeting in San Francisco out of which this intervention emerged, I had initially imagined that I would explicitly focus on the US military’s identity dominance program mentioned above. Primarily obtaining biometric data through the use of handheld computers known as the Secure Electronic Enrollment Kit, or SEEK II, US military personnel scan irises and collect fingerprints, facial images, and personal information ranging from individuals’ names and places of birth to unique identifying physical characteristics such as scars and tattoos (Center for Army Lessons Learned 2011; Gallagher 2015; Public Intelligence 2014; Woodward 2005). This technology also allows military personnel to compile individuals’ digital data and metadata to be stored as well (Gallagher 2015). Through the collection and storage of biometric data that can be queried and cross-referenced by all branches of the US military, FBI and CIA, the US seeks to create a topological, algorithmically driven space of occupation that can facilitate COIN practices, including targeted killings and signature strikes in drone warfare. Here, biometric data collection as a technology of occupation supplements and is not entirely distinct from more traditional notions of territorial occupation. In the case of the digitally driven biometric database, algorithmic practices of governance emerge through and alongside historical techniques of colonial dispossession, extraction, and governance that pervade the management of persons, populations, and territory.

In thinking about this mode of colonial biometric data collection, then, I wanted to approach my remarks very much in the spirit of Simone Browne’s (2015: 109, 16) discussion of biometric surveillance and “digital epidermalization”, where contemporary digital practices of “racializing surveillance” must be situated in relation to their historical antecedents and the other, perhaps less immediately recognizable, forms they might take. I was also pressed and inspired by the work of a colleague at the University of California, Santa Cruz, Claire Urbanski (2016), to

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2 SEEK notably replaced the previously used HIIDE, or Handheld Interagency Identity Detection Equipment, technology (see Public Intelligence 2014).
consider how these practices were operationalized where I had been living, working, and thinking in California’s East Bay, particularly around the dispossession of the local Ohlone peoples. Taking up the Hearst Museum’s collection of Native remains, many of which have been excavated from their resting places in shellmounds around the East Bay as Ohlone land is subjected to ongoing processes of dispossession through infrastructure projects and real estate development, Urbanski interrogates this warehousing of Native remains through the framework of “indefinite detention”. Describing storage practices where skeletons are dismembered and stored by bone type to maximize space, Urbanski (2016) argues, that a “carceral logic informs the shoving of skulls into one old cabinet, skeletons in another … what could have been the forgotten underbelly of a swimming pool is now utilized as a detention center for the dead”. For Urbanski, these extractive colonial practices persistently surveil and police the lines between life and death, colonizer and colonized, and knowing and unknowability as they transform the remains of the dead into sites of value for the settler-state.

In addition to pointing toward the carceral logics that pervade colonial practices from the war on terror to Native American dispossession, Urbanski’s work led me to consider how these practices of dismemberment and storage, where the remains of colonized bodies are dismantled for the purposes of sorting, organization, and, importantly, access, are also indicative of a colonialist database and algorithmic logic. Here, the dismemberment of the skeleton—storing skull with skull, separately from other bones—transforms the ancestral body into a series of vectors that are endlessly reimagined as they are redeployed by various disciplines in and for the settler, and imperialist, university. The data they are imagined to house is transformed into information having both epistemological and financial value, a capacity for value constructed as activated only through the bone’s endless ability to enter into relationships with disciplinary and scientific protocols, algorithms that are shaped and perpetually redesigned through ecologies and economies of academic knowledge production. I want to be clear that I do not mean to set up an analog between the digital biometric database and the non-digital or not-only-digital one to demonstrate that they are one in the same through an anachronistic accounting of colonial histories.¹ Neither do I mean to flatten distinctions between the database and the archive. Rather,

¹ I use the phrase “not only” drawing from Marisol de la Cadena’s work on Indigenous cosmopolitics, where “not only” connotes those excessive qualities and ways of being, doing, and thinking that resist and exceed
I point to these modes of biometric surveillance, sorting, and computation as similar yet incommensurable protocological or algorithmic practices. These algorithmically driven biometric databases emerge through practices of racialization by the colonial nation-state through modes of data-based extraction and expropriation from the colonized body, a historical and ongoing arc of protocological racialization that includes eugenics and scientific racism, financialized risk assessment, census-taking and aerial surveying, and predictive policing.

Disarticulating algorithmic governance from an origin and dominion in exclusively digital registers, then, allows us not only to point toward the consonance of colonial practices as they historically emerge, intensify, and appear to transform themselves but also to then place the digital and non-digital in dialogue as concepts that do various kinds of work within projects of state-building and violence. Refusing the false distinctions these categories generate and, rather, dwelling in the indeterminacy of the gap that is imagined to separate them—the fulcrum between either/or—we might more usefully interrogate algorithmic governance as emerging through what Isabelle Stengers describes as “an ecology of practices”. For Stengers (2005:187), thinking through ecologies of practices requires both thinking “through the middle” and “with the surroundings”. As scholars interrogating algorithmic governance, then, this might be thought of as necessitating a methodological attunement to material, place-based, and historical specificities while refusing the seduction and totalizing impulses of technofetishism. We might think of algorithmic governance, then, as a concept that emerges through entanglements of practices that are never only digital, never only not—and never only algorithmic.

In this way, it becomes possible to speak of the algorithm in the sense described by Paul Dourish (2016:3), as a “term of technical art and practice”, while also engaging the algorithm as a historical phenomenon that exceeds its current digital iterations as Ted Strifhas (2015) does in his recent work. Adopting an attention to practices also allows us to interrogate and destabilize our own investments in algorithmic governance as a concept and analytic even as we take seriously the manifold ways that the algorithmic is entangled with and produced through everyday practices of governance, discipline, and managerial control. What possibilities does algorithmic governance as a concept generate, what does it foreclose? What forms of complicity representational capture and translation (see de la Cadena 2015; see also de la Cadena 2014).
does it highlight or occlude? Moreover, how, through an attention to practices, can we more carefully account for histories and presents of protocological violence that persist across and emerge through multiple registers—from the digital to the non-digital or not-only-digital, from the military to the museum to the university, and across spatial and temporal imaginaries that would hold separate deeply entangled settler and imperialist geographies and histories?

References


