Voluptuous Disintegration: A Future History of Black Computational Thought

Abstract

As algorithmic models increasingly assist, judge, and manage human life, a growing amount of scrutiny, criticism, and backlash has ensued, calling into question the violence of such powerful applications and demanding a renewed focus on bias, ethics, and governance. At the same time elite academic institutions and massive tech firms have been adaptively adept at the capture and depoliticizing of its critics [Whittaker 2021]. Calls for a fundamental reckoning with the logics and violences of computation have been largely disciplined into niche new industries of expertise which Phan, Goldenfein, Mann, and Kuch refer to as "economies of virtue." In response, this essay explores Black Computational Thought as a critical intervention into the residues of Post-Enlightenment thought mapped onto and subtending contemporary computational logics. By placing computation within such genealogical bounds, we are free to ask the question, what other proximal places might we look to to recover computational practices that challenge colonial logics of coercion? What other genres lay in wait? Black Computational Thought holds open these proximal possibilities and directs our attention to the quotidian, social, opaque, woven, and fugitive practices of computation born from Black diasporic movement.

Sucked by the tongue and the lips

while the teeth release the succulence

of all voluptuous disintegration

I am turning under the trees

I am trailing blood into the rivers

I am walking loud along the streets

I am digging my nails and my heels into the land

I am opening my mouth

I am just about to touch the pomegranates

piled up precarious

This is a good time

This is the best time

This is the only time to come together

Fractious

Kicking `

Spilling

Burly

Whirling

Raucous

Messy

Free

Exploding like the seeds of a natural disorder.

-June Jordan, From Sea to Shining Sea

Pomegranates…89 cents each

1

These are the words that close June Jordan's poignant poem, "From Sea to Shining Sea", published in 1983 in the the now seminal *Home Girls: A Black Feminist Anthology* edited by Barbara Smith. Following the rise of Ronald Reagan and his ascendence to the presidency in 1980 this poem is one of escape, incommensurability, and refusal in the face of an authoritarian shift, reductive politics, and the normalization of precarity. In short, this is a poem of survival beyond the regulating edges of possibility. The poem opens with a scene of economization and the regulation of everyday life.

> Natural order is being restored.
>
> Natural order means you take a pomegranate
>
> that encapsulated plastic looking orb complete
>
> with its little top a childproof cap that you can
>
> neither twist nor turn
>
> and you keep the pomegranate stacked inside a wobbly
>
> pyramid composed by 103 additional pomegranates
>
> next to a sign saying 89 cents
>
> Each
>
> Natural order is being restored
>
> Natural order does not mean a pomegranate
>
> split open to the seeds sucked by the tongue and lips
>
> while teeth release the succulent sounds
>
> of its voluptuous disintegration
>
> The natural order is not about a good time
>
> This is not a good time to be against
>
> the natural order.

2

In this scene Jordan describes the quotidian spread of economic dispossession through newly liberated financial markets that mark the Reagan administration and a stark shift towards neoliberal economic policy in the U.S. This rise corresponds to an increase in supply chain logistics, managerial monitoring, just in time production, deindustrialization, the contraction of public benefits, shifts in surplus state capacity, the financialization of the market, and builds the architecture for a global marketplace later inscribed through Free Trade Agreements [Gilmore 2007] [Harvey 2007] [Cohen 2014] [De Lara 2018]. This attention to the exact number of pomegranates piled into a wobbly pyramid, the labeling of the price, the line break before "Each," are intentional moves that draw our attention to what Murphy would call the economization of life. By this she means, "a historically specific regime of valuation hinged to the macrological figure of national 'economy.' It names the practices that differentially value and govern life in terms of their ability to foster the macroeconomy of the nation-state, such as life's ability to contribute to the gross domestic product (GDP) of the nation. It is distinct from

commodifying life or biocapital, or from the broader history of using quantification to monetize practices" [Murphy 2017].

3

In this passage Murphy is speaking to the ways in which life becomes valued by its ability to contribute to larger consolidated national and international markets. Additionally, she is pointing to the transposition of this valuation into a larger logic underpinned by quantification, aggregation, scale, calculability, and monetization. Central to the functioning of this shift is an imposition of separability[1] and the reification of the individual. The pomegranates are not sold in pairs or by the bunch but each. Each pomegranate is assigned an exact value as an individual. Returning to Jordan, she describes this transposition as natural order being restored". As the poem continues, Jordan describes vividly the violences and repercussions of this restoration.

> This was not a good time to be found with a gun
>
> This was not a good time to be found without one
>
> This was not a good time to be gay
>
> This was not a good time to be Black
>
> This was not a good time to be a pomegranate
>
> or an orange
>
> This was not a good time to be against
>
> the natural order

4

She uses the line, "This was not a good time to be a _____", each time inserting a different subject position, as a device to show both the pervasiveness of who is affected as well as the sectarian divisions that rose in response. Jordan speaks to this tension in a 1981 interview with Adriane M. Livingston, Peter Merchant, and Mary Elsie Robertson stating:

> I really think that I know that Americans now are simply overwhelmed; like what is happening, what can we do. Everybody's tendency is understandably to try to take care of yourself; cover your back, make sure you have a house, a door for the key. I say that as understandable as that is, it seems to me that we cannot afford to divorce ourselves from what is happening in South Africa, for example, or for that matter, what is happening in West Germany, or Poland any more than the Reagan administration divides these issues. I think that the Reagan Administration and people in that; they see everything in global terms. From Brooklyn to Angola is not a big jump for them at all. I think that unless we, the people, begin to think in the same way, to make these connections, really on a visceral level, I feel for the survival of the species [Jordan 1981]

5

Jordan's words resound today as an echo. At the time of this writing, we are currently entangled in cascading scenes of stark economic inequality, increasing climate crisis, mass global displacement, a rapidly growing global pandemic, and intensified state sanctioned and extra legal racial violence centered in xenophobia, anti-blackness, and cis-hetero patriarchy. While the edges[2] of this violence continues to expand — encircling those previously thought safe, hunkered behind thin walls of whiteness, denial, or entitlement, the scale of this precarity seems to be matched only by the consolidation of land, computing power, and capital. These hubristic endeavors seek to remap our social, educational, occupational, commercial, and sex lives. Such enhanced on-demand services are built upon massive computational infrastructures. Referring to this dramatic enclosure of vital aspects of our lives as the Screen New Deal, Naomi Klein describes the potential looming future.

> This is a future in which, for the privileged, almost everything is home delivered, either virtually via streaming and cloud technology, or physically via driverless vehicle or drone, then screen "shared" on a mediated platform. It's a future that employs far fewer teachers, doctors, and drivers. It accepts no cash or credit cards (under guise of virus control) and has skeletal mass transit and far less live art. It's a future that claims to be run on "artificial intelligence" but is actually held together by tens of millions of anonymous workers tucked away in warehouses, data centers, content moderation mills, electronic sweatshops, lithium mines, industrial farms, meat-processing plants, and prisons, where they are left unprotected from disease and hyperexploitation. It's a future in which our every move, our every word, our every relationship is trackable, traceable, and data-mineable by unprecedented collaborations between government and tech giants [Klein 2020].

6

Yet today, as was the case in 1980, is not a time of futility but of radical reimagining and visceral reconnection. In the closing of this poem Jordan returns to the pomegranate finally succumb to desire, voluptuously disintegrating. In the final lines she writes that this is the only time to come together, "Fractious Kicking Spilling Burly Whirling Raucous Messy Free Exploding like the seeds of a natural disorder" [Jordan 1981, 221]. Built on the longstanding rigorous work of Ruth Wilson Gilmore, Mariame Makaba, Joy James, Incite! Women of Color Against Violence, and Angela Davis amongst many many more, known and unknown, abolition has announced itself again within the popular imagination. Abolition is not simply decarceration, but the undoing of punishment and violence as responses to organized abandonment[3] within our society. Abolition then moves beyond just the removal (not mere defunding) of police and prisons and opens a capacious landscape of ways to live and be in relationships with each other that treat life as precious. Referring to radical abolition Gilmore states:

> The abolition I speak of has roots in all radical movements for liberation and particularly in the Black Radical tradition. The abolition I speak of somehow, perhaps magically (meaning we don't yet know how, which is what magic is, what we don't know how to explain yet) - the abolition I speak of somehow, perhaps magically, resists division from class struggle and also refuses all the other kinds of power difference combinations that when fatally coupled, spark new drives for abolition. Abolition is a totality and it is ontological. It is the context and content of struggle, the site where culture recouples with the political; but it is not struggle's form. To have form, we have to organize.[Gilmore 2007]

7

We can see the form of abolition organizing in the flourishing of public acts of rebellion, mutual aid projects, community accountability practices, transformative justice trainings, everyday people gathering to block evictions, calling in organizers, and hosting popular education workshops beyond the university. This organizing can also be seen in the connections made between surveillant technologies and carcerality. Increasingly, pressure is being placed on the ban of facial recognition technology[4] as well as big data itself[5]. Embedded in these calls is a politics of refusal. To refuse the grammar of the present order. To come together in all the ways that are sought to be exorcised, messy, spilling, and raucous. It is a call to entanglement, to fugitivity[6], and to emancipation in the fullest sense of the word that is endlessly committed to life.

8

This essay takes up this call. It wrestles with our present moment, by which the old world is dying. This paper takes seriously the call that June Jordan makes and the emergence of a fugitive politics of refusal, so that the new world can be born.[7] It takes aim at these competing worlds, one which writes the complexity of life as calculable units rendered as GDP, as productivity, as debt, within an ordered whole of insurmountably different pieces. The other begins with refusal of the present order of things. It embarks upon various inventions of flight finding the suturing ties that subtend "the beauty of black ordinary, the beauty that resides in and animates the determination to live free, the beauty that propels the experiments in living otherwise" (Hartman 46).

9

Possible but not eventual, the present offers a moment of clarity. It is the time to ask — Why does anti-blackness seem to perpetually overdetermine and saturate the operating system regardless of who is programming it? How do we begin to move to forms of critique and resistance that relinquish a certain focus on the apparatus[8] and begin to disassemble the episteme[9], that seemingly transparent foe that perpetuates the endless production of violent techne[10]? How might this make desirable the pursuits of situating computation elsewhere and towards a poethic[11] of endured proximity? How might such a proximity allow for the messy work of sharing risk together instead of the violent clarity of prediction?

10

What follows are the beginning sketches towards what I am calling Black Computational Thought. Built upon a long history of prior work, [English 1999] [Nakammura and Chow-White 2012] [Keeling 2014] [McKittrick 2014] [Johnson 2018] [Noble 2018] [Benjamin 2020] [Brock 2020]. Black Computational Thought engages Jessica Marie Johnson and

Mark Anthony Neal's call to "refute conceptions of the digital that remove Black diasporic people from engagement with technology, modernity, or the future" [Johnson and Neal 2017, 1]. In doing so Black Computational Thought takes critical aim at the residues of Post-Enlightenment thought as it maps onto and subtends contemporary computational logics. Black Computational Thought denaturalizes these residues and situates them as spatial temporal onto-epistemologies[12] that are highly narrow and specific, rather than universal, axiomatic, or natural. Instead these residues are entangled with and are the basis for past and continued acts of subjection[13], expropriation, extraction, and the totalizing violence of enclosing land and labor. By placing computation within such genealogical bounds, we are free to ask the question, what other proximal places might we look to to recover computational practices that challenge colonial logics of coercion? What other genres[14] lay in wait? Black Computational Thought holds open these proximal possibilities and directs our attention to the quotidian, social, opaque, woven, and fugitive practices of computation born from Black diasporic movement. Blackness here is always in an appositional love affair with queerness, transness, and feminist orientations of the world that fight the simplicity of calculated separability, and instead contend with their relationship to difference, kin, collectivity, risk, non-normativity, non-linearity, ambiguity, and trust.

11

I will work primarily from two points of departure. The first engages the scholarship of Black feminist + trans studies scholars as they speak through grammars of fugitivity into othered ways of being and sharing knowledge that disrupt the coherence of the enlightened Subject as individuated, rational, and self determining. I then extend these thoughts through a reading of the Freedom Quilts, a clandestine system of mapping escape routes for enslaved Black people, as a vital form of computation that forces us to rethink what computing can be when freed from its dependence on colonial pursuits of managing bodies, spaces, and resources.

Fugitive Repertoires

12

In the closing lines of From " Sea to Shining Sea," June Jordan leaves her readers with a deceptively simple request — to come together. Jordan speaks of a coming together that is raucous, messy, whirling, spilling, and free. Coming together is an effusive act. It is a particular voluptuous disintegration. It is the pomegranate sucked by tongue and lips. This stands in sharp contrast with the wobbly, precariously stacked pyramid described in the opening. Pomegranates 89 cents each. The stark individualized metrics of value are succumb to a cacophonous spilling overflow. Coming together is an act of both encounter and attrition, finding each other to shed our individualized selves[15]. In Them Goon Rules: Fugitive Essays on Radical Black Feminism, Marquis Bey describes this coming together as " the critical intimacy we share with one another when we come together to pull things apart" [Bey 2019]. Bey describes this mode of being as fugitive. In this section I will engage Bey's thoughts on Blackness, gender, and fugitivity as critical practices for enacting Jordan's call to come together.

13

For Bey, fugitivity is primarily a praxis that makes real other ways of living together in the world. On this they state, " It is not necessarily a model or template; it is, in fact, defiant of these. It is a flash, a glimmer, a flicker that forces us to see and do differently. It engenders our doing something, not our being something; it engenders our moving with others on unruly grounds" [Bey 2019]. This is a crucial passage for thinking about the intimacy of relations that fugitivity can offer beyond the individual as the standard unit of measure. To engage in the necessary work of undoing together, means to live in the postures and folds of the fugitive as a perpetual state of becoming otherwise through actions taken together. Blackness holds that there is no reconciliation to be found in the individual Subject, that it cannot be taken for granted as the site of liberty. Blackness rememberers the original sin from which liberty was born, and frees us from unquestioningly returning to it. It then follows that Blackness exposes the limits at the end of justice, calls into question attempts at inclusion, dismantles the center from which the invitation of inclusion[16] is sent, and cracks the logics of categorical purity that even whiteness fails to uphold. Or as Bey would say, "'Blackness' names, gives discursive flesh to, a critical existence, a disobedient world-working, an irruption upon the norm that crisisizes the scene so we can reimagine the terms and meanings of the world in which we live" [Bey 2019, 29]. It Is important to stress that Blackness in this conception is born from the racial but doesn't reside there. Blackness is a critical mode of being that struggles through the violences of modernity to foster other ways of being because it must. Fugitivity as the repertoire of Blackness reminds us of the price of admission, the cost of subjection. Blackness is carefully attuned to the residual, the left over, the over flow that spills, through, and beyond subjective categorization and fixed normality. It collects this excess in overlooked corners finding togetherness in the undoing, spreading into aberrant intimacies of how to be together in the vulnerability of non subjects. Blackness, as a way of being in relation, is in fact a natural disorder of voluptuous disintegration.

14

Many scholars across Black studies, trans studies, queer studies, and Black feminism [Spillers 1987] [Cohen 1997] [Ferguson 2004] [Weheliye 2014] [Snorton 2017] have emphasized the inherent queerness of Blackness and its fugitive resistance to hegemonic subject formations. This resistance to categorization extends to interrupt the projected stability of such attendant formations such as gender and sexuality. Race, gender, and sexuality are not mere categories additively summed, but are also relational practices that yield different social and political formulations. This is important as it contrasts sharply with mechanistic understandings of being by which identity is merely a summation of discrete inputs. Instead the scholars above emphasize the mutual constitution of race, gender, and sexuality as immanent processes, not destinations. For Bey this kind of fugitive relationship to gender opens the space for a particular kind of self determination. While self determination has held a long track record within Black political movement building and radical thought, Bey works to remove it from its more militant nationalistic trappings and instead positions it as a commitment to each others' processes of becoming. On this Bey writes,

> it is a demand placed on us all to ensure that self-determinative spirit for others as well, to come at them with an utter, terrifying openness, presuming nothing, letting them show us as much or as little of themselves as they wish. This is how we form a different world worth living within: the radicality of all this movement work we're doing rests in the ability to be fractured and critiqued by the forgotten, to give oneself, radically open, to the unknownness of the other, and to accept as a gift the various iterations of "Y'all need to get y'all act together [Bey 2019, 63]

15

This understanding of self determination that Bey offers cannot be held individually but is always a practice of relating to others while moving through unknown currents. Gender here is not something that can be presupposed or prefigured. This also begins to open the space for engaging gender as a non-proprietary relationship. Bey draws a relationship between one's ability to determine their own gender and the openness of receiving that determination by another. This reflects some of Bey's earlier points about the intimacy that fugitivity offers in coming undone together. In this fugitive space the assumption to know someone based on their temporal presentation is undermined. Such a practice of intimacy begins with compassion and humility to ask, return, and re-return. This leaves space for the fluidity of gender while not eliding the ability to find temporary homes in its folds. Coming undone is not a permanent place of residence. This is crucial as it doesn't disavow the material ways in which we move through the world and the imposition of gender. Rather, at its best this fugitive gesture allows for a reflection of the power relations by which subject formations occur. This posture recognizes the power in normative gender formation as a particular performance and asks where power might be built elsewhere.

16

Thinking fugitivity in this way sets it apart from the enclosure of method, technique, or model and instead bears a strong resemblance to Diana Taylor's work on repertoire. Rather than a static archive, repertoire " enacts embodied memory: performances, gestures, orality, movement, dance, singing — in short, all those acts usually thought of as ephemeral, nonreproducible knowledge" [Taylor 2007, 20]. She goes on to state, "The repertoire requires presence: people participate in the production and reproduction of knowledge by 'being there,' being a part of the transmission. As opposed to the supposedly stable objects in the archive, the actions that are the repertoire do not remain the same. The repertoire both keeps and transforms choreographies of meaning" [Taylor 2007, 20].

17

This focus on fugitivity as repertoire, as embodied knowledge, as gesture, and movement extends Bey's fugivitity from being a critical response to subjection and raises questions about the ways in which such a radical undoing can also be a practice of information sharing and knowledge production. The repertoire requires presence as its mode of transmission. Through the presence of participants coming together again and again, knowledge is produced and reproduced. It is held in the fleshy extensions of those that share space on unruly grounds. In this context the transmission of information is not

separate from the material embodiment of those involved. In fact it is dependent on material bodies in relation. The data is encoded and transmitted through acts taken together. It remains local.[17] As a mode of information sharing and knowledge production the fugitive repertoire is encased in shared cultural practices made available through the intimacy of coming together. It is not interoperable or modular. Instead it requires something of you. To partake in the knowledge you must learn the choreography, the gestures, the furtive movements. The repertoire makes explicit endured agreements of trust, building practices of interdependence in order to share risk together[18]. Both Bey and Taylor stress the importance of presence and "being there" as vital components of engaging in unstable practices together. There is a productive redundancy here. The vectors that Bey and Taylor describe are circular[19]. They thrive on their ability to repeat and return — recursive, not linear. Such acts require endurance, an endurance capacious enough to meet uncertainty, an endurance that supports proximity without fixing boundaries. This makes self determination an act of coming together again and again to be undone while holding the intimacy of how we can be together in motion.

18

My engagements with fugitivity are an attempt to struggle with what it means to live in the theory of fugitivity. Rather than just theorizing on what it can promise, I am interested in how we can begin to recognize a fugitive praxis. In doing so I turn to Tina Campt's seminal text, Listening to Images. Rather than speaking to fugitivity as a constant exhaustive physical act of movement and escape, Campt is interested in the quiet and quotidian. Campt works from this position toward a theory of fugitivity and situated understanding of the politics of refusal. Writing on this Campt states, "the quotidian must be understood as a practice rather than an act/ion. It is a practice honed by the dispossessed in the struggle to create possibility within the constraints of everyday life. For blacks in diaspora, both quiet and the quotidian are mobilized as everyday practices of refusal" [Campt 2017, 4]. Here Campt is quite clear that fugitivity cannot only be used as metaphor or merely an act of escape but is held in the ongoing practices of the dispossessed to survive in a world that isn't fit for their survival. These practices are found in sites of everyday life. This in part returns fugitivity to the body without entombing it, it is where flight meets the ground, without landing, it is in the sweat that permeates pores, the exhaustion as breath leaves the lungs, the smell of fresh soil during midnight maurades. It is a fugitivity that is situated rather than flattened, and made to spread so thinly that it is all encompassing and ambiguous.

19

Keeping with this focus on the mundane, Campt works through identification photography as her primary material to think with. She theorizes these photographs has having a sonic quality that operates at a haptic level, only understood through feeling. Borrowing from Georges Perec, she refers to these photographs as "infra-ordinary, — everyday practices we don't always notice and whose seeming insignificance requires excessive attention" [Campt 2017, 8]. These infra-ordinary practices and objects are moments of refusal that are essential for the possibilities of Black futurity. These practices themselves, as fugitive refusal, should not be understood simply as rebelliousness or revolt, but are born from an insistence to strive for futurity, to matter, to survive. Here is where the stakes and promise of fugitivity come into full view. When put in relationship to

futurity, the fugitive cannot remain a romanticized figure freed from attachments, in constant pursuit of an ultimate unmediated freedom. Rather, the fugitive is one who contends deeply with the daily violences of life to be able to have a future beyond them.

20

Despite its complications, or perhaps because of them, fugitive praxes are important to break open the disciplining logics of rationality and separability. Fugitivity at its best is a repertoire that requires interdependence for care and regular maintenance. I am invested in practices of computation that emphasize such interdependencies while moving through the processes of sharing, storing, and making meaning together. Here, the social and the technical are explicitly intertwined rather than ignored or mechanistically separated. In what follows I hope to show how fugitivity opens computation to being a practice in the making, co-constituted through social repertoires and formations. It is not universal or standard but operates through specific genres. I believe it is within such genres that we might find social processes that make the space to return again and again while immersed in the practices of sharing information and risk together.

Black Computational Thought as Endured Proximity

21

In this final section I will bring forth Bey's subject come undone, Taylor's repertoire, and Campt's infra-ordinary to bear as I locate them within the Freedom Quilts as a future leaning computational past and a living body within Black Computational Thought. I frame this discussion through David Golumbia's computationalism. In his text, The Cultural Logic of Computation, Golumbia makes a distinction between computers and computationalism. For him computationalism is "is the view that not just human minds are computers but that mind itself must be a computer — that our notion of intellect is, at bottom, identical with abstract computation, and that in discovering the principles of algorithmic computation via the Turing Machine human beings have, in fact, discovered the essence not just of human thought in practice but all thought in principle" [Golumbia 2009, 7]. Golumbia expands upon this term "as a commitment to the view that a great deal, perhaps all, of human and social experience can be explained via computational processes" [Golumbia 2009, 8]. Over the course of his text Golumbia tries to show the ways that the digital computer inherits much of its logic from a Post-Enlightenment high rationality. By engaging the work of Decartes, Hobbes, Kant, and Liebnitz, Golumbia positions this rationality; "computationalism entails not merely rationalism per se, but a particular species of rationalism with clear conceptual and historical weight, which we nevertheless seem all too ready to forget" [Golumbia 2009, 190]. The basis of Golumbia's critique lies at the episteme from which computational logics emerge solidified in formal reason and syntax.[20] Golumbia is attempting to show the ways that computationalism understands cognition itself as an inherent computing process, and by extension, all matters of phenomena in the world can be understood as a function of computation. This eerily mirrors the Screen New Deal future that Klein details, by which the economization of life is aggregated, totalized, tracked, mined, and brokered. This world is imagined as an ordered whole made of distinct intrinsically different pieces that can only be understood through their secondary effects of measure[21]. This is the world that the economization

of life emerges from and continues to validate. It is the world of big data, Amazon Web Services, financialized global economies, calculated abandonment, and Eric Schmidt. In this imagination of the world the Subject is the only self determining thing gifted with cognition and capable of measuring the rest of the world through modalities of difference and claims of universality. In short the Subject is granted interiority. Golumbia reminds us that this interiority is thought to operate upon the same mechanistic principles as a computing device, taking in cold empiric data and making assessments and measures through cognition. In fact this model often passes for objectivity and is upheld as an ethical principle within much of computer science. It is a principle based on separability, distance, and asociality. Accordingly to Golumbia "Interiority qua universal subjectivity emerges from numerical rationality applied as an understanding of human subjectivity, and not vice versa. This is not to reject the idea of subjectivity outside of rationalist modernity: it is rather to suggest that the particular and elaborated form of interiority we associate with present-day modernity underwrites an unexpected and radical mechanism" [Golumbia 2009, 10]. This radical mechanism and its assumed neutral evaluation sits at the center of much of modern representation and performances of objectivity ethics. Bringing these insights from Golumbia into conversation with Denise Ferreira da Silva, this "universal" ethic falls away is in fact embodied within white European signification. da Silva argues that, "in both cases, cultural difference sustains a moral discourse, which rests on the principle of separability. This principle considers the social as a whole constituted of formally separate parts. Each of these parts constitutes a social form, as well as geographically-historically separate units, and, as such, stands differentially before the ethical notion of humanity, which is identified with the particularities of white European collectives" [Da Silva 2007, 63].

22

Through the principle of separability which da Silva grounds in Kantian reason, the different pieces which are imagined as components of an ordered world are incommensurable with each other. Their relationship is one of unbridgeable difference and distance. The mechanism that Golumbia describes sits at the center of this ordered world and is inscribed in the moral project of the human, written as white, European, and male. Therefore the others of Europe can only be measured by their difference to white European humanity and are therefore subjected to partial protections through rights and partial violence. This undergirds one of da Silva's primary questions, "How the racial combines with other social categories (gender, class, sexuality, culture, etc.) to produce modern subjects who can be excluded from (juridical) universality without unleashing an ethical crisis?" [Da Silva 2007, xxx]. This also helps us begin to understand one of my own questions which opens this article, Why does anti-blackness seem to perpetually overdetermine and saturate the operating system regardless of who is programming it? Because of the ways in which the Subject is written simultaneously into white European embodiment as well as computationalist rationality, it will continue to carry anti-blackness in its bowels even in the face of the most strident claims of universality and objectivity. For this reason Black Computational Thought allows for speculation beyond the Subject as mechanism, computing as computationalism, and separability as ethics. To ground some of this speculation[22] I work through a reading of the Freedom Quilts as Black Computational Thought in practice. Though containing many formal computational

aspects[23], this reading of the Freedom Quilts is centered in computation as it works with Blackness to unsettle computationalism, objectivity, separability, and the Subject.

23

One of the primary tactics that informs the design and function of the Freedom Quilts is the use of everyday objects to circulate information within traditional African societies. Speaking on the power of everyday objects Tobin and Dobard state, "Communicating secrets using ordinary objects is very much a part of African culture, in which familiarity provides the perfect cover. Messages can be skillfully passed on through objects that are seen so often they become invisible. These objects are creative expressions of African artisans and give tangible form to the cultural and religious ideas of their kingdoms" [Tobin and Dobard 2000, 39]. Tobin and Dobard document this practice through the role of the griot as the guardian of culture and societal history. Based in oral traditions, the role of the griot was to remember and share ancestral lineage, customs, beliefs, histories, and legends from generation to generation. The griots "learned and taught via an oral tradition, based on memory, aided by the use of specially designed mnemonic devices. Encoded staffs, stools, memory boards, sculpture, and textiles chronicled the history of a people. But only the griots and the diviners were able to read them" [Tobin and Dobard 2000, 40]. This practice is one that continued into the new world as enslaved Africans held onto their cultural memories and combined them with others stolen from their lands to create new creolized semiotic systems that crafted convert ways for enslaved peoples to communication with each other, circulate knowledge, and build wholly different cultural systems within the diaspora. These creolized symbols were the basis for a visual language that gave new identities to those for whom culture had been stripped as they were subjugated into objects. Here the materiality and cultural legacies meet in the interface of the quilts themselves. Repertoire becomes the means through which knowledge is archived and materialized within cultural objects.

24

The quilt code which Tobin and Dobard uncover, includes ten primary patterns and a number of secondary patterns. Each pattern had two meanings, both to signal to those enslaved to prepare to escape and to give clues to indicate safe directions on the journey. Following these instructions enslaved people would know when to gather the tools they would need for the coming journey, the time to escape from the plantation, ways to navigate hundreds of miles to Cleveland (as a prominent location for continued travel to free destinations in the North), places to find fresh clothes and shelter, and practices for recognizing other confidants. This mnemonic device was used in addition to sampler quilts which held all ten primary patterns in sequence to aid in recognition while on the run. After leaving the plantation enslaved people would encounter quilts bearing single patterns left in public to air. These quilts became the constitutive matter that held together disparate subterranean connections. Because the circulation of information traveled widely and lacked centralization, the mnemonic devices used and patterns themselves changed often to insulate from outside parties learning and understanding the quilt code. For such a complex system to work it required a tremendous amount of labor, maintenance, and shared risk. This means that aside from the use of everyday objects, the making of shared diaspora cultures through the combining and mixing of cultural artifacts gave rise to fugitive formations themselves, in Bey's sense of the word.

<u>25</u>

Here, computation is not an internal process housed in the Subject (in a vacuum of interiority) that sees and measures the exterior world as a series of different bodies upon which forces are acting. Instead the Freedom Quilts become a site in which Blackness is being written through the creolization of symbols, meanings, context, and codes that literally calculate pathways to fugitive escape and flight from the plantation. Programmability, in this context, complicates the temporality of code as executable function, as cause and effect. The Freedom Quilts generate a type of code that doesn't execute automatically but makes the act of interpretation explicit. While encountering quilts left in public fugitives would discern the code and simultaneously have to read it in context, within the geography of placement. In this instance the executability of code is halted as a declarative axiomatic language imagined within syntax. Code is not an absolute instruction but is read in addition to landscape. Differing from the programming of second-order cybernetics, the landscape is not reintegrated into code, making it workable. Instead the limit of computation is held by the materiality of space, it is not transcended. Black people on the run would read the code with the landscape and continue on their journey. Computation in this instance does not need to be a totalizing logic that engulfs everything but lives alongside bodies in motion, in relation to geography, reading both simultaneously.

<u>26</u>

This relation between Black sojourners, geography, and the quilt code also extends to ancestral calculations.[<u>24</u>] The creolized semiotics that become the patterns encoded with meaning and stitched into the quilts are reflections of knowledges and sense-making done by ancestors prior. The quilt code carries these knowledges into present function. In Campt's formulation[<u>25</u>] certain ancestral calculations were what had to have been for the future-present to be lived now through fugitive acts of flight. The quilt code makes this connection clear, as these creolized semiotics were essential for cultural encryption and the protection of the code.

<u>27</u>

Computation here engages difference outside of separability.[<u>26</u>] Black peoples before capture, from various geographic, historical, and cultural sites, are not fixed in their ultimate difference upon which the only mediation is found through measurement. Perhaps even more importantly the transparent center from which they are measured is not grounded in white European standards. Instead, Black people exchange and reconstitute their own situated knowledges into new systems of information and communication. This is difference without separability.[<u>27</u>] This then opens computation to practices of endured proximity. By this I mean that the measurability of difference cannot be displaced and remade as intrinsic separation. That as we measure and collect data about the external world, we cannot continue to think of ourselves as transparent or incommensurable in our relationship to what is being indexed. Instead we must contend with our relationship to the index. Black Computational Thought grounds computational ethics in this practice of contention. It refuses imaginations of the world by which calculable measurement is the only relationship between things and pushes us to meaningfully engage difference as a relationship that we are entangled within. Only by

doing this will contemporary flights of liberation be imaginable. In this formation, endured proximity supplants objectivity and separability as the moral ground upon which to stand when working on data ethics, bias, or algorithmic violence. Black Computational Thought attempts to open the space for othered social formations that work in excess of measurable, separable difference, and towards staying with the difficult work of proximity, trust, sociality, and risk.

28

One such formation resides in the quilting bees on plantations. Quilting bees were collective circles of primarily women that sat together and constructed quilts in collaboration. Because these quilts were often sourced from various spare pieces of fabric they were piecemealed and required numerous people to collect and plan each quilt. Quilting bees were sites that were both social and operated as convergences for vital stops along the plantation grapevine. Referencing James Oliver Horton's work in *Free People of Color: Inside the African American Community*, Tobin and Dobard describe the plantation grapevine as:

> interregional communication system existing between free blacks of the Northeast, the Midwest, and the South and enslaved Southern blacks. Horton chronicles how enslaved blacks and free blacks were able to meet at inns frequented by traveling plantation owners who were accompanied by black slaves acting as drivers and servants. He discusses how black sailors were able to exchange information with enslaved blacks at port cities; how slaves who were hired out to shops were able to gather information; how the black churches, even under the scrutiny of whites, acted as "post offices" for messages containing escape routes and instructions for escape and survival; and how plantation slaves hired out to work in a neighboring town served as dispatchers of these messages [Tobin and Dobard 2000]

29.

As Tobin and Dobard document, sites such as quilting bees became gathering spaces through which communication between free Black people in the north, white abolitionists, and the enslaved took place across numerous plantations and regions were able to send messages and communicate. Again, because agency was assumed only within the Subject figured as white, propertied, and male, enslaved Black people that accompanied their masters were able to play covert roles as dispatchers of secret messages. Likewise, quilting bees were seen as docile innocuous gatherings associated with craft and feminized labor. Yet, it is exactly this infra-ordinary quality of Black quilt making and its capacity for agency that allows for resistance to take place in the open.

30

Looking at quilting bees in this way also allows us to build on Tiffany Lethabo King's understanding of fungibility, as it relates to computation. *In The Black Shoals: Offshore Formations of Black and Native Studies*, King states:

31

> As a Black fleshy analytic, I argue, Black fungibility can denote and connote pure flux, process, and potential. To be rendered Black and fungible under conquest is to be rendered porous, undulating, fluttering, sensuous, and in a space and state at-the-edge and outside of normative configurations of sex, gender, sexuality, space, and time to stabilize and fix the human category. Black fungibility is an expression of the gratuitous violence of conquest and slavery whose repertoire has no limits or bounds. It operates both materially on the body and produces Blackness (as idea and symbol) as a discursive space of open possibility.

[King 2019, 23]

32

The ways that Blackness works in the diaspora to give rise to various gatherings blurs this line between the separability of things, echoing Moten's definition of blackness as "a specific upheaval, an ongoing irruption that anarranges every line." [Moten 2018, 1] Because chattel slavery remakes the category of Blackness in the New World, formerly African peoples in part lost their connection to specific regional and tribal languages, customs, practices, and histories. This illustrates how various African people affected by chattel slavery became organized through various forms to mount resistance. Yet, the highly adapted systems of communication, cultural creolization, and trust that gave rise to the Freedom Quilts involved consistent forms of sociality and fungibility such as the quilting bees by which the piecemeal formation of the quilts as a vital interface parallels the makings of Blackness to form different possibilities on the edge of subjection. Quilting bees became important gatherings where enslaved people "were able to compile facts regarding geography, landmarks, places to avoid, obscure trails, mileage, and the locations of safe places where food and rest were waiting, many escaping slaves knew where to go and how to get there. Former runaways shared their own tactics and routes of escape. Most early escape attempts were individual efforts by slaves, not part of any organized cooperative ventures headed by Northern abolitionists."[Tobin and Dobard 2000, 74] In this way, Blackness became a constituting position through which computing systems were produced and are entangled with the materials, people, cultures, and places that enacted them.

33

Elsa Barkley Brown speaks brilliantly about the ways that material cultures carry alternate understandings for socially, economically, and politically ordering the world. Speaking specifically about Black women's quilting practices she writes, "African-American quilters prefer the sporadic use of the same material in several squares when this material could have been used uniformly because they prefer variation to regularity... In other words, the symmetry in African-American quilts does not come from uniformity as it does in Euro-American quilts; rather, the symmetry comes through the diversity" [Brown 1989, 923]. Brown connects the errant quilting practices of Black women to other Black cultural forms such as jazz improvisation and polyrhythmic drumming. Both united through a considered practice of making structure through contrast and difference, Brown articulates theses forms as expressions of true democracy, "...for each person is allowed, in fact required, to be an individual, to go his/her own way, and yet to do so in concert with the group-to be an individual in the context of the community" [Brown 1989, 925].

34

Here the digital is returned to the digit, to the hand, to haptics, textures, and textiles, to the process of making through material and proximal relations to each other, to making through endured engagements with difference. Brown's reflections on Black women's quilting practices carry aspects of Bey's self-determinism as a repertoire for ways to share information and knowledge with each other through endured practices of risk taking.

35

In closing, I want to be clear: Black Computational Thought is not just a historic recovery of the fact that Black people have done some shit with numbers. It is an epistemic confrontation with the logics of computation situated elsewhere and challenges the very nature of what we consider computation to be and to have been. It is an argument for forms of computing embedded in technologies of living,[28] connected to care work, to fullness, to difference, and to shared practices of risky meaning making. Returning to Campt, this is not a matter of hope, but is one of tense. She describes this tense as, "humble, and strategic, subtle and discriminating. It is devious and exacting. It's not always loud and demanding. It is frequently quiet and opportunistic, dogged and disruptive" [Campt 2017, 17]. In thinking about futurity as tense Campt offers what she calls, Black feminist futurity. Elaborating on this term she writes, "It strives for the tense of possibility that grammarians refer to as the future real conditional or that which will have had to happen. The grammar of black feminist futurity is a performance of a future that hasn't yet happened but must....It is the power to imagine beyond current fact and to envision that which is not, but must be. It's a politics of prefiguration that involves living the future now — as imperative rather than subjunctive — as a striving for the future you want to see, right now, in the present" [Campt 2017, 17]. In her understanding of futurity there are no guarantees, there is no safety in eventuality, there is nothing promised to us. In the face of this, Black feminist futurity is one that must be made. It is an understanding of the future real conditional, of that which would have had to have happened for us to exist in the future. In this sense futurity is present work upheld by the daily practices of refusal. This makes clear the stakes of fugitive computational practice and the work of Black Computational Thought. It is not a site of salvation or assimilation but instead does the deep work of radical Black feminism, "grappling with precarity, while maintaining an active commitment to the everyday labor of creating an alternative future" [Campt 2017, 16]. I believe this is the call that closes June Jordan's epic poem, written almost 37 years prior to Campt's text, towards a natural disorder. My engagements with fugitive computation are indebted to understanding this natural disorder, this turn to ensuring a future through fugitive acts taken now. To move beyond the paralysis of precarity, preparing a new world in the face of extinction.

Notes

[1] I evoke this term in the ways that Denise Ferreira da Silva mobilizes it from Kant. In "On Difference Without Separability" da Silva identifies separability as a key element of Kantian thought that still influences contemporary political and ethical projects. Separability is the idea that "all that can be known about the things of the world is gathered through formal constructs such as time, space, quantity, quality, relation, and

modality" [Da Silva 2016]. These formal characteristics become the justification for variously hierarchical structures which rationalize some people as human and deserving of ethical consideration and others as less than human and undeserving.

[2] In the preface to Tiffany Lethabo King's *The Black Shoals: Offshore Formations of Black and Native Studies* she describes the violences of genocide and slavery as edgeless. The violence moves as one. Because none of us are truly safe, it requires shared ceremonies to combat.

[3] This term comes from Ruth Wilson Gilmore's work in *Golden Gulag: Prisons, Surplus, Crisis, and Opposition in Globalizing California*. Gilmore uses it to describe the various ways in which capital becomes reorganized in response to surplus crises leading to state neglect and justifying cuts in state spending for social benefit

[4] For reference see Tawana Petty's incredible work in "Defending Black Lives Means Banning Facial Recognition" published in *Wired Magazine* 7/10/2020.

[5] For reference see Yeshimabeit Milner's work with *Data for Black Lives*. In particular I am referencing her article "Abolition Means the Creation of Something New: The history of big data and a prophecy for big data abolition." This article was published in *Medium* 12/31/2019.

[6] Here it is important for me to share my gratitude for Fred Moten's scholarship on fugitivity in his works "The Case of Blackness," *The Undercommons: Fugitive Planning and Black Study* with Stefano Harney, and *Stolen Life*. In *Stolen Life* Moten describes fugitivity as "a desire for and a spirit of escape and transgression of the proper and the proposed. It's a desire for the outside, for a playing or being outside, an outlaw edge proper to the now always already improper voice or instrument…moving outside their own adherence to the law and to propriety" [Moten 2018, 131]. While indebted to Moten + Harney's work in developing a theory of fugitivity I am especially beholden to Tina Campt and Marquis Bey's conceptions explored in this article.

[7] Gramsci refers to this transitional moment as an interregnum, the liminal space between two worlds. For reference see Gramsci's discussions on crisis in *Selections from the Prison Notebooks*.

[8] Translated from Michel Foucault's term, "dispositif," in his 1977 interview *Confessions of the Flesh*. The "apparatus" refers to the institutional, administrative, and physical structures through which power relations are formalized.

[9] Introduced in Foucault's text, The Order of Things, episteme comes to mean the unconscious beliefs that structure scientific knowledge in a particular time and place.

[10] As used in Martin Heidegger's The Question Concerning Technology . Heidegger uses techne to mean a practice of revealing or bringing forth. It is connected to making not just objects but knowledge and discourse. This differs from common understandings of technology as a tool or instrument.

[11] Based in Denise Ferreira da Silva's piece, " Toward a Black Feminist Poethic." She uses poethics to describe a speculative manner of thought to think the world differently, beyond the trappings of linear rationality that underpin Eurocentric colonization.

[12] Here I am referencing Denise Ferreira da Silva's work in *Toward a Global Idea of Race*. In this text she deploys this term to indicate the mutual constitution of specific subjects and knowledge about said subjects through a shared dependence on ontology and epistemology within modern thought.

[13] By invoking subjection I am taking up Saidiya Hartman's explorations in *Scenes of Subjection: Terror, Slavery, and Self-Making in Nineteenth-Century America*. Hartman argues that the violences of slavery are not merely found in the designation of the enslaved as objects but also in the circumscribed forms of humanity imposed on the enslaved. In doing so she details the "the forms of violence and domination enabled by the recognition of humanity, licensed by the invocation of rights, and justified on the grounds of liberty and freedom" [Hartman 1997].

[14] I use the term genre in reference to Sylvia Wynter's work on the sociogenic principle as well as the ways that she takes up Aimee Cesaire's call for a new science of the word. Wynter argues that humans are hybridly evolved as both bios and mythoi, meaning that our brains have evolved in a way by which language and the semiotics we use to describe ourselves carry meaning into scientific empiricism. Science then is never separate from the social, cultural, and political context articulated through language. For this reason Wynter describes humans as existing in different genres given the symbolic and cultural context of language. This challenges universal rationality. I aim to similarly challenge the universal assumptions that computation denotes, instead situating computing practices within specific social, cultural, and political contexts. For further reference see Wynter's work in "Unsettling the Coloniality of Being/Power/Truth/Freedom" and "Toward the Sociogenic Principle: Fanon, Identity, the Puzzle of Conscious Experience, and What It Is Like to Be 'Black'".

[15] Bataille in his text Erotism: Death and Sensuality describes this process as a central desire within modernity. He calls this continuity.

[16] Here I am cautioning against calls for inclusion that fail to address the inherent violences of liberal humanism. In doing so I take heed from Denise Ferreira da Silva's arguments against the sociohistorical logic of exclusion in Towards a Global Idea of Race. In doing so she argues that, "we fail to understand how the racial governs the contemporary global configuration because the leading account of racial subjection — the sociohistorical logic of exclusion — (re)produces the powers of the subject by rewriting racial difference as a signifier of cultural difference" (da Silva xxiv).

[17] In *All Data Are Local: Thinking Critically in a Data-Driven Society* Yanni Loukissas focuses on locality as a vital consideration for working with data that pushes back against the universalism often assumed by the dataset. By focusing on data settings instead of the data set Loukissas invites us "to look at the local conditions of data can be a form of

resistance to the ideology of digital universalism and threat of erasure that it poses to myriad data cultures" [Loukissas 2019, 10].

[18] Throughout this article I have spoken about risk multiple times. My interest in shared risk taking is to make clear alternate ways to respond to the violent utility that predictive analytics authorize. As prediction seeks to identify and control risk preemptively, it simultaneously reifies the Subject as a self determining being in conflict with exteriority. Violence becomes naturalized and justified as a requirement for maintaining the interiority of the Subject. This same logic undergirds predictive analytics and risk assessment models justifying violence as a way to meet perceived risk, read as non-white, poor, ungovernable, and irrational. In the book Mutual Aid: Building Solidarity During This Crisis (And the Next) Dean Spade writes, "Mutual aid can also generate boldness and a willingness to defy illegitimate authority. Taking risks with a group for a shared purpose can be a reparative experience when we have been trained to follow rules" [Spade 2020, 20]. This manner of taking shared risk together as a response to uncertainty allows us to begin to orient to each other and shed the violent utility that protection requires as an individual.

[19] Glissant calls this circular nomadism, "each time a portion of the territory is exhausted, the group moves around. Its function is to ensure the survival of the group by means of this circularity" [Glissant and Wing 2010]. Glissant understands this kind of nomadism as a response to uprooting (crisis) which can "work toward identity, and exile can be seen as beneficial, when these are experienced as a search for the Other (through circular nomadism) rather than as an expansion of territory (an arrowlike nomadism)" [Glissant and Wing 2010]. This is a response to crisis that engages in different constructions of identity through diaspora.

[20] Syntax becomes a crucial component for computationalism in Golumbia's argument. Columbia argues that in order for computationalism to make equivalences between cognition and computation, producing language needed to be described in computational terms. Golumbia details the ways in which Noam Chompsky's innovations into linguistics with a particular focus on syntax became the foundation upon which computer scientists began to remake the mind as a computer. Syntax in this context acts as a formal logic system built on protocol and hierarchy.

[21] By secondary effects of measure I am referring to Denise Ferreira da Silva's article "On Different Without Separability." In it she marks a shift in 17th century continental philosophy which focused on the "secondary (efficient) causes" of motion. This focus on efficient causes reduced the complexity of being into observable differences made certain through measurement. This certainty made a mechanistic world view possible by which difference is irreducible and creates the contours by which our ethical considerations for each other are limited and macerated.

[22] Here it is important to address the scrutiny and criticism following Tobin and Dobard's text *Hidden in Plain View: A Secret Story of Quilts and the Underground Railroad.* Since its publication it has been the primary reference detailing the use of the Freedom Quilts. It has also been a text engulfed in controversy. Much of this controversy comes from quilt historians such as Barbara Brackman who point to various gaps in the

historic documentation to confirm Tobin and Dobard's account. Brackman's argument tends to highlight the dearth of corroborating oral history accounts of the quilts and discrepancies about the popular use and re-use of certain quilting patterns such as The Log Cabin. Rather than prove the use of the quilts in either Tobin and Dobard or Brackman's accounts I find promise in Saidiya Hartman's work struggling with the archive as both an index of violence and an incomplete accounting. In "Venus in Two Acts" Hartman offers a method of critical fabulation to operate beyond the empiric authority of the archive and its inability to render the lives of the enslaved beyond objects. On this she writes, "I have attempted to jeopardize the status of the event, to displace the received or authorized account, and to imagine what might have happened or might have been said or might have been done. By throwing into crisis "what happened when" and by exploiting the 'transparency of sources as fictions of history,' I wanted to make visible the production of disposable lives (in the Atlantic slave trade and, as well, in the discipline of history), to describe 'the resistance of the object,' if only by first imagining it, and to listen for the mutters and oaths and cries of the commodity" [Hartman 2008]. It is in this manner that I am attempting to approach my work with the Freedom Quilts. While the exact mechanics of the use of the quilts is in contention, the practices of enslaved people to engage in exercises of trust building and information sharing along the plantation grapevine cannot be ignored. Neither can the means of plotting and calculating paths of escape from the plantation. I am actively choosing to engage these narratives in ways that ascribe fugitive agency to Black people even without properly proving the mechanics of their actions.

[23] For reference see Ron Eglash's text *African Fractals: Modern Computing* and *Indigenous Design as well as Africa Counts: Number and Pattern in African Cultures* by Claudia Zaslavsky. Both text highlight the ways in which various cultural pattern making practices across the continent retain cultural and formal mathematical functions.

[24] Here I am specifically thinking with Alexis Pauline Gumbs and Julia Roxanne Wallace in their piece, "Black Feminist Calculus Meets Nothing to Prove: A Mobile Homecoming Project Ritual Towards the Postdigital" in which they theorize black feminist calculus writing, "We are the future predicted by the careful calculations of our ancestors, their specific choices about when to breathe, when to sleep, who to be, where to go, and for how long" [Gumbs 2016, 305].

[25] By Campt's formulation I mean her assertion that Black feminist futurity is a matter of tense. In Listening to *Images: An Exercise in Counterintuition* she describes Black Feminist Futurity as the future real conditional or that which will have had to happen.

[26] Here I want to point to parallels between my use of separability and Tara McPherson's work looking at how lenticular logics structure racial representations and epistemologies through UNIX protocols. In "U.S. Operating Systems at Mid-Century: The Intertwining of Race and UNIX" McPherson draws parallels between changing racial and political discourses and emerging digital computing practices in the 1960s. Her argument focuses in part on the rule of modularity as a particular principle within UNIX. She writes that this rule of modularity was adopted by a nascent neoliberal state and used to discipline and quell radical calls for liberation. On this she writes, "I am highlighting the

ways in which the organization of information and capital in the 1960s powerfully responds-across many registers-to the struggles for racial justice and democracy that so categorized the U.S. at the time. Many of these shifts were enacted in the name of liberalism, aimed at distancing the overt racism of the past even as they contained and cordoned off progressive radicalism."[McPherson 2013]

[27] Here I am attempting to take up da Silva's call to rethink the social beyond the separability proffered by Kant and made certain through Cartesian logics. Rather than think the social through Newtonian particle physics she pushes us to consider the strange effects of quantum mechanics primarily nonlocality. Nonlocality refers to the phenomenon by which the measurable properties of one particle instantaneously provide the measurable properties of another particle regardless of the distance between the two. Rather than understood as being separate individual entities they are entangled together through a shared relationship. da Silva closes her essay writing, "When nonlocality guides our imaging of the universe, difference is not a manifestation of an unresolvable estrangement, but the expression of an elementary entanglement" [Da Silva 2014, 65].

[28] I was introduced to this term through Tamura A. Lomax's work, "Technology of Living" published in *The Black Scholar*. In this article Lomax invokes technology of the living from Toni Cade Bambara's seminal work *The Salt Eaters*. In it Bambara describes technology of the living as a spiritual practice of study. Lomax builds on this definition to include "it is a force where the political and logical encounter the spiritual being, where activists and spiritualists come together to make sense of black life and journey toward black wellness" [Lomax 2016, 22],

Works Cited

Bataille and Dalwood 1986 Bataille, Georges, and Mary Dalwood. *Erotism: Death and Sensuality*.San Fransico,CA: City Lights Books, 1986.

Benjamin 2020 Benjamin, Ruha. *Race after Technology Abolitionist Tools for the New Jim Code* Boston, MA: Polity, 2020.

Bey 2019 Bey, Marquis. *Them Goon Rules: Fugitive Essays on Radical Black Feminism*. Tucson, AZ: The University of Arizona Press, 2019.

Brock 2020 Brock André L. *Distributed Blackness: African American Cybercultures*.New York, NY: New York University Press, 2020.

Brown 1989 Brown, Elsa Barkley. "African-American Women's Quilting: A Framework for Conceptualizing and Teaching African-American Women's History" *Signs: Journal of Women in Culture and Society*, 4.4, 1989, pp. 921-929. doi:0097-9740/89/1404-0444

Campt 2017 Campt, Tina. *Listening to Images: An Exercise in Counterintuition*. Durham,NC: Duke University Press, 2017.

Cohen 1997 Cohen, Cathy. J. "Punks, Bulldaggers, and Welfare Queens: The Radical Potential of Queer Politics?" *GLQ: A Journal of Lesbian and Gay Studies*, 3.4 1997, pp. 437–465. https://doi.org/10.1215/10642684-3-4-437.

Cohen 2014 Cowen, Debra. *The Deadly Life of Logistics: Mapping Violence in Global Trade*. Minneapolis, MN: University of Minnesota Press, 2014.

Da Silva 2007 Da Silva, Denise Ferreira. *Toward a Global Idea of Race*. Minneapolis, MN: University of Minnesota Press, 2007.

Da Silva 2014 Da Silva, Denise Ferreira. "Toward a Black Feminist Poethics." *The Black Scholar*, 44.2, 2014, pp. 81–97. doi:10.1080/00064246.2014.11413690.

Da Silva 2016 Da Silva, Denise Ferreira. "Difference Without Separability" from Volz, Jochen, et al. Incerteza Viva: 32nd Bienal De são Paulo: 7 Sept-11 Dec 2016: Catalogue, Fundaçao Bienal De São Paulo, São Paulo, 2016.

De Lara 2018 De Lara, Juan. *Inland Shift: Race, Space, and Capital in Southern California*. Berkeley, CA: University of California Press, 2018.

English 1999 English, Ron. *African Fractals: Modern Computing and Indigenous Design*. New Brunswick, NJ: Rugters University Press, 1999.

Ferguson 2004 Ferguson, Roderick A. *Aberrations in Black: Toward a Queer of Color Critique*. Minneapolis, MN: University of Minnesota Press, 2004.

Foucault 2010 Foucault, Michel. *The Order of Things: An Archaeology of the Human Sciences*. New York, NY: Routledge, 2010.

Foucault 2021 Foucault, Michel, et al. *The History of Sexuality Volume 4: Confessions of the Flesh*. New York, NY: Penguin Books, 2021.

Gilmore 2007 Gilmore, Ruth Wilson. *Golden Gulag: Prisons, Surplus, Crisis, and Opposition in Globalizing California*. Berkeley, CA: University of California Press, 2007.

Gilmore 2011 Gilmore, Ruth Wilson. "What Is to Be Done?" *American Quarterly*, 63.2, 2011, pp. 245–65, http://www.jstor.org/stable/41237545.

Glissant and Wing 2010 Glissant Édouard, and Betsy Wing. *Poetics of Relation*. Ann Arbor, MI: The University of Michigan Press, 2010.

Golumbia 2009 Golumbia, David. *The Cultural Logic of Computation*. Cambridge, MA: Harvard University Press, 2009.

Gramsci 1971 Gramsci, Antonio, et al. *Selections from Prison Notebooks*. London, England: Lawrence & Wishart, 1971.

Gumbs 2016 Gumbs, A. Wallace, J. "Black Feminist Calculus Meets Nothing to Prove: A Mobile Homecoming Project Ritual toward the Postdigital" from Hobson, J. (2016). *Are all the women still white?: Rethinking race, expanding feminisms*. Albany, NY: State University of New York Press.

Harney and Moten 2013 Harney, Stefano, and Fred Moten. *The Undercommons Fugitive Planning & Black Study*. Port Watson, NY: Minor Compositions, 2013.

Hartman 1997 Hartman, Saidiya. *Scenes of Subjection: Terror, Slavery, and Self-making in Nineteenth-century America*. Oxford, England: Oxford University Press, 1997.

Hartman 2008 Hartman, Saidiya. "Venus in Two Acts." *Small Axe: A Caribbean Jounal of Criticism*, 12.2, 2008, pp. 1–14. doi:10.1215/-12-2-1.

Hartman 2020 Hartman, Saidiya. *Wayward Lives:Beautiful Experiments: Intimate Histories of Riotous Black Girls, Troublesome Women and Queer Radicals*.New York, NY: W.W. Norton & Company, 2020.

Harvey 2007 Harvey, David. A Brief History of Neoliberalism. Oxford University Press, 2007.

Heidegger and Lovitt 1977 Heidegger, Martin, and William Vernon Lovitt. The Question Concerning Technology and Other Essays. Harper and Row, 1977.

Johnson 2018 Johnson, Jessica Marie. "Markup Bodies: Black [Life] Studies and Slavery [Death] Studies at the Digital Crossroads." *Social Text*, 36.4, 2018, pp. 57–79. https://doi.org/10.1215/01642472-7145658.

Johnson and Neal 2017 Johnson, Jessica Marie & Neal, Mark Anthony. (2017) "Introduction: Wild Seed in the Machine", *The Black Scholar* 47.3, pp. 1-2. https://doi:10.1080/00064246.2017.1329608

Jordan 1981 Jordan, June, "June Jordan Interview: 09-24-1981" (1981). *Writer Forum Interviews*,4.

Keeling 2014 Keeling, Kara. "Queer OS." *Cinema Journal*, 53.2, 2014, pp. 152–157. https://doi.org/10.1353/cj.2014.0004.

King 2019 King, Tiffany Lethabo. *The Black Shoals: Offshore Formations of Black and Native Studies*.Durham, NC: Duke University Press, 2019.

Klein 2020 Klein, Naomi. "Under Cover of Mass Death, Andrew Cuomo Calls in the Billionaires to Build a High-Tech Dystopia". 2020. https://theintercept.com/2020/05/08/andrew-cuomo-eric-schmidt-coronavirus-tech-shock-doctrine/

Lomax 2016 Lomax, Tamura."Technology of Living", *The Black Scholar*, 46.2, 2016, pp.19-32, https://doi.10.1080/00064246.2016.1147993

Loukissas 2019 Loukissas, Yanni Alexander. *All Data Are Local: Thinking Critically in a Data-Driven Society*. Cambridge, MA: MIT Press, 2019.

McKittrick 2014 McKittrick, Katherine. "Mathematics Black Life." *The Black Scholar*, 44.2, 2014, pp. 16–28. https://doi.org/10.1080/00064246.2014.11413684.

McPherson 2013 McPherson, Tara. " U.S. Operating Systems at Mid-Century: The Intertwining of Race and Unix."from Nakamura and Chow-White.*Race After the Internet*, 2013, pp. 27–43, https://doi.org/10.4324/9780203875063-6.

Milner 2019 Milner, Yeshi. "Abolition Means the Creation of Something New." *Medium*, 31 Dec. 2019, https://medium.com/@YESHICAN/abolition-means-the-creation-of-something-new-72fc67c8f493.

Moten 2003 Moten, Fred. *In the Break the Aesthetics of the Black Radical Tradition*. Minneapolis, MN: University of Minnesota Press, 2003.

Moten 2009 Moten, Fred. "The Case of Blackness." *Criticism*, 50.2, 2009, pp. 177–218, https://doi.org/10.1353/crt.0.0062.

Moten 2018 Moten, Fred. *Stolen Life*. Durham, NC: Duke University Press, 2018.

Murphy 2017 Murphy, Michelle. *The Economization of Life*. Durham: Duke University Press, 2017.

Nakammura and Chow-White 2012 Nakamura, Lisa, and Peter Chow-White. *Race after the Internet*. New York, NY: Routledge, 2012.

Noble 2018 Noble, Safiya Umoja. *Algorithms of Oppression How Search Engines Reinforce Racism*. New York, NY: New York University Press, 2018.

Petty 2020 Petty, Tawana. "Defending Black Lives Means Banning Facial Recognition.", *Wired*, 2020. www.wired.com/story/defending-black-lives-means-banning-facial-recogntion.

Snorton 2017 Snorton, C. Riley. *Black on Both Sides: A Racial History of Trans Identity*. Minneapolis, MN: University of Minnesota Press, 2017.

Spade 2020 Spade, Dean. *Mutual Aid: Building Solidarity during This Crisis (and the next)* New York, NY: Verso, 2020.

Spillers 1987 Spillers, Hortense J. "Mama's Baby, Papa's Maybe: An American Grammar Book." *Diacritics*, 17.2, 1987, p. 64. https://doi.org/10.2307/464747.

Taylor 2007 Taylor, Diana. *The Archive and the Repertoire: Performing Cultural Memory in the Americas*. Durham,NC: Duke University Press, 2007.

Tobin and Dobard 2000 Tobin, Jacqueline L., and Raymond G. Dobard. *Hidden in Plain View: the Secret Story of Quilts and the Underground Railroad*. New York, NY: Bantam Doubleday Dell Publishing, 2000.

Weheliye 2014 Weheliye, Alexander G. *Habeas Viscus: Racializing Assemblages, Biopolitics, and Black Feminist Theories of the Human*. Druham, NC: Duke University Press, 2014.

Wynter 2013a Wynter, Sylvia. "Towards the Sociogenic Principle: Fanon, identity, the puzzle of conscious experience, and what it is like to be 'black' ". *National Identities and Socio-Political Changes in Latin America*, 2013, pp. 46-82. https://doi:10.4324/9781315052717-8

Wynter 2013b Wynter, Sylvia. "Unsettling the Coloniality OF Being/power/truth/freedom: Towards the human, After man, Its OVERREPRESENTATION — AN ARGUMENT". *CR: The New Centennial Review* 3.3, 2013. pp. 257-337. https://doi:10.1353/ncr.2004.0015

Zaslavsky 1974 Zaslavsky, Claudia. *Africa Counts: Number and Pattern in African Culture*. Belmont, CA: Prindle, Weber & Smith, 1974.

2022 16.3 | XML | PDF | Print