// May your rage inform your actions: Embodying the monster and trans nonbinary praxis in creative coding

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ABSTRACT

This project is presented as a critical call and response developed from texts initially written and assembled by KT Duffy, seen here as italicized portions of this project. In what follows, we consider Susan Stryker's formation of the monster as the impulse for a set of theorizations around the assemblage of non-binary trans processes and methods. Advocating the release of the monstrous to actualize collective liberation, we situate the glitch as an essential animating element, utilizing this "visual monstrosity of error and interruption" in solidarity with Abolition Feminism to scope out the ways technology is counterrevolutionary. Reflecting on the objective portrayal of technology, we examine how its destruction does not cease for communities made marginalized, even as the field is diversified. Mining the spaces between lines of code, we illustrate that coding is no longer an esoteric field and that coding and coding education can no longer exist in a vacuum. Instead, it must be grounded in examining how histories of capitalism and racialized hierarchies continue to cause harm. Here, we map out a praxis of trans-coding that activates the monster and its inherited glitches as a tool of disruption spawned in the spaces between binaries. Finally, we situate trans-coding in solidarity with Abolition Feminism, where, from this in-between space, it propels the explosion of normative mediations in service of, not only speculation about, but as an actualization of an Abolition Feminist imaginary.

// The Monster and Their Rage

> Understand software systems . . . and you will understand systems of oppression.
> – Sandee Kastrul, president and co-founder of i.c.stars

I want to throw a bomb inside the syntax of code to see what comes out. I want to deploy a destructive method of working that no longer relies on binary forms of thinking. I'd rather disidentify with technology as it continues to degrade our planet, deplete our resources, and constrain our bodies.[2] I no longer want to participate in capitalist and colonialist ideas of what a

body gets to be. Let me pick up what's left and create from what escaped, fell out, or didn't fit in the first place.

Susan Stryker's opening monologue from "My Words To Victor Frankenstein Above The Village of Chamounix: Performing Transgender Rage," describes her affinity towards the monster in Mary Shelley's *Frankenstein* who "is seen as less than fully human" where her "exclusion from human community fuels a deep and abiding rage."[3] Responding to the surface upon which trans bodies are perceived, she establishes a parallel between her transsexual body and that of Frankenstein where she writes, "it is flesh torn apart and sewn together again in a shape other than that in which it was born."[4] Assembled and reconstructed, Styker's reflection of her body points toward an alignment with the monster to underscore the uneven perceptual shift that is required for her humanness to be visible. Pointing towards the paradox of visibility that trans studies scholars articulate, Stryker shares the feeling of exclusion to reflect on what fuels her "deep and abiding rage."[5]

As creative technologists, educators, and queer people, we share an affinity towards Stryker's refigured monster. Code, as an assembled series of functions, objects, and inputs, describes the ultimate surface of its output. It shares the internal workings of what is otherwise visible, and yet its monstrosity enables the promise of a "regenerative politics" that allow for an "invitation to explore new ways of being, new forms of becoming, new possibilities for kinship, allyship, and change."[6] To embrace code as a monster is therefore to trans/form its legacy as intrinsically queer, to destabilize its trajectory away from its entanglements with surveillance, policing, and the US Department of Defense and insist upon other (safer) alternatives. We insist upon the monstrosity of code to "[elicit] countercodings that retool solidarity and rethink justice:" to provide our students with the tools to end harmful systems and imagine new ones.[7]
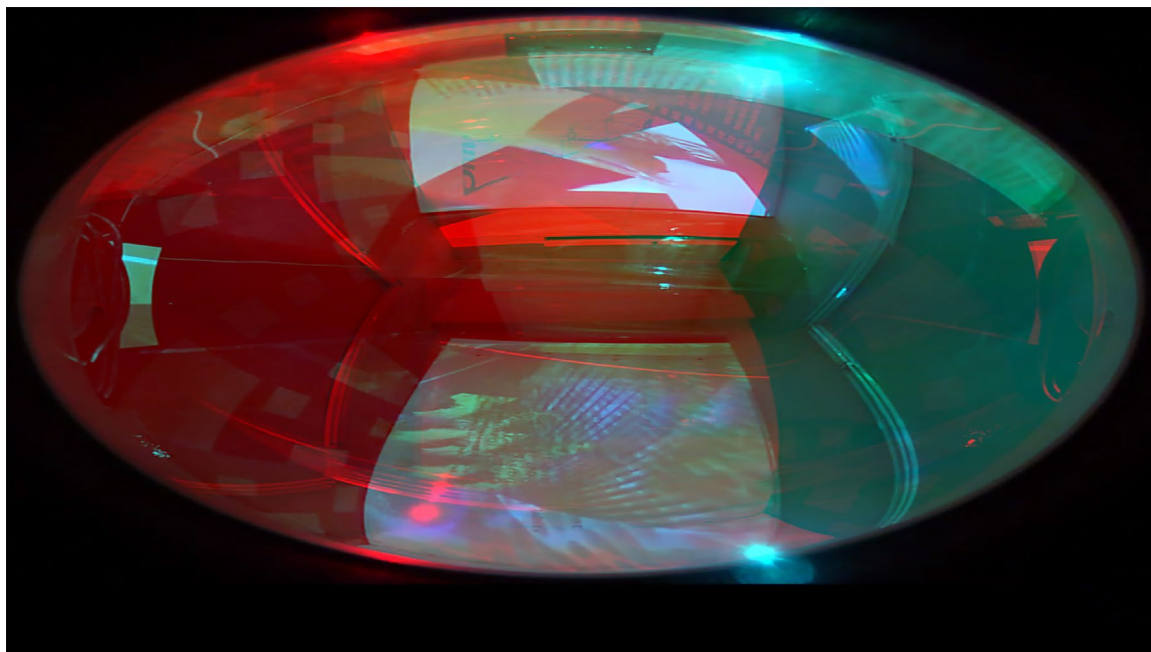

Figure 1. *screenshot of 360 video livestream of CQDELAB's hybrid installation,* **Diffused Stream, Unfelt Shadow** *at ADDS DONNA, Chicago, IL and online, 2020.*

Historically, code has relied on rules of binary logic—ones that establish epistemological frameworks of exclusion and distinction shaped by the white cis-hetero supremacist-patriarchy that continues to favor white cis men. At its core, code functions as a language that enables more complicated instructions, known as algorithms, to be legible to machines. By design, code is not built for nuance, but to execute and deliver instructions through an intended output system. An interface between humans and machines, code's deployment through a system (whether mechanical, digital, etc.) has thus often been considered a "neutral process" because of its procedural nature to activate a set of seemingly straight forward rules regardless of their complexity. Yet as Safiya Umoja Noble notes, a simple Google search query is much more complex than compiling a list of websites based a word or phrase and instead becomes an "[expression] of power and social relations" that changes the dynamic of an instruction when companies can purchase search placements based as paid advertisements.[8] Scaled beyond the immediacy of a website's localized code, code's ability to shape social and political life was further highlighted when computer companies began advertising their new lines of personal computers in the 1980s explicitly towards young white boys. At the same time, US-based higher education computer science programs that primarily favored (cis) men's acceptance into college saw a steep drop in enrollment of women. (Notably, much of that data has not accounted for trans or nonbinary people.)[9] Like Ruha Benjamin, we underscore for our students how emerging technologies exacerbate "interlocking forms of discrimination" that, with the advancement of machine learning and artificial intelligence models, have become more prevalent "especially when we presume they are insulated from human influence."[10] Seen across multiple systems, code's inability to detour from its given instructions thus changes how we might continue to engage (and teach!) it in the future.

Facial recognition technologies embedded across the technological landscape offer one such instance among numerous applications that enable "coded bias" which is influential to its data input, the designers, and the communities to whom they purportedly serve.[11] Of trans concern, Os Keyes highlights that research on Automatic Gender Recognition (AGR)–a subfield of facial recognition–typically tends to "misclassify (and so discriminate against) trans people" given that much of the existing data researchers use to classify gender is based in binaristic assumptions of identification.[12] *Hey, Apple, maybe your early advertisement with the boy deleting a young femme's code had more power than you could even consider.[13] That's probably giving you too much credit. Y'all knew what you were doing.* Perhaps this is where the ideology of the "code mystic" came from, a pernicious exclusionary tactic where "others" were bullied and visually ostracized to perpetuate the phenomenon of the "boys club" still persistent today.

When I was in the tech industry, I wasn't out as a nonbinary trans person. My colleagues thought of me as "a girl" which perpetuated my dysmorphia to a degree that stalled my coming out for years. The infantilizing label was reinforced by the ways my work was regarded and the extracurricular things I was asked to plan for the team. One time we went to lunch with another startup. When I asked why they had no femmes on the team, they jokingly replied, "well, we had one, but she left." I was not surprised: the misogyny and queerphobia were palpable. Everyone on that team self-described as liberal and "chill," but for some reason, I was still tasked to give my queer labor to my colleagues. I had to explain multiple times why "flamer" was not a cute thing to call someone but, indeed a slur.

I worked my ass off learning to code front-end, hoping to shift my position from designer to front-end developer. It was heartbreaking to see recently graduated cis male computer science majors get hands-on training and guidance while I was stuck in the same fucking position with no clear growth opportunities. The only people I saw interviewed for developer roles were cis male presenting. In the back of my mind, I have a shred of hope that at least one of them was trans or nonbinary.

These days as a white,[14] out, nonbinary trans queer, the microaggressions are subtle. I hear "is that a boy or girl" yelled by children engrossed with laughter as they ask their parents, only for the adults to shush them and hurry their kids away. In a 2021 blog post Alok Vaid-Menon writes about how regular this type of harassment has become for them, noting "They become less specific, more atmospheric. Part of the scenery of every street, every city, every identity I live."[15]

In my current job, I'm the only one with pronouns listed in their online profile, which is hilarious and infuriating. (It has since been changed). It's so exhausting to consistently be the vulnerable one in the group. I'm constantly made to feel like I am putting people out because I am asking them to respect my humanity. Let me be as I am! I can't tell you how often I've been asked if my name has *legally* been changed. How can I not be enraged when my dead name appears in front of my colleagues and students to see? I can't tell you how often I've been told that what I teach "isn't actually coding." I have repeatedly been asked if I "actually wrote that code." It feels like I am regarded as a monster. So be it, then. I'll show you how to monster.

You don't see that I am trying to break this mold. Can't you see that I'm trying to explode the binary? Can you not see my rage?

Our rage against the atmospheric harassment embedded in techbro culture unfurls into a productive site of refusal—a feeling that compels us to assert what has otherwise been buried beneath the surface.[16] Embodied to combat legacies of violence that enshroud code's history, rage illuminates "the disruption of categories, the destruction of boundaries, and the presence of impurities" to encourage us to reimagine how code might function beyond its relationships to violence.[17] It allows us to push against code's dependency on binary forms of logic, to underline the inherent monstrosity of its creation built from its contested, problematic pasts. Deploying rage, we become agitators in an ongoing play with code's possibilities to open opportunities for "hacking the code of gender and making binaries blurry."[18] Rage allows us to move through code fluidly, to contest its inherent bias and invent mushy, unresolved declarations. If/then statements become flaccid suggestions, melting between lines of ASCII characters devised from the English Language.[19] Code's textual power gets dissolved, and the infrastructures of its perceptual output are fragile at best. Rage reveals. Rage compels. Rage becomes instruction.

Rage becomes a kind of activation that informs the contours of a glitch. As Whit Pow contends, the "glitch [offers] a visual monstrosity of error and interruption that brings awareness to how power circulates within and around technologies and [signals] the undoing of these systems."[20] As the glitch reveals the inherent discontinuity of code's monstrous assemblage—in a way that disrupts how its lines are mediated on the surface— it underscores the "constant system of rules, the violence of representation and documentation, and the ways in which mediation does not work in expected ways for trans people or for trans history."[21] Glitches remain elusive as they rebound between the textual lines of code and the surface of its output and insist on a multiplicity that destabilize singular articulations of how a surface can be understood.

Living and working as a glitch allows me to problematize the tools I use to create my work in creative code. It is most attractive to me because it inherently problematizes the zeros and ones upon which the computer synthesizes my code. It allows me, a monster, to give rise to monstrosities as it breaks the boundaries of binary code. It creates access points that otherwise would not exist. This is what I crave: **More access! More Stories! More voices!**
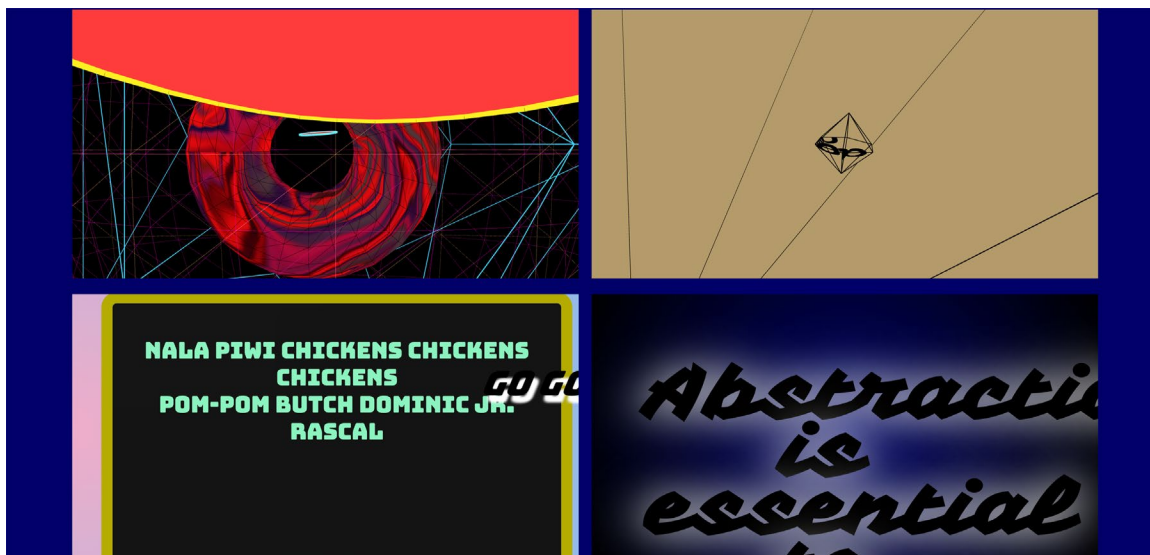
Please, more voices.

Figure 2. *screenshot of compiled participant works following a mini-series of workshops led by CQDELAB as part of the hybrid installation* **Diffused Stream, Unfelt Shadow** *at ADDS DONNA, Chicago, IL and online, 2020.*

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An interjection with/as comments in tension with the surface

Transness asks us to meditate on the manifold ways a thing can present itself differently and, as Kai M. Green states, "allows us to let go of the stability."[22]
–Marquis Bey, *Black Trans Feminism*

Consistent with the way our collaborative project has evolved, the continuation of this work emerged from a series of encounters conditioned by our positions in relation to glass. Physically distant and often working asynchronously, CQDELAB as a collective endeavor has adopted the circumstances (or, opportunities) of digital life that no longer necessitate the need for IRL, AFK, or synchronous communication.[23] Non-linear and sporadic, ideas have taken shape as a result of constant revision, in what Dylan McCarthy Blackston considers a trans method of remix that allows for the "simultaneity of the familiar and the fresh, to look back and sense previously unrecognized synergies while remaining open to the potential for the unexpected."[24] Freely oscillating between

the visible, ephemeral, and indexical, legible texts and workshop projects exist as discursive surfaces that become monstrous assemblages held together only by the containers of the printed page or workshop environments. Operating in what micha cárdenas considers the shift, these projects work between and across physical, temporal, and experiential registers as variable conditions in the algorithmic processes of their production.[25]
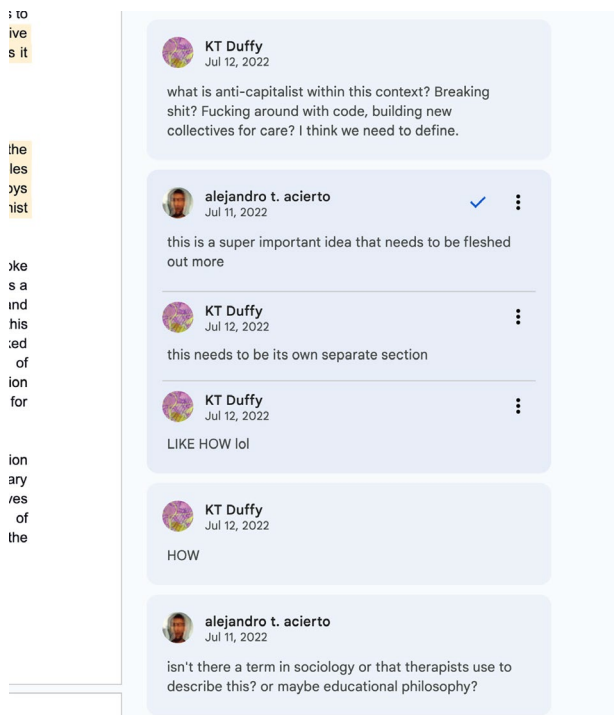

Figure 3. screenshot of comments between the authors in a shared Google Doc work in progress, July 2022.

Beyond their legibility, we want to put forward the condition of the comment as entangled—and often in tension—with the surface as a specific kind of trans assemblage. With a nod towards comments situated between lines of code, we note the bracketed texts that silently occupy the (visible) sidelines of the word .doc(x)s of our work. For us, we are interested in considering how this relationship of the (encoded) comment allows for a continuation of a trans assemblage that shifts the surface of what is otherwise legible from the lived experiences that cannot occupy the spaces of the page. Illuminating the complexities of trans visibility politics that continue to shape the scope of trans studies and trans visual cultures, the comment allows us to consider the nuances of what was (and still is) otherwise monstrous as a form and site of production. In this way, while the comments are not typically visible in most spaces of academic or encoded discourse, we deem them necessary as they function to offer what Ace Lehner describes as a trans analytic where "trans rejects the physical surface in favor of living our lives based on an internal feeling: something that is not visible but manifested visually in a way that plays with the aesthetics and expectations of gender."[26] For us, the comment becomes what is otherwise invisible yet rageful, taking the space of the feelings and reflections that inform the nuanced shapes of the texts to move into print. As such, the comment encourages us to consider the "rethinking of surfaces in relation to essence, identity, authenticity, and fixity" that may ultimately "[unfix] the surface from the subject."[27]

To remain in tension with the surface is to allow for the comment to serve an instrumental role in the ways the surface is otherwise understood. Conditioned by (sub)textual, we envision the comment to hold the capacity of lived experiences (sometimes a footnote, otherwise anecdotal) that shape the contours of the monster's sutures. Working with code, our approaches to coding individually and collectively thus share an affinity for the assembled texts of declarations, variables, and functions that allow for the production of a trans monstrosity that is "full of messiness, contradictions, disappointments, and unexpected outcomes."[28] Noting the importance of comments, Sarah Drasner reminds us that "Code can describe how, but it cannot describe why," highlighting the capacity of the comment to shape an analysis and reasoning for why particular lines of code have taken the shape they do.[29] As texts beneath lines of code or provided as reflections in the sidelines of a document, we rely on the comment also as a form of interjection, one that may destabilize or upend the thought process as it continues to flow on screen.

Enfolded into this theorization of the comment is the mindful consideration of the ways trans lived experiences shape the outcomes of what needs to be said, printed, and discussed (sometimes understood as rage). As we began this work, our conversations were compelled to strategize ways creative coding/*cqding* relied on trans praxis in movement to produce projects, workshops, and ideas that remained committed to upending the gender binary in line with the legacy of abolitionist activist work that has informed our own political positions. For us, the process of cqding was the need to share and develop vulnerable kinds of commenting that not only helped those engaged with learning, but with producing different strategies that could become instrumental in the ways certain code was expressed. Initially set as a collaborative venture for pedagogical skill sharing and thinking under the auspices of a creative coding workshop, CQDELAB has since developed into an interdisciplinary research project that strategizes queer-feminist approaches to pedagogical spaces enveloped by and in technology. Expanding the shape and capacity of the makerspace, CQDELAB has been interested in strategizing pathways towards non-institutional, dis-located sites of collaborative making and coding distinct from the sited-ness of makerspaces that leverage facilities, capital investments, and physical space to define the capacity of its utility. Doing so involved a concerted effort to reconsider how power played into these spaces (devised as expansive makerspaces) located within classrooms and physical workshops as well as online, over Zoom, or asynchronously as part of messaging platforms.

In our last project at ADDS DONNA, we developed a workshop series during COVID as a concerted effort to respond to and build upon our previous publication, *CQDE: A feminist manifestx of CODE-ing.* In that text, we centered a queer/feminist approach that critically engaged restorative justice principles as a method for establishing a culture of care set against the backdrop of what we understood as ongoing and perpetual violence within creative coding spaces.[30] Drawing on Charlotte Sáenz (a.k.a. Lozeh Luna)'s creative and pedagogical work where she asks "how do I learn to *We*?",[31] we were encouraged to rethink our roles as educators within skills-based pedagogical environments, to what bell hooks describes as "engaged pedagogy" that would allow us to work horizontally with students.[32] As creative practitioners and scholars invested in utilizing code as a tool for social transformation, we were excited about the pedagogical space as a way to think critically about the roles and function of collaboration not only with other participants, but with systems, tools, and machines that enabled new kinds of critical output. Moving towards hybrid learning environments meant that we could reconfigure the practice of coding into a process of cqding that kept relationships at the center of Human-Computer Interaction (HCI) design rather than prototypes and objects. For us, cqding was an activation of *We*-ing that allowed us to speculate

alternatives to working with technical systems not reliant upon a continuous pursuit of—or necessity for—capital. Working virtually amidst safety precautions, the embedded distance of our participants compelled us to grapple with the needs and realities of feedback and discourse, where the comment thus became an incredibly useful tool to expand how we understood the nature of collaboration in cqding.

Complicated and contradictory, we devised *CQDE* as a speculative textual work to provoke our readers towards different forms of engagement that could participate in ongoing conversations rooted in queer/feminist approaches to understanding hybrid/digital life.[33] At stake was a need to respond to our localized experience as educators working in creative coding environments where students/participants were suddenly confronted with new forms of political activation, distinct vocabularies (not to be confused with wokeness), and alternative ways of thinking and being in the world. While we envisioned cqding as a communal space of shared development, it was important for us to offer some further context that underscored the need to remain constantly attuned to how technologies (and ultimately, systems) around us were not, nor could they ever be, neutral. Our students and participants—most of whom are GenZ adults that came of age during the racial uprisings of Black Lives Matter and lived through the beginnings of the recent wave of anti-LGBTQI+ legislation and violence following the Pulse massacre in Florida—have become increasingly interested and invested in understanding how these concerns have been entangled with technology. For many, the weight of social collapse was only further exacerbated by the realities of climate change, gun violence, and, more recently, the ongoing fight for bodily autonomy following the evisceration of *Roe v. Wade* in an increasingly conservative political landscape online and AFK. Staring at the interfaces of social media, virtual worlds, and the unending news cycles they/we were enveloped in, cqding thus offered a temporary solution to coping with what seemed to be a condition of constant negotiation amid the myriad forms of institutional, state, and legislative violence that enabled these forms of degradation.

```
//webcam input so put on your video face
cam = createCapture(VIDEO);

//hide lil video preview
cam.size(0,0);
cam.hide();

// initialize the createGraphics layers for shader text
and make // it look gorgeous
shaderTexture = createGraphics(710, 400, WEBGL);

// initialize the createGraphics layers so pretty
shader2Texture = createGraphics(710, 400, WEBGL);
```

Figure 4. *code excerpt of comments (preceeded by "//") from participant work following a mini-series of workshops led by CQDELAB as part of the hybrid installation* **Diffused Stream, Unfelt Shadow** *at ADDS DONNA, Chicago, IL and online, 2020.*

Cqding that relied on the use of the comment came to function as a practical device to enable us the capacity to insert otherwise absent information into the textual/coded files that our

students/participants were working from. Embedded in the comment is also the indexical, the reference, and the lived experience that shapes the approach to coding that becomes legible on the surface. For us, it was worth noting that our approach to encoded bias also indexed the ways violence informed the conditions of one's production of code. As of October 2022, the US saw a record-breaking number of anti-trans pieces of legislation introduced across local, state, and federal governments, amounting to a nearly 800% increase compared to 2018. As reported by *The Washington Post*, only 39 of the 390 bills introduced across the country between 2018 and 2022 have become law, though recent conversations about sports participation have shifted the tendency of anti-trans specific laws to be presented as legislation.[34] These pieces of legislation are part of a lasting legacy of restructuring or limiting bodily autonomy based on gender in the US, and this new wave of legal interest to establish anti-trans laws has profound consequences across the social spectrum. In one such instance, Iowa House File 2416 was enacted into law June 2022, establishing a series of definitions for participation in sporting teams and events across post-secondary schools based on biological sex at birth, or as reported on birth certificates "issued at or near the time of the student's birth;" thereby limiting the participation of students who had changed their assigned sex at birth to reflect their current gender identity.[35] Embedded within the text of the law, legislators relied on a press release issued on January 19, 2022 by the NCAA that further defined gender eligibility based on testosterone levels as defined by each sport, thereby encoding specific metrics used to determine whether an athlete could compete under the "male" or "female" categories. As Mireia Garcés de Marcilla Musté notes, sporting policies in the second half of the twentieth century engaged in a gender verification process which held an "underlying assumption" that "differences exist between men and women which scientific knowledge can decipher and police."[36] Despite numerous challenges by intersex and transgender athletes to compete in events that are predicated on results from labs evaluating their testosterone levels, men's events were never an issue for large sporting bodies and associations. Instead, "the male division [has] no testosterone threshold threatening fair competition," thereby limiting and defining femaleness without the need to define an athlete's male-ness.[37] Systematically enforced into one of only two categories, athletes whose gender or sex did not conform along binary options got caught in complex international legalese that could delay or destroy an athlete's career.

Chase Strangio, trans activist and lawyer for the ACLU, contextualizes this bump of anti-trans legislation in the US as conditioned by the uneven distribution of rights-based legal precedents focused around LGB-specific policies such as marriage equality and the eradication of Don't Ask, Don't Tell that made trans-specific protections increasingly more precarious. For Strangio, the whiplash of rights based policy-making effectively overshadowed trans-affirming healthcare and bodily autonomy which continued to establish an "overreliance on the state-created rights for protection and under-reliance on each other [that left] us increasingly unmoored as our systems fail[ed] us."[38] Citing the ways cis-centric policies within the mainstream LGBTQI+ movement led the conservative Right to "weaponize anti-trans discourse," Strangio further highlights the ways trans and gender nonconforming (TGNC) people are left vulnerable. In the wake of singular (cis) efforts to simultaneously concretize formal equality in the eyes of the law, TGNC people continue to be assaulted, victimized, and targeted—over four times more likely than cisgender people—according to a 2021 study by the Williams Institute at the UCLA School of Law.[39]

While ongoing violence towards trans/queer communities resonates beyond singular identifications, "not all who might identify as either trans and/or queer experience the same relationship to violence."[40] Trans women of color are disproportionally affected by anti-trans

violence and are statistically more likely to be incarcerated or deal with more brutal forms of aggression and violence. In guiding our students and workshop participants through the particularities of bias through examples and code-based exercises, it became critical for us to expand how cqding could function. More specifically, we needed to consider how cqding worked outside of the physical, virtual, and chosen spaces we occupied and return to the radical legacy of abolitionist trans activism that became the backbone of our approach to this work. For us, this was the ultimate comment, the continual referent that we returned to in understanding the contours of our process and pedagogical direction.
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// Monsters in Movement || Monsters as Movement

> Abolition is not *absence*, it is *presence*. What the world will become already exists in fragments and pieces, experiments and possibilities. So those who feel in their gut deep anxiety that abolition means knock it all down, scorch the earth and start something new, let that go. Abolition is building the future from the present, in all of the ways we can. [41]
> –Ruth Wilson Gilmore

> Everyday abolition is a means to connect efforts toward structural change with our everyday cultures and practices. Everyday abolition means undoing the cultural norms and mindsets that trap us within punitive habits and logics.[41]
> –Rodney Carmichael and Sidney Madden, "Making Revolution Irresistible"

As we in the TGNC community endure this recent round of anti-trans sentiment and legislation, it is vitally important to reaffirm our commitments to and remain in solidarity with other communities made marginalized and racialized by oppressive systems. I aimed for Diversity, Equity, and Inclusion benchmarks across my work with institutions, in teaching, and my work. Yet in my experience working and organizing with many elders and peers at a former institution, they generously showed me that the work of DEI would not suffice. Its neoliberal tactics only exacerbated the problems created by the institutions themselves: the only way towards collective liberation could be Abolition Feminism.

Code's assemblage—in its unruly embrace of the glitch, the comment, and the lines that determine its output—presents an opportunity to develop systems that evade and prevent continual violence. In reclaiming code as a monstrous configuration with weighted baggage (entangled with legacies of imperialist, patriarchal, ableist, transphobic, and classist violence), we invited our students to build the future from the present that might allow for a critical depth of engagement with code's consequential output. As part of this reclamation, we initially speculated "an adaptive, speculative system of logic built upon principles of equity and access" that we referred to as CQDE.[42] In many ways, its aspirational insistence upon a queer-feminist framework was designed to allow for a programming language to draw upon a legacy of radical activism and pedagogy. To activate its capacity, we invited our students into collective exercises of cqde*ing*, which allowed for the development of queer/feminist approaches to making in community. Yet, we were also acutely aware that cqding functioned as a temporary form of coping amidst the onslaught of social, legal, and legislative violence that effectively broke the ways we have been able to build and sustain

community inside and outside of the pedagogical space. Reflecting on our own learning environments as educators of code/cqde, it became incredibly important for us to reconsider how we invited our students into more equitable, safer learning spaces.

As trans assemblage, the comments that permeated between lines of cqde further moved this work towards collective care even if it did not have the capacity to effectively disrupt cqde's output. Instead, by way of refining our approach to coding-in-community that would lead us towards collective liberation, we have begun to consider the process of *trans-coding* as a specifically trans nonbinary method of creative coding. With the ability to envelop cqding into the ideals of Abolition Feminism, trans-coding affords further nuance and exactitude in establishing abolition as everyday practice. Like Zach Blas's transCoder (a queer programming anti-language developed "as an attempt to severe ontological and epistemological ties to dominant technologies and interrupt the flow of circulation between heteronormative culture, coding, and visual interface[s]"[43]), trans-cod*ing* cannot encapsulate any form of language. Instead, trans-coding produces a methodology of adaptive and flexible processes that underscore the political potential of dismantling binary systems. While Blas's transCoder literalizes queer and feminist passages as coding structures that deviate from C++ or Java,[44] trans-coding moves towards entangled, complicated, and assembled processes that reflect the larger tensions embedded within abolitionist feminisms. An unfolding practice, trans-coding remains committed to undoing (gendered) binaries of code that have been inextricably linked to carceral forms of violence.

As an iteration of Feminist Abolitionist praxis, trans-coding's deployment and activation draw from a legacy of anti-racist decolonial activism rooted in a critical rejection of prisons, policing, and the systems that perpetuate violence and harm against communities made marginalized. While prisons offer "a one-size-fits-all solution [that sends] people to cages for violating a criminal law,"[45] we are compelled (by our rage!) to stay in community with other Feminist Abolitionist learners in the continual work of collective intersectional liberation.[46] Working through a Feminist Abolitionist framework, trans-coding recognizes "the complexity of harm and the indispensability of humanity" that moves us towards "a practice."[47] As Reiana Sultan and Micah Herskind further describe, "People do abolition every day when they connect to their community, learn how to take accountability, and foster communal responsibility for preventing and responding to harm."[48] Thus, to practice trans-coding in our everyday, as educators and artists, we find ourselves in the midst of a movement to imagine a life that no longer needs to rely on the binaristic systems of code's historical legacy. Liberated from the confines of ones and zeros, trans-coding proposes the infinite variables between binary logics to allow for new opportunities of output. It dreams of instances that mimic "those who have wandered away from their assigned site of gendered origins [who] are brilliantly immersed in the in-between."[49]

To practice trans-coding is to occupy the spaces in-between and create alternatives to binary systems of logic that code has been built from: alternatives that reveal the monstrous complexities without the need to suppress the glitch; strategies that prioritize care and healing and make space for all types of embodied knowledge where no one is disposable. Trans-coding encourages the time to breathe, to foster collective breath amid accelerationist drives towards tech innovation. It refuses to go along with the normative mediation of things. To activate and teach trans-coding is to constantly play within the beautiful in-betweens that encourage us to consider the conditions of its utility while embracing a new vanguard of creative coding. It celebrates code's monstrosity to harness its complexity and refuse its singularity (to "consent not to be a single being").[50] A form

of praxis towards collective liberation, trans-coding draws on the multiplicity of voices that inform its continual evolution, continually pointing to its comments that help shape why its output has been described in that way. It moves us into movement, unleashing our rage to glitch what has otherwise been defined as unmonstrous.

To return to trans-coding as affiliated with abolitionist praxis in the everyday is to nurture the monstrosity of code's violent pasts while building sustainable infrastructures that makes the surface of its output no longer necessary. Dylan Rodriguez notes, "abolition seeks (as it performs) a radical reconfiguration of justice, subjectivity, and social formation that does not depend on the existence of either the carceral state (a statecraft that institutionalizes various forms of targeted human capture) or carceral power as such (a totality of state-sanctioned and extra state relations of gendered racial-colonial dominance)."[51] Within the practice of trans-coding, we are weary of developing structures that rely on binary logic even as they may attempt to reduce harm: trans-coding must imagine an infrastructure much more complex. As noted abolitionist feminist Angela Davis remarks, "building a new transgender wing or pod at an immigration prison is not abolition."[52] Rather, we position trans-coding as what Ruth Gilmore has termed "an infrastructure of feeling,"[53] that leverages relationships in community in ways that "[counteract] the ongoing infrastructural and institutional regulation of gender that reproduces functions of artistic identity to favor the social mobility of people who aren't transgender or gender nonconforming."[54]

As artists and educators, this is not to say that we are unconcerned with how images are rendered as a result of trans-coding's infrastructure. Yet, we are attentive to the "fundamental paradox" of the trappings of (trans) visuality where the visual "offers—or, more accurately, it is frequently offered to [trans people] as—the primary path through which trans people might have access to livable lives."[55] Instead, trans-coding's variable output rejects what "should or should not appear" as a representation of the comments in-between the monstrous lines of code. As Reina Gossett, Eric A. Stanley, and Johanna Burton note, "if we do not attend to representation and work collectively to bring new visual grammars into existence (while remembering and unearthing suppressed ones), then we will remain caught in the traps of the past."[56] Trans-coding's future and ongoing practice thus relies on the paradoxes that allow it to remain active, continually revisited, and never resolved.

//ENDNOTES

1. The epigraph references a quote included in a post by TJ Mikell online. Additional context of that quote can be found at TJ (Tiffany) Mikell, "Happy Black Present, History & Futures Month —," *Medium* (blog), February 3, 2022, https://medium.com/@mikellsolution/happy-black-present-history-futures-month-ccfff2b3cc89.
2. Zach Blas writes on disidentifying with technology in his writing on Queer Technologies that builds on José Esteban Muñoz's notion of queer disidentification. We draw on Blas' language here as part of these ongoing interjective reflections. For additional discussion, see Zach Blas, "Getting Started," in *Gay Bombs Users Manual* (USA: Queer Technologies, Inc., 2008), 15.
3. Susan Stryker, "My Words to Victor Frankenstein Above the Village of Chamounix: Performing Transgender Rage," *GLQ: A Journal of Lesbian and Gay Studies* 1, no. 3 (1994): 237–54.

4. Stryker, 245.

5. Stryker, 238.

6. Karen Barad, "Transmaterialities: Trans*/Matter/Realities and Queer Political Imaginings," *GLQ: A Journal of Lesbian and Gay Studies* 21, no. 2-3 (January 2015): 4.

7. Ruha Benjamin, "Retooling Solidarity, Reimagining Justice," in *Race After Technology: Abolitionist Tools for the New Jim Code* (Cambridge: Polity, 2019), 167–96.

8. Safiya Umoja Noble, , *Algorithms of Oppression: How Search Engines Reinforce Racism* (New York: New York University Press, 2018), 37.

9. T.L. Andrews, "Silicon Valley's Gender Gap Is the Result of Computer-Game Marketing 20 Years Ago," *Quartz* February 16, 2017, https://qz.com/911737/silicon-valleys-gender-gap-is-the-result-of-computer-game-marketing-20-years-ago.

10. Ruha Benjamin, "Discriminatory Design, Liberating Imagination," in *Captivating Technology: Race, Carceral Technoscience, and Liberatory Imagination in Everyday Life* (Durham, NC: Duke University Press, 2019), 3.

11. Ruha Benjamin, "Coded Exposure," in *Race After Technology: Abolitionist Tools for the New Jim Code* (Cambridge: Polity, 2019), 97–136.

12. Os Keyes, "The Misgendering Machines: Trans/HCI Implications of Automatic Gender Recognition," *Proceedings of the ACM on Human-Computer Interaction* no. 2, CSCW (2018): 1–22.

13. *"Astronaut" / Rev. 1 QAEA 4866*, video recording (Apple Computer, Inc., 1985), https://www.youtube.com/watch?v=rxNjx_VWJ8U.

14. As a person with intersecting identities, it is important here to foreground my whiteness in the situations I describe. While I do experience marginality, it is often overshadowed by the ease at which I move through the world within my white privilege.

15. ALOK, "The Camera Cannot Walk Us Home," *Blog* (blog), May 2, 2021, https://www.alokvmenon.com/blog/2021/5/2/the-camera-cannot-walk-us-home.

16. Erin Griffith, "Silicon Valley Slides Back Into 'Bro' Culture," *The New York Times*, September 24, 2022, Technology, https://www.nytimes.com/2022/09/24/technology/silicon-valley-slides-back-into-bro-culture.html.

17. (Jack) Judith Halberstam, "Making Monsters: Mary Shelley's Frankenstein," in *Skin Shows: Gothic Horror and the Technology of Monsters* (Durham, NC: Duke University Press, 1995), 28–52.

18. Legacy Russell, "Glitch Refuses," in *Glitch Feminism a Manifesto* (London: Verso, 2020), pp. 25.

19. Ramsey Nasser, "قلب," accessed April 14, 2023, https://nas.sr/%D9%82%D9%84%D8%A8/.

20. Whitney (Whit) Pow, "A Trans Historiography of Glitches and Errors," *Feminist Media Histories* 7, no. 1 (2021): 197–230.

21. Pow.

22. Marquis Bey, "Abolition, Gender Radicality," in *Black Trans Feminism* (Durham, NC: Duke University Press, 2022), 1–34.

23. In real life (IRL) and away from the keyboard (AFK) are used here to signal experiences separated from person-to-person interactions that happen in close physical proximity, for example, if two people were enjoying lunch together at the same restaurant simultaneously.

24. Dylan McCarthy Blackston, "Introduction," in *The Transgender Studies Reader Remix*, ed. Susan Stryker and Dylan McCarthy Blackston (London: Routledge, 2022), 1–12.

25. micha cárdenas, "The Shift," in *Poetic Operations: Trans of Color Art in Digital Media* (Durham, NC: Duke University Press, 2022), 72–95.

26. Ace Lehner, "Trans Self-Imaging Praxis, Decolonizing Photography, and the Work of Alok Vaid-Menon," *Refract: An Open Access Visual Studies Journal* 2, no. 1 (2019), https://doi.org/10.5070/R72145857.

27. Lehner.

28. Andrea Long Chu and Emmett Harsin Drager, "After Trans Studies," *TSQ: Transgender Studies Quarterly* 6, no. 1 (February 2019).

29. Sarah Drasner, "The Art of Code Comments | JSConf Hawaii 2020", video recording, 2020, https://www.youtube.com/watch?v=yhF7OmuIILc.

30. alejandro t. acierto and KT Duffy, *CQDE: A Feminist Manifestx of Code-Ing* (Chicago: Sybil Press, 2020).

31. Charlotte Sáenz (a.k.a. Lozeh Luna), "Learning to We," *Journal of Aesthetics and Protest* 6 (November 2008), 120-131.

32. Rather than consider the teacher-student relationship as one steeped in hierarchical power structures, hook's "engaged pedagogy" draws on Paulo \Freire's work developed in his pivotal book, *Pedagogy of the Oppressed* (New York: Seabury Press, 1968) that reconfigures the role of students and educators in pedagogical spaces. For a more expansive discussion of these ideas, see bell hooks, "Engaged Pedagogy," in *Teaching to Transgress: Education as the Practice of Freedom* (New York: Routledge, 1994).

33. Though incomplete, Mindy Seu's *Cyberfeminism Index* offers an expansive set of writings, websites, artworks, and conversations that propose an emergent field of study that "allows novices to quickly connote its meaning and speaks to its lineage and evolution." Our work remains in and is energized by conversations cited within the *Index*. To view the full, and decidedly incomplete, online resource, see Mindy Seu, "Cyberfeminism Index," accessed November 22, 2022, https://cyberfeminismindex.com/about/.

34. Anne Branigin and N. Kirkpatrick, "Anti-Trans Laws Are on the Rise. Here's a Look at Where—and What Kind." *The Washington Post*, October 14, 2022, https://www.washingtonpost.com/lifestyle/2022/10/14/anti-trans-bills/.

35. Pat Grassley and Jake Chapman, "Girls' Athletics, Eligibility," Pub. L. No. HF 2416 (2022), https://www.legis.iowa.gov/docs/publications/LGE/89/HF2416.pdf.

36. Mireia Garcés de Marcilla Musté, "You Ain't Woman Enough: Tracing the Policing of Intersexuality in Sports and the Clinic," *Social & Legal Studies* 31, no. 6 (2022): 853, https://doi.org/10.1177/09646639221086595..

37. Garcés de Marcilla Musté, 863.

38. Chase Strangio, "The Courts Won't Free Us—Only We Can," *Them*, June 1, 2022, https://www.them.us/story/chase-strangio-supreme-court-queer-rights.

39. Andrew Flores et al., "Gender Identity Disparities in Criminal Victimization," Williams Institute, accessed November 21, 2022, https://williamsinstitute.law.ucla.edu/publications/ncvs-trans-victimization/.

40. Eric A. Stanley, "Introduction: River of Sorrow," in *Atmospheres of Violence: Structuring Antagonism and the Trans/Queer Ungovernable* (Durham, NC: Duke University Press, 2021), 1–20.

41. Rodney Carmichael and Sidney Madden. "Making Revolution Irresistible". *Louder Than a Riot*. Podcast audio, December 16, 2020. https://www.npr.org/2020/12/16/947147392/making-revolution-irresistible.

42. alejandro t. acierto and KT Duffy, *CQDE: A Feminist Manifestx of Code-Ing* (Chicago: Sybil Press, 2020).

43. Blas, 73.

44. Blas, 74.

45. Reina Sultan and Micah Herskind, "What Is Abolition, And Why Do We Need It?," Department of African American Studies, accessed April 15, 2023, https://aas.princeton.edu/news/what-abolition-and-why-do-we-need-it..

46. Noname, aka Fatimah Nyeema Warner, is a Chicago rapper publicly involved in abolition consciousness. She facilitates an abolitionist book club though social media while simultaneously making music about the societal conditions which necessitate abolition. She uses this term in an interview with Marime Kabain in the last episode of the *Louder Than a Riot* podcast. Sidney Madden, Rodney Carmichael, Marime Kabain, and Noname, "Making Revolution Irresistible," *NPR*, December 16, 2020, sec. Louder Than A Riot, https://www.npr.org/2020/12/16/947147392/making-revolution-irresistible.

47. Sultan and Herskind.

48. Sultan and Herskind.

49. Legacy Russell, "Glitch Refuses," in *Glitch Feminism a Manifesto* (London: Verso, 2020), 7.

50. Édouard Glissant, Manthia Diawara, and Christopher Winks, "Édouard Glissant in Conversation with Manthia Diawara," *Nka: Journal of Contemporary African Art*, no. 28 (2011): 4–19.

51. Dylan Rodríguez, "Abolition as Praxis of Human Being: A Foreword," *Harvard Law Review*, April 10, 2019, https://harvardlawreview.org/print/vol-132/abolition-as-praxis-of-human-being-a-foreword/.

52. Angela Y. Davis et al., *Abolition. Feminism. Now* (Chicago: Haymarket Books, 2022), 88.

53. Quoted in Jeannine Tang, "Contemporary Art and Critical Transgender Infrastructures," in *Trap Door: Trans Cultural Production and the Politics of Visibility*, ed. Reina Gossett, Eric A. Stanley, and Johanna Burton (Cambridge, MA: MIT Press, 2017), 382.

54. Jeannine Tang, "Contemporary Art and Critical Transgender Infrastructures," in *Trap Door* (Cambridge, MA: MIT Press, 2017), 363–92.

55. Reina Gossett, Eric A. Stanley, and Johanna Burton, "Known Unknowns: An Introduction to Trap Door," in *Trap Door* (Cambridge, MA: MIT Press, 2017), xv–xvii.

56. Gossett, et al, xviii.

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