CHAPTER THREE:

"Text Display"

Sex

In the novel *Dawn*, the first of the *Xenogenesis* trilogy by Octavia Butler, the main character, Lilith Iyapo, is seduced by an alien. The alien, called "Nikanj," is a neutral-gendered being. Nikanj coaxes Lilith to join it and her human partner, Joseph, in intercourse: "'Lie here with us,' it says, 'Why should you be down there by yourself?'"—an invitation which Lilith cannot resist,

> She thought there could be nothing more seductive than an ooloi speaking in that particular tone, making that particular suggestion. She realized she had stood up without meaning to and taken a step toward the bed. She stopped, stared at the two of them. Joseph's breathing now became a gentle snore and he seemed to sleep comfortably against Nikanj as she had awakened to find him sleeping comfortably against her many times. She did not pretend outwardly or to herself that she would resist Nikanj's invitation—-or that she wanted to resist it. Nikanj could give her an intimacy with Joseph that was beyond ordinary human experience. And what it gave, it also experienced. (Butler 306)

Having barely survived a nuclear apocalypse only to be "rescued" by the aliens, Lilith is a prisoner on the alien spaceship. She, along with all of the surviving humans, has been saved for the purpose of re-populating the earth with a new, hybrid species of human-aliens. These aliens

have a special sexual organ that facilitates a neural connection between a male and female partner. They make this connection by inserting this organ, which they call a "sensory hand," into each partner's spinal cord at the back of the neck. During the sex act, this organ stimulates each partner's pleasure centers in the brain and collects genetic information which the aliens use to engineer a human-alien embryo.

This sex act is so pleasurable that Lilith, who harbors a deep resistance against the aliens' intention to procreate with humanity, to create what she calls "Medusa children," succumbs to her body's desire, so that "she had stood up without meaning to and taken a step toward the bed" (Butler 87, 306). The role of the body's impulses and the humans' ability to control them speaks to a larger debate among the novel's critics about the effect of biology and biological drives on human behavior in the text. Jayna Brown, for example, argues that this text, like others by Butler, offers humans the choice to "change" or to "prevail," that is, to adapt to external forces or to persist, even against all odds, as a species (89). Some critics, such as Stephen Barnes and Nancy Jesser, are on the side of "prevail," arguing that the human behavior in the novel reinforce intractable sociobiological tendencies, such as those toward hierarchy and sexism. Stephen Barnes, who knew Butler personally, emphasizes the influence of biological research in her writing on human nature, sharing that Butler was fascinated by what she called "emergent properties," which begin from small impulses and grow into complex social behaviors and structures. By contrast, other critics like Donna Haraway and Patricia Meltzer, argue that this novel represents the will of humans to change and adapt in order to survive. Haraway, who reads the story "as if it were a report from the primate field… after a nuclear holocaust," argues that the inter-species relations "facilitate revisionings" of "difference, reproduction, and survival" in the humans, who must evolve in order to thrive (Haraway 376-7).

However, what if Lilith succumbs to seduction not because she lacks mental control over her body's sex drive, but because the mind is simultaneously a *brain*? Taking this example as its jumping point, this chapter argues that materiality persists even in seemingly immaterial processes. And this materiality is always bound by physical protocols, which drive not only experiences of pleasure, like sexual desire, but also computation. In what follows, I undertake theoretical examination of physical processing across two apparently unrelated fields, Black Feminist Studies and Media Archaeology Studies. I examine how each domain theorizes the intersection of physical materiality and its relative conceptual registers: in Black Feminist Studies, in the form of the racialized body, and in Media Archaeology Studies, in what is called the computer "stack," the layers hardware and software which make up a modern computer. I then read a digital work whose screen effects (including animation and text displays) engage the themes of desire and control, similarly to *Dawn.*

Before turning to theory, however, I examine one more scene of embodied experience overcoming cognitive reasoning. When Lilith comes face-to-face with her captors, she is completely overtaken by an experience that is opposite to pleasure, which is fear. Rather than being compelled forward, like in the seduction scene above, Lilith's becomes immobilized:

> [W]hat had seemed to be a tall, slender man was still humanoid, but it had no nose—no bulge, no nostrils—just flat, gray skin. It was gray all over—pale gray skin, darker gray hair on its head that grew down around its eyes and ears and at its throat. There was so much hair across the eyes that she wondered how the creature could see. The long, profuse ear hair seemed to grow out of the ears as well as around them. Above, it joined the eye hair,

> and below and behind, it joined the head hair. The island of throat hair seemed to move slightly, and it occurred to her that that might be where the creature breathed–a kind of natural tracheostomy.
>
> Lilith glanced at the humanoid body, wondering how humanlike it really was. “I don’t mean any offense,” she said, “but are you male or female?”
>
> “It’s wrong to assume that I must be a sex you’re familiar with,” it said, “but as it happens, I’m male.”
>
> Good. It could become ‘he’ again. Less awkward. (Butler 29)

The gender designation, “he,” along with a catalogue of familiar features, “hair,” “eyes,” “ears,” and “throat,” reveals the impulse to categorize the unknown according to anatomical terms. This familiarity, however, disappears when the alien’s appearance begins to exceed these terms:

> She did not want to be any closer to him. She had not known what held her back before. Now she was certain it was his alienness, his difference, his literal unearthliness. She found herself still unable to take even one more step toward him.
>
> “Oh god,” she whispered. And the hair—the whatever it was—moved. Some of it seemed to blow toward her as though in a wind, though there was no stirring of air in the room.
>
> She frowned, strained to see, to understand. Then, abruptly, she did understand. She backed away, scrambled around the bed and to the far wall. When she could go no farther, she stood against the wall, staring at him.
>
> Medusa. (Butler 30)

In an attempt to place the alien into familiar categories, Lilith undergoes a complex physio-cognitive reaction. First, she uses mammalian anatomical categories to perceive Jdahya. Then, as his difference begins to register, she apprehends him on a pre-linguistic, embodied level, characterized by a paralyzing aversion ("unable to take even one more step toward him"), which ends abruptly when she does "understand," an understanding expressed by evoking the mythical monster, "Medusa."

"Medusa" as a descriptor is significant. Her physio-cognitive progression from embodied paralysis to the mythical suggests a peculiar way that humanity handles encounters with what it does not know. The Oankali describe this compulsion to categorize as part of a larger tendency toward hierarchy, which distinguishes life on Earth from other forms of life. They describe the tendency toward hierarchy as a "terrestrial characteristic," present in humans' "closest animal relatives and in [their] most distant ones (Butler 80-81). For Lilith, then, the tendency toward hierarchy first demands that she place him on a scale of familiarity. She compares Jdahya to what she already knows about other living beings, ascribing him within a binary gender system, for example. However, when the hierarchy fails to subsume his other qualities, like the strange, moving "hair" growing all over his body, she freezes until her intelligence speculates with an analogy, "Medusa." This marks the moment when Lilith, who until then has been struggling to visually process this strange being, finally settles onto a familiar, human designation, albeit in the context of myth. Despite his alienness, at that point, Lilith incorporates Jhadaya into her anthropocentric worldview—specifically, into a fearsome figure that represents monstrous and deadly femininity. What scares Lilith, then, is not just difference, then, but difference within similarity: the strange familiarity of this humanoid, this bipedal, two-limbed creature, whose audible language and conscious intelligence is combined with aspects that do not belong to any

mammal.

Unlike humans, the Oankali are attracted to difference. As Jdahya explains to Lilith: “We acquire new life, seek it, investigate it, manipulate it, sort it, use it. We carry the drive to do this in a minuscule cell within a cell, a tiny organelle within every cell of our bodies” (84). This drive to diversify their own gene pool, which they call the “gene trade,” is facilitated by the tentacle-like organs that sprout from their bodies. These organs create a neurological connection between male and female mates, a connection that enables them to transfer not only genetic material and sensations of pleasure.

In the novel, this situation creates what I call a paradox of the flesh, where it is at once an obstacle and enabler of physical connection. While the flesh allows for physical contact between humans, it also functions as an obstacle, creating the potential for fear of the other. By contrast, the Oankali are able to bypass this obstacle entirely. They route through the flesh and into the brain, eliminating the space for fear and repulsion, to activate cerebral pleasure centers.

Flesh

To better understand this paradox, I now examine how two very different fields of study—Black Feminist Studies and Media Archaeology Studies—theorize physical materiality. Though vastly different in focus, with Black Feminist Studies exploring the concept of the flesh within the violent contexts of slavery and racial oppression, and Media Archaeology being the study of materiality in electronic media, both areas of inquiry share a similar investment in reading deeply into surfaces, whether the body’s surface or the screen’s.

In Black Feminist Studies, critics such as Hortense Spillers, C. Riley Snorton, and Amber J. Musser deconstruct racial and gendered processes, a “symbolic order” or “American

grammar," in Spillers's words, ascribed to Black bodies since the violences of trans-Atlantic slavery (68). In the influential essay, "Mama's Baby, Papa's Maybe: An American Grammar Book," Spiller argues that the Black body expresses a "stunning contradiction" between reduction and amplification of meanings (67). Spillers explains that the "severing of the captive body from its motive will," reduces the body to physical materiality, "to a thing, becoming being for the captor," while simultaneously layering meaning, "becom[ing] the source of an irresistible, destructive sensuality" (67). In other words, through this reduction of the body to its bare physicality—into flesh, a material substance for labor and exchange—emerges a possibility for signification, where elements of sensuality, objectification, otherness, and powerlessness can be layered onto the flesh.

For Spillers, and other thinkers who follow her theorization of the flesh, the next critical move is to take the reduction, which has been a tool for appropriating Black bodies for the purpose of exploitation, and create significatory possibilities that sidestep exploitation. Amber J. Musser, for example, explains that the reduction to flesh brings to the surface other desires in tension with the desire to dominate, which enable one to "hold violence and possibility in the same frame" (12). Musser offers the painting *Origin of the Universe 1* (2012) by artist Mickalene Thomas, which depicts a female vulva, revising Gustave Courbet's *L'Origine du Monde* into a bedazzled spectacle. In Thomas's piece, the rhinestone-encrusted vulva creates a brilliant surface, a "formal strategy of producing opacity" (Musser 48). By instrumentalizing its own surface to create opacity, this piece multiplies the potentiality of meanings that work alongside a more pronounced subtext of objectification about the commodification of the Black female body. This subtext, expressed by rhinestones, whose flashiness serves "as a reminder of the long association between black people and the commodity" (50), and simultaneously as evoking

wetness, suggesting sexual pleasure. Musser explains that both possibilities exist in tension,

> Thinking the rhinestone as a trace or residue of Thomas's wetness and excitement allows us to hold violence, excess, and possibility in the same frame. Even as the source is ambiguous, the idea that rhinestones might offer a record of pleasure—-pleasure that is firmly constituted in and of the flesh—-shows us a form of self-possession. This self is not outside of objectification, but its embellishment and insistence on the trace of excitement speaks to the centrality of pleasure in theorizations of self-love. (Musser 63)

The significatory system that commodifies the black vulva exists alongside a production of pleasure. In its opacity, this surface opens a simultaneity of registers, enabling a movement, or a shift, between one and the other, like a shifting between frames, from "violence", to "excess," and finally, to "pleasure" and "self-love."

The reduction to surface enables bodies slip in and out of signification. C. Riley Snorton argues that the interchangeable or "fungible" quality of Black flesh turns bodies into "malleable matter" (20). He illustrates this effect with stories of fugitive slaves, such as of Harriet Jacobs, whose escape from slavery in 1842 is documented in *Incidents in the Life of a Slave Girl* (1861). Snorton explains how the "blackening" of Jacobs's face with charcoal endowed her a level of "fungibility, thingness" to pass as a man, even deceiving those who knew her well (Snorton 71). As opposed to traditional racial "passing" that assumes a degree of whiteness, blackness here reduces gender to an "indefiniteness" that enables Jacobs' escape (56). Through reduction, in this case, into a more "fungible" presentation, the Black body simultaneously accelerates its

significatory potential.

This effect of fungibility creates an almost chaotic state where the Black body becomes susceptible to multiple mappings of meaning and can therefore slip in and out of signification. Snorton offers up an example of the daguerrotype, an early photographic technology that involves using chemicals on silver plates. Snorton explains that daggueroype offers "a visual grammar for reading the imbrications of 'race' and 'gender' under captivity" (Snorton 40). It does so by flipping expectations about surface and depth: here, rather than depth existing below the surface, the surface becomes a ground for the layering of depth. Snorton describes that this flip creates an "unmappability" of meaning:

> … the daguerreotype provides a series of lessons about power, and racial power in particular, as a form in which an image takes on myriad perspectives because of the interplay of light and dark, both in the composition of the shot and in the play of light on the display. That the image does not reside on the surface but floats in an unmappable elsewhere offers an allegory for race as a procedure that exceeds the logics of a bodily surface, occurring by way of flesh, a racial mattering that appears through puncture in the form of a wound or covered by skin and screened from view. (40)

The physical material of the image, that is the silvered copper plate of the daguerreotype, at once solidifies its ground and indexes a liminal space, what Snorton describes as the "unmappable elsewhere." The image of the daguerrotype, which changes according to angle and lighting, evokes the condition of racialization as "a procedure that exceeds the logics of a bodily surface"

while nonetheless adhering to that surface, "a racial mattering that appears through puncture." Snorton's use of the word "puncture" (perhaps revises Roland Barthes's concept of the "punctum") ironically suggests a lack of localization to a precise point.[1] That the image resists fixity allegorizes how physical registers interact with symbolic ones in the collision of flesh and racialization.

HERE

Similarly interested in material forms, though less so in social ones, thinkers in Media Archaeology Studies offer deep readings of technological processes to analyze seemingly immaterial surface forms. These thinkers tend to resist common assumptions about media as ephemeral and transient, existing only on the screen—a view famously encapsulated by Media Studies theorist Friedrich Kitler:

> The general digitization of channels and information erases the differences among individual media. Sound and image, voice and text are reduced to surface effects, known to consumers as interface. Sense and the senses turn into eyewash. Inside the computers themselves everything becomes a number: quantity without image, sound or voice. (1)

Kitler here articulates a common conception that computer code is actually a stream of indistinguishable zeroes and ones that flatten the particular differences of media like text and audio. By contrast, Media Archaeology scholars examine the material specificities of new media

[1] As opposed to the "studium," or subject, of a photograph, the "punctum" is a detail that "pierces" the viewer. See Barthes, *Camera Lucida*, 27.

like “bits,” the technical term for the zeroes and ones that make up Kittler’s “eyewash.” Matthew G. Kirschenbaum, for example, who examines these bits through magnetic force microscopy, explains that each bit “prove[s] strikingly autographic, all of them similar but no two exactly alike, each displaying idiosyncrasies and imperfections—
in much the same way that conventional letterforms, both typed and handwritten, assume their own individual personality under extreme magnification” (62).

HERE

Kirschenbaum uses the term “forensic materiality” to refer to these deeply inaccessible materialities, which remain at the bottom level of computer hardware, on the hard drive. Here, data is encoded in bits on a magnetized surface: a north polarity signifying “1,” or a south polarity signifying “0”. As data moves up the stack, it undergoes a series of transformations, into programming languages that are “higher order,” more easily readable by humans. To trace the transformations of these physical elements as they travel up the software stack, N. Katherine Hayles offers the concept of “flickering signifiers.” Unlike Lacan’s “floating signifier” (a word does not have a stable referent, but attains its meaning through a play of difference against other words), the flickering signifier grounds meaning in physical signals that move through the software stack. Hayles explains,

> As I write these words on my computer, I see the lights on the video screen, but for the computer the relevant signifiers are magnetic tracks on disks. Intervening between what I see and what the computer reads are the machine code that correlates alphanumeric symbols with binary digits, the compiler language that correlates these symbols with higher-level instructions determining how the symbols are to be manipulated, the processing program

> that mediates between these instructions and the commands I give the computer, and so forth. A signifier on one level becomes a signified on the next… "Virtual Bodies" 77

In this process, physical traces on a magnetic surface are first mapped into low-level machine languages which are illegible to human readers. Then, these patterns are translated into "Assembly" languages that pertain to the computer's Central Processing Unit (CPU), the main processor that executes instructions, arithmetic, and logic. Finally, as data moves up the stack, it abstracts into high level programming languages like Python and JavaScript which power applications that users interact with in the form of the Graphical User Interface (GUI). Hayles's "flexible chain of markers" materializes the various levels of transformation that digitized inscription must undergo in order to reach the level of the screen (*Posthuman* 31). At each level, the signal is constantly refreshed. Rather than "float," then, these signals flicker, grounded in physical transformations between one register and the next. As data moves through electronic processing, signal "reinvigoration," in Kirschenbaum's words, a kind of "allographic reproduction," refreshes and standardizes it through approximation rather than exact copying, so the effect on the screen is a "manufactured" phenomenon (136).

The movement up the stack creates a force, a shifting between software registers, which Kirschenbaum calls "torque": "as a user shifts from one set of software logics to another," he explains, there emerges a "procedural friction or perceived difference" (13). Taken from physics, torque is characterized by a rotational movement that combines energy from two directions: first, from the external force acting upon the object, and second, from the relation between the point of contact on the object and its pivot point, or the point along the object where it can be balanced. Torque therefore measures a force that relies on distance between the point of contact and the

object's center. In Kirschenbaum's usage, this term refers to the gap between one significatory system and another, such as a machine-level programming language and its more abstracted language, layered on top of it, as data travels up the software stack. Energized by a sense of volatility in data and by torque between software registers, this chain of transformations culminates at the screen, where the end user experiences them as visual and haptic effects.

Opposed to forensic materiality, which exists in physical markings of hardware, the software layer introduces a layer of "formal materiality," according to Kirschenbaum. Formal materiality drives the "illusion of immaterial behavior," that objects on the screen appear, disappear, and move without a physical origin (11). While forensic materiality describes physical inscription, where markings are individuated in the lowest levels of computer hardware, formal materiality describes a structural and even symbolic realm that manifests in display and appearance on the screen. Kirschenbaum offers the example of an image file:

> An image file is typically considered to consist of nothing but information about the image itself—the composition of its pixilated bitmap, essentially. However, the image can carry metadata (documentation as to how it was created, embedded as plain text in the file's header), as well as more colorful freight, such as a steganographic image or a digital watermark. This content will only become visible when the data object is subjected to the appropriate formal processes, which is to say when the appropriate software environment is invoked—anything from the "Show Header" function of an off-the-shelf image viewer to a 128-bit encryption key . (13)

In contrast to the digital immateriality of the screen, formal materiality highlights the physical effects and qualities of digital objects—the way that these objects *appear* and the way that they *move*. For the image file, depending on the file type, it will appear properly if it is opened by a particular image editing program, which runs the appropriate software to open files of that type. In the below example, one image shows an image file, in PNG format, opened with text editing software, which displays the file as an illegible string of characters. By contrast, the image editing software displays the file as it is meant to be seen. Both images show the file in the dimension of formal materiality, but in different registers, according to different software logics.

[image of .png file opened with a text editor]

[image of a .png file opened with an image editor like *Preview*]

As data travels up the software stack and away from its original inscription on the hard drive, a strange thing happens: it becomes more manipulable. Perhaps unintuitively, as data moves away from its original inscription on the hard drive, it moves toward something that users can "touch" and "move" on the screen, so to speak. For example, by dragging and right-clicking on items on the screen, users can move, duplicate, or delete large quantities of data. Although the screen displaces the user from digital inscription, there is in actuality an inverse relationship between digital abstraction and tactile manipulation, a state which Kirschenbaum calls "digital volatility" (140).

In the next section, I explore how these "screen effects" of digital media relate to the "surface effects" of the flesh. In both cases, the foreclosure of depth enables these effects,

denying access to underlying technical processes so that new relations to emerge. As I demonstrate below, these effects create physical *moves* that occur on the surface of the screen—the shifting of meanings between registers, or torque, and the explosion of meaning which cannot be located, in digital volatility. In what follows, I apply these two moves in my reading of the screen effects for a hypermedia literary work, *skinonskinonskin*.

Skin

skinonskinonskin (1999), a work of "net art" created by Auriea Harvey and Michaël Samyn, under the collaborative artist name, *Entropy8Zuper!*, documents Harvey and Samyn's love affair, which begins in an internet chat room and grows in an exchange of "digital love letters" ("*skinonskinonskin*" *Net Art Anthology*). The works consists of individual web pages, each containing animations or interactive elements, using software that is mostly defunct by today's standards. The work is preserved in the *Net Art Anthology* on *Rhizome.org*, where it runs on an "emulator," a virtual desktop environment that simulates outdated software programs and processes.

skinonskinonskin falls within a body of electronic work called "Electronic Literature," which is now practically inaccessible to modern web browsers and applications. Electronic Literature spans several subgenres, including hypertext fiction, network literature, interactive fiction, and generative text, which share a common interest in exploring digitality as an aesthetic. Although the work is written in HTML (HyperText Markup Language), which continues to be the default language for the web, it is animated by depreciated versions of JavaScript and Flash

software.[2] Besides the outdated code, it also operates on an obsolete web browser, Netscape 4. The decline of this browser, which was popularized as a platform agnostic solution at the time of its emergence (rendering HTML pages on both Harvey's Mac and Samyn's PC), brought with it the depreciation of certain HTML and JavaScript elements contained within the work. Today, the only way to view the full work in something like its original context is through emulators, like the one hosted on *Rhizome.org*, that enables viewers to read *skin* through a simulated Netscape 4 window.

The "air.html" page (pictured below) depicts an animation of two small figures over a black background. The two figures, which represent Samyn and Harvey, float in a horizontal position over a cyber-scape of rolling, green lines. As the user's cursor pans across the screen, it attracts each of the figures toward it, like a magnet. The effect is that the figures appear to "fly" over the rolling expanse toward the user's mouse. The illusion of free movement, however, is deceiving. While the figures slide effortlessly in all directions, they require a precise tactile control from the user's mouse in order to guide them to a specific part of the screen. Additionally, while the mouse can bring the individual bodies into contact, they can never cross each other, nor can they cross over to the other side of the screen. Samyn's body remains confined to the left, while Harvey's is to the right (see video #2).

[2] Flash software was officially discontinued on December 31st, 2020. Though Flash delivered advanced graphics at a time when media-rich content traveled slowly over the web, over the last 20 years, the development of newer, more efficient and secure animation technologies brought Flash into obsolescence. This termination made a generation (roughly from mid 1990s to 2010) of internet games, net art, and electronic literature virtually inoperable.

Video #2: Screen recording of the "air.html" animation.

The bodies' animation is defined in the source code of the page, in a series of functions written in the JavaScript programming language, a popular language for authoring interactive elements on web pages. Below is an excerpt of one JavaScript function called `flyMouse()`:

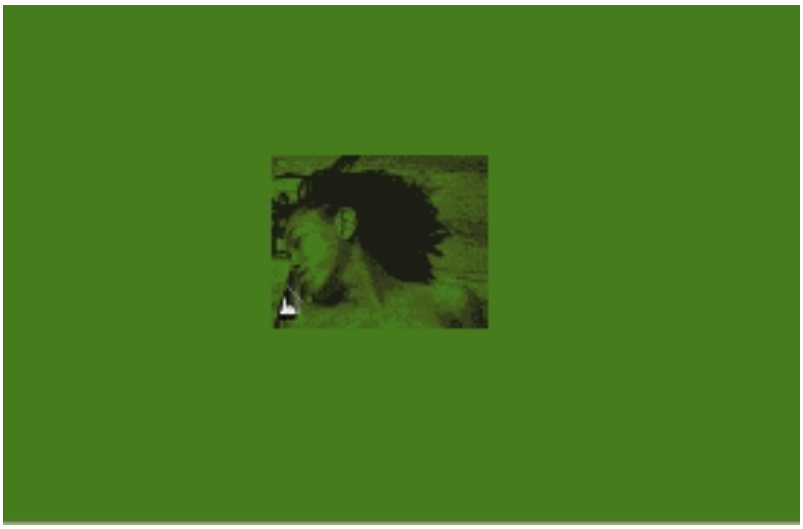
```
if ( mouseX < halfW )
{
      var mFactor = 0.1;
      var aFactor = 0.01;
}
else
{
      var mFactor = 0.01;
      var aFactor = 0.1;
};
```

In this excerpt of code, which is technically called a "conditional statement," the movement of the bodies on the screen is conditional on their distance between the mouse and the original positioning of the bodies on either side of the screen. The first line of the code, `if ( mouseX < halfW )`, specifies the condition: if the position of the mouse on the horizonal axis (x-axis) is less than half of the screen's width, then execute the code that is indented immediately below. However, if the position of the mouse is more than half the width, execute the code immediately under `else`. The conditional statement therefore determines the order of operations based on whether a specific condition is true or false. As a foundational construct for many programming languages, conditional statements allow code to make decisions, so to speak. In this case, the conditional statement defines the direction and speed of the bodies' movement. Depending on this distance, the magnetic force for each of the bodies is multiplied against a factor of .1 or .01. This results in a higher velocity from Samyn's body when the mouse is near Samyn's original position on the left side of the screen, and a higher velocity from Harvey's body when the mouse is near Harvey's original position on the right side. The specifications for each figure's positioning and velocity create this effect of magnetized movement as the user pans her mouse across the screen.

The binary nature of the conditional statement—it can be true or it can be false—enables an animation that moves in many directions. However, while the figures can follow the user's mouse in multiple directions, their velocity is predefined. So there is freedom in their movement, but a freedom that exists within constraints. The tightly constrained structure of the conditional statment in the source code complicates this illusion of free movement on the surface, and reinforces the intractable nature of the figures themselves, who follow the mouse, but only up until a certain point. The structure of the code, its formal materiality, thus emerges in the shift

between the coding layer and the surface layer.

Another page, “control.html” also plays with this movement, or torque, between coding and screen registers (see Video #3). The page consists of a monochrome green image of Harvey’s head, which rolls from side to side in the direction of the user’s cursor as it pans over the image. As the cursor exposes Harvey’s face at different angles, it displays pieces of “alt-text,” which hover momentarily over certain parts of Harvey’s head, and contains words like “go” “believe” “ocean” and “mind.” Together, the bits of text and the jolty movement of Harvey’s head as it rolls from side to side creates a sense of lag on the surface.



Video #3: Screen recording of the “control.html” animation (does not include alt-text effect).

But the surface only reveals a small part of the animation’s working. The source code, written in HTML, shows that the animation consists of individual images, each one within its own `<AREA>` element, and containing specific `ALT` and `COORDS` attributes that define the alt-text and coordinate associated with that image. As the user pans to a specific coordinate on the image surface, the image will change to another one that corresponds to the current coordinate. The alt-text will also change to display the text associated with the new image. Thus, the animation is created by superimposing a number of individual images (23 images in total) and text that

activate when the user's mouse lands on a specific coordinate of the image pane. While the viewer only sees one image or alt-text at a time, the full list is contained within the source code. Reading down the `ALT` attributes, for example, brings the full message into view: "i believe in it you created it in my mind my mind cannot let it go the ocean the waves its a vision." The superimposition of images explains why Harvey's head appears to jumps from one position to another, rather than a smooth progression from side to side. The effect is to create a slight lag, a series of fleeting pauses in which Harvey gazes directly to the viewer.

```
<AREA SHAPE=RECT ALT="i" HREF="#" COORDS="0,0,8,142"
onMouseOver="strokeimage.src=stroke1.src [...] >

<AREA SHAPE=RECT ALT="believe" HREF="#" COORDS="8,0,15,142"
onMouseOver="strokeimage.src=stroke2.src [...]>

<AREA SHAPE=RECT ALT="in" HREF="#" COORDS="15,0,22,142"
onMouseOver="strokeimage.src=stroke3.src [...] >

<AREA SHAPE=RECT ALT="it" HREF="#" COORDS="22,0,30,142"
onMouseOver="strokeimage.src=stroke4.src [...] >
```

Here, the message contained within the source code is foreclosed from the display level of the work, where only part of the image and message exist at any point in time, depending on where the user's mouse is located on the screen. And the image/text changes when the mouse's position changes. Like Snorton's daguerreotype, the full image exists across a thick surface (in this case, layers of images) that cannot be located to a single point. In this way, the full visual display is

"unmappable" to the end user. This "unmappable" effect created by the individual images contributes to the work's preoccupation with control, specifically, with control over the female body. While most of this pages in this text contain HTML elements that specify an author, title, and date, this one only contains a title, "you:controlMe."

The notion of control brings me back to the opening scene of this chapter, when Lilith is seduced into having sex with Nikanj, the alien, and Joseph, Lilith's human partner. In that scene, one might expect a conflict between Lilith sexual instinct and her free will, that is, between her desire and her resistance to the forced interbreeding. But Lilith readily succumbs, without even "pretend[ing] outwardly or to herself that she would resist" (Butler 306). When Nikanj "plugs" into her, Lilith experiences a torrent feelings from Joseph:

> She immediately received Joseph as a blanket of warmth and security, a compelling, steadying presence.
>
> She never knew whether she was receiving Nikanj's approximation of Joseph, a true transmission of what Joseph was feeling, some combination of truth and approximation, or just a pleasant fiction.
>
> What was Joseph feeling from her?
>
> It seemed to her that she had always been with him. She had no sensation of shifting gears, no "time alone" to contrast with the present "time together."
>
> He had always been there, part of her, essential. (308-309)

What Lilith first feels as Joseph's physical presence, a "blanket of warmth," she builds into cognitive interpretations, of doubt then reassurance. When she questions the objective truth of

her experience, she is reassured by sensing Joseph: “he had always been there, part of her, essential.” Meanwhile, Nikanj, who is mediating the experience, becomes imperceptible to the two of them:

> Nikanj focused on the intensity of their attraction, their union. It left Lilith no other sensation. It seemed, itself, to vanish. She sensed only Joseph, felt that he was aware only of her.
>
> Now their delight in one another ignited and burned. They moved together, sustaining an impossible intensity, both of them tireless, perfectly matched, ablaze in sensation, lost in one another. (308-309)

The sex between these characters dissolves the sense of time, space, and the distance between Lilith and Joseph, who she felt “was aware only of her.” In the midst of this intensity, the intermediary, who makes this fusion possible, fades away. Afterward, when Lilith asks whether Joseph also experienced what she experienced, Nikanj explains that he did, but “on a sensory level. Intellectually, he made his interpretations and you made yours.” To this, Lilith remarks that she “wouldn’t call them intellectual” (310-311). That Lilith questions whether her experience is based on a shared reality, and immediately afterwards asserts their physical nature, suggests that the cognitive and sensual registers of feeling become indistinguishable during the sex act. Are her feelings imagined in her mind, or are they imagined in her body? The direct neural connection makes this conflation between body/mind possible, creating a channel through which embodied sensation and intellectual interpretation can blend into one another.

Something similar occurs in *skinonskinonskin,* where natural and computer languages mix to make verbal exhortations of love. On the page, “breath.html,” an animated male torso

swells slightly and emits a breathing sound when the mouse pans over it. Hidden in the machine layer of HTML and JavaScript below the display, lies a message meant only for human eyes. This message contains romantic protestations organized into a list of “whispers”:

```
whispers[2] = “skin”;
whispers[3] = “skin on skin”;
whispers[4] = “skin on skin on skin”;
whispers[5] = “implode”;
whispers[6] = “soft”;
whispers[7] = “slow”;
whispers[8] = “can you feel me?”;
whispers[9] = “touch me”;
whispers[10] = “one more cigarette”;
whispers[11] = “i am so open”;
whispers[12] = “i want to feel you inside of me”;
whispers[13] = “smoke”;
whispers[14] = “i want to breathe you”;
whispers[15] = “we are smoke”;
whispers[16] = “yesss”;
whispers[17] = “deeper”;
whispers[18] = “i am disappearing”;
whispers[19] = “warm”;
```

Turning on the themes of smoke and air, this coding layer extends the sensory affordances of the animation above it. References to smoke play on the auditory dimension of the work, the sounds

of breathing on the surface animation. Smoke, like sound, takes air as its medium. And just as smoke is a kind of air which is made visually apprehensible, air that is visible by a degree of opacity, so this stream of "whispers" only becomes apprehensible within the source code. The sensual registers here, from breathing, to smoke, and finally, to "whispers" move between display and source code layers, or "skins," of the work.

An online chat between New York, where Harvey lived, and Belgium, where Samyn lived, draws attention to the layers of technology that facilitated their communication—indeed, their entire relationship—in its early days:

> womanonfire: the sound is a bit distorted with these things
>
> zuper: (private) yes
>
> womanonfire: if no one was around me here
>
> zuper: (private) the image is distorted too
>
> womanonfire: i would speak to you
>
> zuper: (private) but that's ok
>
> womanonfire: yes!
>
> womanonfire: these are all part of our relationship
>
> womanonfire: these limitations
>
> womanonfire: we must
>
> zuper: (private) 26 letters, no sound, no image
>
> womanonfire: learn new ways
>
> zuper: (private) make DHTMLove to me… ("http://entropy8zuper.org/")

Due to a bad connection, the computer cannot render the audio and video in the chat. They are limited to the screen and to the "26 letters" of the keyboard. Every decision is therefore meaningful: for example, Samyn writes his messages in private mode, while Harvey, as *womanonfire*, uses the public one.[3] The syntax also suggests an intimacy, despite their distance: *womanonfire* tends to use pithy expressions ("we must") that stop and restart on a following line ("learn new ways"), while *zuper* responds with gentle assurance ("but that's okay"). The messages flow into each other, even appearing to complete the other.

Later in the chat, Samyn and Harvey revel in the intimacy enabled by this mode of communication:

> zuper: I'm falling in love with a 160x120 pixel video…
>
> […]
>
> womanonfire: seems so
>
> womanonfire: strange
>
> womanonfire: maybe it is lust
>
> womanonfire: i cant tell anymore
>
> zuper: pixellust?
>
> womanonfire: right
>
> zuper: I my case only ASCIIlust…

Even in this intimacy, however, doubts remain. The question of whether their connection is really love recalls Lilith's questioning Nikanj about sexual intercourse, which I describe above.

[3] If there are others in the chatroom, they have been removed from the transcript.

In that scene, Lilith asks Nikanj whether the feelings she experienced during sex are "real" or not. Here, *womanonfire's* question points to a similar kind of doubt, a doubt about whether the channels of communication are faithfully mediating their experiences. In the way that Lilith's neural connection to her sexual partners bypasses the outer body, this technological connection also bypasses physical obstacles, not least the obstacle of physical distance (Samyn and Harvey are separated by an ocean). Given the distance between them, is it love, or is it "pixellust"?

In addition to geography, this mode of digital communication bypasses cultural and racial differences:

> zuper: (private) I realised today that I have never been in love with somebody who doesn't speak Dutch before.
>
> womanonfire -> zuper: i have never been in love with someone in another country before
>
> zuper: (private) I have never been in love with someone with green dreadlocks before
>
> zuper: (private) let alone black skin
>
> womanonfire -> zuper: yes i hope you wiwll like my skin
>
> zuper: (private) I already do.
>
> womanonfire -> zuper: :) ("http://entropy8zuper.org/")

The reduction of their communication to letters on a screen flattens aspects of their identity into textual expressions. Separated from the referent, the physical human being, these expressions become something like the list of HTML attributes that define the animation of Harvey's head on the page "control.html." There, the attributes for `COORDS` and `ALT` in the source code, which

configure the superimposition of images in the animation, are inaccessible on the surface display. Like those attributes in the source code, skin color in this chat recalls something like an HTML attribute in list of other attributes, including native country, language, and hair color. This severing of attributes from the physical body to text occurs in tandem with additional superimpositions of meaning. For example, there's hope, expressed by Harvey's message, "yes i hope you wiwll like my skin." The typo here draws attention to this moment in the exchange, and the repetition of the "w" character in "wiwll" suggests a kind of stutter in the text, perhaps expressing a sense of anticipation. Harvey's "hope" that Samyn will "like [her] skin" reinforces the distance and differences between them. Despite the professions of closeness, this line is a reminder that it is impossible to fully know the beloved.

In Butler's novel, Lilith asks Nikanj to explain how it feels pain. It plugs into her brain, and gives her "… a new color. A totally alien, unique, nameless thing, half seen, half felt or… tasted. A blaze of something frightening, yet overwhelmingly, compelling" (Butler 429). Despite their direct neural connection, the description here derives its expressive power from a quality of unknowability, expressed in liminal forms, "half seen, half felt," "alien," "a new color". This quality of unknowability is essential for maintaining a distance that enables connection in the first place. Rather than subsume alienness into familiar structures of knowledge, in the way that Lilith subsumes Jhadaya's tentacles into the terrifying Medusa, the neural connection here sustains the irresolvable differences between self and other. In *skinonskinonskin*, in online interaction between two people of different cultural and racial backgrounds, hope is what comes to the surface; it is what maintains the distance between the lovers, a distance that is a necessary precursor to intimacy.

Reading these two texts together enables one to think through materiality from the

physiological to the technological. In *Dawn*, a flattening between registers takes place, where the sex act collapses the distinctions between thinking and feeling. In *skinonskinonskin*, by contrast, reading across the layers for formal materiality (across the display layer and source code layer) deepens the sensuality of the surface effects. While the underlying code layer enhances the tactile qualities on the surface of the work, where the user can manipulate objects on the screen with her mouse, the displacement of inaccessible layers of software and hardware also reinforces the sensible elements that remains on the screen. When the fundamental condition of digitality is displacement, everything—the surface layer, the code layer—becomes skin.