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### Jae Duotient Of Design

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## Song Book: The Quotient of Desire

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#### Introduction

#### ROMI RON MORRISON

"But what is our spirit, what will it project? What machines will it produce? What will they achieve? What will be their morality? Check the different morality of the Chinese birthday celebration firecracker & the white boy's bomb. Machines have the morality of their inventors." - Amiri Baraka, Ethos and Technology'

"The practice of refusal invoked in the collective's name [Practicing Refusal Collective] signals a rejection of the status quo as livable. It is a refusal to recognize a social order that renders you fundamentally illegible and unintelligible. It is a refusal to embrace the terms of diminished subjecthood with which one is presented and to use negation as a generative and creative source of disorderly power to embrace the possibility of living otherwise. The practice of refusal is a striving to create possibility in the face of negation." Tina Campt, The Visual Frequency of Black Life<sup>2</sup>

"Who Killed Julius Eastman?" Camae Ayewa, Analog Fluids<sup>3</sup>

We begin with a clarification of terms...

#### 1. Quotient [ kwoh-shuhnt ]

noun mathematics.

<sup>1.</sup> For more see Amiri Baraka's work as anthologized in Raise Race Rays Raze: Essays Since 1965.

<sup>2.</sup> For more see Tina Campt's work in A Black Gaze: Changing How Artists See.

<sup>3.</sup> This line is the title of Camae Ayewa's poetry collection *Analog Fluids* that coincided with their show at The Kitchen in 2018.

- the result of division; the number of times one quantity is contained in another
- 2. the number resulting from the division of one number by another
- 3. quota; share, as in a measure of debt or intelligence
- 4. the magnitude of a specified characteristic or quality

Is there a name for division that has no quotient?

Yes, division that has no quotient is often referred to as "undefined" or "indeterminate." This occurs in cases where the division operation does not yield a meaningful or well-defined result within the rules of mathematics.

Indeterminate quotients misbehave. They operate in excess of the rules.

What are advanced mathematical methods for handling indeterminate quotients?

Advanced mathematical methods for handling indeterminate quotients often involve concepts from calculus and analysis. Here is one technique commonly used to handle indeterminate forms in limits and calculus:

Residue calculus: In complex analysis, the residue theorem can be used to evaluate certain types of integrals and limits involving indeterminate forms by analyzing the residues of a function.

What follows is an experiment in the offerings of residue.<sup>4</sup> The partial traces of something that has already happened. Between absence and presence residue is rife with the potential for porosity, the unchartered movements between, amongst, and beyond.

But what happens when these terms stray? When quotients, calculus, and residue converge and depart? When they saunter off the established path to wander errantly?<sup>5</sup> This is a story of errant wandering, of improvised repertoires

<sup>4.</sup> Lisa Lowe adapts Raymond Williams' use of the term residual to describe elements of the past that permeate into and continue to shape the present. Her work in The Intimacies of Four Continents tracks the residual processes of colonialism and slavery that shape liberal formations of personhood. In my own deployment I am interested in the residual potential that Julius Eastman's life may hold for learning how to move in relation to uncertainty amidst an increasing demand for predictive computing models today.

5. My use of the term errantly is a homage to Glissant's thinking on errantry. In Poetics of Relation Glissant describes errantry as a spatial form of relation, not a wandering or repetitive cycle, but to be directed by relation. I see Julius's life as an invocation of being directed by relation.

and recursive arrays—radiance borne through connection. Song Book: The Quotient of Desire attempts to trace the residues that collect in the life of artist Julius Eastman. To consider his life, and the cacophony of his encounters, as an experiment in maintaining a proximity to uncertainty. To thrive in the queer temporality of risk. $^6$ 

To wander beyond the inscriptions of order, which is to say entropy.

In 1976 Julius Eastman left the relative stability of Buffalo, NY for the seductive din of New York City. Fourteen years later he would die alone in a state hospital. Complications due to cardiac arrest. After years of various displacements later in his life, his heart couldn't take it anymore: it broke. Julius Eastman died of a broken heart.

One year before Julius left for New York City, he performed an iteration of John Cage's canonical work *Song Books* with the S.E.M. Ensemble at The University of Buffalo. Julius chose *Solo for Voice #8 ("Solo")*. The composition is defined by a series of Cage's instructions for the performer such as:

"[1] n a situation with maximum amplification (no feedback), perform a disciplined action. With any interruptions. Fulfilling in whole or part an obligation to others. No attention to be given the situation (electronic, musical, theatrical)."8

<sup>6.</sup> My use of risk is informed by the queer Black feminist scholarship of Cathy Cohen and Kara Keeling. In "Punks, Bulldaggers, and Welfare Queens", Cohen considers how a queer politic may thrive through embracing deviance as a model for coalition building beyond the stasis of same sex attraction. In *Queer Times Black Futures*, Keeling theorizes queer temporality as the social formations that thrive in relation to uncertainty. I see Cohen's embrace of deviance as an instantiation of the social formations Keeling hints at within queer temporality.

<sup>7.</sup> For nine years Buffalo had been home to Julius's flourishing creativity. He produced 23 compositions, including some of his seminal work, *The Moon's Silent Modulation (1970), Macle (1971), Stay On It (1973), and Femenine (1974)*. He was a core member of the highly regarded Creative Associates, owned a house, and taught as an Assistant Professor in the Music Department at the University of Buffalo. However, the stability that Buffalo provided was fraught at best. It is clear that Julius struggled to adhere to the social expectations and protocols that secured such stability. Julius fails to perform. He fails to perform deference. He fails to perform convention. He fails to perform the professionalism that the academy demands. He fails to perform what is already a failed performancestraight white masculinity. Put simply, he is out of place. Instead, he is flamboyant, curious, flirtatious, and bold. He operates in excess of the rules. For more on this see Renée Levine Packer (2015), Issac Alexandre Jean-Francois (2020), Ryan Dohoney (2014), and Ellie M. Hisama (2014).

<sup>8.</sup> These are the instructions in full for *Solo for Voice #8* quoted directly from Cage's *Song Books Volume 1*.

As early as 1971, Julius performed various versions from Cage's *Song Books*, attracting the attention of Cage himself. However, for this performance, Julius decided to break from prior conventions and give an improvised performative lecture on "a new system of love." Adhering to Cage's strict insistence that no rehearsals were allowed before a performance, Julius took a man and woman on stage and proceeded to undress the man. In the guise of a mock discourse on sexuality and the sterility of medical approaches to sex, Julius examined the naked man while switching his affect from the stoic lecturer to libidinous satire. S.E.M. performer Peter Kotik described the scene:

"Julius only managed to get the guy naked and being an outspoken homosexual, he was making all sorts of 'achs!' and 'ahs' as he was pulling his pants down. He was all over the guy while the girl was standing there rather embarrassed. Cage thought that this was some kind of mockery about him. He was scandalized."10

The performance enlivened the audience but unsettled Cage. The following day in a lecture he castigated Julius's performance for its use of nudity and its emphasis on queer desire. Desire disarms the limits of Cage's aesthetic control. It marks the bounds of appropriateness, the prescribed contours for how one ought to engage improvisation and indeterminacy. The rules to entertain chance. This marked a pivotal turning point in Julius's career. What was relegated to absence for Cage was unavoidable for Julius. His very presence as a Black gay man honed his political life and work. Four years after his confrontation with Cage, Julius composes Evil N, Crazy N, and Gay Guerrilla (all 1979)—an affront to the sensibilities that secure Cage's silence. 11

<sup>9.</sup> In his article, "John Cage, Julius Eastman, and the Homosexual Ego", Ryan Doheney interviews Peter Kontik about the Song Books incident. He shares that Cage was impressed by previous performances Julius had done of Song Books and discloses that, "...when Feldman asked me to perform Song Books with S.E.M...I was convinced that the reason was Julius Eastman."

<sup>10.</sup> Ibid.

<sup>11.</sup> Ibid. Later in his article Dohoney references Caroline A. Jones and Jonathan D. Katz's work to theorize on Cage's use of silence as a strategic "homosexual aesthetic" that disembodies the self as a means of passing within compulsive heterosexuality. However, this silence cannot be separated from its dependence on white male embodiment, the very thing that it seeks to obscure, the body. It is whiteness that marks silence as not only possible but strategic. Doheney is careful to note that the Song Books incident marks an end to the strategic usefulness of Cage's silence. Instead it became the basis for his disapproval of Julius's performance. George Lewis calls this capacity of whiteness exnomination, the ability for whiteness to negate itself while continuing to operate within a white universalism, judging others in relation to itself.

The same year that Julius left Buffalo for New York City, computation attempted to rationalize the city landscape, spoken through loud sirens, controlled flames, and Cartesian grids. Between 1969 and 1976, the RAND Institute in coordination with the Department of Housing and Development devised an algorithmic model that decimated Black and Brown neighborhoods. Known as Planned Shrinkage, these algorithms were used to justify immense service reductions mainly in densely populated, high-fire-incidence neighborhoods of color. The service reductions accelerated an epidemic of fires that led to abandonment and neglect. As a result many neighborhoods were destroyed, forcing mass migrations and triggering a public health and safety crisis spanning the 1970s into the early 1990s. Two areas that lost the most housing stock and saw the highest rates of displacement during this period were the South Bronx and the Lower East Side. Both were neighborhoods that anchored Julius. Researcher Mindy Fullilove calls this serial displacement root shock. Root shock is the traumatic stress reaction that follows displacement and the severing of one's social and emotional ecosystem.

"Root shock, at the level of the individual, is a profound emotional upheaval that destroys the working model of the world that had existed in the individual's head. Root shock undermines trust, increases anxiety about letting loved ones out of one's sight, destabilizes relationships, destroys social, emotional, and financial resources, and increases the risk for every kind of stress-related disease, from depression to heart attack." <sup>12</sup>

It is the stress of heartbreak.

To read about the end of Julius's life is to read the often repeated siren call of uniquely gifted and extraordinary Blackness caught in the perils of brilliance, succumbing to their own demise. It is a story about Nina, Billie, Donny, and Jimi. <sup>13</sup> But much like Cage's aesthetics of uncertainty, <sup>14</sup> the context is absent. What follows is an act of love. Research as an act of love, not to write the thing

<sup>12.</sup> For more see Mindy Fullilove's Root Shock: How Tearing Up City Neighborhoods Hurts America, and What We Can Do About It.

<sup>13.</sup> For clarity I'm referring to the ways that Nina Simone, Billie Holiday, Donny Hathaway, and Jimi Hendrix are often described posthumously as tragic figures who struggled with mental health. What is obscured is the context, the root shock of cis white hetero patriarchy. For more on Blackness and madness see La Marr Jurelle Bruce's How to Go Mad Without Losing Your Mind, and Theri Alyce Pickens' Black Madness: Mad Blackness.

<sup>14.</sup> George Lewis places Cage within a Eurological approach to improvisation. This approach seeks to exclude history or memory and operates in pursuit of an idealized pure spontaneity.

but to *right the thing*. <sup>15</sup> To correct the story, and to come with receipts. To right the thing is to hold the residues—the ephemera left in the wake of the event. Ephemera too can be a way of knowing.

In *Queering Utopia: The Then and There of Queer Futurity*, theorist José Muñoz described queerness itself as an orientation to absence. Specifically he stated that queerness is "a structuring and educated mode of desiring that allows us to see and feel beyond the quagmire of the present... Queerness is that thing that lets us feel that this world is not enough, that indeed something is missing." This "something" that is missing marks absence as an affective site for desire, and the beginnings of a path towards knowing that makes use of the ephemeral and the fleeting as meaningful markers of history that evade the devices of neat capture. For Muñoz ephemera counts as "all of those things that remain after a performance, a kind of evidence of what has transpired but certainly not the thing itself." Perhaps then absence is able to have a different relationship to evidence, not as the inverse of presence, but as a way to mark the space for desire.

This Song Book is an attempt to speak to the absences, the radical removal of context in a Cagean aesthetic, and to contextualize the fullness of desire, of that form of knowing so vital to Julius that points beyond the present and challenges the inscribed normative protocols towards the non-normative, the deviant, and the experimental. A longing grasped at the edges made porous. In speaking to the voluminous gait of Julius, I anthologize and scramble the residues that help me to make sense of his life and his challenge to the adherence of instructions, bucking a certain programmability. Instead, I want to consider the direction of his desire as he navigated across New York in search of a horizon beyond the present. What is the residue of his own queer calculus about where to go, who to meet, and how to make home? What networks of encounter were built at a time when the fraying of the city's social fabric was expedited through neat ledgers and specious equations? The compiled texts ranging

<sup>15.</sup> This distinction between what it means to write the thing and to right the thing comes from the Mythscience series conversation between Lonnie Holley and Fred Moten on May 31st at 2220 Art+Archives.

<sup>16.</sup> This quote comes from "Ephemera as Evidence: Introductory Notes to Queer Acts" by Jose Munoz.

<sup>17.</sup> 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 as "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".

from sound studies, Black studies, geography, and computer science bring us a textured reconsideration of a life that operates from a different code. The impossible calculus of desire that fosters the literal space for a different genre of computation. <sup>18</sup> To engage the flesh and the materiality of Julius, his body, his movements, the ephemera of old lovers' lofts, dim lit corners of dance floors, and the hushed tones of "vicious sissies." <sup>19</sup>

This is not to entomb Julius to his body but to consider the ways he is aware of the unavoidable politics of how he shows up in place. His own positioning draws that unavoidability into sharp contrast with Cage's cleanly aesthetic instructions to create uncertainty. Rather, Julius understands the material stakes of his own context, unapologetically Black and queer. Within this context he builds a relationship to uncertainty, and commits to them as a lived expression beyond syntax.

What would it mean for software and computing at large to deal with its own materiality in a similar way? To reckon with its context? No longer able to transcend towards the promise of a radical erasure, or a metaphoric immateriality. The poetics of the cloud in dissipation. To refuse the negation that Cage sanctified as a radical act of improvisation and uncertainty, how might Julius's errant paths and scandalous desires be considered their own knowledge, a knowing that takes the form of a refusal but doesn't remain within its bounds.

A knowledge of seeking beyond what seems possible. How might this seeking through uncertainty push the bounds of our current discourses on technology beyond bias, and into the strangely otherwise? More importantly, this may be a problem through which we not only are required to think, but also are required to feel. A disastrous repertoire for a sensuous reassembling.

What I have come to realize is that the archive for such a practice does not exist in exhausted canons but in fragments and residues. Evidence that misbehaves and yields complex expressions. A calculus gone awry. What follows is an attempt to follow those residues to work in tandem with the absence. To engage

<sup>18.</sup> See "Voluptuous Disintegration: A Future History of Black Computational Thought" for more of my thinking on genres of computation.

<sup>19.</sup> In an interview with R. Nemo Hill by Renee Levin Packer he states that Eastman was "into S and M" and preferred "vicious sissies." For more see *Gay Guerilla: Julius Eastman and His Music.* 

<sup>20.</sup> I also want to be clear here, that Blackness and queerness are not mere significations of bodies and their relationship to sex, gender, or race—but are also ways of knowing and being in the world. Worlds unto themselves.

the fullness of a pause, the cadence that breaks speech into information. Which is to say that this piece, this research, this work, quickly came out of bounds, tarrying at the edge of expectation. This text is an experiment in a different kind of algorithm making, one born from the residues needed to put a life in context. Of Black queer desire as a form of knowledge that produces wayward geographic practices to rekindle an abundance of relationships. The ties that move through uncertainty to avoid root shock, posing new questions.

What would computation look like that saunters, that sways in obtuse degrees and non-euclidian curves? A computation that lingers between the overwrought narratives of salvation and eschatological demise. Computation not as a tool, but as a desire to hold things in irresolution, as a mode of seeing and understanding, no longer a view from nowhere.<sup>21</sup>

What is the quotient of desire divided by direction, the constant upending of a predictive program set on limiting the outcomes of Black lives?

How might desire work as a queer form of knowing that drives us to what might not seem possible in the present but is needed?

What is the queer calculus of desire that offers other forms of social organization that thrive in relationships to uncertainty? An impossible calculus of recursive loops, vibrant triplets—a fundamental blasphemy.

<sup>21.</sup> In "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective" Donna Haraway seeks to critique the disembodied place from which scientific objectivity speaks. Instead, she is "arguing for the view from a body, always a complex, contradictory, structuring, and structured body, versus the view from above, from nowhere, from simplicity."

#### **Julius Eastman:**

# The sonority of blackness

**RESIDUE** 

#### otherwise

HIGHLIGHT [PAGE 2]: THERE IS SOMETHING ORGANIC TO BLACK POSITIONALITY THAT MAKES IT ESSENTIAL TO THE DESTRUCTION OF CIVIL SOCIETY

Highlight [page 14]: In response to Zwerin's query about his thoughts on jazz, Cage replies, "I don't think about jazz, but I love to talk, so by all means, come on up" (Zwerin 1991,161).



This early moment of movement in Eastman's life is significant because of the ways in which flight operated as a constitutive feature in his own experience. Performances by orchestras that otherwise would not have done the works.

especially in the experience of black queer life, is sticky and defies linearity; the trauma and joy experienced in the past informs alternative presents.

Like the Otolith Group's 2017 The Third Part of the Third Measure or Dustin Hurt and Tionna Nekkia McClodden's 2017 curated show Julius Eastman: That Which is Fundamental in Philadelphia, attempt to figure Eastman at the impasse of abjection and excess that

#### ht [page Proceeding from the intersection scientist's een musicology, substant groundbreaking scholarship on

queer studies, indebted to black

queer crifical theorists like Ashon T. the nuanced ways in which Eastman

breathes alternative articulations of build on Crawley's hermeneutics of th sound of blackness and black feminist

of bebops a Sec based in of gen

speech.

I engage both of these perspectives consider Eastman's life and work

alongside the ways in which black and brown folklive, barely breathing, in an anti-black United States. As

rawley writes, "Alternatives exist against the normative modes under which we endure.10 Indeed,

the idea of endurance is not foreign encounters with the work of Julius Eastman. I inhabit a vexed proximity to Eastman's work. My own position

f color has affected my research on Julius Eastman in

that the musical dynamics crisscross to the work of Julius Eastman and am

left breathless. The fraught embodied Cosition Eastman held along with the black queer people that have continued before and after him, bursts open an alternative

> becoming. An attendance to the sonic production in that break gestures to

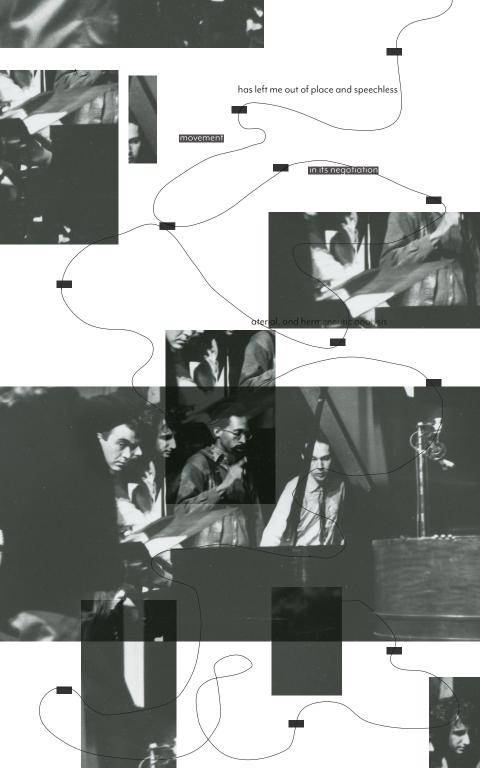
in town, though very much out of place.11

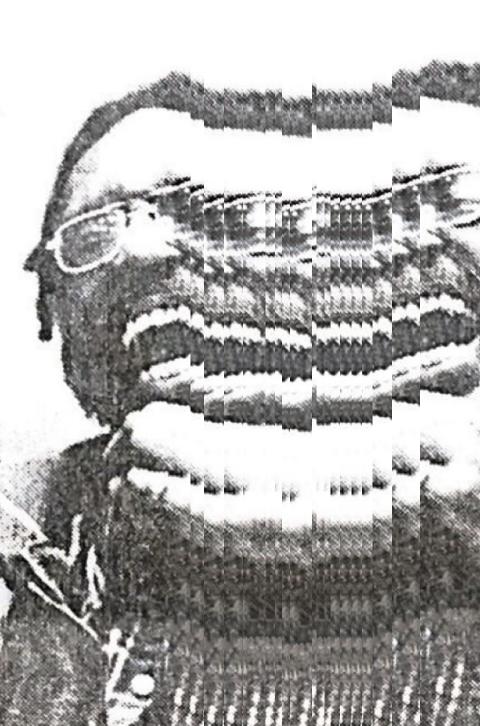
This essay explores the question of black breath as a site for tracing the managed movement, survival, and persistence of black and brown bodies in the wake of chattel slavery. The breath is embedded in conceptualizations of black life and dynamically refused—"that deadly occlusion that is continually reanimated" in the unfinished suffocating project of the United States. 12 I open with an analysis of sound in relation to the historicized management of black breath as an analytic for encountering Eastman, whose struggle helped constitute his aesthetic production in the space of revalued occlusion—he composed in and through the wake. I depart from the biographical and musicological to ask: If we can attend to the life and work of Eastman by way of the sounds that have, and continue to, aspirate around him, then what do we learn from those breathy breathless vocal



Throughout his life as a composer, performer, educator, and listener, Julius Eastman found himself in largely white-dominated neighborhood, institutions, and concert spaces. He would not necessarily have been welcomed with open arms by his black intellectual counterparts, either, as the community too often insisted upon stark positions against a classical music tradition that was already deemed white. I will demonstrate this later in reference to Eastman's 1980 Northwestern concert, which was met by protest from black student organizers. <sup>13</sup> Under the conditions of archivally indicated absence in both white and black dominated spaces, how did he manifest, and under what terms? My hermeneutical analysis of breath that engages history, performance, and compositional intent, starts by way of an interdiction of black breath that is entwined with a sonic aspirating insistence on life.

I hear an uncomfortable resemblance in Eastman's groans and moans in Peter Maxwell Davies's Eight Songs for A Mad King (1973) for voice and instrumental ensemble and the horrific sounds of bodies under duress that former-slave Olaudah Equiano can barely stomach in a section of his 1789 book, Interesting Narrative of the Life of Olaudah Equiano, or Gustavus Vassa, the African: Written by Himself, describing the hold of slave ship: "The shrieks of the women, and the groans of the dying, rendered the whole a scene of horror almost inconceivable."14 Thinking outside of Equiano's account, black studies historian and theorist Saidiya Hartman queries, "How does one listen for the groans and cries, the undecipherable songs, the crackle of fire in the cane fields, the laments for the dead, and the shouts of victory, and then assign words to all of it?"—the "inconceivable" conceived in a gesture to sound. 15 Yet, this sonic similarity does not only operate as a happenstance connection. The relationship between sounds of suffering and joy, or as Saidiya Hartman notes, terror and enjoyment, offer historicized sites of meaning-making.





absence that signals the ultimate project, and constitutive limits, of the archive. In an effort to problematize the language of empowerment that can seep into this scene, I am interested in the nuanced ways in which Eastman's black queer sonority has persisted loudly through the silence of the archive.

Eastman crafts fugitive sounds and bodies that escape right before the blast in the archive. In approaching the archival wreckage, I find the streaks of what Eastman calls a "gay guerilla" in his Northwestern pre-concert remarks. The phrase is used both as a title for one of Eastman's pieces, and a signifier

# er creates naelstron

I depart from Morrison's earlier referenced notion of Blacksound to think about the active tense of black queer sonority: always disturbing, acquiescing, moaning, and desiring past linear notions of archival time. I thus argue that Eastman's dance through the Downtown scene was disidentificatory: he was deeply interested in pre-tonal music and Bach and could perform those pieces with as much vigor as works by avant-garde composers like Meredith Monk. Musicologist George E. Lewis also offers an interpretation of the term relating to the "disidentification with standard tropes of what it meant to be black in [the downtown New York] scene. We're sort of both allowed by that scene but also looked at as rather quizzical. Julius [was] an extreme case of that..." Here, errantry functions as an analytic that assists an engagement with Eastman where he seems to undo himself; partying and creating alongside perspectives that seem to be against his embodied practice.

On January 16, 1980, Eastman completed a yearlong residency at Northwestern University with a performance



Guerilla, and Crazy Nigger.<sup>42</sup> He referred to the first and la pieces as part HIGHLIGHT [PAGE 18]: I

are fifty-two.



I was either a nigger



what a badge of honor it was, but they did not

"Nigger Series" ARRIVE AT THE, SOUND



which becomes a title of one of his pieces performed at Northwestern University—Crazy Nigger emerges out of a white supremacist act of jettisoning black music, and black

Eastman claims OF BLACKNESS AS THE SOUND BETWEEN JOY AND en eurotypical

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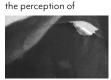
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Eastman's cor EASTMAN'S VOCALITY e revaluation of greeted with sig protest, especial OPENS POSSIBILITIES FOR

black students ALTERNATIVE WAYS OF BEING nic production

faculty of the unAND SOUNDING: These protests altered

the Northwestern community "were beset



Assistant Professor of





invocation and exegesis of the word."44 Lewis continues by stating: "the evil nigger and the crazy nigger are more similar than different. Whether by choice or necessity, both become desperadoes, outlaws, to is about expanding on the ways in which normative descriptors of musical production lack. Crazy was a term used in the decades before Eastman to describe black



for understanding black life, particularly as it becomes legible through sound and

music, otherwise. <sup>47</sup> Eastman's recollection of finding hin or a Negro" <sup>48</sup> was not about maintaining one position of exposing the need to understand that "black or African particular history—a crazy history. <sup>49</sup> Eastman engages of the lack thereof, that operates between material and marker sound and slur.

Even before we get to Eastman, and the Northwestern performance scene, we are confronted by a "seizure of the words 'nigger' and 'faggot' in the titles for his compositions." What does it mean for the sound of blackness to seize the very slurs that plan for the destruction of blackness before we have arrived to hear its sound? Eastman's discussion with protesters and his preconcert talk hearkens back to what he was called and understood himself to be, a gesture to his own becoming in relation to a particular retelling and marking of black embodiment. The titles, which somehow skirt away from "this black or African-American stuff," outwardly misfire: Eastman's measured voice did not convince Black members of the Northwestern community, who did not identify with the slur and found it offensive. The flow of information about this performance proceeded as follows: concert advertisements, press, protest and Eastman's failed attempt to discuss his black experience with the black community of Northwestern, preconcert remarks, and the performance. The preconcert vocality of Eastman's



Northwestern intelligentsia leaves out, as Matthew e question of the particular politics of Eastman's and his remarks to be offensive and counterproductive against racism on campus.<sup>51</sup> "The largely white

audience at Northwestern" uncomfortably witnessed Eastman's initial remarks. 52

Anticipating further backlash and understanding that the titles of his pieces had been removed from the concert programs, Eastman delivered a nearly seven-minute spoken introduction to his concert. The recording of his remarks reveals that his remarks were met with complete silence, yet that silence was filled with meaning. <sup>53</sup> A sonic blackness, through voice, argument, and protest, flows through different discursive spaces, but Eastman's ability to speak "eloquently" did not matter in either the time preceding the performance or the preconcert remarks, especially around "fellow" black people. The fraught dynamic of the reception of the piece, before Eastman had even performed a single note of music, became part of Eastman's legacy as a trickster and provocateur.



the preconcert remarks where Eastman's composition, tical endeavors collide. Race and space intersect in odied experience of adversity laced with critical





ESS, IN EASTMAN'S CASE, ON THE GENRES AND HOLD HIS PERFORMANCE. Silence is sound where there is no thing, yet Eastman is present loud and clear. The triplet ever sold usely refunds between 20:03-20:11 followed by a large bang on the plano in the low legister. The sound that does emerge through the silence in the last part of Eastman's piece is startling, but the fullness of its influence esounds. The silence comes to create an image of subjectivity that is available to us precisely because it is fractured, uneasy, always in a process of reformulation, precisely because it mirrors the obscene nature of all subjectivity." In the space of repetition and silence isteners reflect on what was immediately heard but are not given the opportunity to get too comfortable. Evil Nigger closes as the last note dissipates at 21:00; the echo casts its mirror onto our jugged eneaunter with a timed piece always already out of time.

Eastmants piece stirs me, in part due to its use of both precariously fast and uncomfortably story articulations. Eastman composes music that is black and gay to the fullest and "tricks" audiences and concert spaces that presume music to be apolitical and uninterested in a history of black sound making. Eastman refuses a political economy of sound production in which the distinction between composer, piece, and audience is fraught with (dis)embodied concerns. He is clear that his music is "blackto the fullest," and the audience finds itself in a tense relationship with his subjectivity in the appraisal of his work. The critical distance maintained in the assumption that a composer is separate from their composition collapses.

Evil Nigger threatens a sonic sociality between composer, performer, audience and space: we are made uncomfortable yet dynamically overwhelmed by the effulgence of Fastman's composition. We are asked: "Does black life, in its irreducible and impossible sociality, and precisely in what might be understood as its refusal of the status of social life that is refused it, constitute a fundamental danger an excluded but immanent distribution, to social life?" The music is irreducible, not only to one phrase or key, but also to the paratively neat distinction between composer, performer, and listener—another "immanent distribution" that are at healing income a Epstman's disavowed black sonic movement. It resisting normative source making practices, black sonority does not guarantee escape. The potential to be emancipated exists in the indeterminacy of life and death in-and out-side of the hold. Listening and sounding otherwise articulates refusals of state violence and insists on alternative possibilities of sounding in the world.

#### Conclusion or, Perhaps a Call to Stay On It

I close with a reflection in the spirit of the dissipated and worried note: one that will continue to echo into the search and sound of Julius Eastman, his creations, and philosophical ruminations. To call this a conclusion would be to limit the scope of Eastman's composition of and through the otherwise, as he is always already behind-and-ahead of what we expect to hear and find from him. I have yet to explore Eastman's firm interest in non-western cosmologies or his punk rock creativity, but it is that multiplicity of identification that makes this scholarly direction so urgent and exciting for me. I departed from the biographical to learn about specific aspects of Eastman's life in relation to the sound that he produced and communities with which he, perhaps obliquely, shared collective spaces, practices, and performances. I offered a musical analysis outside of the purely theoretical, musicological, or historical rendering of sonic critique in an effort to expand upon the breadth of scholarship that has inspired so much of my thinking around the life and work of Julius Eastman. The capacity to conceptualize black queer life through and against the wake, sometimes with, takes the wind out of me. At times it calls for pause. Eastman demonstrates that the position of the abject can be an exciting, exhausting, and generative space to become—and even then, the analytic of the abject does not seem capacious enough. The repetition of words, musical phrases, crashes, and silences in Eastman's 1973 Stay On It suggests that holding Eastman in ecstatic tension between abjection and exceptionality is ongoing. This iterative quality of Eastman's work is the price of a ticket to his always ongoing show. The show is sticky and sometimes self-effacing, but the shock cascades listeners into new practices of listening. We, his dissenters and lovers, approach Eastman renewed in the key demanded by a multilayered and motile black queer performance, performer, and composer who existed at the center and margins of thought.

# On plantations, prisons, and a black sense of place

HIGHLIGHT [9]: MOVEMENT, AND ATTENTION TO THE SONIC REMNANTS OF GESTURE AND FLIGHT, ARE PART OF AN EXPANSIVE HISTORY OF BLACK PEOPLE AND JOURNEY.

Highlight [page 2]: A black sense of place draws attention to the longstanding links between blackness and geography. It brings into focus the ways in which racial violences (concrete and epistemic actions and structural patterns intended harm, kill, or coerce a particular grouping of people) shape, but do not wholly define, black worlds.

HIGHLIGHT [PAGE 4]: WITH THIS
IN MIND, A BLACK SENSE OF
PLACE CAN BE UNDERSTOOD AS
THE PROCESS OF MATERIALLY
AND IMAGINATIVELY SITUATING
HISTORICAL AND CONTEMPORARY
STRUGGLES AGAINST PRACTICES
OF DOMINATION AND THE
DIFFICULT ENTANGLEMENTS OF
RACIAL FNCOUNTER.



The conditions of bondage did not foreclose black geographies but rather incited alternative mapping practice. during and after transatlantic slavery, many of which were/are produced outside the official tenets of cartography: fugitive

just as black people and places fully partitioner in the incollectual narrative of modernity. With this in modernity with this in modernity and black sense of place can be understood as the process of materially and imaginatively

power in relation to the flows and movement.

Different social groups have distinct relationships to this anyway differentiated movement: some people are more in charge of a than others;

aing historical and charge of in the emporary struggles some initiate for

maroon maps, domination

ation and the don't; some are more

now HIGHLIGHT [PAGE 5]: A BLACK SENSE OF PLACE IS NOT family of A STEADY, FOCUSED, AND HOMOGENEOUS WAY OF maps SEEING AND BEING IN PLACE, BUT RATHER A SET OF alongs CHANGING AND DIFFERENTIAL PERSPECTIVES THAT (\*\* ARE ILLUSTRATIVE OF, AND THEREFORE REMARK UPON, black ca LEGACIES OF NORMALIZED RACIAL VIOLENCE THAT expl. CALCIFY, BUT DO NOT GUARANTEE, THE DENIGRATION landmas OF BLACK GEOGRAPHIES AND THEIR INHABITANTS.

routes, boundaries, and so forth). These ways in the Americas that is of understanding and predicated on struggle.

writing the world identify the significant racial contours of modernity. This is to say that the racial underpinnings of modernity, of which translational colonialism are salient features, single black people and places.

A black sense of place can also be indensition and so be indensition alongside whosely single which is about what one might call the power geometry of it all, the power geometry of it all, the power solutions are salient features, single places.

moint concerns not merel states of with moves and who doesn on the Americas and provided the blueprint for future sites of racial entanglement. Diverse spatial practices— wherein the structural workings of racism kept black cultures in place and tagged them as placeless, as these communities innovatively worked within, across, and outside commonsense cartographic and topographical texts—



help form a black sense of place. Thus, that which 'structures' a black sense of place are the knotted diasporic tenets of coloniality, dehumanization, and resistance; this is a sense of place wherein the violence of displacement

A black sense of place is therefore tied to fluctuating geographic and historical contexts.

Indeed we all respond to the ongoing brutalities and various time-space particularities of racial violence differently. It the denigration of black geographies and their inhabitants.

violence of displacement

violence differently. It

and bondage, produced

33 Grand at the corner of Thompsond that as

solven a plantatio April 3, 1980 8 pm

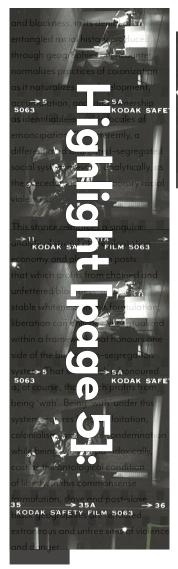
the plantation provides

the plantati

as one (not the only)
meaningful geographic
locus through which race
is made known (and
bodies are therefore
differently disciplined)
across time and space.

is not a steady, tocused, and homogeneous way of seeing and being in place, but rather a set of changing and differential perspectives that are illustrative of, and therefore remark upon, legacies of normalized racial violence that calcify, but do not quarantee,

Our long history of racial-sexual condemnation reveals a system of knowledge that cannot bear to embrace the ways in which blackness (and therefore the plantation) has produced untidy historically present geographies that are predicated on difficult encounters and our entangled and common histories (Walcott 2000; McKittrick 2006). Instead of encounter, in fact, our present system knowledge, inherited from enlightened colonialism and Eurocentric modernity, repetitively constitutes blackness as a discreet (and hostile) racial category that routinely 'troubles' an already settled whiteness (Morrison 1992). This paradigmatic perspective on race



What if bifurcation—segregation is not, in fact, the sole way to conceptualize the ways in which the brutalities of violence and terror have shaped our collective geographies in the



wiolence? With this in mind, a black sense of place might not to be read as an authentication of blackness, or a truth-telling conceptual device, or an offering of a 'better' place; rather a black sense of place locates the ways in which anti-black violences in the Americas evidence protean plantation futures as spaces of encounter that hold in them useful anti-colonial practices and narratives.

#### Highlight [page 10]

If the history of colonial and antiIt is therefore worth thinking about black violence is conceptialized the ways in which the cyclical and within and beyond the plantation, death-dealing spatialization of the condemned and those 'without' difference, and geography in the remains analytically intact, at least Americas are partial indeed in part, because thinking otherwise objections in the Americas is deeply demands attending to a whole new system of knowledge wherein the social, and introstructural decay and brutalities of racial violence are not geographic surveillance: the flooding descriptively rehearsed, but always on alternative and practical activities son, the condition of the conditi

deportations, urban crises, declining property values, riots, and more (Costa Vargas and Alves 2009; Woods 2005; Pulido 2000; Browne 2009; Gooding-Williams 1993). These black geographies, while certainly not solely

spaces 'wit Highlight [9]: The against rad composer and singer Julius 2007), Ind place and Dunbar Eastman (1940pollution, o 1990) was a dynamic as of mode plantation exploitatio polymath whose skill seemed to ebb and flow through antagonism, haexception, and isolation station meaningfu

`-vis enforced placelessness) racial violence in the Americas but also naturalized a plantation logic that anticipated (but did not twin) the empirical decay and death of a very complex black sense of place.

It follows that the complexity of a black sense of place—questions of encounter, practices of resistance—can be, at least conceptually, swallowed up by the very death and decay that is bolstered by the hard empirical evidence of black geographic peril. With this in mind, urbicide—the deliberate death of the city and willful place annihilation—can stand in as a viable explanation for the ongoing destruction of a black sense of place in the Americas. Urbicide, which has been defined as 'the murder of the city' and the 'deliberate denial or killing of the city' (Berman 1987: 8; Graham 2004), draws attention to the aforementioned sites of environmental, social, and infrastructural deterioration and geographic surveillance that demarcate many black geographies and their inhabitants. Put differently, urbicide is one sensible conceptual tool that can make sense of the interlocking and connective tenets of place, poverty, and racial violence in the Americas.

A black sense of place and the plantation are not explicitly taken up in many studies of urbicide; instead, many discussions are primarily concerned with the militarization of, and damages to, urban space in Europe, Africa, and the Middle East.<sup>5</sup> Yet blackness and black geographies in the Americas are not wholly absent from analyses of place annihilation. Indeed, references within urbicide literatures to the 'global south', 'planet of slums', gentrification, white

flight, the inner city, uprisings of the 1960s, and the 'wretched of the earth' provide a glimpse of how black cultures in the Americas are both embedded within analyses of urbicide and shaped by urbicidal acts (Campbell, Graham, Monk 2007a: Goonewardena and Kipfer 2006). Related, the annihilation of black geographies in the Americas is deeply connected to an economy of and thus capitalism, wherein the process of uneven development calcifies the seemingly natural links between blackness, underdevelopment, poverty, and place within differing global contexts. An overview of urbicide literatures nstrates that the term itself can be understood alongside very une heterogeneous, and distinct processes of place annihilation. With this in min the brutal violences enacted by Western militaries outside the Americas cannot be easily disentangled from blackness, black soldiers, urbicidal acts within the continent of Africa connot be contained to particular regions or absent from the diasporic imagination. Anti-black violence within f course, bound up in a range of death-dealing activities: bloodless genocides imprisonment, rocial profiling and police brutalities, poverty, environmental racism, and community bloodshed all eath in black communities. With this, one can also ible urbicidal practices through the razing of specific black communities, homes, buildings, and sacred sites Africville, the African Burial Ground, the ninth ward in New Orleans, and more We can, collectively, imagine the material consequences of urbicide in the Americas burned up, bombed out, flooded, crumbling buildings, and infrastructural decomposition. While t erm, urbicide, seemingly depersonalizes acts of violence—the term inadvertently erases the genocidal omours of city death by drawing attention to the violence against and the destruction of urban infrastructure—it is a very human, and therefore specifically racialized, activity. The deliberate destruction of the city goes hand in hand with imperialism, violence, and economic, racial and ethnic terror while also hinging on specificities: scale, region, economy, place, and how each destructive force is delivered, all matter. While place annihilation certainly differs according to time and place, the devastation, so clearly pointed to in the term urbicide—the deliberate killing of the city brings into sharp focus how violence functions t render specific human lives, and thus their communities, as waste (see also Davis 2006; Sundberg 2008; Sundberg and Kaserman 2007). This is to

Davis 2006; Sundberg 2008; Sundberg and Kaserman 2007). This is to say that multiruding usurbicidal parts—the (acaning up' of slums, the forceful displacement of economically disadvantaged communities, the deliberate destruction of city buildings, bridges, houses, shops, roads, and parks—are

always inhabited with disposable 'enemies', impoverished dwellers, those 'without'.

Theorists of urbicide are interested in who lives and who dies, and thus who kills and who is killed; the overarching Put more simply, racist and colonial practices wipe out different facets of geographic life, buildings fall and people are put to death, and the execution of place and people is bound up in the corpse, the displaced survivors, the perpetually lifeless and disposable. These massacred bodies disclose the ways in which 'terror is a defining feature of both slave and late-modern colonial regimes' (Mbembe 2003: 39), and therefore reify

the normalization of 'premature death' (Gilmore 2007: 244).

those 'without'.

Or, as noted above, these ongoing acts of violence against particular cultures and who dies, and thus who kills and who is killed; the overarching implication of urbicide in the Americas, as I OF BLACK OFF, ALONG WITHOUT SEAL OF

The specificities of urbicide matter. As in my discussion above regarding the uneven time-space workings of plantation logics, my use of urbicide is not meant to conflate very different social-spatial deaths and present the racial violences of New Orleans, Zimbabwe. and historical black geographies as one in the same (although we can, as I arque

Highlight [15]: Although the history of chattel slavery the United States frames the space and time of blackness, black sociality exists between scenes of disaster and joy.

HIGHLIGHT [16]: LOITER-THEORIST LA MARR TION OF BLACK QUEER CAPTURE, BUT SIMPLY elsewhere, envision the plantation a viable blueprint for the modern city and black diasporic claims to space, McKittrick, 2010). Related, I am not intending haunts urbicide: rural violence and other non-urban scales of trans-local bloodshed that complement the death of the city (prisons being poignant example, discussed later; see also Cowen 2007). Rather, I am ing attention to the concept in order to identify the ways in which urbicide inadvertently uncovers the ways in which blackness is an unspeakably intelligible trait within the practice of geographic violence in the Americas, how it knits gether destructive force and human life through the prism of colonicity, or how the geographic management of blackness, race, and racial difference land thus non-blackness) hinges on a longstanding but unacknowledged plantation entre of these observations stands the less-than-human-as-waste dying, 'black' presence within analyses of violence. Indeed, the dead and dying which haunts a range of studies that link race to violence, brings erous analytically teleplogical linearity of our intellectual work and spatial politics (Wynter 2003; McKittrick 2006). More specifically, when racial violence is the central analytical query (in the humanities and he dead and dying black/honwhite body becomes the conceptual tool that will undoubtedly complete, and thus empirically prove, the brutalities of racism. This analytical logic can only 'end' with black death which, is (seemingly) working against: that bifurcated-segregated social systems and thus biological differences rooted in race and phenotype result in the real/ impirical and analytical death of blackness that is walled in by decay. This is to say that analyses of racial violence require the conceptual and thus material subordination of the black/nonwhite human to extra-human violence which positions the ontological stakes of liberty as decidedly oppositional to black

ING, WHICH HAS BEEN DISCUSSED BY BLACK QUEER JURELLE BRUCE, CAN BE A GENERATIVE ARTICULA-EXPERIENCE THAT DOES NOT NECESSARILY RESIST CANNOT BE TRACED.

sense of place.

# RESIDUE

Thus, my construction of "Afrological" and "Eurological" systems of improvisative musicality refers to social and cultural location and is theorized here as historically emergent rather than ethnically essential, thereby accounting for the reality of transcultural and transracial communication among improvisers.

These traditions are exemplified by the two towering figures of 1950s American experimental musics-Charlie "Bird" Parker and John Cage.

#### Bird

In the musical domain, improvisation is neither a style of music nor a body of musical techniques. Structure, meaning, and context in musical improvisation arise from the domain-specific analysis, generation, manipulation, and transformation of sonic

symbols. Jazz, a largely improvisative musical form, has long been explicitly and fundamentally concerned with these and other structural issues. For African-American improvisers, however, sonic symbolism is often constructed with a view toward social instrumentality as well as form. New improvisative and compositional styles are often identified with ideals of race advancement and, more importantly, as resistive ripostes to perceived opposition to black social expression and economic advancement by the dominant white American culture.

Ebullient, incisive, and transgressive, the so-called "bebop" movement brought this theme of resistance to international attention. Influencing musicality worldwide, the movement posed both implicit and explicit challenges to Western notions of structure, form, and expression. In the United States, the challenge of bop, as exemplified by the work of Charlie "Bird" Parker, Dizzy Gillespie, Thelonious Monk, Bud Powell, and Kenny "Klook" Clarke, obliged the dominant European-American culture to come to grips, if not to terms, with Afrological aesthetics. Bop improvisers, like earlier generations of jazz improvisers, used "heads," or

HIGHLIGHT [24]: THE TRIPLET SOUNDS LIKE JUMPING ON Å HOT SURFACE AND THE NATURE OF THE SURFACE EXTENDS THROUGH MULTIPLE XTRATEXTUAL REGISTERS IN THE SCENE OF THE SONIC's JUMP—THE SOUND OF BLACKNESS IN-AND OUT-SIDE OF CAPTURE.

improvisers. Bebop's challenge to the dominant culture was not limited to musical concerns; in fact, bebop musicians challenged traditional notions of intra and extra-musicality. The composer and improviser Anthony Braxton (1985, 124) comments tha rstanding the realness of black people's actual position in America." Frank Kofsky (1970, 270-271) quotes Langston Hughes's blues signifyin' on bebop's origins in "the police beating Negroes' heads ... that old club says, 'BOP! BOP!... BE-BOP! ... That's where Be-Bop came from, beaten right out of some Negro's head into them horns." In Blues People, Amiri Baraka (then LeRoi Jones) asserts that bebop "had more than an accidental implication of social upheaval associated with it" (Jones 1963, 188). For the bebop musicians this upheaval had a great deal to do with the as HIGHLIGHT [24] with regard to their role as musical artists. While jazz has always existed in the interstices between Western ert music and entertainment, between the commercial ntal, challenging the assigned role of th THE POETIC

WORK OF THE so for the construction of an African-American improvisative musicality that could define itself as explicitly experimental. This radical redefir DISSONANCE challenge, by extension the entire social order as it applied to blacks in 1940s apartheid America: "The young Negro musician (ARTICULATES) ize that merely by being a Negro in

America, one was a nonconformist" (Jones 1963, 188). Indeed, the musicians were often called "crazy"-an appellation often assigned  $THE\ LARGER$  either by the dominant order itself or by members of an oppressed group who, however one SOCIAL ration, are fearful of the consequences of change.

In his essay exploring improvisation, the theorist Carl Dahlhaus provides us CRITIOUE... with five defining char ork that, in his view, must be present for the work to be considered a composition. These characteristics n a kind of logically daisy-chained sentence, which I will present in exploded form. According to Dahlhaus, a composition is, first, an individually complete stru individuelles Gebilde"). Second, this structure must be fully worked-out ("ausgearbeitet"). Third and fourth, it ten form ("schriftlich fixiert") in order to be performed ("um aufgefiihrt zu werden"). Finally, what is worked-out and notated must constitute the essential part of the aesthetic object that is constituted in the consciousness of the listener' (Dahlhaus 1979, 10-11). That these five characteristics identify the very notion of composition as European in nature is asserted by Dahlhaus at several points. The dialectic between composition and

notation, according to Dahlhaus, is critical to the notion of composition itself. Compositions that are worked-out without being notated, in Dahlhaus's view, are neither compositions nor improvisations (21). Dahlhaus, however, does not present his own view about just what such a hybrid might be called or how, given his definitional stance, the nature of such music might be accounted for theoretically

Recognizing that his definition excludes much non-European music, Dahlhaus consoles the reader

...THIS
MUSIC
CANNOT BE
ANYTHING
OTHER
THAN
BLACK AND
GAY.

with the thought that some things simply are what they are: "A historian who hesitates to describe a piece of non-European music as composition es, by so doing, no understanding that he values it any the less"2 (22). In any event, given the explicitly particularist nature of Dahlhaus's theory, characterizing it as prototypically Eurological should present no great analytical obstacles. The work of John Cage presents an explicit challenge to this fixed notion of composition. Like Bird, the activity of Cage and his associates, such as Christian Wolff, David Tudor, Morton Feldman, and Earle Brown, had profound and wide-ranging influence not only in he musical, literary, and visual domains but socially 🕒 and culturally as well. The musical and the vork of these composers can be credited with radically reconstructing Eurological composition; trenchancy of this reconstruction involved in large measure the resurrection of Eurological modes

- Das Ausgearbeitete und Notierte den essentiellen Teil des asthetischen Gegenstandes ausmacht, der sich im BewuS3tsein des Horers konstituiert.
- Ein Historiker, der zogert, ein Stuck auLereuropaische Musik als Komposition zu bezeichnen, gibt dadurch keineswegs zu erkennen, dali er es gering schatzt.

real-time musical discourse, often approaching an explicitly improvisative sensibility. Along with his associates, Cage was responsible for the entrance into musical history of the term "indeterminacy." Cage's essay on indeterminacy from Silence (Cage 1961, 35-40) presents examples of "indeterminate" elements in European music from the last two centuries, from Karlheinz Stockhausen's Klavierstiick XI to J. S. Bach's Art of the Fugue. According to Cage, Bach's nonspecification of timbre and amplitude characteristics identifies these elements not as absent but simply as nondetermined but necessary material, to be realized by a performer. The construction as indeterminate of non-specified elements in the Bach work allows "the possibility of a unique overtone structure and decibel range for each performance" (35). The performer's function in this case is "comparable to that of someone filling in color where outlines are given" (35). Later descriptions of indeterminacy, such as that advanced by Elliott Schwartz and Daniel Godfrey (1993) in their survey text on "music since 1945," define a musical factor as indeterminate "if it is dictated by chance and operates without any links to other factors" (92). Cage's own initial definition of indeterminacy, however, did not necessarily include the use of chance as a salient factor. In Silence, Cage (1961, 35) provides several methods, unranked as to preference, by which the performer may realize the indeterminate aspects of the Art of the Fugue: "feeling his way, following the dictates of his ego ... following his taste ... employing some operation exterior to his mind: tables of random numbers ... or chance operations, identifying there with no matter what eventuality."

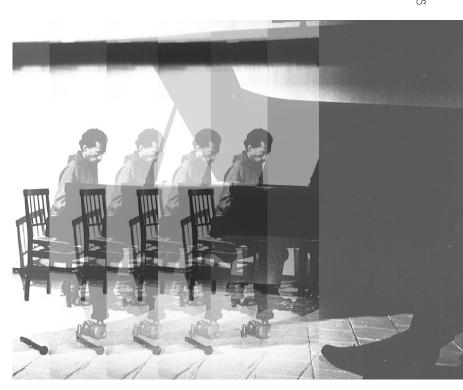
Another of Cage's lasting contributions to both compositional and improvisative method is the radical use of these "chance operations." The 1951 Music of Changes was composed by Cage using the ancient Chinese oracular method known as the I Ching, or Book of Changes, to generate musical material within parameters chosen by the composer. The object of the use of the I Ching, as described by the composer himself in explaining his compositional process for the Music of Changes, is the creation of "a musical composition the continuity of which is free of individual taste and memory (psychology) and also of the literature and 'traditions' of the art" (Cage 1961, 59). In this regard, Cage consistently maintains that "sounds are to come into their own,

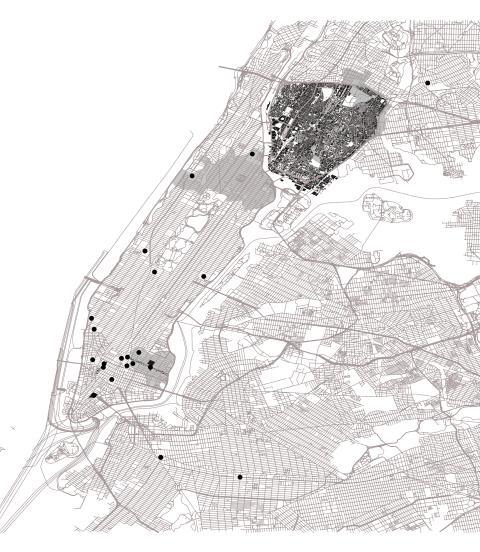
rather than being exploited to express selftiments or ideas of order" (69).

Cage, though perhaps not the first to p the experimental in mi Silence, several workir music," The compose is one the ou unique" (39). Cage's notion of spo informed by his studies of Zen a at Daisetz Suzuki's early 1950s lectur York City (Revill 1992, 108, 110). That this view have social implications was fully recognized by Indeed, Cage's social and philosophical views form part of the literature about film. In the Kostelanetz interviews rom 1987, Cage explicitly addresses his own essential anarchism points (Kostelanetz 1987, 266). Connecting his view nis andrchism, the composer expresses his need for are sounds just sounds but in which not subject, that is, to laws established by of them, even if he is "the composer" or 'the conductor.' om of movement is basic to both this art and this society" Cage's notion of social instrumentality, however, does nect this very American notion of freedom-perhaps iscent of the frontier myth-to any kind of struggle that be required in order to obtain it. The composer denies the tility of protest, maintaining that "my notion of how to proceed ociety to bring change is not to provest the thing that is but rather to let it die its own death.... Protests about these hings, contrary to what has been said, will give it the kind of life that a fire is given when and that it would be best to gnore it, put your attention elsewhere, take actions of another kind of positive nature" (Kostelanetz 1987, 265, 266). In terms of social location, composers such as Cage and Feldman located neir work as an integral part of a socior world that xplicitly bonded with the intellectual and Europe. The members of this art world, while o ontemporary European culture, were explicitly con ing to develop this "Western" tradition on the Ar

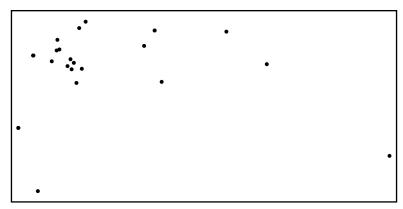
continent. The composer's "History of Experimental Music in the United States" (Cage 1961, 67-75) identifies as relevant to his concerns both European and American composers and artists, including the European Dada movement, composers such as Debussy and Varese, and later European experimentalists such as Pierre Boulez, Karlheinz Stockhausen. Luiai Nono, and Luciano Berio. Among the American composers that Cage mentions as being part of America's "rich history" of music are Leo Ornstein, Dane Rudhvar, Lou Harrison, Harry Partch, and Virgil Thomson. Though these and other composers do earn criticism, the only indigenous music that receives sharp denunciation from Cage is the African-American music that he frequently refers to as "hot jazz." Criticizing the expression of Henry Cowell's interest in this and other American indigenous traditions, Cage appropriates the then-current conventional wisdom about the opposition between "jazz" music and "serious" music: "lazz per se derives from serious music. And when serious music derives from it. the situation becomes rather silly" (Cage 1961, 72). We may regard as more rhetorical device than historical fact Cage's brief account of the origins of jazz. In any event, despite such declarations as "the world is one world now" (Cage 1961, 75) or "when I think of a good future it certainly has music in it but it doesn't have one

kind ... it has all kinds" (Kostelanetz 1987, 257), it is clear that Cage has drawn very specific boundaries, not only as to which musics are relevant to his own musicality but as to which musics suit his own taste. The Cageian tendency is to confront this contradiction through the use of terms that essentially exnominate or disguise his likes and dislikes as such: "some music ... which would not be useful to me at all might be very useful to someone else" (Kostelanetz 1987, 257). The composer does, however, make allowance for the fact that others may draw different boundaries: "I can get along perfectly well without any jazz at all; and yet I notice that many, many people have a great need for it. Who am I to say that their need is pointless?" (Kostelanetz 1987, 257). This basic reference to freedom of choice, however, can hardly be extrapolated to argue that Cage is characterizing himself as possessing a culturally diverse musical sensibility. Rather, the composer is reaffirming a relatively mundane truism concerning the diversity of personal taste, while simultaneously making clear that, for him, a "need for jazz" would indeed be pointless.

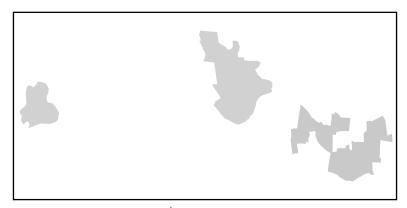




- archived Eastman spots recovered from primary and secondary materials
- most severe housing loss due to Planned Shrinkage
- speculative Eastman spots: those areas referred to without addresses



archive pattern



loss pattern



score pattern

#### NOTATION

the tension of endured proximity to the boundary that seeks to enclose you\_\_\_\_\_the quotient of desire over direction

0

a desire for home even if only temporary

TUNING

slose your eyes

a longing horizon

imagine the last place that felt like home, its smells and counds, the roundness that reconates as invitation home in on this resonance hum it for yourself feel your body expand and contract matching the resonance of belonging - find its tone play it for yourself with any instrument this is your base frequency your root note your key to deviate from and become errant

find your position on a map

trace the boundaries of your neighborhood with your finesay its name out loud to yourself

repeat

repeat until the counds become unfamiliar and shift pay attention to how foreign, strange.

and arbitrary they sound

this place has known many names







the direction of a boundary that seeks to enclose

DESIRE

er

allow them to become familiar record the sounds of each circuit there are your spectral dynamics.

r.epes

repeat until you have what you need

your source for harmonics and texture

walk the boundaries of your neighborhood

walk until you start to feel the edges, can anticipate each coming turn

come to one of the boundaries of your neighborhood and stop listen

how does the edge feel?

the imposition of enforcement. the violence of the line

the violence of the fine

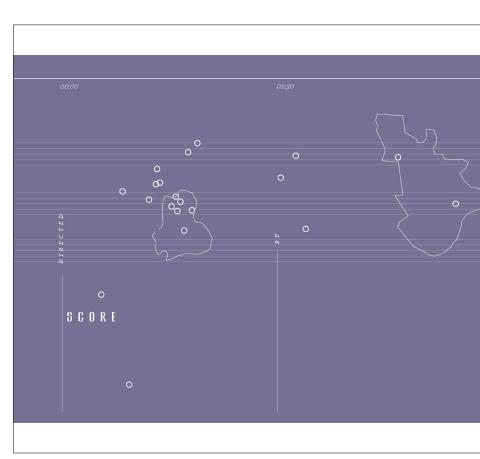
stretch the weight of the line, the heaviness of being.

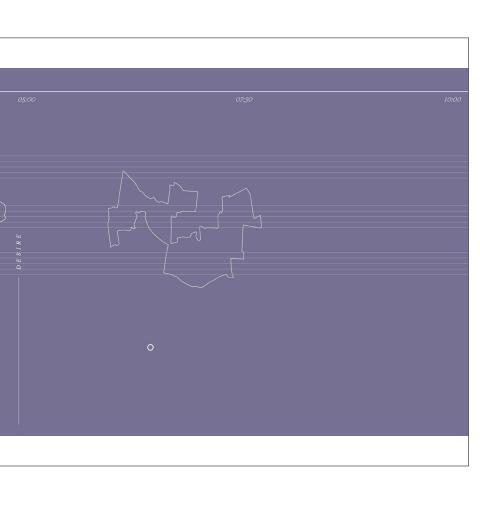
the superposition of both/and

the last place they thought to look

a gap between digits, that discrete infinity the tension of desire divided by direction

this tension is the timbre and tempo









# Voluptuous Disintegration: A Future History of Black Computational Thought

DITIONS OF BONDAGE DID HIGHLIGHT AGE 4]: THE C LOSE BLACK GEOGRAPHIES BUT RATHER INCITED ALTERNA VE MAPPING PRAC ES DURING AND AFTER TRANSATIANTIC SLAVERY, MAI H WERE/ARE PRODUCED OUTSIDE THE OFF S OF CARTO GITIVE AN MAROON MA ACY MAPS, FOO URISHMENT MAPS, FAMILY MAPS, MUSIC MAPS ASSEMBLED ALONGSIDE 'REAL' MAPS (THOSE PRO BY BLACK CARTOGRAPHERS AND EXPLORERS WHO S, ROADS, ROUTES, BOUNDARIES,

Highlight [16]: the language of empowerment that can seep into this scene, I am interested in the nuanced ways in which Eastman's black queer sond ity has persisted loudly through those of the archive.

#### Black Computational Thought as Endured

#### Proximity

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 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 episteme from which computational logics emerge solidified in formal reason and syntax.[20] Golumbia is attempting to show the ways that computationalism understands cognition

computational and social experience itself as an inherent a living bod, with the furth explained 224 compy in process of Black Computational computational by extension, all matters Thought. I frame this discussion through 2009, 81. Over the world can be understood David Golumbias // They self is feet. F. P. as full tight of V. P. F.

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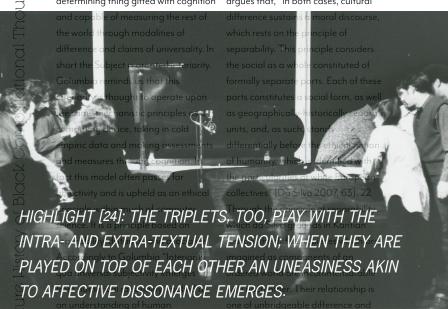
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human minds are computers but that mind itself must be a computer — that our notion of intellect is, at bottom, identical with abstract computation, and that in discovering the principles of algorithmic computation via the Turing Machine human beings have, in fact, discovered the

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

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 Silva, this "universal" ethic falls away is in fact embodied within white European signification. da Silva argues that, "in both cases, cultural



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

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 auestions, "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 Romi Ron Morrisor 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 antiblackness 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 3/26 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 read them" [Tobin and Dobard 2000, 40]. This practice is one that continued into the new world as enslaved Africans held onto their cultural nemories 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 gadies meet in the interface of the quilts themselves. Repertoire becomes the under-tones.

everything but lives alongside bodies in motion, in relation to geography, reading both simultaneously. 26 This relation between Black sojourners, geography, and the guilt code also extends to ancestral calculations.[24] The

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 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

become the patterns encoded with meaning and stitched into the knowledges and

sense-making done by

European standards. Instead, Black people exchange and situated knowledges into new systems of

meaningfully engage difference as a relationship that we are by doing this will contemporary flights of

code carries these knowledges into present function. In Campt's

communication. This is difference without separability.[27] This

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HIGHLIGHT [26]: THE POTENTIAL TO BE EMANCIPATED EXIST THE INDETERMINACY OF LIFE AND DEATH IN-AND OUT-SIDE OF THE HOLD: LISTENING AND SOUNDING OTHERWISE ARTICULATES REFUSALS OF STATE VIOLENCE AND INSISTS ON ALTERNATIVE POSSIBILITIES OF SOUNDING IN THE WORLD.

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 chranicles how enslaved blacks and acks we ab o meet at inns free ave g plantation free Inted by s who we a some hied blacilaves a ng dri servats. He cagus houblac saile were a to chc je info ation w en ivea lack por ties; ho lav wh vere out shops vie a strouthe v the place churces, info ation; h nder th cru y of hite ffic acte as "pos fo ness es ning es be i tes hd tions fo scd ar surv ior and bw plan ave ired ut to n a neig ori tov serv as disp chers of ese bbin ess jes and obard 2 DO 9 A Tobir nd

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 infraordinary quality of Black quilt making and its capacity for agency that allows for resistance to take place in the . 30 Looking at quilting bees in vay also allow us to build on ny Lethabo K 🔭 's ur 🥽 rstanding hgibil 🔭 as it ates . In T Blac Shoals: butat matic of Back and hore f No re Stumes, Kirmstate 3116/26 As Black shy calytic argue, Blook fung lity condend e flux, co ote p oces and ntial. be re ered ack and fur ble u er cor Jest o be ered prous, colular ring, nsuot and a space state sthe-e e an butside of no ative infigu ions sex. ge er, se ality, : ace, d time to stalize a fix the uma category.

	Black fungibility is an expression of the gratuitous violence of conquest and	57	
	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	$\delta$	
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	ongoing irruption that anarranges every line." [Moten 2018, 1] Because chattel		i
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200	customs, practices, and histories. This illustrates how various African people	9	
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resistance. Yet, the highly adapted systems of communication, cultural

forms of sociality and fungibility such as the guilting bees by which the

Highlight [page 10]: Despite Cage's disavowal of jazz, however, the historical timeline shows that Cage's radical emphasis upon spontaneity and uniqueness- not generally found in either American or European music before Cage- arrives some eight to ten years after the innovations of bebop...

Blackness became a constituting position through which computing systems were produced and are entangled with the materials, people, cultures, and places that enacted them. 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]. 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 auiltina practices carry aspects of Bev's self-determinism as a repertoire to ation and know, with each other thru от risk taking in closing, I want to be clear: Black endured pract 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 we consider computation to be and to ve been. It is an argument for s of computing embedded in technolo of living, [28] connected to care to fullness, to difference, and to shar tices of risky meaning making ing to Campt, this is not a matter of hope, be one of tense. She this tense as, "humble, and strategic, subtle and discrindevious and exacting. It's not always loud and demanding. It is frequently quiet disruptive" [Campt 2017, 17]. In thinking about and opportunistic, dogged futurity as tense Campt off she calls, Black feminist futurity. Elaborating s term she writes. "It he tense of possibility that grammarians 's the future rec or that which will have had to happen TI performance of a future that hasn't \* teminist futurity gramn must....It is the power it magine beyond current fact and happen it which is not, but must be. a politics of preguration the envision living th ture now — as imperative rather than subjunctive—as a striving for the f bu want to see, right now, in the present" [Campt 2017, 17]. In her g of futurity there are no guarantees, there is no safety in is nothing promised to us. In the face of this, Black feminist eventuality, th e made. It is an understant g of the future real futurity is one the ich would have had to have happened for us to exist in conditional, of the the future. In this ise futurity is present work upheld by the daily practices of refusal. This ma' clear the stakes of fugitive computational practice and the butational Thought. It is not a site of s work of Black ion or assimilation حمرز فررما deep work of radical Black feminism rining an active commitment to t

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.

ture" [Campt 2017, 16]. Ib



### **African**

## Influence in Cybernetics

**RESIDUE** 

5/6

Opposition to racism has often been composed through two totalizing, essentialist strategies: sameness and difference. For example, Mudimbe (1988) demonstrates

HIGHLIGHT [19]THESE PARTICULAR PIECES—FORMALLY—ARE AN ATTEMPT TO MAKE, WHAT I CALL, 'ORGANIC' MUSIC.' THAT IS TO SAY, THE THIRD PART OF ANY PART (OF THE THIRD MEASURE OR THE THIRD SECTION, THE THIRD PART) HAS TO CONTAIN ALL OF THE INFORMATION OF THE FIRST TWO PARTS AND THEN GO ON FROM THERE.

Here any subaltern identity (female, non-white, working class, etc.) appears only as yet another powerless victim, and typically one for whom a previously natural existence is endangered by the intrusion of artifice. Thus the focus of this essay on African contributions to cybernetics is not an attempt to overlook the brutal tragedies enacted by that science, but rather to underscore the multifaceted aspects of its history, and thus possibilities for resistance and reconfigurations. By moving between questions of epistemological structure and social constructions of science, this essay will suggest some possible origins of cybernetic theory in African culture, ways that Black people have negotiated the rise of cybernetic technology in the West, and the confluence of these histories in the lived experience of the African diaspora.

#### Information and Representation in Cybernetics

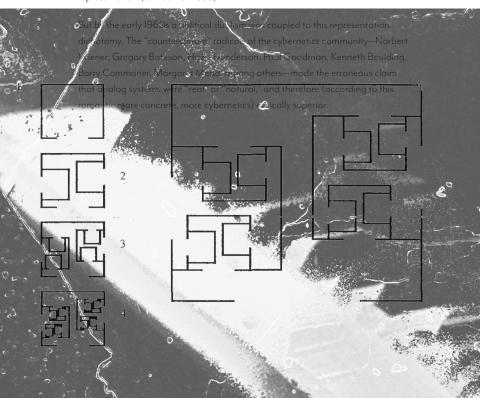
Cybernetic theory is based on two dimensions of communication systems. One is the information structure, the other the physical representation of that information. The most fundamental characteristic of an information structure is its computational complexity, which is a measure of its capacity for recursion (i.e., self-reference, reflexivity).

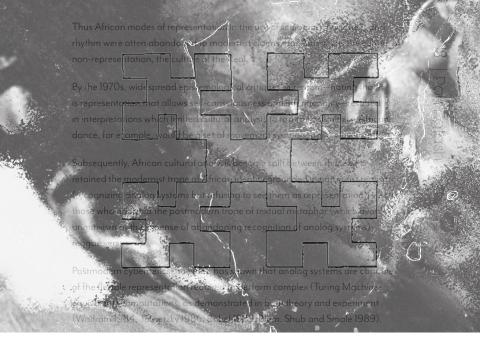


This mathematical result agrees nicely with our intuition about the crucial role of reflexive awareness in our own "information structure.» The most fundamental characteristic of a representational system is the analog-digital distinction. Digital representation requires a code table (the dictionary, Morse code, the genetic code, etc.) based on physically arbitrary symbols (text, numbers, flag colors, etc.). Saussure postulated this characteristic when he spoke of the "arbitrariness of the linguistic signifier." Analog representation is based on a proportionality between physical changes in a signal and changes in the information it represents (e.g., waveforms, images, vocal intonation). For example, as my excitement increases, so does the loudness of my voice. While digital systems use grammars, syntax, and other relations of symbolic logic, analog systems are based on physical dynamics—the realm of feedback, hysteresis, and resonance.

This dichotomy is fundamental to current cybernetic debates concerning, for example, which type of representation is used by neurons in the human brain, or the type recommended for artificial brains.

In the first years of American cybernetics, analog and digital systems were seen as epistemologically equivalent, both considered capable of complex kinds of representation (cf. Rubinoff 1953).





In particular, a new appreciation for analog systems was fundamental to the rise of fractal geometry, nonlinear dynamics, and other branches of chaos theory (Gleick 1987, see also Dewdney 1985, Pagels 1988).

By viewing physical systems as forms of computation, rather than merely inert structures, researchers became open to the possibility of having infinite variation in deterministic physical dynamics. Analog systems can achieve the same levels of recursive computation as digital systems; the two are epistemological equals.

In other words, the appeal to digital systems in African culture may well have been a necessary antidote to the skewed social portrait of it, but it is not the only recourse for combating ethnocentric epistemological claims. African cultures have indeed developed systems of analog representation which are capable of the complexities of recursion, and there are indications that this indigenous technology has been in conversation with cybernetic concepts in the west.

#### Africa in the origins of the cybernetics

The use of African material culture as a form of analog representation is particularly vivid in cases of recursive information flow. In African architecture, recursive scaling—that is fractal geometry—can be seen in a variety of forms. In North Africa it is associated with the feedback of the "arabesque" artistic form, particularly in the branches of branches forming city streets (figure 1). In Central

Africa it can be seen in additive rectangular wall formations (figure 2), and in West Africa we see circular swirls of circular houses and granaries (figure 3).

This is not limited to a visual argument; the fractal structure of African settlement patterns has been confirmed by computational analysis of digitized photos in Eglash and Broadwell (1989).

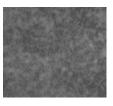
Recursive scaling in Egyptian temples can be viewed as a formalized





the first mathematical models for biological growth patterns, and inspired Alan Turing and other important figures in the history of computational morphogenesis. Since Fibonacci was sent to North Africa as a boy, and devoted his years there to mathematics education (Gies and Gies 1969), it is possible that this seminal example of recursive scaling is of African origin.

Benoit Mandelbrot, the "father of fractal geometry," reports that his invention is the



Egyptian art and architecture. Given these facts, and the similarity of this first European fractal to the Egyptian architectural structure symbolizing creation (the lotus), an Egyptian origin is likely here as well. H.E. Hurst also has Egyptian connections, as will be discussed shortly.

Recursive scaling also occurs in the case of certain African sculptural forms, where it is often related to animist religious concepts.

Although frequently reduced to "fetish



religions are still active in Africa today, this conception of animated physical form is quite ancient, and is reflected in the myths of God creating humanity from clay. In some North African traditions certain spiritualists could create their own clay robots, "golems."

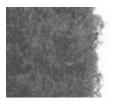
Norbert Weiner, the Jewish founder of analog cybernetics, was quite influenced by this concept of information embedded in physical dynamics (Heims 1984, Eglash 1992). He made





many African societies have developed techniques for the analog representation of Fig. 4. Mandelbrot fractal time-varying systems, including transformation into frequency- or phasedomain representation. In figure 5 we see animist energy flow, drawn by a Bambara seer for the author, visualized as a spiral wave emanating from a sacrificial egg. The dashed lines inside the figure are a digital code symbolizing good fortune. Undulatory schemes in Egyptian art





taken once a year for 15 centuries, became the basis for the work of H.E. Hurst mentioned previously. A British civil servant, Hurst spent 62 years in Egypt, and finally deduced a scaling law, based on this timeseries, which Mandelbrot used to bring Cantor's abstract set theory into empirical practice.

The most common frequency analysis used by Weiner and others in modern cybernetics is the Fourier transform. Fourier began his work with an analysis of Descartes' theory



of Fourier's visualizations of convergence of a sequence with a diagram of Egyptian architecture (which, because of the Fibonacci sequence, also shows convergence to a limit), suggests that the African concept of recursive structure and dynamic form may have contributed to this analysis as well.

#### African influence in American cybernetics

Related to these systems of analog recursion are studies on computational self-reference; these too have possible African influences. For example, Seymour Papert, a white computer scientist who championed hierarchical, non-recursive computing in the 1960s, made a dramatic conversion to decentralized computation following his U.N. work in Africa in the mid-70s. Another white engineer, N. Negroponte, developed his conceptions for self-organized computing following his study of "vernacular architecture," most of which was African.

Earl Jones, one of the first African-American computer engineers, was an innovator in decentralized data distribution. Analog computing networks have become increasingly important in the post-modern phase of American cybernetics, where they are no longer a stronghold of holistic hippy science, but rather a promising (and well-funded) area of research for the military and industry (Eglash 1990, 1992). African influences in American science date back to the contributions in biological knowledge and metalwork by slaves; the biological (especially botanical) is particularly significant for cybernetics due to its involvement in models of information coding. While romantic accounts of cultural difference would use botanical expertise to emphasize the "naturalness" of African traditions, this is certainly not the only interpretation. George Washington Carver, for example, declared that not only did God create the Kingdom of Plants and the Kingdom of Animals, but that He also had a "Kingdom of the Synthetic." This spiritual legitimation of the artificial fits well into the African religious traditions of analog representation discussed previously.

A direct line for African influences in analog cybernetics can be seen in the work of E. E. Just, who used music as both a conceptual model for decentralized biological morphogenesis, and as a cultural basis for understanding his African heritage (Manning 1983, pp. 203, 261). Just's work, particularly that on information encoded in non-symbolic representation (based in part on Just's rebellion against the position that the only intracellular information is that of a "master code" in the cell nucleus), was taken up by Ross G. Henderson, an

important influence in the General Systems Theory (GST) community (Haraway 1976), which in turn influenced the origins of cybernetics through studies of aggregate self-organizing phenomena and positive feedback loops.

As previously noted, the GST and related cybernetics community took a romanticist turn in the 1960s, which resulted in a disabling of the analog conception by Realism (cf. Varela's account of the "nonrepresentationist point of view" developed in the 1960s with McCulloch, Maturana, and others [Varela 1987, pp. 48-49]). What little involvement the Black community had in the cybernetics movement was, however, often opposed to this romantic tendency. For example, at the first Cybercultural Research conference in 1966, James Boggs, a Black political activist, suggested that the "new cybercultural society" would not be alienating to Blacks because (unlike whites) they could draw on a labor history in which their dual identity as both biological automatic machines and the makers/users of machines were deeply imbricated with their cultural identity (Boggs 1966, p. 172). Black identification with categories of the artificial are here political, but converge with the same conceptions that informed Carver and others; concepts that parallel the animist legitimations of the artificial in Africa.

The lived experience of African-Americans' interactions between these African diasporic innovations and their survival of American racism's particulars. On Comparent in the work of African-American women. As Nakano Glenn (1992) argues for the case of service workers, gender and race cannot be reduced additive oppressions," and must be seen as the site of an interlocking or securious diagrams. For example, both the traditional work of African women

Check and Sticher 1984), and specific labor locations for women of all chnicities in America have contributed to the frequency of their involvement in biomedically related fields. From 1876 to 1969, over half of the Black women science Ph.D.s have been in bio-sciences (Jay 1971), and the Black women inventor, Clara Fry, specialized in health-care tools (James 1989, p. 80). The most relevant example in cybernetics is the work of Patricia Cowings, who makes cyborgs for NASA. In an interview in this volume, Cowings discusses he use of analog biofeedback as a method for reducing motion sickness in space, and notes several complex interactions between her identity as a Black woman and her successful career in cybernetics. Yet she has distanced berselt from the claims for any simple mimesis of "African culture" in her construction of cybernetics.

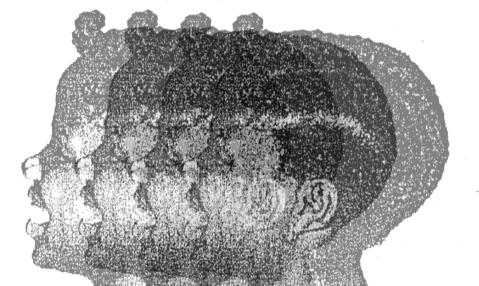
The contributions of African-American women to what has become modern cybernetics should be seen as a form of resistance that cannot be reduced to

either the restoration of tradition or a relocation to universalism

#### Black cybernetics in the postmodern era

The rejection of cybernetic romanticism by radical African-Americans was no longer necessary by the mid-70s, when youth sub-culture had turned from hippy naturalism to the urban affinity of punk-rock and hip-hop (Hall 1980, Hebdige 1987, hooks 1990). Thus the popular rap group Digital Underground displays an appreciation of cybernetics which is politically oppositional but no longer primitivist or naturalizing. While the impact of new cybernetic technologies on African-American communities has been part of a long history of labor displacement (Jones1985, Hacker 1979), environmental racism, and other subjugations, here we can also see some hints for the appropriation of technology in new configurations. For example, the famous "scratch" sound in hip-hop came about when the normally silent back-cue of the dee-jay's turntable was amplified and moved in time to the beat, thus changing a passive reproduction into an active synthetic instrument; turning tables on the turntable.

To what extent is this subcultural cybernetics merely "bricolage"—reassembling available components for a practical goal—and to what extent is it a deeper understanding of abstract principles? First, we should note that "official" cybernetics is both; it used pre-existing abstract principles—feedback, information theory, etc.—for practical application in a new assemblage. Indeed, the divisions between bricolage and science in general are far more permeable than we have been led to believe. This point has been admirably made in Sherry Turkle's study of bricolage programming styles in the hacker community, where she also notes that the interaction between popular culture and the scientific community is an active source of ideas in both directions.



Let us pursue this question a bit further. Setting aside both the definition of cybernetics and its interaction with popular culture, what kinds of technological capability does the vernacular cybernetics of the African-American community represent? One clear illustration can be found in the striking utilization of the analog/digital dualism for the production of musical signifiers in the divisions between reggae and rap music. As previously noted, reggae is more aligned with the naturalizing trope of modernity, and rap with the artificial affinities of the postmodern. In reggae we see the language of analog representation. "Rastaman Vibration" lets us "tune into de riddem;" we become resonant nodes linked by the waveforms of a polyphonic beat. In rap music it is digital communication that signifies cultural identity. Natural harmonies are broken up by arbitrary soundbites and vocal collage, and the melody is subordinated to a newly spliced code; a mutant reprogramming of the social software.

From the viewpoint of cultural studies, the utilization of the analog/digital division in reggae vs. rap does indeed count as a technological capability. But would it also count from the view of a cybernetics engineer? The use of the scratch sound mentioned earlier is associated with the birth of rap, but phonograph records are analog devices. Similarly, reggae makes use of an array of both analog and digital audio equipment. Isn't the use of technological language by African diasporic subcultures merely linguistic play? The answer is no.

Despite (in fact because of) the wide assortment of apparatus, rap, reggae artists have created a technology for signal processing that would indeed meet the specificities of current cybernetics engineering. The evidence for this begins in the work of Richard Voss, who first measured the fractal dimension for various types of a Voss discovered that the physical arbitro d signifiers meant that the ere a succession of fairly random signals, over communico "white-noise spectrum." In analog waveforms, on the other hand, long-t changes in information were reflected in long-term signal changes. Since were similar information changes on many scales, the result was a fractal structure, or "1/F noise spectrum," in the case of analog communication. Thus the waveform created by pitch changes in speech, which are primarily due to the phonetic differences between words, tends toward a white-hoise spectrum, while the pitch signal of music shows the fractal structure of analog representation.

Voss (1988) later showed the this relationship held for all types of music, both instrumental and yocal, with samples ranging from Indian ragas to Russian (gray) and two passive lines.

folksongs. My own studies (Eglash 1993) show that while reggae music also has this fractal structure, rap is the only music (aside from avant-garde experiments such as those of John Cage) which violates this rule (figure 8). The reason for this is the intentional violation of analog representation by digital coding, a violation that invokes rap artists' oppositional stance, but also offers a positive outlook in the possibilities for their cybernetic innovation. Moreover, the rapreggae fusions that are now becoming increasingly popular (e.g. ragamuffin) have characteristics which indicate that their signals are likely to average a fractal dimension value half-way between the two. This precision of control over an abstract cybernetic principle indicates that it is not simply a matter of the adoption of terminology; African diasporic identity is expressed in these examples through a conscious manipulation of complex signal characteristics.

#### Conclusion

In summary: the history of African interactions with cybernetics does not revolve around a single essence. It includes white engineers bringing ideas from Africa and Black engineers who make no claims about inspiration from any ethnic tradition. A portrait of the multivariate dynamics between the African diaspora and the information sciences—from the celebration of popular culture to the struggle of minority scientists—must be brought together with an understanding of the lived experience of people, from a multiplicity of ethnic configurations, who have found themselves fused, networked and oddly interfaced in the evolution of cyborg society.



## Benign Neglect and Planined Shrinkage

RESIDUE

EVIDENCES AN UNEVEN COLONIAL-RACIAL

EVIDENCES AN UNEVEN COLONIAL-RACIAL

ECONOMY THAT, WHILE DIFFERENTLY

ARTICULATED ACROSS TIME AND PLACE,

LEGALIZED BLACK SERVITUDE WHILE

SIMULTANEOUSLY SANCTIONING BLACK

PLACELESSNESS AND CONSTRAINET.

## Roger Starr and Planned Shrinkage

"Planned shrinkage" was the New York City expression of Moynihan's "benign neglect." A form of triage, it dictated the withdrawal of essential services from sick neighborhoods which were seen as unable to survive of undeserving of survival. These services ranged from libraries to fire service to public transportation. Of course, the neighborhoods diagnosed as "sick" were all poor and nonwhite.

Roger Starr first articulated the theory of "planned shrinkage" in Urban Choices: The City and its Critics in 1966. At that time, Starr had been executive director for a decade of the Citizens' Housing and Planning Council, a bogus "citizens' group," funded and governed by the real-estate industry. Starr cast himself as the rational, reality-based debunker of myths, prominent among them the "myth" of American community.

HIGHLIGHT [PAGE 4]: DIFFERENT SOCIAL GROUPS HAVE DISTINCT RELATIONSHIPS TO THIS ANYWAY DIFFERENTIATED MOVEMENT: SOME PEOPLE ARE MORE IN CHARGE OF IT THAN OTHERS; SOME INITIATE FLOWS AND MOVEMENT, OTHERS DON'T; SOME ARE MORE ON THE RECEIVING-END OF IT THAN OTHERS; SOME ARE EFFECTIVELY IMPRISONED BY IT' WITH A BLACK SENSE OF PLACE IN MIND, THE PLANTATION NOTABLY STANDS AT THE CENTRE OF MODERNITY. IT FOSTERED COMPLEX BLACK AND NON-BLACK GEOGRAPHIES IN THE AMERICAS AND PROVIDED THE BLUEPRINT FOR FUTURE SITES OF RACIAL ENTANGLEMENT. DIVERSE SPATIAL PRACTICES—WHEREIN THE STRUCTURAL WORKINGS OF RACISM KEPT BLACK CULTURES IN PLACE AND TAGGED THEM AS PLACELESS...

reconstituted about as readily as freight trains. (p. 43)

Since they have no property, their only marketable asset is hardship in a society pledged to eliminate that hardship which it is unable to ignore. Because this hardship is described to social workers and community organizers who are constitutionally disposed to believe the people they are listening to, and whose luck it is to listen only to the downtrodden and disadvantaged, it seems an immoral suggestion that some of the people displaced by urban renewal might just be exaggerating the sense of deprivation that they feel over their "lost homes." (p 46)

We have advocated the continuation of urban renewal, in the course of which we may displace poor people to make room for middle-class people; and all in the hope of producing racially integrated models. We have recommended an increase in public housing on which we propose to spend far more money than ever before, HICHIIGHTC PAGE 4]: ....BLACK to provide more interesting design. We have SENSE OF PLACE ARE THE in the civil-service system to provide stimular to DIASPORIC TENETS OF design. We have urged taking an interemining number of children away.

COLONIALITY, DEHUMANIZATION, AND RESISTANCE; THIS IS A SENSE OF PLACE WHEREIN THE VIOLENCE OF DISPLACEMENT AND BOMDAGE, PRODUCED WITHIN A PLANTATION ECONOMY, EXTENDS AND IS GIVEN A GEOGRAPHIC FUTURE.

Yet, no matter how lightly the word is used, the overtones of community refuse to die out, lending to the place or persons referred to, a significance they never earned. The overtones of the word suggest that, in the area described, people have thrown down their swords and spears; that they have created not only their own safety, but a web of love and kindness, understanding and mutual support, which it is sacrilege to tamper with. The careless abuse of the word community leads away from an understanding of the differences between people occupying a geographical area, and towards a veneration for kinship that may not even exist. The unearned veneration blocks changes that may, on other counts, be highly desirable. (pp. 412)

Provided only that a certain homogeneity of social class and income can be maintained, American communities can be disassembled and reconstituted about as readily as freight trains. (p. 43)

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immoral suggestion that some of the people displaced by urban renewal might just be exaggerating the sense of deprivation that they feel over their "lost homes." (p 46)

We have advocated the continuation of urban renewal, in the course of which

high HIGHLIGHT [PAGE 6]: WITH THIS IN MIND, URBICIDE—THE in the DELIBERATE DEATH OF THE CITY AND WILLFUL PLACE ANNIHILATION—CAN STAND IN AS A VIABLE EXPLANATION FOR THE ONGOING DESTRUCTION OF A BLACK SENSE OF PLACE IN THE AMERICAS.

indeterminate number of children away from the homes of their natural parents

that some human city problems cannot be solved at all with knowledge now in hand. We have urged the expenditure of tremendous sums of federal money on sewerage systems and treatment plants. We have condoned the construction of saw automobile highways that will destroy a large in the source of construction, and have scoffed at the possibilities of a greatly improved rapid transit system. (p. 258)

These necessarily lengthy and numerous quotes reveal the ideology and techniques behind the selling of "planned shrinkage." He told a plausible story, a sheer fabrication, a theatrical selling of snake oil laced with poison. By denying the existence of the community social fabric and by evoking dysfunctional poor families,

characterizes Roger Starr's planned shrinkage proposal:

The aim of such a policy, in the opinion of Roger Starr, the Housing and Development Administrator, would be to hasten the population decline already begun in these neighborhoods so that, ultimately, further cutbacks in city services could be concentrated in **Hi**mited number of

he helped provide the intellectual basis of the poor

his approach would be mare efficient

communities did not become pa

A 1976 New York Times article

These recommendation

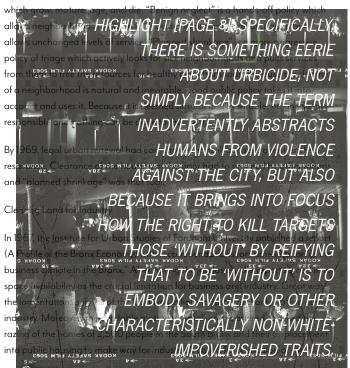
however, the huge numbers of people still living in these targeted

of the Bronx below

Starr also disingenuously pretended that "planned shrinkage" had played no role in the initial loss of population from these neighborhoods. In fact, what he proposed in 1976 was the coup de grace to neighborhoods which were victims of previous implementation of "planned shrinkage."

Particularly desirable in Starr's eyes was not repairing or rebuilding damaged housing. He urged letting the land lie vacant until a new use could arise. Among the new uses which he mentioned was industry.

Susan Roberts pulled together the sociology and urban studies literature on the concept of the city and the neighborhood life cycles and showed how this unproved notion led to "benign neglect" and "planned shrinkage." In short, the life-cycle concept depicts cities and especially neighborhoods as organisms



zoning laws and of the building codes. It trumpeted the priority of industry over housing in land use conflicts. It called for designation of the South Bronx as a redevelopment area.

In 1969, the New York City Department of Planning in its Master Plan for New York City described the South Bronx: It is an area of turbulence and change. . . . Frequent tenement fires force residents to move and leave gutted buildings or vacant lots. Residential densities are high, averaging 85 dwelling units an acre. Four-story walkups on 60-by-100 lots house as many as 21 families. Most of the housing-grim,

crowded tenements-is concentrated between 134th Street and Bruckner Boulevard.

The majority of residents are black and Puerto Rican. Mobility is high. Between 1960 and 1965, 64 percent of the black families in the Bronx and more than 75 percent of its Puerto Rican families

those areas. The Rand Fire Project staff knew by 1969 that the pattern Highlight [page 7]: This is to say that multitudinous in the constitution of the const

vacant parcels and

communities, the dealing with the ate destruction to feel worklood orbifration, the

deliberate destruction of works working buildings, bridges, houses, shops, roads, and barks—are always inhabited with disposable "enemies", thus one private important barks bed dwellers, impoverished dwellers,

Impoverisned awellers,

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the hour those without?

Again, the downturn

incidence rose with

The arbitration

covered both engines and ladders. The Kirby Report noted that the opening of these companies would allow the City time to address the socioeconomic forces behind the growing fire incidence and its geographic spread, but it didn't stop there:

The major increases in fire companies recently added to the Bronx will assist in absorbing a large part of the expected fire rise. These units will also afford a greater flexibility of Bronx operations. ... These are capable administrative decisions and help us face our problems but not our causes.

As has been said 'trend is not destiny.' If we learn from examples of the past, a great part of the expected fire rise can be averted. To do so rehabilitation must move forward at a greater rate than decomposition. Sanitation facilities in the Bronx must be brought up to a level that exists in Manhattan; for example, the nonstructural-to-structural-fire figures in the 11th Battalion are close to 1-to-2 while slum areas of the Bronx

are over 2-to-1....There are many more physical and social changes which must be planned to reverse the fire trend. If these are beyond the fiscal capabilities of the City or inequitable with our economic structure, it does not relieve us completely of our obligation to point up problems as we see and forecast them. For this reason, I would recommend that a very high ranking member of the Department be a full-fledged member of all New York City agencies dealing with Housing, Redevelopment and similar functional groups.

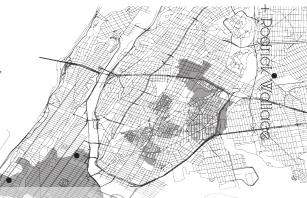
It has been said that the major part of funds in the City should be allocated to improvement of social conditions of the poor. The actual fires and the constant threat of fire must surely be a devastating horror to people required to live in houses in a deteriorating neighborhood. We also know that fire is a large component of the decay cycle and we can suspect that it adds to the uneasiness and insecurity of the poor. After years of fire experience, fire prevention and fire investigation, I feel that it can be said that rather than being accidental, fire is largely a social

problem and the Bronx has and will have its share of such problems.

Moynihan and Rand, who called fire a social indicator may seem to echo Kirby, who called fire a social problem. Yet "social" means quite different things in the two uses of the word. Moynihan and Rand accused the poor of arson and mischief, but Kirby saw sanitation, housing, and economic development as part of the social environment determining fire incidence and pattern.

The pace of urban decay suddenly increased with the 1968 rise of fire contagion (the simultaneous rise of fire incidence and spread of area of high fire incidence). Besides fire. another phenomenon destroyed homes in poor neighborhoods, namely building abandonment. By 1969, the most densely crowded neighborhoods, against intuition and logic, also hosted a growing number of empty building shells and partially occupied buildings. In most of these "deaths."

the landlord simply walked away, stopping all maintenance and not paying the superintendent who, understandably, would also walk away when the paychecks stopped. Because a report isn't filed every



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Deborah Wallace

HIGHLIGHT [PAGE 11]: EXNOMINATION
BY WHICH WHITENESS AVOIDS BEING
AND THUS KEEPS ITSELF OUT OF THE
INTERROGATION AND THEREFORE OF
FOR CHANGE.... ONE PRACTICE OF EXTHE AVOIDANCE OF SELF-RECOGNITION
DEFINITION. DEFINING, FOR WHITES, IT THAT IS ALWAYS DIRECTED OUTWARD
MULTIPLE 'OTHERS' BUT NEVER INWADERINER' (42).

time a landlord walks, the way a report is filed every time even one fire company responds to an alarm, the incidence and geography of building abandonment went undescribed until the late 1970's. The studies of Michael Dear in Philadelphia, John Odland in Indianapolis, and The Women's City Club in NewYork revealed the building abandonment secome

contagious destroyer of the housing stock.

Dear described the contagious abandonment process in detail:

The process of abandonment as it operates in space... suggests an initial scattering of abandoned structures,

HIGHLIGHT [24]: MIRRORING
EASTMAN'S ANTAGONISTIC
RELATIONSHIP WITH TRULY
ABLE HOUSING OR SOCIAL
ENVIRONMENTS, THIS TRIPLET
JUMPS AROUND BETWEEN THE
FOREGROUND AND BACKGROUND
OF THE PIECE. EASTMAN DIED
WITHOUT A HOME AND WAS
KNOWN TO GIVE AWAY MONEY AND

characterized by the occurrence of many small groups of abandoned houses. With the passage of time, this pattern is intensified; the broad scatter is maintained, although the small groups now contain a greater number of structures. A two stage process is clearly suggested; the initial abandonments occur and later consolidation follows. ... It suggests a 'leader-follower' sequence which resembles the propagation of a plant species or the diffusion of information. It is essentially a contagious sequence. . . . Only in very rare instances were large groups of abandoned buildings returned to the market....

... [O]nce abandonment has begun it is likely to be very difficult to stop. It may become almost a self-sustaining process under the force of contagion...

It wasn't until 1970, when Owen Mortiz reported in the New York Daily News on the extent of building abandonment in the City ghettoes that the problem appeared on the urban issues map. Neal Hardy, then Assistant City Housing Administrator, suddenly called for more federal funding to combat abandonment and predicted that sound areas would become "ghost-towns" as abandonment spread. So it was clear that by 1970, the City knew about both fire and building abandonment contagion.

Deborah Wallace + Rodric

Highlight [page 9]: § Freedom of movement is basic to both this art and this society" (257).





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