



Spring 2025 Issue

WILLIAMS
UNDERGRADUATE
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JOURNAL

Thomas
Huckans

"On Strikes and
Demonstrations:
The Power of
Protest in France"

table of contents



6. “I Contain Multitudes:’ The Modern Making of Beat Poet Allen Ginsberg”

Austina Xu

18. “Flattery Instead of Representation:’ Sterling A. Brown’s Frustrations with Black Drama”

Jazmin Morenzi

23. “On Strikes and Demonstrations: The Power of Protest in France”

Thomas Huckans

30. “Superfund at 44: A Policy Puzzle of Environmental Persistence”

Jessica Kim

39. “From Burma to Bangladesh: Continuous Challenges and Refugee-Empowering Resolutions for Rohingya Children’s Access to Education”

Emerald Dar

50. “Small Molecule Stabilization of the CARD11 G-quadruplex Represses Transcription: Developing a Therapeutic Target for Diffuse Large B Cell Lymphoma”

Aarohi Sonputri

56. “CRISPR-Cas9: A Testament to the Value of Basic Research”

Ray Wang

letter from

Dear Reader,

It is our pleasure to present to you the fifth edition of the Williams Undergraduate Research Journal (WURJ). We proudly remain Williams' first and only peer-reviewed research journal and continue to publish original student work across all three academic disciplines. WURJ's mission has remained consistent this year: we work to recognize, review, and publish student research, and to increase the visibility and accessibility of academia on campus. We are especially proud and grateful to be supported by Pathways for Inclusive Excellence in our work to promote diversity in academia. We hope that this journal plus our yearly initiatives and events have made this year a success.

WURJ events this past academic year consisted of a healthy mix of proven panels and discussions from prior years, plus the introduction of our first Annual Winter Study Conference. We were excited to give students a platform for oral and poster presentations, and were thrilled to receive a solid body of submissions for both formats. We hope that the Conference will continue to thrive in future years, and perhaps that its reach could become intercollegiate in time. In addition to this highly focused academic event, the executive and editorial board maintained interest and connection throughout the fall semester by hosting the customary Introductory Research Panel and Editorial Information Session, respectively. The spring semester highlight was our faculty dinner discussion series, in which students had the opportunity to talk to an all-time high of six professors including representatives from Arabic/comparative literature, economics, chemistry, and

computer science.

WURJ articles this year span all three academic divisions at Williams and include a plurality of articles in the social sciences, representing the strong showing of Division II papers in our submission pool. These articles represent research conducted at and outside Williams by Williams students, and include work that began as class projects and shone through our peer-review process. We strongly encourage anyone interested in getting published in following editions of WURJ to visit our website (www.wurj.com, proudly designed from the ground up this year) and submit for the 2026 Winter Study Conference and print journal.

We feel that the articles in this edition truly showcases both the high bar of professionalism and the extraordinary diversity of original work that students here at Williams College pursue. The work presented here spans both incredibly varied topics and locations around the globe, from the Williams College Archives to the streets of France to refugee camps in Bangladesh. This journal could not have been made without the valuable contributions of so many individuals; we suggest you take a look at the following acknowledgements page for the full list thereof. We are immensely grateful to the students—the authors, editors, and executive and editorial boards—who have made this year's journal come to fruition, and who have made WURJ remain such an engaging and empowering community.

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“I Contain Multitudes”: The Modern Making of Beat Poet Allen Ginsberg

Austina Xu

... At last, I woke ashamed of myself.
Is [Eliot] that good and kind? Am I that great?
What's my motive dreaming his
manna? What English Department
would that impress? What failure
to be perfect prophet's made up here?
I dream of my kindness to T.S. Eliot
wanting to be a historical poet
and share in his finance of Imagery—
overambitious dream of eccentric boy.
God forbid my evil dreams come true.
Last nite I dreamed of Allen Ginsberg.
T.S. Eliot would've been ashamed of me.

— Allen Ginsberg¹

These are the words Ginsberg scribbled in his journal on February 29, 1958. Two-and-a-half years before, the famed Beat poet gave the first public recitation of what would become his most famous poem, “Howl,” at Sixth Gallery during the birth of the literary movement later known as the San Francisco Poetry Renaissance.² The poem, which defied previous poetic tradition through its sexual explicitness and visceral, unflinching personal references, earned both praise and criticism. American poet and novelist James Dickey acknowledged that “Howl” was “a whipped-up state of excitement” yet ultimately decided that “it takes more than this to make poetry.”³ Conversely, poet Kenneth Rexroth, the master of ceremonies at the Sixth Gallery reading, told Ginsberg that “this poem will make [him] famous from bridge to bridge.”⁴ Even if publication of the poem by Lawrence Ferlinghetti in 1956 failed to garner Ginsberg the fame needed to kickstart his career, an obscenity trial a year later did. San Francisco Municipal Judge Clayton W. Horn ruled in defense of “Howl” as a work of critical value and not one to

be banned due to charges of obscenity, solidifying the poem as not only a touchstone of the Beat movement but also a pivotal step in protecting First Amendment rights in literature.⁵

In more ways than one, “Howl” defined Ginsberg’s place in the literary canon as well as in the broader historical landscape of America. According to Michael Schumacher, author of *Dharma Lion: A Biography of Allen Ginsberg*, Ginsberg “brought together the influences of [Walt] Whitman and [William Carlos] Williams, the American idiom, elements of jazz, [and] the philosophy of the Beat Generation.”⁶ In “Howl,” Ginsberg, a young homosexual writer who frequently saw himself as an outsider, passes the microphone to the social groups brushed aside in America—the homosexuals, political radicals, criminals—helping to turn the tide of what was considered normal during the Cold War era.

So why nearly three years after writing the poem that many consider to be the embodiment of counterculture, postmodern America, was that same poet both rejoicing and lamenting about being unable to impress T.S. Eliot, whose contributions to high modernism render him antithetical to Ginsberg? For that matter, how do associations between Ginsberg and modernism even exist? After all, such claims are rarely made.⁷ Yet beneath this popular assumption lies a greater truth. After all, some of Ginsberg’s greatest influences were modernists such as Ezra Pound and William Carlos Williams.⁸ Both writers maintained correspondence with Ginsberg, and they served as integral contributors to Imagism, a branch of modernism that helped bring to life some of the prosaic and phonetic qualities characteristic of Ginsberg’s works. Additionally, Ginsberg’s use of hypnotic, spiritual-like chants influenced by the Hebrew bible spirituality act as a manifestation of melopoeia—Pound’s way of describing the sonic quality of poetry that enables words to transcend their original meaning.

1 Allen Ginsberg, “Feb. 29, 1958,” in *Journals Mid-Fifties 1954-1958*, ed. Gordon Ball (New York, NY: HarperPerennial, 1995), 427-428.

2 Michael Schumacher, *Dharma Lion: A Biography of Allen Ginsberg* (New York, NY: St. Martin’s Press, 1992), 214.

3 “Allen Ginsberg,” Poetry Foundation, accessed March 30, 2023, <https://www.poetryfoundation.org/poets/allen-ginsberg>.

4 Schumacher, *Dharma Lion*, 216.

5 Patricia Cohen, “‘Howl’ in an Era That Fears Indecency,” *New York Times*, October 4, 2007, accessed March 19, 2023, <https://www.nytimes.com/2007/10/04/books/04howl.html?module=Search&mabReward=relbias%3As%2C%7B%221%22%3A%22RI%3A5%22%7D>.

6 Schumacher, *Dharma Lion*, 207.

7 Brian Jackson, “Modernist Looking: Surreal Impressions in the Poetry of Allen Ginsberg,” *Texas Studies in Literature and Language* 52, no. 3 (2010): 298, JSTOR.

8 Jackson, 299.

to transcend their original meaning.¹ Imagism aside, amongst the lineup of Beat writers, Ginsberg distinguished himself.

As a young writer, he was often bogged down by commercial interests, causing him to focus on the ability for poetry to appease the literary masses by means of technical prowess. For much of his career, this objective manifested itself in the form of raw vernacular poetry infused with everyday language, spontaneous prose, and unabashed references to counterculture trends. However, when he was a budding writer, Ginsberg's commercial interests, born out of a desire to both support himself financially but also imitate his literary idols, resulted in a struggle between conformity and nonconformity, and his work, although exhibiting technical achievement, was often far too esoteric to both the layman and his fellow Beats. Historically and temporally, Ginsberg lived on a threshold between two great literary movements, and much of his early writing resided in that liminal space. While scholarly work analyzing his association to modernism is rather limited, the pieces Ginsberg himself cites as having a profound influence on his journey to finding his style all bore a modernist touch: "Early years had brought on wave after wave of major poems," he lamented in his journal, citing "Death in Violence," "Denver Doldrums," "The Green Automobile," "Siesta in Xbalba," and "Howl" as examples.² Here, Ginsberg referred to "Denver Doldrums" and "Death in Violence," two epic poems whose exhibition of technical skill, a focus of New Criticism modernists, ultimately diminished their thematic impacts. Similarly, poems such as "The Bricklayer's Lunch Hour" and "How Come He Got Canned at Got Canned at the Ribbon Factory," both of which Ginsberg described as pieces that incited his incorporation of prose and succinct imagery, echoed the minimal economy of language and visual stimulation characteristic of the modernist Imagism movement. Although Allen Ginsberg helped develop the postmodern characteristics of the Beat Generation, his early works exhibited an often overlooked modernist style that drew upon influences from the Imagist and New Criticism movements and played a critical role in his development as a poet.

Overview of Modernism

Despite the competing interpretations of the genre, most historians believe that a radical pivot in the United States

and Europe at the beginning of the twentieth century resulted in an equally profound change in Western society, values, and arts.³ At large, scholars like Daniel Joseph Singal and Ross Murfin and Supriya M. Ray, authors of *The Bedford Glossary of Critical and Literary Terms*, tend to define modernism as the cultural movement that resulted from this historical shift.⁴ Consequently, scholar Scott Barbour defines literary modernism as the revolutionization of language as a reaction to the modernizing world during the first half of the Twentieth Century.⁵

At the time, the world was accelerating on all fronts. Technologically, the invention of the radio, automobile, and film paved the way for consumerism and mass entertainment.⁶ Widespread urbanization across the United States drew attention to cosmopolitan settings and their inhabitants, as opposed to Victorian or Romantic literature's focus on agrarian landscapes.⁷ The rise of multiple -isms in the art world—Imagism, Cubism, Futurism, Expressionism, Dadaism, Surrealism, and Post-Impressionism—came to fruition, especially in European cities such as Paris and London. In the world of music, there was Igor Stravinsky, in architecture Frank Lloyd Wright, and visual arts had Matisse and Picasso.⁸ To top it off, World War I left civilization in a state of disillusionment, generating thoughts of violence and doom among artists as well as conceptualizing the 1920s "Lost Generation."⁹ With the war's end in 1918 came the crumbling European supremacy to be replaced with a rising American literary identity.¹⁰ With society undergoing a change of such immense magnitude, it comes as no surprise that writer Virginia Woolf proclaimed that "on or about December 1910, human character changed," or that Ezra Pound rallied other modern writers under his mantra, "Make it new!," a cry beckoning for a new wave of art that rejected past tradition.¹¹ Perhaps the moment that writers truly became aware of the forthcoming era of novel poetry was when Harriet Monroe's *Poetry* magazine arrived in Chicago in 1912.¹² While literary experimentation had occurred previously, many critics regard this event as a catalyst for the modernist poetic movement in America.¹³ The magazine published early pieces by pomodernist poets Wallace Stevens, Carl Sandburg, T.S. Eliot, Ezra Pound, Marianne Moore, and William Carlos Williams.¹⁴

1 Bartholomew Brinkman, "Making Modern Poetry: Format, Genre and the Invention of Imagism(e)," *Journal of Modern Literature* 32, no. 2 (Winter 2009): 36, ProQuest Research Library.

2 Schumacher, Dharma Lion, 236.

3 Daniel Joseph Singal, "Towards a Definition of American Modernism," *American Quarterly* 39, no. 1 (1987): 7, JSTOR.

4 Scott Barbour, "A History and Overview of American Modernism," in *American Modernism*, Greenhaven Press Companion to Literary Movements and Genres Series (San Diego, CA: Greenhaven Press, 2000), 14.; Singal, "Towards a Definition," 7.

5 Barbour, "A History," 11.

6 "Jazz Age and the Roaring Twenties," in Gale U.S. History Online Collection (Detroit, MI: Gale, 2021).

7 Barbour, "A History," 15.

8 Academy of American Poets, "A Brief Guide to Modernism," Poetry.org, last modified May 20, 2004, accessed Mar 30, 2023, <https://poets.org/text/brief-guide-modernism>.

9 Maurice Beebe, "Introduction: What Modernism Was," *Journal of Modern Literature* 3, no. 5 (July 1974): 1608, JSTOR.

10 Academy of American Poets, "A Brief," Poetry.org.

11 Academy of American Poets.

12 Barbour, "A History," 18.

13 Barbour, 18.

14 "About Us," Poetry Foundation, accessed March 30, 2023, <https://www.poetryfoundation.org/about-us>.

Notable works like Eliot's *The Waste Land* and Pound's *The Cantos* came to be hallmarks of modernism.¹ Likewise, writers like W.S. Merwin and James Wright rebuffed Western civilization, encapsulating the contemporary ennui and melancholy generated by materialism, industrialization, noise pollution, mass media, and war in their works.²

Perhaps the most salient principle of modernism was literary radicalism, which was, as author Sir Malcolm Stanley Bradbury stated, "a considerable sense among artists of finding themselves in a context of aesthetic revolution." His claim makes sense: as a new era of artists with an increasingly disillusioned perception of their industrialized, war-torn society rose, their work would come to reflect the surrounding contemporary chaos and detach itself from past tradition, whether it be the rigid structures and scientific interests of Victorian poetry or what they saw as blind optimism from the Romantics. In his book *American Modernism*, Scott Barbour writes that modern American poetry began substituting strict rhyme schemes, meter, and classic forms for more colloquial and minimal language, musical qualities, and depictions of raw experience. Suspended expressions, images, and lines of poetry as well as non-sequential logic all evoked a waning confidence in humanity. Furthermore, cynicism, promoted by writers like Pound and Eliot, was unsurprisingly prevalent as a response to the increasingly commercialized, capitalistic, and mechanized American society. Building upon the aforementioned mindset, modernists learned to ask answerless questions, committing to a seemingly aimless, destination-free trek. American literary and social critic Irving Howe describes this embrace of nihilism as "a dynamism of asking and of learning not to reply" and an acceptance that certain questions cannot be answered.³

Like many other literary movements, modernism is often characterized by its rejection of previous literary tradition, though many modernists were aware of their historical impact and, consequently, their role in the preservation of some greater literary ancestry.⁴ The emotionality characteristic of poetry during the Romantic, Georgian, and Victorian eras found itself substituted for work that was more, as Pound put it, "austere" and "direct."⁵ This journey for authenticity manifested itself in the rejection of the Victorian glorification of consistency and

honesty as the human race's ideal qualities.

Introduction to Imagism

One of the early stepping stones for the modernist movement, Imagism owes much of its origin to *Poetry* magazine and its publishing format, which could capture a poem as a physical object or image for the reader to perceive beyond the words themselves.⁶ The magazine helped spread word of F.S. Flint's "Imagisme" and Pound's "A Few Don'ts by an Imagiste" and released works by quasi-Imagists.⁷

By the late 1800s, poetry began to stray from traditional forms as it flowed toward a convergence with prose and the visual arts like illustrations and photography, as seen with the rise of Symbolist poetry and the haiku structure, both of which aimed to create a hybrid between the English lexicon and visual imagery.⁸ Similarly, by exercising a minimal economy of language and rarely relying on traditional phonetic devices in their works, Imagists focused on capturing the raw essence of the theme or subject at hand.⁹ The product of such a philosophy represented a rebellion against Victorian and Romantic poetry.¹⁰ One Imagist poem that best embodies the essence of the movement is Pound's "In a Station of the Metro":

The apparition of these faces in the crowd :
Petals on a wet, black bough .¹¹

Pound, widely considered to be the founder of Imagism, first mentioned the concept after editing a poem by Hilda Doolittle he signed as "H.D. Imagiste" and later went on to detail the tenets of the movement in an issue of *Poetry* published in March 1913.¹² However, it is important to note that the poet had built on concepts of relying on concrete visuals previously established by T.E. Hulme, who writes that images are the basis of poetry in his essay "Romanticism and Classicism." Other notable adherents of the movement include William Carlos Williams, Hilda Doolittle, and Amy Lowell, who would later build her own interpretation of the movement in her 1915 anthology *Some Imagist Poets*.

For Ginsberg, figures such as Williams and Pound served as literary idols throughout much of his writing career. The former especially fascinated Ginsberg through his ability

1 Academy of American Poets, "A Brief," Poetry.org.

2 David Perkins, *A History of Modern Poetry* (Cambridge, MA: Harvard University Press, 1987), 553.

3 Irving Howe, "The Characteristics of Modernism," in *American Modernism*, ed. Scott Barbour, Greenhaven Press Companion to Literary Movements and Genres Series (San Diego, CA: Greenhaven Press, 2000), 32.

4 Richard Ellmann and Charles Feidelson, Jr., "Modernism Expresses Both Historical Discontinuity and a Sense of Tradition," in *American Modernism*, ed. Scott Barbour, Greenhaven Press Companion to Literary Movements and Genres Series (San Diego, CA: Greenhaven Press, 2000), 53.

5 Beebe, "Introduction: What," 1705.

6 Brinkman, "Making Modern," 36.

7 Brinkman, 33.

8 Brinkman, 24.

9 Barbour, "A History," 19.

10 Academy of American Poets, "A Brief Guide to Imagism," Poetry.org, last modified September 4, 2017, accessed March 30, 2023, <https://poets.org/text/brief-guide-imagism>.

11 Ezra Pound, "In a Station of the Metro," Poetry Foundation, accessed April 5, 2023, <https://www.poetryfoundation.org/poetrymagazine/poems/12675/in-a-station-of-the-metro>.

12 Academy of American Poets, "A Brief," Poetry.org.

to capture clear images in his work while incorporating “actual talk rhythms he heard in the place that he was, rather than metronome or sing-song archaic literary rhythms he would hear in a place inside his head for having read other writings.”¹ Yet this interest with more natural prosody was merely one of many ways the influence of Imagism touched the young Ginsberg.

Phanopoeia, Melopoeia, and Logopoeia

When asked to determine what constitutes good poetry, Ginsberg responded with the three terms Pound cited in his 1934 work *ABC of Reading* as embodying the main hallmarks of Imagism: “Phanopoeia, melopoeia, and logopoeia.”²

Described by Ginsberg as “casting an image on the mind’s eye,” phanopoeia refers to the ability of a writer to encapsulate an image or object in an honest and straightforward manner free of abstractions.³ Given that Imagist language is, as American poet Alice Corbin Henderson put it, “essentially a graphic art, and, like the finest etching, print or wood-cut,” phanopoeia encapsulated the movement’s pith.⁴ For Ginsberg, capturing authentic and detailed life images in his work was a way of converting internal energy and projecting it to his surroundings.⁵ In future lectures, Ginsberg would frequently mention “sketching,” a technique adapted from Kerouac in which Ginsberg would construct a poem by first examining the tangible features of the subject and choosing a few that best embodied the subject’s essence.⁶ Additionally, like Pound, Ginsberg found inspiration in modern art. Specifically, the works of French Post-Impressionist painter Paul Cézanne occupied much of Ginsberg’s creative references before the creation of “Howl.”⁷ The artist practiced “petite sensation,” a technique that evoked rapid flares of light, a visual experience Ginsberg had witnessed in Harlem when noticing the harsh divides between the urban cityscape, his room, and the sky.⁸ In Cézanne’s *The Great Bathers*, Ginsberg noted how the nude bathers in the foreground bore little connection to the scenscape behind them, the colors of the painting further highlighting this dichotomy.⁹ (See Fig. 1) Ginsberg hoped he could induce a similar sensation by focusing the reader’s attention on multiple striking images without attempting to attach them rhetorically.¹⁰ Furthermore, a proponent of drug use as a method of



Figure 1. Cézanne, Paul. *The Great Bathers*, 1898-1905. Oil on canvas, 2.08x2.52 m. Philadelphia Museum of Art, Pennsylvania.

heightening sensitivity to the outside world, Ginsberg relied on substances in order to induce mystic visions that can be seen as a means of achieving the visual awareness demanded by Imagism.¹¹

In “Havana 1953,” he employs direct imagery of a nighttime café scene in Havana, Cuba with minimal elaboration or attempts at blending the descriptions:

The night café — 4 A.M.

Cuba Libre 20c:

white tiled squares,

triangular neon lights,

long wooden bar on one side,

a great delicatessen booth

on the other facing the street.

In the center

among the great city midnight drinkers,

by Aldama Palace

on Gómez corner,

white men and women

with standing drums,

mariachis, voices, guitars—

drumming on tables,

knives on bottles,

banging on the floor

and on each other,

with wooden clacks,

whistling, howling,

fat women in strapless silk.¹²

1 Schumacher, Dharma Lion, 124-125.

2 Joseph Karwin, “The Phenomenological Beat: Allen Ginsberg’s Many Multitudes” (Master’s Thesis, University of Texas at Tyler, 2018), 5, accessed March 19, 2023, <http://hdl.handle.net/10950/1159>.

3 Allen Ginsberg, “Summer Discourse 1978: Meditation and Poetics 7/17/1978,” mp3 audio, 1:00:11, Naropa University Digital Archives, July 17, 1978, accessed March 19, 2023, <https://cdm16621.contentdm.oclc.org/digital/collection/p16621coll1/id/2195>.

4 Brinkman, “Making Modern,” 33.

5 Karwin, “The Phenomenological,” 6.

6 Karwin, 6.

7 Karwin, 11.

8 Schumacher, Dharma Lion, 197.

9 Schumacher, 197.

10 Karwin, “The Phenomenological,” 29.

11 Karwin, 58.

12 Allen Ginsberg, “Havana 1953,” 1953, in *Collected Poems 1947-1980* (New York City, NY: Harper & Row, 1984), 92.

Written after Ginsberg had arrived in the politically unstable Cuba, the poem was published in his 1963 work *Reality Sandwiches* almost a decade later and blends Williams' use of the triadic breath-like structure with Kerouac's spontaneous sketching.¹ The layering of images without much effort to connect them rhetorically adds both vivacity and realism to the poem. Similarly, in his 1947 poem "The Bricklayer's Lunch Hour," the simplicity of the image of a bricklayer who "has yellow hair and wears / a smudged but still bright red cap / on his head" was Ginsberg's first attempt at the objective narrative without being tethered to traditional form, and, much to Ginsberg's delight, the work was one of the first to earn approval from William Carlos Williams.² The poem, which was later included in his 1961 *Empty Mirror: Early Poems* collection, marked the beginning of what Ginsberg considers to be his "good" poetry, with "Bricklayer" being "maybe the best, and the nearest to Williams in a way."³ In fact, *Empty Mirror* contained multiple journal entries of prose Ginsberg later reconstructed as poems after acknowledging the value of objective narration.⁴ "The Trembling of the Veil," written in 1948, consists entirely of visionary descriptions of a tree branch shaking in the wind. Schumacher observes that through the minute, objective details, Ginsberg was able to capture "the precise vibrant quality of aliveness of life" that existed all around him in even non-human beings.⁵

Today out of the window
the trees seemed like live
organisms on the moon.

Each bough extended upward
covered at the north end
with leaves, like a green

hairy protuberance. I saw
the scarlet-and-pink shoot-tips
of budding leaves wave

delicately in the sunlight,
blown by the breeze,
all the arms of the trees
bending and straining downward

at once when the wind
pushed them.⁶

The use of sketching in both poems encouraged Ginsberg to rely on concrete visual details that were accessible to the audience yet contained a nuance that could not be emulated through more traditional strophic form.⁷

Another instance of Ginsberg capturing the illustrative quality of phanopoeia lies in a poem he had written in 1950 while working for the Paterson ribbon factory after leaving a reporter job.⁸ After he was fired just a few weeks later for lagging behind on work, the pressure of being unable to attain a stable career began to dawn on Ginsberg.⁹ He folds his personal anxiety within the lines of "How Come He Got Canned at the Ribbon Factory," a poem about an unidentified young worker unable to tie knots, despite its being written in the more detached third person:

There was this character come in
to pick up all the broken threads
and tie them back into the loom.

He thought that what he didn't know
would do as well as well did, tying
threads together with real small knots.

So there he was shivering in his shoes,
showing his wish to be a god of all the knots
we tended after suffering to learn them up.¹⁰

The succinct imagery and triadic line structure leave little room for moral reflection or symbols; instead, the poem's use of plain detail acted as a self-deprecating yet earnest way for Ginsberg to mock his own incompetence without making the poem moralistic or brooding, a key weakness in earlier works.¹¹ More importantly, Ginsberg's infusion of prose, a result of the advice from a newspaper friend telling him to "write it like you're writing a story," would continue in his later works. In a reading at a conference in Vancouver in 1963, Ginsberg recited both "How Come He Got Canned at the Ribbon Factory" and "The Bricklayers' Lunch Hour" along with "Hymn," a poem written around the same time with dense lines like

No hyacinthine imagination can express this clock of
meat bleakly
pining for its sweet immaterial paradise
which I have celebrated in one gone dithyramb
after another ...¹²

Using the latter poem to illustrate the duality of his early writing, Ginsberg concluded that when

1 David S. Wills, *World Citizen: Allen Ginsberg as Traveller* (St. Andrews, UK: Beatdom Books, 2019), 58.

2 Schumacher, *Dharma Lion*, 81.

3 Allen Ginsberg, "Mind, Mouth and Page," Lecture, July 25, 1975, The Allen Ginsberg Project, last modified April 30, 2012, accessed March 19, 2023, <https://allenginsberg.org/2012/04/mind-mouth-and-page-8-ginsberg-williams/>.

4 Schumacher, *Dharma Lion*, 121.

5 Schumacher, 121.

6 Allen Ginsberg, "The Trembling of the Veil," 1948, in *Collected Poems 1947-1980* (New York City, NY: Harper & Row, 1984), 14.

7 Jackson, "Modernist Looking," 301.

8 Schumacher, *Dharma Lion*, 129.

9 Schumacher, 129.

10 Allen Ginsberg, "How Come He Got Canned at the Ribbon Factory," 1950, in *Collected Poems 1947-1980* (New York City, NY: Harper & Row, 1984), 60.

11 Schumacher, *Dharma Lion*, 129.

12 Ginsberg.

Ginsberg reasoned that when writing both “Bricklayer” and “Ribbon Factory” he switched his poetic approach and attempted “to combine what I thought of as a worldly wide cynical reality ... with Williams’ sense of ... actual facts.”¹

Melopoeia refers to a poem’s musical properties.² In “A Few Don’ts by an Imagiste,” Pound describes the importance of using “no superfluous word, no adjective, which does not reveal something.”³ Such precise and usually colloquial language involved few rhymes, meters, or rhythms.⁴ Inspired by Williams’ deviation from more classic and traditional poetic verse, Ginsberg dedicated his attention to the breath and the act of preserving the idiosyncrasies of natural speech, akin to spoken word.⁵ In order to induce a meditative, trance-like state in his poetry, Ginsberg synthesized chantings he had learned from the Hebrew bible with Whitman’s verse and the human breath.⁶ This technique is present in “Howl” with the repetition of the word “Moloch” creating a repeated cycle of trochees.⁷ “The Bricklayer’s Lunch Hour” also employs the repeated “-er” sound in the ending syllables of “cellar,” “grown over,” “Denver,” and “bricklayer,” evoking a sense of idleness and working class monotony. His use of melopoeia here renders the sensuality introduced in the middle of the piece both subtle yet jarring compared to the serenity of the scene.

Ginsberg also played with the arrangement of lines to fuse elements of phanopoeia and melopoeia together, such as in his brief lyric “Scribble.” Written in 1956, he breaks the lines of the poem in places where the voice must naturally take another breath, and in an instance of rendering the poem as a visual object, once the readers have reached the end of the poem, their own line of sight has drifted toward the bottom right of the page much like a thought or vision slowly dissipating:

Rexroth’s face reflecting human
tired bliss
White haired, wing browed
gas mustache,
flowers jet out of
his sad head,
listening to Edith Piaf street song
as she walks the universe
with all life gone

and cities disappeared
only the God of Love
left smiling.⁸

During his Blake vision—a hallucinatory vision Ginsberg experienced in 1948 when he suddenly began hearing a voice recite Blake’s “Ah Sunflower” while lying on his bed in East Harlem—Ginsberg’s awareness of the human voice’s pattern of inhalations and exhalations opened up another plane of consciousness. He hoped to emulate this experience in his poetry so that the reader could understand the poet’s emotions in their rawest form.⁹ Later on in his career, he would even dedicate an entire volume titled *Mind Breaths*, a slow, breath-like poetic journey through various locations in America, to the concept of meditation.¹⁰ Professor Joseph Karwin notes that during a time of extreme vice in the world with the Cold War and nuclear warfare, Ginsberg’s use of melopoeia through the deliberate, intimate treatment of the breath and incorporation of spirituality and drugs in his works enabled him to escape a seemingly hellish society.¹¹

Logopoeia was described by Pound as “the dance of intellect among words.”¹² Considered to be the amalgamation of melopoeia and phanopoeia, logopoeia helped to create new connections between images and sounds.¹³ In an analysis of Ginsberg’s reflection on Williams’ “The Red Wheelbarrow,” Karwin notes how the poem’s combination of iambic pattern and concrete imagery enabled Ginsberg to detect the presence of human experience in a way that transcended the ordinary world.¹⁴ In “The Bricklayer’s Lunch Hour,” Ginsberg invokes the aspect of logopoeia that encourages writers to use words in a way that surpasses their literal meanings. Lines like

... He sits idly on top
of the wall on a ladder that is leaned
up between his spread thighs, his head
bent down, gazing uninterestedly at
the paper bag on the grass. He draws
his hand across his breast, and then
slowly rubs his knuckles across the
side of his chin ...¹⁵

imbues a chaste setting with an intimacy and sensuality that would not exist had he not taken advantage of the connotations

1 Ginsberg.

2 Brinkman, “Making Modern,” 36.

3 Ezra Pound, “A Few Don’ts by an Imagiste,” Poetry Foundation, last modified October 30, 2005, accessed April 12, 2023, <https://www.poetryfoundation.org/poetrymagazine/articles/58900/a-few-donts-by-an-imagiste>.

4 Pound, “A Few Don’ts,” Poetry.

5 Karwin, “The Phenomenological,” 7.

6 Karwin, 7.

7 Karwin, 7-8.

8 Allen Ginsberg, “Scribble,” 1956, in *Journals Mid-Fifties 1954-1958*, ed. Gordon Ball (New York, NY: HarperPerennial, 1995), 152.

9 Schumacher, Dharma Lion, 95.; Karwin, “The Phenomenological,” 32.

10 George P. Castellitto, “Imagism and Allen Ginsberg’s Manhattan Locations: The Movement from Spatial Reality to Written Image,” *Colby Quarterly* 35, no. 6 (1999): 6, accessed March 19, 2023.

11 Karwin, “The Phenomenological,” 41.

12 Ginsberg, “Summer Discourse,” mp3 audio.

13 Karwin, “The Phenomenological,” 8-9.

14 Karwin, 9.

15 Allen Ginsberg, “The Bricklayer’s Lunch Hour,” 1947, in *Collected Poems 1947-1980* (New York City, NY: Harper & Row, 1984), 4.

would not exist had he not taken advantage of the connotations behind the words themselves, the subtle eroticism representing his repressed homosexuality.¹ In a future discussion with Williams, Ginsberg confessed that he did not actually intend on writing about his sexuality nor his relationship with Neal Cassady at the time.² Instead, by just describing the objects outside of him and playing with cultural connotations of simple words, a technique suggested by logopoeia, Ginsberg was able to capture those feelings regardless:

You can feel the slightly erotic sense. And so, by means of the sense of the things I described outside myself, I was able to represent the feelings, as well as clamp the mind down on objects – (precisely) because I wasn't trying that. It was just that I was sick of myself, actually, "allergic to myself" ... so I finally just looked outside of the window to see outside of my skull.³

Prior to employing phanopoeia, melopoeia, and logopoeia, much of Ginsberg's earlier work, although showcasing awareness of poetic technique, tended to be overly esoteric and self-absorbed. Schumacher describes an early series of poems titled "Denver Doldrums" as having countless vapid symbols and being generally too introspective and somber.⁴ Prior to "Bricklayer," which Ginsberg described once as "probably the earliest text [he] published which makes real sense," much of his poetry tried too ardently to adhere to old standards of poetry, resulting in disorienting work.⁵ All in all, Ginsberg's employment of modernist Imagism in his early works served as a crucial stepping stone for him to evolve from the obscure melancholy of his early poetry to the uncensored, honest style he is now known for.

While Imagism had a profound impact on Ginsberg, many are already aware of Ginsberg's interactions with writers like Williams. However, rarely did Ginsberg directly interact with pioneers of the 1920s high modernist revolution, specifically figures associated with New Criticism such as T.S. Eliot, Robert Penn Warren, I.A. Richards, and Yvor Winters.⁶ Upon initial inspection, this lack of communication does not come as much of a surprise as the Beat Generation and postmodernism rose to prominence during a time where New Criticism was deemed desolate and lackluster.⁷ Nevertheless, the ideological impact the restrictive genre had on Ginsberg manifested itself in the form of personal and career anxieties that played a significant role in the creation of the Beat poet.

¹ Ginsberg, "Mind, Mouth," lecture, The Allen Ginsberg Project.

² Ginsberg.

³ Ginsberg.

⁴ Schumacher, *Dharma Lion*, 81.

⁵ Schumacher, 81.; Wills, *World Citizen*, 52.

⁶ Perkins, *A History*, 7-8.

⁷ Perkins, 11.

⁸ Schumacher, *Dharma Lion*, 100.

⁹ Robert Genter, "I'm Not His Father": Lionel Trilling, Allen Ginsberg, and the Contours of Literary Modernism," *College Literature* 33, no. 2 (2004): 33, JSTOR.

¹⁰ Genter, 31.

¹¹ Genter, 33.

¹² Howe, "The Characteristics," 32.

¹³ Todd Gitlin, "Inaccessibility as Protest: Pound, Eliot, and the Situation of American Poetry," *Theory and Society* 10, no. 1 (January 1981): 67, JSTOR.

¹⁴ Gitlin, 69.

Specifically, research on his reverence for Eliot, whom Ginsberg described multiple times during the late 1940s and early 1950s as "the clearest expression of what I have in mind," is limited.⁸ Dissecting his relationship with the high modernist unveils a deeper understanding of the difficult process Ginsberg underwent to transition into a true Beat.

Overview of New Criticism

Popular in the 1950s, New Criticism is often deemed the catalyst for high modernism. New Critics analyzed poetry through a closed manner by minimally taking into account the experiences and circumstances surrounding the poet, as doing so would taint the true, artistic value of the work.⁹ The movement also adapted an opposition against ideals of capitalism, liberalism, communism, and modern American industrialization.¹⁰ Furthermore, New Critics aligned with the anti-science beliefs of the Beat poets, and prioritized aesthetic language as a means of combating the technological and scientific atmosphere present in America during the Cold War era.¹¹ Nevertheless, the differences between New Critics and the budding postmodernists are evident, not only due to the New Critics' large disregard for emotionality and psychology, but also because of the elitism present in New Criticism.

American literary critic Irving Howe argues that modernism was a rejection of bourgeois culture, while referencing the decay of Western culture in the modernists' eye as a denial of cultural refinement and rationality.¹² In reality, modernism presents strong ties to bourgeois culture as the upper class was its primary audience, and eventually these connections, made stronger by New Criticism's insistence on the depersonalization of poetry, later contributed to the disintegration of the movement. In his book *Bohemian Versus Bourgeois*, sociologist César Graña argues that heavy competition in the literary market post-nineteenth century meant that writers were forced to develop a "cult of originality."¹³ The phenomenon boils down to basic supply and demand: too many writers amongst too small of a reading public. What would the audience want? In the process of answering this question, many writers began to believe that they live in a society far too unworthy to understand their work, a trope coinciding with the "hero climbing above the mob" superiority complex that guided the bourgeoisie.¹⁴ Marxist philosopher György Lukács laments that while modernist writers were quick to critique their society, they did little to

make a call to action.¹ According to Lukács, the valuing of human impotence rather than human action happens to coincide with yet another aspect of bourgeois culture in which a “self-made and self-contained individual confronts history, but history given a static, and as such fundamentally ahistorical, form.”² In general, the loss of faith in the efficacy of human action eventually led to a disregard for personality, a concept based on the interactions between humans and their environment, replacing it with intense woe and self-induced suffering.³

T.S. Eliot, whose aversion to Romanticism became a focal point for American New Critics, was a prominent pioneer of the modernist movement.⁴ In a series of essays written in the 1920s, Eliot pushed for poetry to be analyzed with a scientific objectivity alienated from information about the poet’s own life, repudiating the Romantic perception of poetry as a celebration of the self.⁵ This emphasis on poetry as what author and editor Paul Hoover described as “sonorous, well-made objects to be judged independently of the author’s experiences” traces part of its roots back to Eliot’s “Tradition and the Individual Talent.”⁶ A touchstone text in New Criticism, his essay best articulates his perspective on the effect of past tradition and the poet’s identity on their work. According to Eliot, critics must acknowledge what parts of a writer’s work take from previous literary practice in order to properly analyze it while keeping in mind that previous tradition is malleable and fluid. Thus, while the past affects the present, the addition of new, contemporary work also fundamentally alters the entire previous literary canon. Continuing, Eliot also argues for the surrendering of oneself to literary tradition through the abandonment of personality in a poet’s work, the idea being that a poet should treat their poetry with the same objectivism a scientist treats an experiment. This is not to say that there is no emotion in poetry, but rather, poetic emotion is distinct from the actual human emotion of the poet themselves. In fact, the emotions of the poet can be “simple, or crude, or flat” but the “emotion in his poetry will be a very complex thing” as long as the poet uses their medium of poetry to express it as such.⁷ The Eliot-promoted acceptance of works as internally and independently sufficient with no need for understanding their external influences was central to New Criticism.⁸

1 Robert McNamara, “‘Prufrock’ and the Problem of Literary Narcissism,” *Contemporary Literature* 27, no. 3 (Autumn 1986): 356, JSTOR.

2 McNamara, “‘Prufrock’ and the Problem,” 356.

3 McNamara, 357.; Barbour, “A History,” 20.

4 Perkins, *A History*, 9.

5 Donald J. Childs, *The Birth of New Criticism: Conflict and Conciliation in the Early Work of William Empson, I. A. Richards, Robert Graves, and Laura Riding* (Quebec: McGill-Queen’s University Press, 2014), 4, ProQuest Research Library.

6 Paul Hoover, “Introduction: The Battle of the Anthologies,” in *Postmodern American Poetry*, 2nd ed. (New York, NY: W.W. Norton & Company, Inc., 2013), xxxv.

7 T.S. Eliot, “Tradition and the Individual Talent,” Poetry Foundation, last modified October 13, 2009, accessed December 8, 2022, <https://www.poetryfoundation.org/articles/69400/tradition-and-the-individual-talent>.

8 “Glossary of Poetic Terms: New Criticism,” Poetry Foundation, accessed March 30, 2023, <https://www.poetryfoundation.org/learn/glossary-terms/new-criticism>.

9 Schumacher, *Dharma Lion*, 100.

10 Joshua Earl Paulus, “The Eliot-Ginsberg Connection: Post-Apocalyptic, Post-War Poetry with an Original Creative Manuscript, ‘The Weak Minds of My Generation’” (master’s thesis, Emporia State University, 2013), 10, accessed July 12, 2022, <https://esirc.emporia.edu/handle/123456789/3263>.

11 Schumacher, *Dharma Lion*, 24.

12 Schumacher, 4.

13 Perkins, *A History*, 546.

14 Schumacher, *Dharma Lion*, 1.

Ginsberg, Eliot, and the Journey to Becoming a Poet

Given Eliot’s strong cries for personal detachment from poetry and his associations with classicism, it may come as a surprise that, when still trying to find his style, Ginsberg cited Eliot and Blake as writers he wanted to emulate.⁹ Even so, the two had more in common than many give credit for. American literary critic Helen Vendler noted that “both possessed exceptionally high-strung sensibilities, which when exacerbated plunged them into states alarmingly close to madness; both had breakdowns; both sought some form of wisdom that could ameliorate, guide, or correct the excess of their reactions.”¹⁰ Furthermore, from upbringing alone, both were surrounded by New England influences, were raised by a parent who was a traditionalist poet, and felt pressured to conform in some way, Ginsberg in initially attempting to forgo his idiosyncratic image in Columbia University and Eliot with his distinguished bloodline.

Notes of Ginsberg’s rigorous upbringing can be seen in the exercise of literary restraint during much of his early career. At Columbia, his professors supported his creative endeavors and defended him from expulsion but pushed back when Ginsberg suggested they study non-Victorian poets like Whitman, Shelley, Williams, or Pound.¹¹ More broadly, having been raised in a world that at times seemed to never accept him for his true self, the budding writer would let his anxieties restrict his growth not only as a writer but also as a person. His father, Louis Ginsberg, a traditionalist poet who, despite mild success, struggled to make a living and took a second job as an English teacher, warned Ginsberg of the harsh reality of the publishing world.¹² His father also made clear that he disapproved of Ginsberg’s early attempt at writing a novel resembling Kerouac’s *The Town and the City* due to its profanity.¹³ In general, Louis Ginsberg’s literary career would frequently serve as both a model and something to revolt against for Allen. Additionally, his father’s struggle to support his family likely served as a reminder for Ginsberg of the challenges of pursuing a career as a poet, much like how modernists felt compelled to appeal to the upper echelons of society in order to survive in the literary world.¹⁴ Furthermore, Allen’s homosexuality would distance him from his father,

who preached adherence to conventions. His later promise to forsake his gay lifestyle, initially a ploy to get the staff at a mental institution to release him early, eventually became a mission he actively tried to fulfill.¹ His relationship with his mother was no less complicated. The trauma associated with Naomi Ginsberg's psychotic episodes and her subsequent lobotomy, combined with his own experience at a psychiatric institution, fostered negative associations with science, matching the anti-science rhetoric of New Criticism, which Professor Robert Genter notes as a central pillar to the movement.²

Due to Ginsberg's intimate and frequent exposure to contemporary issues like mental illness, war, and sexuality, he embraced the aforementioned societal conditions Kerouac described as the foundation of the Beat Generation but in a way that initially was at odds with other Beats. Carl Solomon had no interest in Ginsberg's rhyme and technique-centered works and viewed him as "literary, erudite, and puckish."³ Indeed, at the time, much of Ginsberg's work was structured and rhymed, his adherence to past literary norm harkening back to Eliot's words in "Tradition and Individual Talent." For instance, while *Empty Mirror* did include poems like "Bricklayer" and "The Trembling of the Veil" that exhibited prosaic qualities mentioned earlier, the collection also showcased much of Ginsberg's formal poetry which he had written simultaneously with his more Imagist works. Poems like "A Very Dove," written in 1948 and consisting of three ballad stanzas with ABAB rhyme schemes, best represent this trend:

A very Dove will have her love
ere the Dove has died;
the spirit, vanity approve,
will even love in pride ...⁴

The alternation between iambic trimeter and iambic tetrameter throughout the poem creates a clichéd sing-song melody which, combined with the traditional subject matter of romance and nature, do little to stray from literary convention. "The Shrouded Stranger," written around 1950, also bears an inclination toward rhymed verse with its quatrains consisting of two couplets:

Bare skin is my wrinkled sack
When hot Apollo humps my back
When Jack Frost grabs me in these rags
I wrap my legs with burlap bags
My flesh is cinder my face is snow
I walk the railroad to and fro

When city streets are black and dead

The railroad embankment is my bed ...⁵

Teaching literature at the Naropa Institute, Ginsberg referred to "The Shrouded Stranger" as a written imitation that played within existing forms.⁶ Interestingly enough, when asked by a student whether his work underwent a significant change like Kerouac's at the time, Ginsberg responded with that while the subject matter of the poem was much more erotic and uncensored—the line "When hot Apollo humps my back / When Jack Frost grabs me in these rags / I wrap my legs with burlap bags" referring to intercourse with two masculine personifications of the sun and winter—any experimentation he did remained confined to classical meters.⁷

According to Schumacher, Ginsberg also felt a spiritual and psychological dichotomy between him and Kerouac. Ginsberg described his fellow Beat as having an adventurous, innocent, patriotic spirit reminiscent of Thomas Wolfe compared to Ginsberg's own listless and anxious "non-Wolfean" persona heavily influenced by European culture.⁸ When both received Neal Cassady's famed "Joan Anderson letter," Ginsberg, while sharing Jack's high regard for the work and its spontaneous prose, suggested edits and focused more on the letter's marketability than Jack, who regarded the publishing world with more disdain than Ginsberg.⁹ Part of Ginsberg's early unwillingness to fully embrace spontaneous prose can be attributed to another disagreement he had with Lucien Carr, who thought that art was meant to fulfill the artist whereas Ginsberg believed that art could and should communicate a message, a noticeable devaluing of unabashed self-expression on Ginsberg's part.¹⁰ His hesitance with the aforementioned "New Vision" of art that disregarded all past norms was made apparent during his reaction to Kerouac's initial revisions of *On the Road*, which Kerouac later published as a different novel titled *Visions of Cody*. Ginsberg believed that the revised version of the novel, which incorporated a nonlinear timeline along with his sketchings, decreased in marketability and told Cassady, "[Jack] was not experimenting and exploring in new deep form, he was purposely just screwing around as if anything he did no matter what he did was O.K. no bones attached."¹¹ "Two Sonnets" from Ginsberg's *Empty Mirror* collection also illustrates differences in artistic philosophy between the two. Inspired by Kerouac's manuscript reading of *The Town and the City*, Ginsberg's poems portray the hellish deterioration of an

1 Schumacher, 110.

2 Genter, "I'm Not His Father," 32.

3 Schumacher, Dharma Lion, 116.

4 Allen Ginsberg, "A Very Dove," 1948, in *Collected Poems 1947-1980* (New York City, NY: Harper & Row, 1984), 7.

5 Allen Ginsberg, "The Shrouded Stranger," 1949-1951, in *Collected Poems 1947-1980* (New York City, NY: Harper & Row, 1984), 26.

6 Allen Ginsberg, "Basic Poetics I and II [Part 27 of 35]," mp3 audio, 1:19:50, Naropa University Digital Archives, May 1, 1980, accessed March 19, 2023, <https://cdm16621.contentdm.oclc.org/digital/collection/p16621coll1/id/375>.

7 Ginsberg, "Basic Poetics," mp3 audio.

8 Schumacher, Dharma Lion, 62.

9 Schumacher, 133.

10 Allen Ginsberg, "June 22, 1944," in *The Book of Martyrdom and Artifice: First Journals and Poems: 1937-1952*, ed. Juanita Lieberman-Plimpton and Bill Morgan (Boston, MA: Da Capo Press, 2006), 38.

11 Schumacher, Dharma Lion, 147.

city in the form of a contained Shakespearean sonnet:

I dwelled in Hell on earth to write this rhyme,
 I live in stillness now, in living flame;
 I witness Heaven in unholy time,
 I room in the renowned city, am
 Unknown. The fame I dwell in is not mine,
 I would not have it. Angels in the air
 Serenade my senses in delight.
 Intelligence of poets, saints and fair
 Characters converse with me all night.
 But all the streets are burning everywhere.
 The city is burning these multitudes that climb
 Her buildings. Their inferno is the same
 I scaled as a stupendous blazing stair.
 They vanish as I look into the light ...¹

Much like the New Critics repelled by the postwar world, Ginsberg found himself deterred by the industrialization and aftermath of a war torn American society, but rather than deviate completely from literary tradition, as Ginsberg writes in the first line of the almost Spenserian poem, he “dwelled in Hell on earth to write this rhyme.”² Similarly in “Death in Violence,” written in 1947 and one of his most ambitious creative undertakings, the epic, while illustrating an early attempt to express his thoughts in his work, was also brimming with countless esoteric and erudite references.³

Ginsberg included notes crediting Auden, Rimbaud, Frederick Prokosh, Beethoven, Shakespeare, Blake, Yeats, and more within merely the first half of the poem and used many epigraphs, one referencing the line “... In the end is my beginning” from Eliot’s “Four Quartets.”⁴ An homage to his greatest poetic idols, “Death in Violence” merged the disillusionment of modernism and postmodernism while still preserving Ginsberg’s emphasis on technical skill and tradition.⁵ Looking to find his own style while anxious to fully deviate from previously established poetic norms, Ginsberg initially wrote poetry that adhered to basic rhyme, meter, and line structures, formal techniques New Critics would have admired to understand self-contained texts.

Additionally, Kerouac accused Ginsberg of having a tendency to envelop himself in the masochistic, suffering artist archetype.⁶ The latter’s work “Denver Doldrums,” a project Ginsberg described as having a similar magnitude to that of “Death in Violence,” “Howl,” and “The Green Automobile,” best illustrates this flaw.⁷ Inspired by a conversation with Neal while under the influence of benzedrine, the series of poems lament Ginsberg’s lost love for Cassady but in a manner that felt overly melancholic and esoteric.⁸ The poems oscillate between lamenting over the shrill cries of nightingales, confusing the details of the nightingales with that of Cassady’s features, and discussing the holy relics of love with religious allusions to Eros and God.⁹ Schumacher notes that other than being filled with symbols Ginsberg had already used in earlier works, the poems “were relentlessly depressing, bogged down by self-absorption and repressed images.”¹⁰ In a letter written to Kerouac in 1945 two years prior to “Denver Doldrums,” Ginsberg reflects on the solipsism in his work by calling his art, “an emotional egocentricity ... dedicated to myself.”¹¹

In a similar vein, many of Eliot’s works were, as biographer Lyndall Gordon describes, “self-absorbed fantasies.”¹² The titular speaker of his famous poem “The Love Song of J. Alfred Prufrock” showcases glimmers of this internal dilemma in a self-referential way. Throughout the poem, Prufrock suffers from self-paralysis caused by inaction, to the point where he feels anxious about performing a task as simple as eating a peach.¹³ Critic Hugh Kenner described Prufrock’s soliloquies as “self-contained, the speaker imprisoned by his own eloquence.”¹⁴ Prufrock’s self-aggrandizing tendencies, his inability to withstand rejection or grapple with contemporary ennui, and his self-comparisons to Hamlet all paint him as a narcissist, one entrenched in his own dismay.¹⁵ Nevertheless, through Prufrock, Eliot was able to embody the confusion and anxieties of a post-World-War generation, himself included, despite how much he preached about poetry as “an escape from personality.”¹⁶

This paradox of portraying an intimate life, whether it be

1 Allen Ginsberg, “Two Sonnets,” 1948, in *Collected Poems 1947-1980* (New York City, NY: Harper & Row, 1984), 5.

2 Ginsberg, “Two Sonnets,” in *Collected Poems*, 5.

3 Schumacher, *Dharma Lion*, 64.

4 Allen Ginsberg, “Death in Violence,” 1947-1948, in *The Book of Martyrdom and Artifice: First Journals and Poems: 1937-1952*, ed. Juanita Lieberman-Plimpton and Bill Morgan (Boston, MA: Da Capo Press, 2006), 433.

5 Schumacher, *Dharma Lion*, 63.

6 Schumacher, 63.

7 Schumacher, 236.

8 Wills, *World Citizen*, 31.; Schumacher, *Dharma Lion*, 81.

9 Allen Ginsberg, “The Denver Doldrums,” 1947, in *The Book of Martyrdom and Artifice: First Journals and Poems: 1937-1952*, ed. Juanita Lieberman-Plimpton and Bill Morgan (Boston, MA: Da Capo Press, 2006), 461.

10 Schumacher, *Dharma Lion*, 81.

11 Allen Ginsberg to Jack Kerouac, September 6, 1945, in *Jack Kerouac and Allen Ginsberg: The Letters*, ed. Bill Morgan and David Stanford (New York, NY: Penguin Books, 2010), 26.

12 Lyndall Gordon, *T.S. Eliot: An Imperfect Life* (Manhattan, NY: W.W.Norton & Company, 1998), 94.

13 T.S. Eliot, “The Love Song of J. Alfred Prufrock,” Poetry Foundation, accessed April 5, 2023, <https://www.poetryfoundation.org/articles/69400/tradition-and-the-individual-talent>.

14 Hugh Kenner, *The Invisible Poet: T.S. Eliot* (New York, NY: McDowell, Obolensky, 1959), quoted in McNamara, “‘Prufrock’ and the Problem,” 372.

15 McNamara, 375-376.

16 Eliot, “Tradition and the Individual,” Poetry Foundation.

Ginsberg's relationship with Cassady or the anxieties of Eliot and his shaken postwar peers, in a manner that is overly depressing and solipsistic to the point of detachment resonates with Eliot's "Tradition and Individual Talent":

Poetry is not a turning loose of emotion, but an escape from emotion; it is not the expression of personality, but an escape from personality. But, of course, only those who have personality and emotions know what it means to want to escape from these things.¹

Despite having called poetry an "emotional egocentricity" in a 1945 letter to Kerouac, Ginsberg echoes Eliot's argument above and laments his shortcomings as an artist rooted in his self-detachment:

To categorize according to your own terms, though intermixed, [you and Lucien] are romantic visionaries ... I am neither romantic nor visionary ... I am a Jew ... alien to your natural grace, to the spirit which you would know as a participator in America ... You cry "oh to be in some far city and feel the smothering pain of the unrecognized ego!" (Do you remember? We were self ultimate once.) But I do not wish to escape to myself, I wish to escape from myself.²

Stuck in between denying and capturing oneself in his art, Ginsberg's dilemma resembled that of Eliot's, whom, despite arguing for the poet's detachment from his work, Lyndall Gordon described as being "most outspoken in his poetry, guarded by his celebrated theory of impersonality which, he once admitted, was a bluff. As more is known of Eliot's life, the clearer it becomes that the 'impersonal' facade of his poetry—the multiple faces and voices—masks an often quite literal reworking of personal experience."³

While there are fundamental differences, New Criticism and Eliot left a remarkable imprint on Ginsberg's early stages as a writer. Both writers grappled with ennui, their psyches responding to a postwar society in similar self-isolating yet simultaneously self-embracing ways. While eventually carving his own path, Ginsberg's early writing mimicked high modernists like Eliot, and his incorporation of modern prose with classic form represented a synthesis of his voice and the literary tradition promoted by New Criticism.⁴ If strands of modernism can be detected in Ginsberg's earlier works, do hints of these connections exist in his more recent writing? For Ginsberg, capturing images through prose-like poetry would carry on throughout his repertoire. His post-

Kaddish work often exhibited phanopoeia to a great extent with some poems containing catalogs of descriptive images.⁵ "Don't Grow Old," a series of poems written prior to the death of his father, reads much like a personal narrative as it does a poem:

Now he lay naked in the bath, hot water draining
beneath his shanks.
Strong shouldered Peter, once ambulance attendant,
raised him up
in the tiled room. We towed him dry, arms under his,
bathrobe over his
shoulder—
he tottered thru the door to his carpeted bedroom ...⁶

With regard to melopoeia, after "Howl," Ginsberg also continued his study of the breath and hypnotic chants in poems like "Wichita Vortex Sutra," "Plutonian Ode," and "Wales Visitation," and the Beat poet also continued to perform his work aloud.⁷ Additionally, Ginsberg produced musical pieces, such as "Capitol Air," toward the latter half of his life.⁸

While the lasting impact of New Criticism and Eliot on Ginsberg's work is perhaps less detectable, given that he would later actively rebel against the genre, analyzing the connection between Ginsberg and this subset of modernism during the early stages of his writing is crucial to understanding his true identity as a poet. In his anthology *Eight American Poets*, Joel Conarroe describes Ginsberg as perhaps "the most uneven major poet who ever put pen to paper—the distance between his strongest work and his weakest is immense."⁹ At times Ginsberg rebelled against all established tradition; other times, he saw T.S. Eliot in his dreams and hoped to one day be respected by literary figures like him, even if they were formalist writers.¹⁰

Karwin writes that in a published interview in 1989, when Ginsberg was asked how he knew what Whitman meant in his poem "Song of Myself" by the line "Do I contradict myself? / Very well then I contradict myself, / (I am large, I contain multitudes.)," Ginsberg replied with the following: "I know what he meant ... Because I am large. I contain multitudes."¹¹ A reminder that literary revolutionaries are not formed overnight, Ginsberg and his journey to becoming a Beat is one riddled with hurdles, specifically his own self-doubt on whether he should stray from poetic norms or find his

1 Eliot, Poetry Foundation.

2 Allen Ginsberg to Jack Kerouac, July 1945, in Jack Kerouac and Allen Ginsberg: The Letters, ed. Bill Morgan and David Stanford (New York, NY: Penguin Books, 2010), 10.

3 Gordon, T.S. Eliot, 4.

4 Schumacher, Dharma Lion, 63.

5 Karwin, "The Phenomenological," 42.

6 Allen Ginsberg, "Don't Grow Old," 1978, in *Collected Poems 1947-1980* (New York City, NY: Harper & Row, 1984), 710-711.

7 Karwin, "The Phenomenological," 47.

8 Allen Ginsberg, *Collected Poems 1947-1980* (New York City, NY: Harper & Row, 1984), 744.

9 Joel Conarroe, ed., *Eight American Poets: An Anthology* (New York City, NY: Vintage Books, 1994), 221.

10 Ginsberg, "Feb. 29, 1958," in *Journals Mid-Fifties*, 427-428.

11 Karwin, "The Phenomenological," 3.; Allen Ginsberg, "The Puritan and the Profligate," interview by John Lofton, in *Spontaneous Mind: Selected interviews, 1958-1996*, ed. David Carter (New York, NY: HarperCollins Publishers, 2001), 484.

own voice. Even after he did do the latter, his writing consisted of an amalgamation of different styles, stitching together and re-inventing aspects of “Imagism, Surrealism, modernism, the avant-garde, Impressionism, Romanticism, jazz, confessional poetry, and stream of consciousness,” personifying what Eliot had asserted about contemporary writers preserving and altering the legacies of artists before them. For that matter, perhaps the classification of Ginsberg entirely as a postmodernist is in and of itself limiting, as his work and identity delineated an individual acting as a bridge between modernism and postmodernism. Ginsberg’s complexity and unabashed embrace of his nuances have enabled him to alter an entire nation’s treatment of poetry into an art form that resonates from generation to generation.

the avant-garde, Impressionism, Romanticism, jazz, confessional poetry, and stream of consciousness,” personifying what Eliot had asserted about contemporary writers preserving and altering the legacies of artists before them.¹² For that matter, perhaps the classification of Ginsberg entirely as a postmodernist is in and of itself limiting, as his work and identity delineated an individual acting as a bridge between modernism and postmodernism. Ginsberg’s complexity and unabashed embrace of his nuances have enabled him to alter an entire nation’s treatment of poetry into an art form that resonates from generation to generation.

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“Flattery Instead of Representation:” Sterling A. Brown’s Frustrations with Black Drama

Jazmin Morenzi

In 1937 Sterling A. Brown published *Negro Poetry and Drama*, his important critical study of Black characters in the theatre. His book includes critiques of plays written, directed, and acted out by Black artists, as well as notes on Black audiences. Brown uses his knowledge as a theatre critic to analyze why Black drama has not been as successful as drama by white authors and actors, claiming there are many technical shortcomings in the industry. Brown boldly states that “none of the Negro folk playwrights show the structural skill of white dramatists,” perhaps reflecting biases of the time (Brown 122). However, the book also covers the evolution of Black characters in drama from the audience’s perspective. Brown acknowledges that Black presence in drama has been a slow-growing phenomenon because of internalized expectations from white audiences, which prevented the implementation of non-stereotypical Black representation: “The negro audience frequently wants flattery instead of representation, plaster saints instead of human beings, drawing rooms instead of the homes of the people. And the typical white audience wants stereotypes” (Brown 123). While he notes deficiencies in Black playwriting throughout his book and suggests that the industry should foster new and young theatrical leadership, Brown criticizes the technical deficiencies in Black playwriting and the limiting expectations of audiences. Rather, he argues that it was these audience expectations that caused the continuation of “the Negro’s [...] rigidly circumscribed” role in drama (Brown 1).

Throughout his career, and before the publication of *Negro Poetry and Drama*, Brown thought about the Black character as seen by white audiences. In April of 1933, an article entitled “Negro Character As Seen by White Authors” in the *Journal of Negro Education* wherein he describes the types of Black characters displayed in theater written by white playwrights. The objective of the article, he states, is to highlight that “the majority of books about Negroes merely stereotype Negro character. It is the purpose of this paper to point out the prevalence and history of these stereotypes” (Brown 56). Here, the difference between Brown’s analysis of Black characters in theater from 1933 and 1937 is the

author and the audience. In analyzing the two side-by-side, two similarities become apparent: in playwriting by white authors and Black authors, “all of these stereotypes are marked either by exaggeration or omissions; that they all agree in stressing the Negro’s divergence from an Anglo-Saxon norm to the flattery of the latter” (Brown 56). The temporal difference between Brown’s book, *Poetry and Drama*, and his essay about portraying Black characters testifies to the long-standing norm of characterizing Black characters. Thus, even during the evolution of theater, Brown’s writing, his influence and advocacy, and writing and playwriting faced seemingly immovable barriers when it came to producing profitable theater due to the lack of willingness to respectfully and accurately represent Black characters and folk-life.

While *Negro Poetry and Drama* demonstrates Brown’s cumulative opinion that predominantly white, misinformed audiences are limiters of authentic Black writing, archival evidence suggests that Brown continued to think and write about this subject after the book’s publication. In my recent sessions in the Sterling A. Brown archives at Williams College, I discovered an unpublished, typed, and annotated manuscript, “Drama,” in which Brown discusses the shortcomings of Black representation in the dramatic arts, crediting it to the failure of Black artists to capitalize on “the mine of folk humor which is the Negro’s birthright”; the manuscript signals a shift from a dual focus on audience and playwright to a greater emphasis on playwright shortcomings (Brown 10). I was intrigued by Brown’s bold statements of criticism toward the quality of Black writing and thus was inspired to uncover more of his thinking on the subject. My search brought me to his book, *Negro Poetry and Drama*. The book seemed to contain expanded versions of the ideas I saw in his manuscript, which led me to believe that “Drama” was written first. However, upon further examination, I was surprised to notice that the manuscript’s final section describes drama from 1917 to 1941, which he defines as the “Modern Era,” indicating that Brown must have written “Drama” after his book’s publication. I was particularly fascinated by the fact that this unpublished

manuscript condensed his thoughts on drama without recognizing the role of the audience. As in his book, “Drama” focuses on the intersection between drama and social justice. For example, Brown notes that “from the very beginning the American theatre relegated to him [Black characters] the role of clown, and the most recent cinema seeks to perpetuate that tradition”, emphasizing the impact societal norms had on Black characters (Brown 1). However, he also highlights rising Black playwrights or actors, noting that Little Theatres “have contributed to a certain drama-consciousness among Negroes” (Brown 12). Because this work takes the form of a fourteen-page typed manuscript, there is significantly less space to elaborate on the role of the audience. Instead of focusing on how white audiences greatly influenced the persistent misrepresentation and stereotyping of Black characters in theatre, as in *Negro Poetry and Drama*, Brown chose to focus on the inferior storytelling abilities of Black playwriting. Brown’s condensed iteration, thinking, and choice of what to include suggest that this manuscript may have had a different goal than the book. These two documents share a similar objective: To encourage increases in Black representation in drama and accurately portray Black folk life; yet, they differ in delivery style and sense of urgency. My initial analysis of “Drama” indicated that it was an undeveloped predecessor to his book. However, my discovery that his manuscript came after his book’s publication altered my assumptions, suggesting that Brown shifted his intentions rather than his ideas. While it may occur to one that the manuscript could have been compiled or composed in stages, it is evident from in-person examination and a staple in the pages that Brown likely typed his manuscript in closely-timed sittings. Examining his archival material plays a crucial role in deciphering his thoughts on what was necessary to inspire and elevate the Black artistic community. Thus, the comparison between his published and unpublished work gives insight into the social state of theatre and proves his continued dedication to advancing the field of Black drama.

In “Drama,” Brown describes the history of Black people in theatrical productions to emphasize the enduring patterns of mistreatment toward Black people in drama. Before the manuscript begins its sectioned analysis, Brown notes the generally underdeveloped skill of Black writers and the failure to break from the frequent use of stereotypes and harmful imagery of Black people in drama. His generalization is further reinforced in his written chronology by selected periods, which Brown groups as the following: “Beginnings,” “Middle Period,” and “Modern Era,” the first of which begins in 1776. Each section emphasizes a new evolution in Black stereotyping. Throughout “Drama,” Brown gives specific examples

where Black playwrights lack the skills to write compelling plots and character dynamics. He notes that in Black drama, although “the work is historically important; as drama, it is extremely weak” (Brown 5). For instance, he includes a critique of William Wells Brown’s play, *The Escape, or a Leap for Freedom*, written in 1858, where he notes that the main melodramatic, love-affair-driven plot was “utterly impossible from the theatre angle” (Brown 5). Despite being a technically flawed play, its message emphasizes how “universally accepted [the Black comic] stereotype had become by 1858” (Brown 4). While the playwright’s message is important, Brown claims it is undercut by poor skill and bad delivery. Yes, William Wells Brown was “an important anti-slavery writer and lecturer, the author of the first American Negro novel, [and] was also the race’s first dramatist,” Sterling Brown admits, but in 1858, he was catering to a primarily white audience who commonly degraded and oppressed Black people in the arts and life.

As in *Negro Poetry and Drama*, Brown traces the arc of Black theatre companies after 1865 in his unpublished manuscript. However, Brown continues to attribute the failure of theatrical companies to internal deficiencies in the technical abilities and narrative quality in Black playwriting rather than disclosing that audiences fundamentally rejected their work as he does in his book. During the “Middle Period” section of “Drama,” Brown notes that while collegiate-level drama companies were essential for the development of Black writers and their growing numbers, “many have been shortlived [and have] failed probably because of lack of trained leadership. [...] It tended to become a social rather than a serious artistic movement” (Brown 12). Here, he places significant responsibility for the failure of these companies on leadership and writership rather than on the audience, noting that writers were too focused on the message of their work rather than its artistic quality. It is important to note that Brown mentions an increase in Black theatrical spaces and an increased development of the “Negro show.” These Black companies began to break the minstrel tradition around 1890, displaying “syncopated Negro music” and musical comedies. However, despite the important contributions of Black playwrights to American theatre and the increase in Black artists and theatre companies in serious dramatic areas, Brown describes them as “not well-organized or outstanding enough to make an impression upon the chroniclers” (Brown 6). Black playwrights and actors attempted to break free of stereotypes heavily present in theatre but were rejected by larger audiences and never took off. Instead of noting that audiences on Broadway at the time were looking for mass appeal rather than artistic and social statements, Brown blames the minimal presence of Black people in serious drama on effort: “The Negro was

on his part to write it" (Brown 7). Through critiques of various efforts to foreground educational messages, Brown claims that the authors "apparently knew nothing of the theatre," reinforcing his general blame of misrepresentation on skill (Brown 7). *Negro Poetry and Drama* highlights similar points, however, with the acknowledgment of the audience's role. He draws attention to the internalized expectations of the audience when watching drama produced by Black playwrights: "The audience was readier to sympathize with heroes and heroines nearer to themselves in appearance" (Brown 113). Already, by virtue of a difference in race, social status, and the current stage of development in drama at the time, audiences were set up not to regard the "Negro show" as serious drama. Furthermore, he notes that because Black playwrights were respected less than their white counterparts, it was necessary to use the little theatres as laboratories for the Black dramatists to aid in their gaining respect in the theatrical industry. Brown uses more subtle uplift to stimulate the improvement of Black playwrights, conscious of the fact that the life of a Black dramatist is made more difficult by their position in society: "The necessary apprenticeships of the playwright in the theatre, beyond the footlights, is still too rare, and college dramatics cannot sufficiently offset this" (Brown 123). However, he confesses that this is no excuse not to be assiduous. Ultimately, Brown's condensed message in "Drama" from his more holistic message in *Negro Poetry and Drama* indicates the continued unfortunate state of Black representation in the dramatic industry. While in 1937, the theatre was dominated by discriminatory practices, which persisted through 1941 in Brown's timeline. The stagnancy of the industry prompted Brown to continue his literature on the subject more forcibly. Brown's praise of Black playwright's attempts at significant theatre and his awareness of the difficulty for Black artists to get their foot in the door in *Negro Poetry and Drama* are offset by his criticisms in "Drama." His abridging of an integrated, encouraging message in his book only allows space for an intensified message that the Black playwright must make space for himself in the field of drama, rather than waiting for an audience to readily accept a broadened industry.

Brown's eagerness to foreground Black playwrights and encourage their improvement highlights his commitment as a teacher. In 1973, the Library of Congress recorded Brown performing a selection of poems. During the recording, Brown frequently pauses between poems, drinking water, or beckoning for his wife, and sometimes, stopping to chat with the technicians for up to a few minutes. It is not until about halfway through the session that Brown clarifies why he must take these breaks. He comments that his poetry readings are exhausting because he regards them as a performance: "Now, I'm gonna stop after each one, but not too long, you know, it uses me up. I'm kind of acting them out" (30:12). By admitting

that these readings take a substantial amount of energy to produce, he demonstrates a level of effort that is unique to most artists. His commitment to genuineness in his readings demonstrates how Brown expects Black life to be portrayed and shared with one's whole being. Therefore, Brown's attempt to condense his much larger narrative into a shorter, potentially more accessible format may indicate his desire to encourage others to do the same. He aims to build up the Black playwriting community, not beat them down. He does this by example in his recording for The Library of Congress and through frustrated and urgent critiques in "Drama." Brown may not believe that poor representation of Black drama is caused entirely by a lack of ability among playwrights. However, his emphasis on the need for technical improvement rather than on the audience's internalized expectations of Black people in drama denotes an effort to bring Black writers forward in the dramatic industry.

Brown's description of the "Modern Period" is a further indication of the unfortunate state of the reception of Black drama. While Brown notes an overall improvement in messaging in a creative sense, praising the (slow) incorporation of Black folklife into the theatre, he displays hints of disappointment in the community for their continued shortcoming in storytelling ability. Having published numerous critical reviews, Brown has direct contact with the intentions behind the drama, is in touch with the current theatrical scene, and has some authority in defining what "good" drama looks like. Brown praises playwrights such as Ridgely Torrence, who "showed the dramatic possibilities of the folk element" in *The Rider of Dreams*, *Simon the Cyrenian*, and *Granny Maumee* (Brown 8). His positive feedback focuses on Black creative (not storytelling) ability, and he notes that after Torrence's plays, many playwrights followed his lead. However, he reverts to his initial assertion that plays were too heavily centered on social statements and that they fail to effectively and authentically convey the realities of Black life. His focus shifts to the broader dramatic scene as he considers how Black characters were used by white writers who had no connection to Black folk life. Many white writers used Black characters as "a symbol of social protest," indicating that there has been a healthy social change in the perception of Black people, especially in an artistic sense:

James Knox Millen's *Never No More* (1932), Frederick Schlick's *Bloodstream* (1932), John Wexley's *They Shall Not Die* (1934), and Paul Peters and George Sklar's *Stevedore* (1934) all protest the injustice which is the Negro daily lot in America. This trend, though a reversion to the problem drama, is exceedingly healthy because it takes the Negro out of any narrow racial groove and puts him in the full stream of the proletarian movement. These plays make the Negro character

the oppressed of the earth. (Brown 9)

Although he praises the newly found representation of folklife in the theatre, Brown suggests that plays have a long way to go, technically speaking, in delivery and writing. While these contributions to drama heightened the impact of the “Negro Renaissance,” he recommended that a “School of New Negro dramatists” should be established,” indicating his sentiment of continued inadequacy in the Black playwright community (Brown 9). He continues to emphasize that while many plays contain “much good raw material,” which they fail to use effectively, playwrights both Black and white fail to successfully unveil the richness of Black life (Brown 10). Frequently, plays of important premises would make their way into mainstream media only to be overshadowed by the rest of the dramatic scene after a short time. Brown shows frustration with Black theatre with the realization that even when a play “showed the most brilliant promise of any Negro vehicle to appear on Broadway, [...] the promise [would] not [be] fulfilled by a subsequent work” (Brown 10). Brown’s dismay comes from an apparent belief that the beauty in Black folklife speaks for itself. His grievances with the dramatic industry concerning Black representation come from his perceived inauthenticity in writing. Since these plays tended to be social rather than artistic projects, only appealing to white audiences, they lacked the honesty and emotion required to convey to an audience that Black life is essential in a social justice context. His lament to the industry suggests that Brown’s role as a social activist is best characterized by his commitment to portraying Black life with genuineness and passion and his encouragement for others to follow suit.

Unlike in “Drama,” Brown does not discuss the history of Black characters in the format of a clear chronology in *Negro Poetry and Drama*. Instead, he emphasizes plays that accurately portray Black life, exhibiting that creativity exists in the Black community to portray Black life. While he critiques the narrative quality of the plays, he does not resort to the shortcomings in the skill of Black playwrights as harshly. Instead, he takes on a more constructive yet hopeful tone: “None of the Negro folk playwrights show the structural skill of white dramatists like Marc Connelly, or the power and scope of Paul Green. This is to be expected since they are still learning” (Brown 122). His softer tone highlights that because there has been such a lack of representation in the arts, there has simply not been enough time for Black artists to develop the same skills and draw from the same vein of artistic history as white writers. He also attributes undeveloped skills to a lack of effort to educate Black playwrights in universities and other institutions. While Brown conducts his analysis of Black characters starting from the perspective of writers, beginning

in a similar manner to “Drama,” he later moves on to the audience’s contributions to the acceptance of Black artists in the industry. Firstly, Brown notes that most “serious” theatre that included Black characters was “produced by whites for whites” and “soon lost its rudimentary realism: the dialect became gibberish and caricature a cartoon” (Brown 106). However, his hopefulness persists throughout the book as he highlights that the rise of Black companies and theatre education greatly “enriched the lives of countless students and mentored several generations of scholars” (Brown 1). Brown notes that this rise in education for Black playwrights is a first step in catalyzing the abilities and stories of Black life. One play Brown praises is *The Green Pastures*, written in 1930 by Marc Connelly. Connelly’s play, based on a book of fictionalized “folk stories” by Roark Bradford, a southern-white writer, was also praised as a simple, yet glorified representation of Black folk life: “Newspaper files reveal that audiences of the 1930s were so affected by the ‘simple folk charm’ of this glorified pageant that it ran for eighteen solid months in New York, then toured the south and Canada” (Harold 41). Since Connelly was a white playwright, Brown, nor other play critics, do not discuss any technical deficiency in his writing in reviews of *The Green Pastures*. Instead, Brown focuses on its tribute to Black folk life: “If the play is not accurate truth about the religion of the folk-Negro, it is movingly true to folk life” (Brown 119). This play was highly regarded in the theatre community due to Connelly’s preexisting status as a “good” playwright, predisposing him to success. Connelly had an existing audience to present his work to, unlike most Black playwrights. Connelly’s pre-established following was vital to the play’s success and accessibility to a large audience. Brown, a renowned Black play critic, could watch and review the play. However, one must consider who *The Green Pastures* was written for and who ended up in the audience. An article in Volume 42 of the *Negro History Bulletin* by Walter C. Daniel describes the discriminatory environment where *The Green Pastures* showed, illustrating that Brown, as a renowned Black critic, was an anomalous witness to the alleged accurate portrayal of Black life: “The management announced that the National Theatre had not changed its racial policy and that Negroes would not be permitted to enter the theatre” (Daniel 42). Despite Brown’s high praise for the accuracy in the portrayal of Black life, he was an exception to the accessibility barrier. This is further demonstrated by the fact that during the time *Green Pastures* was running “Negroes did not support the play in any noticeable numbers” (Harold 41). Brown, therefore, is slightly biased in his perception of the impact of the play. Because it was not widely accessible to a Black audience, no one else could vouch for its truthful portrayal. Brown himself notes that

“if the play is not accurate truth about the religion of the folk-Negro, it is movingly true to folk life,” which indicates that the play was only accurate to some aspects of Black life (Brown 119). Brown presents minor criticisms of *The Green Pastures* yet maintains that it is a moving portrayal of Black life. This follows its white audiences, who also saw it as a profound insight into Black folk life. However, without a Black audience or the perspective of a Black author, it is evident that despite being praised for its “holistic” portrayal, aspects of Black life were still overlooked.

Despite a seemingly grim attitude toward the efforts of Black playwrights, at the end of “Drama,” Brown affirms that there is hope for their future in the slowly growing field. He claims that in the “Modern Era...individual actors like Robeson, Ingram, and others, have been given unusual (i.e., for America) opportunities on the national stage,” even mentioning that “treatment by white writers has grown tremendously in depth, sympathy, and understanding” (Brown 13). White audiences, as noted in his book *Negro Poetry and Drama*, frequently have rejected plays and art by Black playwrights and artists because of preconceived expectations of Black character roles. However, because there has been “precious little” drama produced by Black playwrights, Brown stands in a unique position to elevate and inspire Black dramatists (Brown 2). As a figure of relative authority in the dramatic industry as a critic, Brown wields some power in defining good drama. He demonstrates his authority in his literature on drama, including numerous articles published in *Opportunity: Journal for Negro Life* magazine, his book, *Negro Poetry and Drama*, and in his unpublished manuscript, “Drama.” His contributions to the dramatic industry foregrounded Black artists on more accessible platforms, spreading his message to wider audiences beyond the world of theatre. However, his criticism also served to encourage consistent growth in Black playwriting. Archival materials, such as drafts, allow us to track not only Brown’s thinking about the evolution of drama but also the state of the theatre from a social justice perspective. Through his tonality and urgency, we see his disappointment in the theatre and Black playwrights since the publication of *Negro Poetry and Drama*. However, he does not lose hope. Rather, he encourages the Black playwright with a heavier hand. Brown’s continued analysis of the role of Black people in drama is a tribute to Brown’s scholarly approach, which he would continue throughout his career. It was once Brown did reach the end of his career and his archive was acquired by Howard University, his place of employment from 1929 to 1969, and organized by Williams College in 2018, that his narrative opinions and throughlines can be pieced together. While manuscripts like “Drama” demarcate the numerous, tumultuous, and changing opinions toward Black drama, his choice to publish *Negro Poetry and Drama* shows his overall dedication to encouragement and hope and a resistance to the dominant narrative about Black theater.

Conclusion: Brown’s Pedagogy

So, what does Brown think is absent from the Black dramatic narrative? Brown’s archived work, published literature, and public-facing content suggest that authenticity and emotion are the missing ingredients to portraying Black life to its fullest capacity. Until the time of the writing of “Drama,” Brown seems to notice that “vast areas of Negro experience and character remain unexplored” (Brown 138). Because Black characters had been reduced to predictability, single dimensionality, and stereotypes, there had been no exploration of the vitality and richness of Black life. Genuine performance and authenticity are Brown’s solutions. While he knows that education and improved leadership can remedy the technical abilities of Black playwrights, Brown demonstrates in his work and performances that the way to an audience’s heart is through emotion and realism. As the situation becomes more pressing, it becomes clear that Brown is increasingly frustrated with Black writers, urging them to break free of centuries of expectation and stereotype. As Brown writes in *Negro Poetry and Drama*, “the treatment of the Negro character with honest realism certainly does not seem too much to ask” (Brown 137).

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On Strikes and Demonstrations: The Power of Protest in France

Thomas Huckans

Abstract

This article examines the salience of one of the key features of French political culture: civil disobedience. I employed a semi-structured interview methodology to collect information: as opposed to empirical surveys, I discovered higher degrees of nuance and received unexpected responses throughout the interviews, while also allowing for a richer exchange of cultural perspectives. Other influences on civil disobedience are also briefly investigated, such as the unique nature of labor unions and policing practices in France. Put briefly, the article hopes to answer: “What inspires French people to protest?” “Is civil disobedience a civic responsibility?” and “Do French people have confidence in the efficacy of dissent?” I conclude that protest’s importance to French history and cultural memory contributes to a high level of civil disobedience, that protest being seen as a duty varies with ideology but is generally considered a political right and tool rather than a responsibility, and that protestors have low confidence in the immediate impacts of their actions but nonetheless believe strongly in the symbolic impacts of their actions. In all, the responses to these questions give insights into the deeper motivations for the frequency of protest in France and provide clues to the issues most likely to inspire larger-scale protests, both of which are fundamental to understanding the state of civil disobedience in France.

Introduction

Ask an American what comes to mind when hearing the word “Paris,” and a typical response might include “renowned art museums,” “stunning monuments,” or even, “envious cuisine.” But for many Parisians, the word conjures images of stopped subways and streets choked with massive protests instead. In fact, France has been famously marked by large, sometimes violent protests throughout its history—the foundational French Revolution in 1789 being one of the most recognizable revolutions in the world—but it is clear that the expression of dissent is no longer quite so bloody an affair. Nonetheless, French symptoms of dissent have only worsened,

particularly in the last seven years of the Macron presidency, and after the resignation of the prime minister and reshuffling of the cabinet in January 2024, the situation is “*chaude*.”

Moreover, when trying to understand the protest cultures of other nations, it may be useful to use insights from France—insights which may reveal the geneses of distinguishing characteristics of civil disobedience and potential future developments. France, with a robust protest culture and considered by many a bastion of liberal ideals, could be taken as a canary of democracy when rights or institutions are perceived as under threat. With a public clearly unafraid to provide political input beyond just the ballot box, the rapidity and vocalness of French political expression contrasts with more reserved nations; thus, as France may be seen as a bellwether among European democracies, understanding its citizens’ underlying motivations for civil disobedience may reveal latent dissent in other nations.

The goal of this research is to examine the current opinions of French citizens regarding dissent, government, and civil disobedience in a rapidly changing world, using a combination of scholarly literature, contemporary news media outlets, and, predominantly, a series of semi-structured interviews with protestors and labor unionists.

Background

As mentioned above, a long, rich history of revolutions and protests underlies French culture, but the revolutionary events of nearly two-hundred-and-fifty years ago are not directly linked to the current atmosphere and perspective on dissent in France. To be sure, a history of revolution builds a national consciousness that may be more inclined to make use of protest as a political expression, but the nature of protest itself has significantly changed. For example, revolutionary tendencies of the nineteenth century led to considerable bloodshed, such as in the revolutions of 1848 and the Paris Commune in 1871, but by the Fourth and Fifth republics, dissent had become decidedly less deadly. Moreover, as in other nations—such as the United States—French

authorities now require protests to be reported to relevant security forces before any demonstration occurs, and labor unions must provide due notice before striking. Of course, in practice such regulation of dissent is not foolproof, but the codification of dissent enshrines it as a feature of political life.

But to which time period can contemporary French civil disobedience be traced most directly? Some scholars claim that the roots of the current protest system can be found in the aftermath of the 1968 May protests. Without focusing much on history, it suffices to say that the May '68 protests, although they began as student protests against consumerism and capitalism, soon included a vast general strike and even made political leaders fear revolution (famously, President de Gaulle fled France in secret). Although casualties were quite low, the protests' created an "enduring form of low-level physical and symbolic violence."¹ This continuing inclination for "low-level" and "symbolic" violence have become implicit cultural touchpoints, marking a clear change from the bloody historical revolutions of the past, but simultaneously continuing to enshrine dissent as a political tool.

After 1968, the new light-militant protest culture persisted due to infrequent clear defeats for demonstrators, overall support from the French public, and the perception on the far-left that such actions would inspire workers to do the same.² Since protest organizers regarded some violence as a necessary political communication tool, low-violence protests stayed salient into the late 1970s.³ Thus, modern-day protest, although having moderated even further since the *après-mai* 1968 (post-May '68) period, undoubtedly has its more violent iterations rooted in this same tradition.

A contemporary analogue to the militant French Maoist groups of the early 1970s is clearly the Black Bloc, a term used to describe the militant, destructive, black-garbed protesters that have become a symbol of the destructive side of European protests. Although such groups have existed since the 1970s, they became much more prevalent in the twenty-first century, as a new era of chaotic protests was "inaugurated" after September 11.⁴ Thus, although modern French protests are decidedly more orderly and regulated than those of May 1968, violent extremism has persisted in fringe groups, which complicates policing and can sometimes appear to discredit otherwise-peaceful movements.

Modern-Day

In 2019, the Organization for Economic Co-operation and Development (OECD) published a list of average annual number of strike days per 1,000 employees between 2008 and 2016. Of the included member nations, France topped the list with 128 days, well ahead of most nations (the United States had five days).⁵ In fact, strikes are expected annually across a variety of industries and are even viewed as a major vehicle to secure wage increases. One might therefore infer that France has a robust union network, with workers united across the country for collective bargaining; however, the opposite is true.

Strangely enough, as my conversations with several unionists revealed, only about ten percent of French workers are official union members. However, the apparent contradiction between low membership and high influence is answered by the great organizational power of unions and the power of a unique law that allows individuals to go on strike without being union members. In France, labor unions also serve a distinctive role in that, when legislation is passed, the burden falls partially on the unions to codify nuances the broad legislation missed. Although "tribunals" make the final verdict on whether the interpretations are constitutional, unions are still given outsized power, at least in comparison to the American system. But then again, French unions' direct lobbying is weaker than that in other EU nations, such as Germany or Belgium.⁶

Protests, on the other hand, remain salient across many nations, and have in fact been identified as an "escalating global trend" by the Center for Strategic and International Studies (CSIS). From 2009 to 2019, global protests increased 11.5 percent annually due to "slowing global economic growth, climate change, and foreign meddling in internal politics via disinformation."⁷ But more than just new geopolitical and environmental issues, the world's "global political awakening" is facilitated by great structural changes. Global Information Communications Technology (ICT), or more simply, internet connection, has been the greatest "critical enabler of global protests" by establishing hubs to share grievances, connecting disgruntled people, providing forums to discuss alternatives to status quo, and "spurring mass mobilization."⁸ At the same time, growing inequality, made visible by expanded social media access, has contributed to deep feelings of aggrievement

1 Provenzano, Luca, 458.

2 Ibid., 461.

3 Ibid., 470.

4 Chemin, Anne.

5 Armstrong, Martin, and Felix Richter.

6 France 24, "Born to Revolt."

7 Brannen, Samuel J, et al., IV.

8 Ibid., 15.

among those who feel left out of the rapid economic growth brought by globalization.

In France, growing sentiments of inequality found an outlet in December of 2018, when a Change.org petition against a new carbon and fuel tax garnered enough support that that online protest suddenly spilled into the physical world. The resulting “Yellow Vest” protests, reported worldwide, marked a change in the style of French protest because, although many of the initial demonstrators had no protest or political experience, unprecedented violence quickly erupted between protestors and police.⁹ Yet despite the chaos, during weekly Saturday protests for approximately six months, the Yellow Vests enjoyed consistent support from high numbers of demonstrators, despite the deaths of twelve people between November 2018 and January 2019.¹⁰ Over time, the aims of the movement shifted to encompass about forty demands, with topics ranging from social and fiscal justice to democracy; eventually, the movement evolved to focus more on calls for direct democracy, with a proposed “Citizens Referendum.”

In France, the key factor enabling such large-scale protest from typically politically-inactive citizens was widespread access to social media. Research on social media’s impacts on protest in first-wave developed democracies found that the ease of interpersonal exchanges, ability to join groups with common interests, and trust-building between protestors all increased propensity to protest.¹¹ However, in the specific example of the Yellow Vest protests, research found that the biggest indicator of likelihood to protest was not mere social media usage, but instead the expression of political opinions on social media and the deployment of social media to reach political actors.¹² Particularly because many Yellow Vest demonstrators seemed to lack clear ideological profiles, finding traits correlated with protest participation is vital to understanding how future demonstrations may evolve.

In an attempt to quell the protests, President Macron proposed “*Le Grand Débat*”, a nation-wide poll of major policy issues, reminiscent of the referendum called for by the Yellow Vests. However, on top of the problem that just under 1.5 percent of the French population participated in the Débat, county-level survey data tended to show participants had high levels of education, high median incomes, and had by-and-large voted for Macron, suggesting a very one-sided exercise.¹³ Polls from the

time also showed seventy percent of people were skeptical of the effectiveness of the Grand Débat, and two-thirds believed the views they expressed would be ignored.

In the past year, this belief of many French citizens regarding the government’s unresponsiveness seems only to have been confirmed by Macron’s administration’s repeated usage of Article 49.3, a legal artifact from the era of Algeria’s struggle for independence that allows the French government to force a law’s passage without a vote, unless parliament were to pass a motion of no confidence. Understandably, Macron’s usage of highly undemocratic means to force through unpopular policy objectives has also worsened the political and social climate. For instance, Macron employed Article 49.3 to pass both a wildly unpopular pension reform in 2023 and a law restricting immigration and asylum access in January 2024 (the latter inspiring the largest of the protests I was able to attend), both of which sparked the largest protests since the pandemic. More frequent and stronger protests can thus be expected when the president is viewed to be eroding key features of French democracy.

Protestor Interviews

As is hopefully clear, the current French political landscape is bleak and heated, which made it an ideal moment for me to undertake this type of project. While attending protests, I took notes of the general atmosphere, a general profile of demonstrators, and then engaged in a series of semi-structured interviews with attendees. The goal of my questions was to understand people’s underlying motivations or inspirations for protesting, whether people considered protest a type of civic duty, and whether they considered civil disobedience inherent to the spirit of the French Republic or rather a byproduct of a tumultuous present period.

In January 2024, the largest protests were motivated by the aforementioned January 2024 immigration law (the Darmanin Law), the war in Gaza, and unfortunately beginning only after my departure, discontented farmers who began to blockade major points of entry into Paris.¹⁴ Due to the nature of time constraints, the protests I attended included two concerning the Darmanin Law, a smaller demonstration against preparatory school closures, and a Yellow Vest protest. In total, I spoke with just under twenty participants at every protest except the first Darmanin Law one, allowing me to synthesize a wide range of political ideologies and provide a snapshot of French protests at that moment in time.

⁹ Monnery, Benjamin, and François-Charles Wolff, 286.

¹⁰ Libération.

¹¹ Froio, Caterina, and Xavier Romero-Vidal, 3.

¹² Ibid., 9.

¹³ Monnery, 286.

¹⁴ France 24, “French Govt Prepares to Head off ‘siege.’”



Figure 1: La Place de la Republique filled with demonstrators gathered to protest the Darmanin Law. Many unionists and independent protestors attended.

The first protest in which I interviewed attendees was a demonstration to raise awareness of, and counter the arbitrary closing of, various free preparatory schools in the greater Paris region. The march set off from La Place de la Sorbonne, a common site for smaller protests and had by far the youngest median age of the protests I attended, due to the high number of preparatory students in attendance—the rest of the demonstrators were largely teachers and people who worked in fields pertaining to educational administration. Overall, the protestors spoke about deep problems in the lack of transparency in the decisions being made by government officials, which was highlighted by the viral clip of the new Education Minister lambasting the public school system, only to later admit that she has kept her children in private schools. To many protestors, the prevailing wisdom was that ministers and other politicians were too far removed from the issues to be making accurate decisions.

Of the students in attendance, there was a mix of new and experienced protestors, and they cited professors and parents as inspirations for voting. Moreover, many of the protestors were not actually being affected by the school closings but were instead protesting in a show of solidarity. When asked about the effectiveness of these protests, protestors were cautious in expressing hope: they were resolved to raise awareness, but also unsure of what their labors would bring. On the question of civil disobedience being a civic duty, most protestors expressed the importance of taking full advantage of all of one's political rights, but did not claim participating in protests or strikes was a civic responsibility. Interestingly, a staunch unionist in attendance was much more emphatic on the importance of protesting.

The following protest was on a Saturday afternoon, a weekly protest organized by the Yellow Vests to protest elite rule and the burdens shouldered by the middle and working classes. I was surprised, as the Yellow Vest movement had supposedly ended years prior, and yet I found myself in a

posse of almost anachronistic neon-clad protestors. However, for all intents and purposes, the movement was over: the once-mighty movement that had commanded national attention was winnowed down by a pandemic that arrested its activities, a series of police reforms, and a paucity of tangible results, leaving a dedicated core of only sixty people still attending weekly protests five years later.

France is a largely anti-patriotic nation, and many of the protests I attended had more Gazan flags than French ones, if there were any present at all. However, demonstrators proudly carried French flags at the Yellow Vest protest, providing an interesting foil to the other demonstrations I attended, which were decidedly less chauvinistic. Through my conversations with attendees, it was also rather difficult to pin down concrete political beliefs, a contrast to the other left-leaning protests I attended. Within the Yellow Vests, there were clearly many political currents, but as one protestor carefully explained, that was the goal: from the onset, the Yellow Vests were never meant to comprise a distinct ideology. Instead, its original power came from its spontaneity, universality, and elevation of the citizen over the politician.



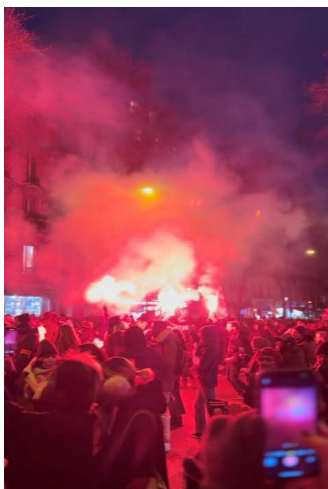
Figure 2: The small but passionate group of Yellow Vests sang songs and played the drums during their weekly protest.

When I asked about the efficacy of their protests, an air of something having been lost noticeably descended upon the Yellow Vest interviewees. To me, it was clear that those who still don the yellow vests long for the past, for an era in which they truly believed in the power to make lasting change. Moreover, on questions of the necessity of protest as a civic duty, Yellow Vest protestors were more likely to treat it as nearly essential for a complete civic life. Finally, many pointed to France's revolutionary history as an explanation for the prevalence of strikes and protest in France.

Before I left the protest, one particular chant stuck in my head: "*On est là!*" ("We are here!"). Although the tune was defiant, it seemed more melancholic than anything. The

Yellow Vests are certainly still there, in their same worn garb, but it seems impossible that they will ever regain what they once had.

The final protest at which I interviewed demonstrators was a second anti-Darmanin one, this time much larger in scale. This protest, held on January 21 and coordinated with protests occurring all around the nation on the same day, was estimated to have had over sixteen thousand people in attendance, and the march started from the Plaza Trocadero and went to the Hotel des Invalides. The structure of this protest was like many larger French demonstrations (according to the union member and experienced protestor with whom I attended the protest) in that the first part of the procession was made up of independent protestors and small affinity groups, the second half was composed of swaths of unionists following large trucks which normally carry leaders energizing the crowd through speeches and chants, and in the rear a huge police presence to largely deter Black Bloc groups from interfering but also to uphold order.



Figures 3 & 4: Figure 3 depicts how, as night falls, protestors break out flares to illuminate the procession. Figure 4 shows a common protest tactic of removing ads from public displays and slotting large handmade protest signs back in.

At this protest, I was able to talk to many different people, as it had the broadest cultural intersections of all the protests I attended. At this demonstration, most protestors were French, and therefore not impacted by the law, but I did have the opportunity to speak with a longtime Chilean resident of France. The Chilean, although they had less to say about civil disobedience as an obligation, was deeply passionate about supporting other immigrants.

Unsurprisingly, people were not necessarily optimistic about the protest itself resulting in an immediate government response, but most, seemingly inspired by the massive attendance, expressed faith in the protest representing the first step in a series of efforts that could repeal the Darmanin Law. More like the preparatory student

protest, most attendees I spoke with also seemed to avoid prescribing protest as a political obligation, although they mentioned the importance of exercising as many civic powers as one can. Finally, many of these protestors spoke of familial and historical inspirations for protest.

Unionist Interviews

Fortunately for the city, but not for my research, the major strikes in Paris that are so common in warmer months were not present this January. However, I was fortunate to be able to speak with two figures from the largest educational union in France, SGEN-CFDT (Syndicat général de l'Éducation nationale), one a rank-and-file union member, and the other the secretary general of the Versailles and West Paris region of SGEN-CFDT. I also attempted to contact representatives from la CGT, which is the railroad workers union renowned for its ability to shut down travel across the entire Île-de-France region, and a union representing police officers, but neither of the two groups replied to my questions.

As explained earlier, unions occupy an interesting position in France, due to their rather limited penetration into the workforce but rather large impact on worker's rights and laws impacting the workplace. Both unionists I spoke with pointed to increasing union membership throughout the Macron presidency, as people began to grow tired of politicians and sought political gains elsewhere. However, many French people have grown exasperated with the endless bureaucracy and hierarchical structure of unions in France, which helps explain the genesis of movements like the Yellow Vests—intentionally anti-hierarchical—which further reduced the power of unions in agitating for guarantees from the government.¹



Figure 5: A typical clustering of unionists found at the rear of the January 21 protest preparing to set off.

The Secretary-General spoke at length about the various union traditions—Christian, Reformist, and Revolution—and shed light on the difficulty unions have, not only with

¹ Vail, Mark I., Sara Watson, and Daniel Driscoll, 377.

the government, but also between themselves on conflicting traditions and perspectives on the role of unions. Particularly, a large debate lies in how best to secure rights for union members and workers, and how much a union should serve as a vehicle for social progress. Discussing the importance of civil disobedience, both unionists expressed the view I had heard at previous protests, which acknowledged that neither strikes nor protests can be considered obligations but are instead useful ways of making use of French political rights.

Security and Policing

In France, security forces have increasingly become unpopular, particularly after a series of brutal crackdowns on protests and several killings of young people by police. During the course of my investigation, I tried several times to reach out to various representatives of the police in order to learn more about the complicated role security forces play in expressions of civil disobedience and how they balance and manage security at protests, but to no avail. The job of the police is tricky: on one hand, police are there to protect normally peaceful demonstrators from the intrusions of more violent groups, but at the same time, they might end up protecting protests that are against police interests, such as a protest calling for police reform or reducing the number of police officers, and so on.



Figure 6: A well-armored and equipped unit of police began to wall off the exit of the Alexandre III bridge to both contain protestors and to prevent militant groups from causing violence.

Additionally, in recent years French police have earned a reputation for being more brutal than peer nations. In fact, an analysis of counterprotest measures during the Yellow Vest demonstrations in 2019 found many similarities between contemporary measures and the “zero tolerance” practices of the past.¹ As mentioned earlier, since the early 2000s there have been increases in the violence of protests, but in contrast to de-escalation movements begun in nations like England,

Switzerland, and Germany, French security goals have been to remove the “spirit and letter from the right to demonstrate.”² Some call the problem “splendid isolation,” which is the idea that France’s model of maintaining order in the twentieth century has been put forward as a mythical story and that and that it is difficult to accept a reality where the security enforcement model may not function as well as claimed.

Conclusion

In reflecting on this experience, I consider its greatest benefit to have been an exploration of French cultural attitudes on strikes, protests, and civil disobedience and of what factors influence these differing perspectives. Speaking directly with others in a semi-structured interview style can reduce the consistency of responses, which is challenging to translate to more quantitative examinations. However, I believe the insights obtained through open conversation led to a much greater wealth of knowledge and opinions shared.

Additionally, through my many conversations, it became clear that familial and historical examples serve as major inspiration for protest attendees in France. Protest is deeply engrained in the memory and cultural legacy of many French people, which contributes to high participation in demonstrations. Regarding whether protest is a duty, results were mixed. Most protestors were cautious labeling civil disobedience “a civic responsibility,” but they did identify it as an important political tool. However, the Yellow Vest attendees embraced protests as a civic duty, owing perhaps to the populist nature of their struggling movement.

As for the efficacy of their efforts, few interviewees were optimistic about the immediate impacts of protests. Nevertheless, many protestors appreciated the symbolic quality of civil disobedience and explained that protest was vital to demonstrate discontent to political elites. For many, the hope is that sustained protest may make change long-term, but short-term results should not be expected.

Finally, many protestors spoke of democratic overreach and erosion (especially in the usage of Article 49.3) as motivations for protesting, suggesting a broader link between perceived threats to democracy inspiring stronger civil disobedience. It is thus likely that if the Macron administration continues overreach perceived guardrails of French democracy, or if average citizens continue view political elites as unsympathetic and disconnected, high levels of protest will continue.

For future work, I would be interested in creating a more quantitative survey segment of this study, to find more precise ways to measure public opinion. In addition, I would pose the same questions to those who do not attend protests often in order to hear competing perspectives on the role of civil

¹ Chemin.

² Ibid.

disobedience and protest. Finally, designing a comparative study of protest in France—for example, in comparison to the US—could prove insightful.

Overall, although France's political climate is certainly not tranquil, the continued belief many people have in the value of protest is a good omen that the situation is not hopeless. Despite the current administration's tumultuous relationship with its citizenry, people continue to tap into the French tradition of protest, fighting even against large odds for a plethora of ideological concerns. Thus, although tangible political results of protests in France remain rare, it is clear that the spirit of protest remains sound.

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Superfund at 44: A Policy Puzzle of Environmental Persistence

Jessica Kim

I. Introduction

Over the past forty-four years, Congress has slowly authorized the expansion of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). Initially, passing CERCLA, colloquially known as the ‘Superfund Act,’ or just ‘Superfund,’ was not a simple feat. But following Superfund’s passage in 1980, federal authority has not retrenched or diminished—rather it has grown and extended.

Today, the Superfund Act’s size and reach are staggering. The Environmental Protection Agency (EPA) maintains a National Priorities List (NPL), which records the sites requiring intervention and clean-up assistance. The most recent example of the Superfund’s expansion is the Biden Administration’s Bipartisan Infrastructure Law, which invested \$3.5 billion into “environmental remediation” at NPL sites and reinstated Superfund chemical taxes, looking to address “legacy pollution.”¹ Since the NPL’s creation in the early 1980s, the EPA has added approximately 1,340 sites, of which only 458 have been successfully remediated—a seemingly mere 25 percent. Therefore, at first glance, it may seem that the EPA has been ineffective and slow-moving in its cleanup efforts. However, the program’s scope has consistently expanded since the Act’s initial passage; thus, sites are continuously added to the EPA’s workload, which, instead of reflecting the EPA’s incompetence, perhaps are more reflective of the persistent and ever-emerging environmental challenges that plague the US.

CERCLA’s passage and expansion do not result from long-term bipartisan compromise; instead, they reflect one set of interests prevailing over the other. As with most legislation, many groups opposed CERCLA’s passage—while environmentalists and others led advocacy efforts for CERCLA’s expansion, chemical companies, land developers, and politicians aligned with these corporate interests opposed

the Act. In particular, chemical and business interests and related coalitions did not like the increased regulation and taxation schemes Congress proposed in the Act. Conversely, many groups supported the passage of the legislation—for example, environmentalists, groups affected by toxic chemical spills, and other related coalitions. Ultimately, groups on both sides of the issue were unhappy with the provisions in the bill.² Yet, there was a sense that any action was better than none and that the legislation could be improved over time through compromise.

³Why have the pro-CERCLA interests prevailed in the long term? Ultimately, Superfund’s expansion can be attributed to a persistent coalition of pro-environmental interests. With that said, expansionary efforts have not been as extreme as pro-environmentalists may have liked—opposition groups consistently provided enough resistance to moderate these activists’ desires for increased regulatory and liability schemes.

The Superfund’s Origins

The idea for the Superfund Act was born in the late 1970s, when media stories about a growing prevalence of unexplained rashes, coughs, and birth defects in residential areas around Love Canal, New York, sparked outrage and hysteria in the United States. Allegedly, the Hooker Chemical Company was clandestinely using the Canal as a “municipal and industrial chemical dumpsite” for decades.⁴ The public panicked and worried about other secret and potentially hazardous chemical waste sites. Seeing an opportunity to capitalize on the public’s hysteria and growing interest in legislative solutions to such chemical risks, environmentalists and sympathizing politicians referred to chemical dump sites such as Love Canal as “ticking time bombs,” which did nothing to assuage people’s worries.⁵ As a result, then president Jimmy Carter declared a state of emergency at

1 Environmental Protection Agency, “Superfund Accomplishments Quarterly Report - Fiscal Year 2024,” US EPA, September 19, 2024, <https://www.epa.gov/superfund/superfund-accomplishments-quarterly-report-fiscal-year-2024>.

2 Cartwright, Martina E. “Superfund: It’s No Longer Super and It Isn’t Much of a Fund.” *Tulane Environmental Law Journal* 18, no. 2 (2005): 299–322. <http://www.jstor.org/stable/43292807>.

3 Congressional Quarterly Inc., “Congress Clears ‘Superfund’ Legislation,” in *CQ Almanac* 1980, 36th ed. (Washington, D.C.: Congressional Quarterly Inc., 1981), 584–593.

4 Environmental Protection Agency, “The Love Canal Tragedy,” US EPA, accessed November 22, 2024, <https://www.epa.gov/archive/epa/aboutepa/love-canal-tragedy.html>.

5 Richard Stroup, “Superfund: The Shortcut That Failed,” *PERC*, May 1, 1996, <https://www.perc.org/1996/05/01/superfund-the-shortcut-that-failed/>.

inadequate laws to clean up chemical spills.¹ Thus, to demonstrate a sense of control over the situation, President Jimmy Carter used the Love Canal disaster as a focusing event to propose CERCLA, which created an emergency \$1.6 billion “superfund” to address similar chemical spills. The House and Senate officially enacted the Superfund Act on December 11, 1980.

Generally, Superfund established liability schemes to establish responsibility among polluters, granted greater authority over environmental cleanups to the federal government, and, controversially, specified the lack of compensation for chemical spill victims.² In a significant victory for the pro-environmentalism coalition, the “polluter pays” principle, which placed the financial burden of cleanup efforts on industries responsible for contamination rather than taxpayers, was central to CERCLA. In this vein, the Act also established liability schemes for Potentially Responsible Parties (PRPs), which would be responsible for cleanup, natural resource damage, and health assessment costs (but not any resulting medical complications).³ Furthermore, the Act granted the White House the authority to order a company to remove and control hazardous substances that threatened public interest or to order any emergency cleanup actions deemed necessary.⁴ With that said, the Act’s opponents ensured that CERCLA did not mandate the provision of financial compensation to victims of chemical spills.⁵ Instead, legislators encouraged victims to initiate private lawsuits against the responsible parties.⁶

During the Act’s initial passage, environmentalists and the chemical industry profoundly disagreed about the amount of funding necessary for such a superfund.⁷ In the end, the Act mandated the creation of a five-year tax on the chemical and petroleum industries.⁸ Finally, the Act

created the National Priority List (NPL), for which the EPA was tasked with finding four hundred sites in the first five years of implementation.⁹ The EPA prioritized hazardous waste sites on the NPL and allocated funding for cleanup.¹⁰

II. Legislative History: The Expansion & Retrenchment of Superfund’s Powers¹¹

Expansion¹²

Year	Act	Extent of Change
1982	Selection of Hazardous Waste Sites for Superfund Funding	Significant
1984	Hazardous and Solid Waste Amendments	Fair
1986	Superfund Amendments and Reauthorization Act	Very significant
1990	Extension of Superfund Taxes	Fair
1994	Brownfields Action Agenda	Significant
1997	Brownfields National Partnership Launched	Fair
1999	Superfund Redevelopment Initiative Announced	Significant
2002	CERCLA-Amended Brownfields Law Passed	Very Significant
2009	American Recovery and Reinvestment Act	Fair
2010	Environmental Workforce Development and Job Training Program	Fair
2017	Brownfields Initiative Reauthorized	Fair
2022	Inflation Reduction Act	Significant

Stasis and Retrenchment¹³

Year	Act	Extent of Change
1995	Superfund Amendments and Reauthorization Act	Very Significant
1996	GOP Scraps Superfund Plans	Fair
1997	Partisan fights stall Superfund progress	Fair
1999	Partisan fights stall Superfund progress	Fair
2013	GOP environmental riders stall Superfund Progress	Significant

1 Ibid.

2 Ibid.

3 Ibid.

4 “Congress Clears ‘Superfund’ Legislation.” In CQ Almanac 1980, 36th ed., 584–93.

5 Ibid.

6 Ibid.

7 “Congress Clears ‘Superfund’ Legislation.” In CQ Almanac 1980, 36th ed., 584–93.

8 James Bovard, “The Real Superfund Scandal” (CATO Institute, August 14, 1987), <https://www.cato.org/policy-analysis/real-superfund-scandal>.

9 Environmental Protection Agency, “Current NPL Updates.”

10 Ibid.

11 Given that nearly forty-five years have passed since the Act’s initial passage, Superfund has been amended far more than can be addressed in this paper. Therefore, this section will observe how Congress has grown or diminished CERCLA’s authority since 1980 and present additional background information on Superfund’s significant amendments and initiatives.

12 Since the Superfund Act’s inception, amendments to CERCLA have primarily expanded it. This paper categorizes types of reform into levels of expansion: ‘fair’, ‘significant’, and ‘very significant’. While expansions categorized as ‘fair’ caused minor adjustments or funding increases to maintain the program, expansions categorized as ‘significant’ or ‘very significant’ introduced broader regulatory authority or more significant financial commitments. The distinction between programs categorized as ‘significant’ and ‘very significant’ lies in the magnitude of the bill—for instance, the Superfund Amendments and Reauthorization Act of 1986 is categorized as ‘very significant’ because of its sheer scope, even if similar changes to CERCLA have been made since in more minor amendments. These distinctions provide a framework to explore why the retrenchment of the Superfund Act’s powers has been minimal despite the presence of coalitions that should have a vested interest in the Act’s retrenchment. This paper will examine the hearings conducted for amendments and acts categorized as ‘significant’ and ‘very significant’. The assumption is that the interest groups present at such hearings represent the interests that shaped these expansions. This is a fair assumption, given that Congress generally calls upon a wide range of witnesses to attend such hearings.

13 Over the years, advocates for the Superfund Act have made slow and steady progress. But policy stasis and retrenchment has occurred over the years. This paper categorizes moments of retrenchment and stasis using the scale of ‘fair’, ‘significant’, and ‘very significant’ introduced earlier. ‘Fair’ indicates that very minimal stasis occurred. ‘Significant’ indicates stasis or mild retrenchment to a somewhat greater degree. Moments categorized as ‘very significant’ constituted an explicit retrenchment of authority or funding that reversed or cut short previous progress.

III. Interest Group Involvement

Based on the previously established timeline, this paper categorizes amendments and initiatives into three primary eras: the initial amendments and reauthorization (1982–1992), the retrenchment era (1992–2002), and more recent expansions (2002–present).

Initial Legislation and Early Amendments (1980–1992): The Superfund Amendments and Reauthorization Act (SARA) of 1986

A pivotal moment in CERCLA's legislative history was Congress's passage of the Superfund Amendments and Reauthorization Act (SARA) in 1986. In the face of criticism of the EPA's bureaucratic and slow processes, Congress authorized SARA to address key deficiencies in the Superfund Act. Perhaps most importantly, SARA clarified liability for PRPs, establishing retroactive liability.¹ SARA also increased available federal funds to 8.5 billion dollars to address the NPL.² In addition, through SARA, Congress mandated stringent standards for cleanups and formally established the importance of long-term solutions over temporary fixes.³ In doing so, Congress moved beyond seeing CERCLA as a temporary, reactive Act in response to the Love Canal disaster, and instead, Superfund was set up to have an impact for many years to come.

Some early coalitions emerged at the 1985 SARA hearings: federal agency advocates, state and local government advocates, industry and legal representatives, and environmental and public health advocates.

Federal agency advocates included representatives from the EPA, the Department of Justice, the Navy, and the Agency for Toxic Substances and Disease Registry (ATSDR). These speakers primarily testified defending the existing liability frameworks—specifically the joint and several liability schemes—and advocating for strengthened enforcement mechanisms.⁴ Their testimonies highlighted the importance of balancing work in three areas: operational efficiency, public health, and compliance.⁵

State and local government representatives—employees of state-level waste management or environmental agencies—advocated for increased state-level authority, funding, and cleanup flexibility.⁶ State representatives also emphasized successful local cleanup efforts that ran more

smoothly and efficiently than federal efforts due to the smaller scale of such programs.⁷

Industry interests and their legal representatives predictably sought severe reforms to the Superfund's liability frameworks, emphasizing the importance of fairness, cost efficiency, and reducing litigation burdens.⁸ These advocates also pushed for incentives for voluntary cleanup programs and risk-based remediation standards.⁹ Some groups at the hearings include the American Petroleum Institute, Asarco, the American Insurance Association, the National Association of Manufacturers, and the Superfund Coalition Against Mismanagement. These groups argued that streamlined cleanup processes and reduced liability schemes would increase economic growth.¹⁰ This demonstrates early industry opposition to the Superfund's expansion.

Environmental protection and public health advocates presented overlapping arguments supporting the Superfund Act's expansion. Playing to their respective fields of expertise, public health advocates focused on rationalizing why the Act was necessary, while environmental advocates focused on how the Act would be implemented. Both groups spoke of the importance of maintaining the “polluter pays” principle, high cleanup standards, and robust public health protections.¹¹ Such advocates included public citizens, like Janet Hathaway, who opposed liability reforms advocated for by industry interests, and more established groups, such as the North Baton Rouge Environmental Association or Friends of the Earth. These testimonies demonstrate the early mobilization of the pro-expansion coalition that was crucial to the initial passage of Superfund, long before the Act was expanded. Their collaboration continues at later hearings and moments of expansion. Together, this coalition framed CERCLA not as a burden but as a necessary tool to address environmentally hazardous sites.

Overall, there was a critical dynamic at play in the 1986 SARA hearings: environmental and federal coalitions framed CERCLA's liability schemes as essential for accountability, while industry interests in opposition, though strong, focused on reform of CERCLA's existing frameworks rather than arguing for an outright dismantling of the program. Such a focus on moderation rather than obstruction likely enabled CERCLA's expansion.

¹ Ibid.

² Congressional Quarterly Inc., “Congress Clears ‘Superfund’ Legislation,” 584–593.

³ James Bovard, “The Real Superfund Scandal,” Cato Institute, August 14, 1987, <https://www.cato.org/policy-analysis/real-superfund-scandal>

⁴ U.S. Congress. House. Committee on the Judiciary. Superfund Reauthorization: Judicial and Legal Issues. Oversight Hearings before the Subcommittee on Administrative Law and Governmental Relations of the Committee on the Judiciary. 99th Congress, 1st Session, July 17 and 18, 1985. Washington: U.S. Government Printing Office, 1985.

⁵ Ibid.

⁶ Ibid.

⁷ Ibid.

⁸ Ibid.

⁹ Ibid.

¹⁰ Ibid.

¹¹ Congressional Quarterly Inc., “Congress Clears ‘Superfund’ Legislation,” 584–593.

Retrenchment and Opposition (1992–2002): SARA of 1995

The Superfund Amendments and Reauthorization Act of 1995 was a moment of moderate expansion and some retrenchment for CERCLA. In some ways, this reflected shifting political dynamics in Congress, which favored regulatory reform and cost-cutting measures. Congress allowed the Superfund tax to expire in 1995, leaving the EPA reliant on appropriations from the general Congressional fund.¹² These reforms streamlined the EPA's processes and created more transparency around the cleanup processes. They also introduced mechanisms for more substantial stakeholder engagement.¹³

Between 1985 and 1995, the interest groups at the Superfund hearings remained largely the same. But, industry groups capitalized on the so-called "Republican Revolution" of 1994 to achieve modest policy retrenchment.¹⁴ Specifically, the Superfund tax was allowed to expire.¹⁵ Five primary coalitions and interest groups spoke at the hearings for SARA: federal officials, state and local officials, industry and legal representatives, environmental and public health advocates, and academics and experts.

Federal officials generally sought to defend the existing Superfund Act legislation and advocated for expansion and increased authority while supporting targeted efficiency and cost-reduction reforms. For example, Thomas Grumbly of the Department of Energy highlighted the inefficiencies and high costs of activities mandated in the Superfund Act, particularly at federal facilities.¹⁶ He also advocated for greater standardization of cleanup criteria and emphasized the importance of innovation and community involvement to achieve the most cost-effective solutions.¹⁷ Lois Schiffer of the Department of Justice's Environment and Natural Resources Division defended the controversial "polluter pays" principle, emphasizing the importance of holding polluting corporations liable for their action and not placing the burden on taxpayers.¹⁸ In addition, a former EPA administrator, Mary Nichols, acknowledged the need for increased administrative reform and efficiency but highlighted the program's success in reducing public health risks and vehemently opposed liability reductions.¹⁹

State and local government leadership advocated

for increased liability protections and federal funding to grant more significant control over Superfund cleanups to the states and municipalities. Overall, these speakers emphasized the ability of non-federal government officials to achieve efficient and cost-effective outcomes by drawing upon local expertise when addressing contaminated sites.²⁰ State officials from New Jersey, Massachusetts, Michigan, California, and Pennsylvania highlighted the inefficiencies created by federal oversight. Amongst the state and local leaders, there was some disagreement on the retrospective liability schemes—some merely called for increased clarity regarding liability standards, while others explicitly advocated the retrospective liability system's removal.²¹ In addition, local elected officials such as Robert Varney of New Hampshire, Susan Thornton of Colorado, and John Weichsel of Connecticut criticized the complexity of Superfund regulations, arguing that such legislation unnecessarily burdened municipalities and highlighted successful local cleanup efforts.²²

Industry representatives and their legal representatives primarily focused their testimony on liability reforms, voluntary cleanups, and streamlined processes to reduce litigation costs. Speakers of note include Roger Ferland, an attorney for the National Association of Manufacturers; Robert Roberts, the President of the National Mining Association; and Stephen Harper, the Director of Government Affairs at Intel Corporation.²³ Ferland's testimony criticized the liability frameworks, called for equitable cost-sharing schemes, and advocated for increased voluntary cleanup incentives.²⁴ Roberts, too, advocated for voluntary cleanup effort incentives, criticized the liability rules, and highlighted industry investments in remediation technologies. Harper echoed criticisms of liability schemes and called for reform, highlighting the inefficiencies of the bureaucratic process.²⁵

In contrast, environmental and public health advocates focused their testimonies on the public health risks posed by Superfund sites. They strongly opposed any reduction in liability reforms so as not to reduce accountability for polluters.²⁶ In many cases, such advocates emphasized the importance of increasing funding to conduct additional

¹² Cartwright, "Superfund: It's No Longer Super," 299–322.

¹³ Ibid.

¹⁴ Congressional Quarterly Inc., CQ Almanac 1994: 104th Congress, First Session (Washington, D.C.: Congressional Quarterly Inc., 1995), 1–4.

¹⁵ Ibid.

¹⁶ U.S. Congress. House. Committee on Transportation and Infrastructure. Superfund Reauthorization: Hearings before the Subcommittee on Water Resources and Environment. 104th Congress, 1st Session, June 13, 20, 21, 22, 27, and July 11, 1995. Washington: U.S. Government Printing Office, 1996.

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ Ibid.

²⁰ Ibid.

²¹ Ibid.

²² Ibid.

²³ Ibid.

²⁴ Ibid.

²⁵ Ibid.

²⁶ Ibid.

research into the adverse effects of toxic chemicals. They criticized the Superfund risk standards as too relaxed. Within this coalition were representatives of environmental activist groups like the Environmental Defense Fund and Friends of Earth.¹

Finally, academic experts also presented arguments, though their testimonies mostly aligned with those of the environmental and public health advocates. For example, Professor Bruce Ames of the University of California, Berkeley, criticized the EPA for being overly conservative in its risk assessments and argued for more explicit cleanup standards based on real-world exposure scenarios.² Furthermore, Dr Paul Locke, an environmental health expert from Johns Hopkins University, highlighted the need for more research-based policy decisions and criticized inconsistent risk standards in the Superfund cleanups.³

Though the 1995 hearings marked a rare retrenchment moment, industry groups leveraged favorable political conditions to undermine CERCLA's funding mechanisms and the fundamental "polluter pays principle." However, CERCLA's core frameworks remained intact, underscoring the strength of the pro-expansion coalition's advocacy.

Brownfields and Redevelopment (2002–2020): The Brownfields Initiative of 2002

The Brownfields Initiative of 2002 was another significant moment of legislative expansion. With that said, the Initiative constituted a legislative victory for industry interests because it created incentives for voluntary cleanups and provided increased liability protections for potential developers.⁴ Brownfields, abandoned or non-used industrial properties with unknown levels of chemical contamination, were not mentioned in the original Superfund Act.⁵ As such, due to the stringent liability schemes established in the 1990s, developers shied away from purchasing or cleaning up such plots of land, fearful of legal responsibilities under CERCLA. Most brownfields were located in urban areas in economic decline.⁶ In this way, this initiative reflected a shift toward economic redevelopment beyond Superfund's original goals of environmental remediation.

The Brownfields Revitalization and Environmental

Restoration Act hearing in 2000 was much smaller than the two SARA hearings and was focused on smaller-scale contamination in more urban settings. Four primary interests presented testimonies: federal officials, state and local government officials, environmental and conservation activists, and industry representatives.

Timothy Fields of the EPA's Office of Solid Waste and Emergency Response represented the Clinton Administration's perspective that prioritized targeted brownfield cleanup but opposed comprehensive Superfund reform.⁷ Furthermore, Fields defended the existing EPA reforms and emphasized the importance of federal oversight. He also called for additional funding support, given the expiry of the Superfund Tax in 1995.⁸ Perhaps most significantly, Fields supported increased State voluntary cleanup programs, though he did caveat this by advocating for federal oversight to remain in place.⁹

State and local officials were represented by Jan Reitsma of the Rhode Island Department of Environmental Management, Mayor Christian Bollwage of New Jersey, and Mayor Preston Daniels of Iowa. Together, Reitsma, Bollwage, and Daniels presented the economic and community benefits of redeveloping brownfields.¹⁰ Their testimony included themes familiar from the 1985 hearings, including the need for greater liability protections and federal funding.¹¹ As a coalition, state and local officials collaborated to present a successful case for increased funding through the Brownfields Initiative.

Environmental advocates largely maintained consistent positions with those of advocates in the 1985 hearings. Predictably, these advocates largely supported the Brownfields Initiative and dedicated much of their testimonies to painting the bill as balanced and thorough.¹²

The most significant difference in perspective was that of the industry representatives. These advocates focused their arguments on redevelopment and urban renewal, though they emphasized the importance of liability protection and clarity in regulations.¹³ Rather than reducing retrospective liability schemes, the speakers focused on the need for legal finality to mitigate financial risk and encourage long-term economic growth.¹⁴ In some ways, this reflects the Superfund program's evolution. When it was initially created, it focused on large-scale hazardous waste sites. But over time, it focused more

1 Ibid.

2 Ibid.

3 Ibid.

4 Ibid.

5 Environmental Protection Agency, "Brownfields Success Stories," US EPA, <https://www.epa.gov/brownfields>.

6 "Brownfields Legislation and Related Programs," CQ Almanac 1994.

7 U.S. Senate. Committee on Environment and Public Works. Superfund Program: Status of Cleanup Efforts: Hearing before the Subcommittee on Superfund, Waste Control, and Risk Assessment. 106th Congress, 2nd Session, March 21, 2000. Washington: U.S. Government Printing Office, 2001.

8 Ibid.

9 Ibid.

10 Ibid.

11 Ibid.

12 Ibid.

13 Ibid.

14 Ibid.

on urban, underutilized properties. In other ways, this shift in focus is also reflective of a change in legislative strategy on the part of industry representatives—to achieve their economic goals, they reframed their positions to somewhat align with pro-expansion coalitions, ensuring that they benefited from CERCLA's growth, rather than resisting it outright, as they had in the 1980s and 1990s.

Ultimately, the 2002 Brownfields Initiative illustrates how industry groups strategically adapted their rhetoric to align with the expansionist coalition's redevelopment goals, shifting from opposition to cooperation. By framing CERCLA expansions as economically beneficial, these groups sustained the program's growth while securing liability protections that mitigated personal financial risk.

Modern Revival and Climate Concerns (2020–Present): The Inflation Reduction Act of 2022

Though the early 2000s did not see many significant expansions in the Superfund Act's power, the Inflation Reduction Act of 2022 marked a resurgence in CERCLA's political relevance. Specifically, the IRA allocated \$3.5 billion for the cleanup of hazardous waste sites on the EPA's NPL.¹⁵ Furthermore, the IRA reinstated the excise tax that Congress allowed to expire in 1995, reviving one of the foundational principles of the original Superfund Act: "polluter pays."¹⁶

In 2020, the House Energy and Commerce Subcommittee on Environment and Climate Change held a hearing on cleanups and climate resilience. Findings from the hearing informed the inclusion of the Superfund clause in the 2022 IRA. Four key witnesses presented, representing three interests: the federal bureaucracy, environmental advocates, and industry advocates.

Alfredo Gomez, the director of Natural Resources and Environment at the Government Accountability Office, focused his testimony on the risks posed by climate change to Superfund sites.¹⁷ Gomez specifically highlighted the EPA's need for increased guidance on climate risk integration, given that 60 percent of non-federal Superfund sites are in areas vulnerable to climate change-induced risks.¹⁸ This represented a shift in the federal government's focus from justifying the EPA's authority to a new focus on contemporary issues such as climate change.

The environmental advocacy and justice coalition was represented by Amanda Goodin, an attorney for Earth

Justice, and Amy Dinn, a managing attorney at Lone Star Legal Aid's Environmental Justice team. Both emphasized the risks posed by climate change and called for polluters to be held accountable for their actions via tax.¹⁹ Dinn, in particular, also addressed Superfund sites' disproportionate impact on low-income and minority communities.²⁰ The consideration of Superfund sites in a more intersectional manner was novel and reflects increased conversation around such issues in the US political climate. This renewed push for CERCLA funding highlights the persistence of environmental advocates over the years, cementing their role as a durable, pro-expansion coalition.

Finally, Laurie Matthews, legal counsel representing the Superfund Settlements Project, testified on behalf of the industry and responsible parties coalition. Matthews' testimony focused on opposing additional financial assurance requirements, claiming that current regulations were sufficient.²¹ Matthews also presented new mandates and costs as potentially inefficient and supported a streamlined version of the existing Superfund program.²² This does not represent a significant departure from what other industry representatives argued for in past hearings in the twentieth century. But it was markedly less tepid than the opposition displayed by industry interests in the early 2000s. Indeed, under political and financial pressure, industry interests were far less focused on cooperating with other coalitions to achieve bipartisan legislation.

In conclusion, the 2022 IRA hearings demonstrated a return to entrenched opposition from industry groups, reflecting concerns over renewed tax burdens. Yet, environmental coalitions' persistent advocacy—bolstered by fears of climate change and desires for environmental justice—proved decisive in sustaining CERCLA's relevance and securing a renewal of the "polluter pays" principle.

Overall Trends

The examination of interest group dynamics reveals why CERCLA expanded over time. Federal agencies consistently framed Superfund as critical for public health and corporate accountability. Environmental advocates maintained pressure for expansion by continuously expressing their concerns, including pollution and climate justice. While initially strong, industry opposition shifted its approach over time, seeking reforms, liability protections, and redevelopment incentives rather than outright repeal.

¹⁵ Environmental Protection Agency, "Superfund Accomplishments Quarterly Report - Fiscal Year 2024," US EPA, September 19, 2024, <https://www.epa.gov/superfund/superfund-accomplishments-quarterly-report-fiscal-year-2024>.

¹⁶ Ibid.

¹⁷ U.S. House of Representatives. Committee on Energy and Commerce. Superfund Oversight Hearing: Testimony of Hon. Fred Upton, Hon. Ann Wagner, and Mathy Stanislaus. 114th Congress, 2nd Session, July 13, 2016. Washington: U.S. Government Printing Office, 2017.

¹⁸ Ibid.

¹⁹ Ibid.

²⁰ Ibid.

²¹ Ibid.

²² Ibid.

This ultimately had varied outcomes, from the expiration of the tax to a consensus on Brownfields to a total failure for industry with the IRA. This push and pull between opposing groups moderated CERCLA's expansion and ensured its institutionalization.

The federal bureaucracy acted as a stabilizing force over the years. Agencies like the EPA and the Department of Justice did not necessarily advocate expanding the Superfund's powers. Instead, they consistently defended the status quo, presenting arguments in defense of CERCLA's liability schemes and frameworks and justifying the necessity of Superfund by highlighting public health concerns and the desire to hold polluters accountable. However, this does not imply that federal officials maintained a consistent position on Superfund. Indeed, their testimony evolved, reflecting contemporary political trends and issues, such as the shift in becoming more open to the delegation of powers to the state level between 1995 and 2002 or the shift in focus from public health concerns to worries about how climate change would

affect the Superfund sites.

State and local governments, too, remained relatively consistent in their priorities—their primary goals were greater autonomy, increased federal funding, and reduced regulatory burdens. This is not to say that state interests didn't adapt over time; indeed, as redevelopment became a focus during the Brownfield Initiative hearings in the early 2000s, state representatives' testimonies shifted to highlight the local economic benefits of the proposed amendments. This coalition, however, was notably absent in the 2022 hearings, suggesting a diminished role in shaping federal-level Superfund policies in the modern climate-focused era. This could be attributed to the fact that their testimony seemingly had very minor effects on legislation.

Industry groups and their representatives initially concentrated on reforming CERCLA's liability schemes and reducing litigatory burdens in the 1980s and 1990s. But, their position evolved after the Superfund excise tax on chemical companies expired in 1995. By 2002, after achieving their

	1985	1995	2002	2022
Federal	Defends liability schemes; emphasizes efficiency, public health, and industry compliance	Justifies federal government authority, acknowledges need for greater efficiency and cost-reduction, advocates for the "polluter pays" principle	Does not desire Superfund overhaul, but supports the Brownfields Amendment, defends the EPA, supports greater delegation of authority to the state/local levels	Highlights risks to Superfund sites presented by climate change, calls for greater funding to the EPA
State & Local	Highlights local success, desire more local authority	Desires more local authority, criticize liability schemes and complexity of laws	Desires more local authority, greater funding, and more relaxed liability schemes	N/A
Industry Interests	Criticizes liability schemes, push for voluntary clean up incentives	Criticizes liability schemes, push for voluntary cleanup incentives, desire better cost-sharing schemes to reduce corporate taxes	Emphasizes the redevelopment and urban renewal opportunities for economic growth, no mention of liability schemes	Criticizes proposed changes, claim that increased regulation will mean unnecessary bureaucracy
Environmental Advocates	"Polluter pays," focus on public health concerns	Focus on public health concerns, legislation should be more stringent, "polluter pays"	Strong support for Brownfields amendment, see it as balanced and fair	Worry about climate change, "polluters pay," emphasize social justice angle
Others	N/A	Academics: greater research needs to be done to create more explicit cleanup standards	N/A	N/A

goals, industrial advocates shifted to be less inflammatory, emphasizing their commitment to economic redevelopment through initiatives such as the Brownfields Amendments, which created more explicit liability protections. This shift reflects an adaptive strategy: rather than outright opposing CERCLA's expansion, the industry interests were just as interested in stasis as the federal government, and reframed their goals to align with broader economic and redevelopment objectives. However, their strategy again shifted in 2020, when it became clear that the corporate excise taxes might be reinstated. At that point, industry interest emerged again with strong critiques of additional regulatory mandates.

Environmental advocacy groups remained broadly consistent in their demands and desires. Advocacy for a more stringent "polluter pays" framework and robust public health protections remained consistent in their testimonies since 1985. The most significant way that environmental advocacy groups have evolved in their positioning is how they have grown in considering broader societal conversations around equity and justice. Such considerations are reflected in their arguments for why amendments expanding the Superfund Act were necessary. Initially, they primarily highlighted the public health risks posed by Superfund sites, and by 2020, they also highlighted how such risks disproportionately affect specific marginalized communities.

IV. Conclusions

The expansion of CERCLA over the past forty-four years is a compelling case study of legislative persistence and compromise, albeit a compromise that significantly favored expansionary measures. Ultimately, without opposition groups such as the business and industry interests, CERCLA's expansion may have proceeded much more drastically. In this way, though the Superfund Act has expanded over the years, it has done so in a much more moderate manner than it might have given the absence of opposition.

First and foremost, environmental advocacy groups worked together to form pro-expansion coalitions, consistently framing CERCLA as essential to safeguarding public health standards and environmental protection. Their persistence over several decades, plus increased societal interest in preventing pollution and pursuing environmental justice, has kept the Superfund Act politically relevant. Secondly, federal agencies—primarily the EPA—have done substantial work defending CERCLA's liability and enforcement frameworks while adapting their priorities over the years to address emerging environmental challenges and newly prominent concerns, such as climate change or renewed focus on urban redevelopment. Finally, over the years, other groups developed vested interests in sustaining or expanding CERCLA via funding or increased clarity in

regulation. Indeed, the pro-expansion coalition added and lost members over the years: environmental advocates, federal officials, state and local government, and, at times, the very same business interests that opposed expansion in previous years. This coalition has proven durable and adaptable, navigating shifting political and social dynamics to sustain the Superfund program's growth. At the same time, the opposing business interests coalition demonstrates an equal ability to adapt, reframing their goals where necessary to achieve desirable outcomes.

The expansion of CERCLA holds important implications for understanding regulatory policy and interest group dynamics. While opposition from industry interests remained consistent, their strategies shifted over time from outright resistance to a concerted effort to influence Superfund's direction through cooperation to a return to outright resistance. Despite a consistent commitment to one set of ideals, they might adapt their strategies to extract concessions from other parties, shape policy outcomes in ways they deem more meaningful, or, perhaps most importantly, reduce perceived regulatory burdens when their method of opposition proves ineffective. Indeed, opposition groups can influence policymaking without dismantling legislation's fundamental framework. Further, the Superfund case study demonstrates that coalitions can sustain crisis-driven policies far beyond an initial focusing event if they consistently advocate for the legislation.

With that said, this paper's analysis is limited because while congressional hearings are one method of observing interest group dynamics, one cannot analyze these transcripts in isolation from informal lobbying procedures, closed-door political negotiations, or public opinion. That said, such parts of the legislation development process are much more difficult, simply because such resources are not readily available to the public. Therefore, future research could explore how media framing and grassroots advocacy beyond formal legislative settings contributed to Superfund's expansion. In addition, a comparative analysis of the Superfund program with other environmental or regulatory programs could reveal if CERCLA's expansion reflects a broader policy pattern or is unique in its legislative trajectory.

In conclusion, CERCLA's trajectory offers a blueprint for understanding how modern environmental legislation can adapt its frameworks to novel challenges.

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From Burma to Bangladesh: Continuous Challenges and Refugee-Empowering Resolutions for Rohingya Children's Access to Education

Emerald Dar

Abstract

The Rohingya, an ethnic minority from Burma (Myanmar), fled in large numbers to Bangladesh in the twenty-first century after facing increasing persecution in their homeland. However, due to government policies, inadequate living conditions, and pervasive cultural gender norms, Rohingya children's education has suffered in both Burma and Bangladesh. While scholarship on problems the Rohingya face in Bangladeshi refugee camps exists, journal-length articles that concomitantly explore their impacts on children's access to education, address curricular and campwide infrastructural shortcomings, and spotlight refugee-led campaigns are scarce. In detailing the intersectional challenges Rohingya children face in the world's largest refugee camp and highlighting grassroots campaigns to promote children's education, this article aims to both provide humanitarian practitioners and the general populace with an informed view of children's experiences in Kutupalong Refugee Camp, and shed light on rarely heard stories of refugees as agents of change rather than simply recipients of humanitarian aid.

Introduction

Hafsa (an alias), a fourteen-year-old Rohingya Muslim girl residing in Kutupalong Refugee Camp in Bangladesh, has faced turmoil since birth. Originally, she was forced to flee her home in Rakhine state in Burma (often written "Myanmar" in Western literature), having faced severe discrimination from the governing Buddhist minority in her home state, a part of the Buddhist majority in the country overall. As with

countless other Rohingya refugees, she and her family likely witnessed the extrajudicial murders of Rohingya men in their community, sexual violence towards women and girls, and encountered severe restrictions on movement, employment, and education throughout their lives in their home state.¹ Not only did the Burmese military round up and execute many Rohingya in their villages, but soldiers have also been credibly accused of confiscating land,² destroying crops,³ slaughtering animals, looting Rohingya homes, and burning entire villages, making it impossible to rebuild life after such incursions. Children like Hafsa had to flee the only homes they had known, many on Eid,⁴ the chief day of celebration for Muslim day communities. Many families opted to bring just one or two photographs and the clothes on their backs, knowing the flimsy boats they needed to ride to Bangladesh's coast could not bear much more than the weight of their bodies. This research paper explicates the circumstances Rohingya children like Hafsa have faced since birth—with an emphasis on education accessibility—both before fleeing ethnic cleansing in Burma and after seeking refuge in Bangladesh, proposing pragmatic solutions throughout. I draw primarily upon qualitative observations gleaned from interviews conducted within refugee camps in Bangladesh, reports from non-governmental organizations (NGOs), intergovernmental organizations (IGOs), and governmental offices. I also cite academic literature, texts, and quantitative data sets on a range of topics, from the infrastructural challenges Rohingya refugees in Bangladesh may face, to broader fields such as psychology, healthcare, and migration

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2 Amnesty International, "Caged Without a Roof," 76–77.

3 Jeffrey Gettleman and AKM Moinuddin and Nick Cumming-Bruce, "Rohingya Recount Atrocities: 'They Threw My Baby Into a Fire,'" New York Times, October 11, 2017, <https://www.nytimes.com/2017/10/11/world/asia/rohingya-myanmar-atrocities.html>.

4 "Rohingya crisis: The Children suffering in refugee camps" YouTube video, timestamp 2:16–2:21, from televised British news program [2017], posted by Channel 4 News, November 1, 2017. https://www.youtube.com/watch?v=_kF0mHrjzWA.

studies. The remarkable range of my primary and secondary sources capacitate among the most concise and comprehensive English-language analyses of Rohingya children's access to education to date. I hope this research paper can aid not only academic researchers and humanitarian practitioners, but also non-specialist readers unable to parse through lengthy and technical NGO, IGO, government, or secondary reports, in understanding and improving the circumstances of the world's largest group of refugee children today.

I begin this paper with a historical analysis of the Buddhist majority's protracted discrimination against the Rohingya minority in Burma, discovering resentment from British colonialism as a primary cause. Next, I outline many of the challenges the Rohingya people have faced in Burma since the country's independence in 1948, including legal restrictions on education, the wide economic disparity between the Rohingya and other Burmese ethnic groups, and inflammatory rhetoric depicting Rohingya in Burma as recent immigrants, contradictory to their enduring presence in the country.⁵

For the majority of this research paper, I engage in a three-pronged analysis of themes germane to the majority of Rohingya youth's education outside of Burma. Firstly, I review some of the major problems Rohingya children face in the world's largest refugee camp, threading inadequate sanitation, nutrition, building materials, and physical safety to explicit and plausible impacts on education access. Secondly, I unearth the noteworthy stories of a Rohingya woman and child in Kutupalong Refugee Camp who, despite severe danger, have resisted cultural and legal customs to educate and be educated. Finally, I propound practical solutions humanitarian and government agencies may use to ameliorate these issues, including disbursing food aid in learning centers to incentivize attendance, working within rather than working counter to cultural norms to increase girls' access to education, and addressing widespread mental health concerns by implementing art therapy in learning center curricula. By weaving these components together, I aim to not only illuminate prime impediments and solutions for children's learning in Kutupalong Refugee Camp, but also foreground the agency and ingenuity of Rohingya refugee women in forging pathways to education for children living in the camp.

History of Rohingya Persecution

Long having faced discrimination, such as extreme restrictions on movement outside of a single state in Burma,⁶ Rohingya

people in Burma were pushed out of their home country after several waves of violence perpetrated by the Burmese military on the government's behalf. While tensions have long simmered between the Rohingya Muslim minority and Buddhist majority, they were heightened by the 2012 rape and murder of a Buddhist woman by three Rohingya men, and the subsequent Buddhist mob lynching of ten unrelated Rohingya passengers riding a bus.⁷ Since then, the Burmese military and Buddhist majority's persecution of Rohingya communities has intensified, culminating in regrettably common stories like Hafsa's—that is, of children fleeing for safety as the military razed their fields, homes, and entire villages to discourage return.⁸

It is difficult to pin the troubled relationship between these two native ethnic groups on any singular cause. However, historians might trace the root of their conflict to the British colonization of Burma, during which the British elite reportedly granted preferential treatment to the Muslim minority at the expense of the Buddhist majority. In the following century, after Japan invaded British Burma during World War II, Japanese forces recruited from the Buddhist majority while the British recruited Rohingyas, which many Buddhists viewed as the continuation of the social hierarchy from colonial rule. Burma gained independence from British colonial rule shortly afterward in 1948, and the relationship between these two populations worsened. Since independence, the Buddhist government has orchestrated several waves of displacement against the Rohingya population.

These policies rest on the government's counterfactual claim that all Rohingya in Burma today descended from migrants during the British colonial era, despite census records proving Rohingya existed in Burma for generations before colonial rule. This argument conflates the limited Bengali and Indian immigrants with the native Burmese Rohingya population and was the foundation for the internationally condemned 1982 Citizenship Law, which recognized over 100 ethnic groups in Burma as citizens but notably excluded the Rohingya,⁹ effectively rendering them stateless. The argument that Rohingya are "migrants" has since been used by the Burmese political elite and military to restrict Rohingya people's access to politics, education at every level, and the professional workforce, leading this demographic to the country's highest unemployment rates and a correlated dependence on farming for survival.¹⁰

That being said, because the Rohingya were largely

⁵ Rohingya Cultural Center, "History of the Rohingya."

⁶ Amnesty International, "Caged Without a Roof," 42.

⁷ Benjamin Ismail, "Crisis in Arakan State and New Threats to Freedom of News and Information," Reporters Without Borders, January 20, 2016. <https://rsf.org/en/crisis-ara-kan-state-and-new-threats-freedom-news-and-information>.

⁸ Amnesty International, "Myanmar/Bangladesh: Rohingya community facing gravest threats since 2017," Amnesty International, October 24, 2024. <https://www.amnesty.org/en/latest/news/2024/10/myanmar-bangladesh-rohingya-community-facing-gravest-threats-since-2017/>.

⁹ Rohingya Cultural Center, "History of the Rohingya," RCC Chicago, accessed November 10, 2024. <https://rccchicago.org/history-of-the-rohingya/>.

¹⁰ Amnesty International, "Caged Without a Roof," 73.

forced to live in isolation from other ethnic groups in one state—Rakhine State—since the founding of the country, it can be inferred that the sense of community inculcated among Rohingya Muslims in Burma before each swell of displacement was likely exceptionally high compared to other ethnic groups, who had no restrictions on movement and therefore could live throughout the country. Accordingly, many Rohingya refugees recount openly celebrating religious and cultural traditions together in Rakhine State, and many of them long to spend time gathering with friends and neighbors throughout the day again. While other ethnic groups also live in Rakhine State, the relatively homogenous demographics of the Rohingya villages may have also benefited the ethnic group linguistically. More specifically, it is plausible that their isolation contributed to the preservation of the Rohingya language, which is verbal with no written form.¹¹ However, the insidious and far-reaching impacts of being restricted from equal citizenship far outweigh these purported benefits, particularly where education is concerned. For example, no Rohingya have been granted permission to attend the singular university in Rakhine State in over a decade, there is an extraordinary 50 percent greater illiteracy rate among the Rohingya population compared to legal Burmese citizens, and the government still enforces strict ethnic segregation policies that bar Rohingya children from attending all but three of the seventeen government schools in Rakhine State.¹²

Experiences of Rohingya Children in Kutupalong Refugee Camp

After arriving at Kutupalong Refugee Camp in Cox's Bazar, Bangladesh, fourteen-year-old Hafsa began attending one of the—at the time—1,900 “learning centers” established and run by UNICEF in the settlement.¹³ Echoing the troubles faced in Burma, the Bangladesh government prohibits children like Hafsa from attending government-run schools,¹⁴ contending that all Rohingya living in their territory are “Forcibly Displaced Myanmar Nationals” soon bound back for Burma, not refugees entitled to long-term care in their new territory.¹⁵ Somewhat paradoxically,

Bangladesh produces camp identity cards for Rohingya refugees with this label, despite the Burmese government's repudiation of the Rohingya.¹⁶ In a speech to the UN General Assembly, Former Prime Minister of Bangladesh Sheikh Hasina underscored her country's inability to care for the Rohingya long-term, highlighting not only budget constraints—the United Nations classifies Bangladesh as a “Least Developed Country”¹⁷—but also the environmental destruction borne from the increasing population and demand for shelter in Cox's Bazar.¹⁸

In addition to Bangladesh's demonstrated financial and ecological concerns in housing more Rohingya refugees, Amnesty International has reported alarming news about the Bangladeshi Coast Guard's behavior along the Bay of Bengal, where Kutupalong Refugee Camp is located. More specifically, members of Bangladesh's Coast Guard are estimated to have engaged in over five thousand cases of refoulement, sending Rohingya desperately fleeing from state-inflicted violence back across the river to Burma, even when refugees raise the chance of death.¹⁹ While this is a clear violation of the international humanitarian law principle of non-refoulement, Bangladesh—alongside all South Asian countries—is not a signatory to the United Nations' “1951 Convention relating to the Status of Refugees,” nor the corresponding “1967 Protocol relating to the Status of Refugees.”²⁰ Crucially, this does not mean Bangladesh has never engaged in humanitarian relief, a notion the very existence of Kutupalong Refugee Camp refutes. On the contrary, many non-signatory countries—mainly countries in the Global South with economies less advanced than Western states—outpace signatories in bestowing aid to those crossing borders in search of safety, most prominently in the cases of Jordan and Lebanon.²¹ Nevertheless, because Bangladesh is not bound to the 1951 Convention and 1967 Protocol, there are many questions raised about who is responsible for the Rohingya. Mohamad Rezaul Karim, a Bangladeshi official who supervises Kutupalong Refugee Camp, maintains that the Rohingya are short-term guests and Bangladesh “is waiting ... as soon as possible to repatriate them peacefully in their country.”²²

11 bangladesh@translatorswithoutborders.org, “Rohingya Language Factsheet,” Translators Without Borders, June 2022, <https://clearglobal.org/wp-content/uploads/2022/06/Rohingya-language-factsheet.pdf>.

12 Amnesty International, “Caged Without a Roof,” 66–68.

13 “In World's Largest Refugee Camp, Rohingya Children Face a Desperate Choice” YouTube video, timestamp 5:34–5:38, from televised American news program [2019], posted by PBS NewsHour, May 30, 2019, www.youtube.com/watch?v=vX9tQ9knfjo.

14 PBS NewsHour, “Rohingya Children Face a Desperate Choice,” timestamp 1:04–1:13.

15 Sheikh Hasina, “High-Level Side Event on “Forcibly Displaced Myanmar Nationals (Rohingya) crisis: Imperatives for a Sustainable Solution” (speech, Dhaka, Bangladesh, September 23, 2021), Bangladesh Ministry of Foreign Affairs, <https://mofa.gov.bd/site/page/a3d64c7a-3cf9-4780-9f27-80421cfcbe92>.

16 “Rohingya crisis: The Children suffering,” timestamp 4:45–4:57.

17 United Nations Trade & Development, UN list of least developed countries (Geneva, Switzerland: UNCTAD, 2021), <https://unctad.org/topic/least-developed-countries/list>.

18 Sheikh Hasina, “High-Level Side Event.”

19 Amnesty International, “Myanmar/Bangladesh.”

20 United Nations Treaty Collection, 1951 Convention relating to the Status of Refugees (1951 Convention) and its 1967 Protocol (Geneva, Switzerland: UNHCR, January 31, 2024), <https://rimap.unhcr.org/refugee-treaty-legislation-dashboard>.

21 Rebecca Hamlin, *Crossing* (Redwood City, CA: Stanford University Press, 2021), 109.

22 PBS NewsHour, “Rohingya Children Face a Desperate Choice,” timestamp 6:26–6:32.

In contrast with the Bangladeshi government's hopes, many of the non-governmental organizations supporting Rohingya refugees agree that a return to Burma will not be feasible under the current government.

Further, concerned humanitarian actors point out that multiple generations of Rohingya children are at risk of growing up uneducated, restricted from accessing schooling in both Burma and Bangladesh unless their host country allows them to attend local schools. For the majority of Rohingya children today, more than three thousand UNICEF learning centers²³ and partner NGO-run learning centers in Kutupalong Refugee Camp, designed as a temporary and informal academic aid, are their only route to schooling of any sort. However, given the over 400,000 children in need of an education in Cox's Bazar today,²⁴ classroom sizes are staggeringly large, with 80–105 pupils per class.²⁵ Given recent decreases in international funding for nutrition,²⁶ it is plausible humanitarian workers simply do not have the capacity to prioritize education over the population's most basic survival needs.

Among the over 400,000 school-aged children in Cox's Bazar, about 100,000 are not engaged in any form of learning.²⁷ There are a host of possible reasons, ranging from sexual harassment of girls in the camp discouraging them from leaving their shelter, to hygiene problems arising from a lack of clean water, and, critically, cultural beliefs prominent among conservative Rohingya Muslims that girls cannot interact with boys after menstruation begins—with no exceptions for mixed-gender classrooms. This latter cultural norm, referred to as *purdah* (lit. “veil”), requires the “seclusion of women from public [and unknown male] observation by wearing concealing clothing from head to toe.”²⁸ In practice, *purdah* often results in social isolation for pubescent girls and all women, given the certainty of men in the crowded conditions outside their shelter. One cogent method to promote female participation in camp life includes the development of female-only community spaces where women and girls of all ages can gather to speak with each other without the need for *purdah*.

Thirty-year-old Romida Begum of Kutupalong

Refugee Camp remembers such spaces back home in Burma, recounting that, “[W]e had a space near our house that was secluded. We women used to go and sit and chat there together. I was happy. We don't have anything like this here in the camp.”²⁹ This concept may be extended to education. For instance, UNICEF may run a learning center specifically for menstruating girls, managed by female teachers to encourage equal access to education. As educated Kutupalong Refugee Camp resident Shahida Win asserts, “[I]t's possible to still get an education and ‘live’ while practising *purdah*.”³⁰ The creation of female-only learning centers can serve the dual purposes of educating girls while adhering to their cultural norms, simultaneously providing much-needed employment in education to Rohingya women in the camps who may not otherwise feel comfortable leaving their shelter.

In terms of curriculum, from 2017 to 2022, UNICEF learning centers were authorized to teach only basic math, science, English, “life skills” such as physical education, and the Burmese language.³¹ The curriculum, designed by UNICEF and approved by the Bangladeshi government, was strictly enforced, with government officials regularly scrutinizing school materials and lesson plans for compliance. Notably, this curriculum was not aligned with either Burmese or Bangladeshi national standards, and restricted Rohingya children from learning their native Rohingya language as well as their host country's national language, Bangla, in the classroom. Consequently, even children who regularly attended learning centers risked falling behind grade level. Discussion with NGO workers on Rohingya youths' future aspirations has at times been marred by the latter's frustration over the lack of formal documentation for learning center-provided education, curricular differences between Burma and Bangladesh, and their effective inability to have a professional career in both Burma and Bangladesh due to circumstances out of their control.³² Despite these significant obstacles, many Rohingya children maintain hope for their future and remain dedicated to their education. For example, girls in the camps speak about wanting to become teachers and doctors,³³ and

23 Sayed Ezatullah Majeed, “Inside Look: How UNICEF Supports Rohingya Refugees in Bangladesh” (interview, Dhaka, Bangladesh, September 9, 2024), UNICEF USA, <https://www.unicefusa.org/stories/inside-look-how-unicef-supports-rohingya-refugees-bangladesh>.

24 United Nations Children's Fund, “UNICEF: Education milestone for Rohingya refugee children as Myanmar curriculum pilot reaches first 10,000 children,” UNICEF, May 1, 2022, <https://www.unicef.org/press-releases/unicef-education-milestone-rohingya-refugee-children-myanmar-curriculum-pilot>.

25 Education Cannot Wait, “Hope in a World Gone Mad,” Education Cannot Wait, January 29, 2019, <https://www.educationcannotwait.org/news-stories/human-stories/hope-in-world-gone-mad>.

26 Daniel F. Runde, “The Rohingya's Plight in Bangladesh Is Not Sustainable,” Center for Strategic & International Studies, May 1, 2023, <https://www.csis.org/analysis/rohingya-plight-bangladesh-not-sustainable>.

27 United Nations Children's Fund, “UNICEF: Education milestone for Rohingya children.”

28 Susan P. Arnett, “Purdah,” Prof. Pavlac's Women's History Site, December 18, 2001, https://departments.kings.edu/womens_history/purdah.html.

29 “Rohingya women fight to be heard | DW Documentary” YouTube video, timestamp 2:24–2:35, posted by DW Documentary, June 26, 2023, <https://www.youtube.com/watch?v=cnxvTlS16F8>.

30 DW Documentary, “Rohingya women fight,” timestamp 10:21–10:29.

31 M. Mahruf C. Shohel and Rasel Babu and Md. Ashrafuzzaman and Farhan Azim and Asif Bayezid, “Learning Competency Framework and Approach for the Displaced Rohingya Children Living in Bangladesh: A Critical Review,” *Continuity of Education* 4, no. 1 (2023): 53, <https://doi.org/10.5334/cie.57>.

32 “Education Barriers for Rohingya Children” YouTube video, timestamp 3:50–4:31, posted by Peace Research Institute Oslo, December 8, 2023, <https://www.youtube.com/watch?v=WsBc2sBL8bM>.

33 DW Documentary, “Rohingya women fight,” timestamp 6:41–6:46.

Hafsa herself strives to become a human rights activist for the Rohingya people.³⁴

Fortunately for fourteen-year-old Hafsa, her mother is a staunch advocate for her education, and has argued with Hafsa's father that their daughter is too young to be married,³⁵ despite Rohingya cultural norms and her aging out of the UNICEF learning centers. The global education non-profit Malala Fund appears to support Hafsa and her mother's positions, positing that a baseline of twelve years for girls' education not only "promotes gender equality," but also "strengthens economies, supports climate action, and builds healthier communities."³⁶ While Hafsa's mother eventually persuades her husband to permit their daughter's education, her work has just started: she must now begin the arduous—and dangerous—task of illegally enrolling her daughter in a government school. First, she must locate and pay local criminals, using money raised from reselling the family's food rations, to forge Bangladeshi birth documents for her daughter.³⁷ Even at this early stage, Hafsa's mother faces the horrific risks of the felons revealing Hafsa's identity to the Bangladeshi authorities, or physical and sexual exploitation to preserve her daughter's documents—hence, her reliance on an alias. Fortunately, the process goes relatively smoothly, and Hafsa starts attending a formal school for the first time in years—if not her life.

However, Hafsa's mental turmoil most likely only increases when she starts attending the local school. Every weekday, at school, Hafsa must completely conceal her identity, adopting a fake name and ethnicity with administrators, teachers, and her peers, as with the townspeople she encounters en route to classes. If they knew her identity, they would torment her mentally and physically. As literature on the psychological impact of stigmatization states, children like Hafsa face inner turmoil from concealing their immutable identities,³⁸ which often impacts their socio-economic outcomes in adulthood, and has even been linked to premature death.³⁹ In other words, Hafsa must jeopardize aspects of her present and future well-being to continue her education in the present.

Hafsa is fortunate to have learned Bangla, the national language of Bangladesh, on her own, as the Bangladeshi government bars instruction of Bangla in the UNICEF learning centers,⁴⁰ so she would otherwise not understand the lessons in her local school. This policy reflects the Bangladeshi government's belief that the Rohingya are temporary residents who should not be integrated into Bangladeshi society. As Mizanur Rahman of Bangladesh's Office of the Refugee Relief and Repatriation Commissioner states regarding Rohingya children, "Why should we pay our taxpayers' money to educate the other country's people? It's not our mandate."⁴¹ In response to a German journalist incredulously confirming "[T]o be clear, state policy is not to integrate these people?" Mizanur emphatically agrees, saying, "Definitely not."⁴²

The Bangladeshi government's anti-integration sentiment is further mirrored in their ruling that Forcibly Displaced Myanmar Nationals cannot legally exit Kutupalong Refugee Camp,⁴³ a law that hearkens to the Burmese government's confinement of the Rohingya population in Rakhine State. Due to the Bangladeshi government's intentional withholding of linguistic, academic, and professional support for the Rohingya population, these refugees do not have the chance to develop the skills necessary for survival in their new country outside of Cox's Bazar. The host government's lack of support is certain to increase the likelihood of generations of prospectless Rohingya children and a cycle of forced dependence on humanitarian aid for survival, diminishing the Rohingya refugee population's dignity, sense of community, and capability over time.

Furthermore, because Rohingya are prohibited from leaving Kutupalong Refugee Camp, teenagers and adults—whose ages have restricted them from attending the UNICEF learning centers—have had little option but to work under the table for below-market wages,⁴⁴ or even resort to criminal activity, such as the rampant methamphetamine trade,⁴⁵ to supplement their meager rations or support their loved ones. In the absence of alternatives, these actions have caused friction between Rohingya refugees and their neighboring

34 PBS NewsHour, "Rohingya Children Face a Desperate Choice," timestamp 0:38–1:03.

35 PBS NewsHour, "Rohingya Children Face a Desperate Choice," timestamp 2:01–2:30.

36 Malala Fund, "Why Girls' Education," Malala Fund, 2024, <https://malala.org/girls-education#m4su3plt>.

37 PBS NewsHour, "Rohingya Children Face a Desperate Choice," timestamp 2:15–3:22.

38 Diane M Quinn and Stephenie R Chaudoir, "Living With a Concealable Stigmatized Identity: The Impact of Anticipated Stigma, Centrality, Salience, and Cultural Stigma on Psychological Distress and Health," *Journal of Personality and Social Psychology* 97, no. 4 (2009): 5, <https://pmc.ncbi.nlm.nih.gov/articles/PMC4511710/pdf/nihms706276.pdf>.

39 David G. Blanchflower and Alex Bryson, "The adult consequences of being bullied in childhood," *Social Science & Medicine* 345 (2024): 8, <https://www.sciencedirect.com/science/article/pii/S0277953624001345>.

40 DW Documentary, "Rohingya women fight," timestamp 7:14–7:39.

41 PBS NewsHour, "Rohingya Children Face a Desperate Choice," timestamp 8:03–8:11.

42 PBS NewsHour, "Rohingya Children Face a Desperate Choice," timestamp 8:12–8:20.

43 DW Documentary, "Rohingya women fight," timestamp 1:40–1:52.

44 Geoffrey Macdonald and Isabella Mekker and Lauren Mooney, *Conflict Dynamics between Bangladeshi Host Communities and Rohingya Refugees* (Washington, DC: United States Institute of Peace, 2023), 6, https://www.usip.org/sites/default/files/2023-04/sr-519_conflict-dynamics-bangladeshi-host-communities-rohingya-refugees.pdf.

45 Krishna N. Das, "Stateless Rohingya refugees sucked into booming Bangladesh drug trade," *Reuters*, February 27, 2017, <https://www.reuters.com/article/world/stateless-rohingya-refugees-sucked-into-booming-bangladesh-drug-trade-idUSKBN1662M7/>.

Bangladeshi communities around Cox's Bazar, with Bangladeshi citizens expressing resentment toward, and even thoughts of violence against, Rohingya refugees for what they perceive as a surplus of domestic and international support—and an increase in criminal activity in their communities—at the expense of locals.⁴⁶

Campwide Infrastructural Deficits and Impacts on Rohingya Children's Learning

Compounding stressors impacting children's access to education, and the broader experience of Rohingya refugees in Cox's Bazar, also include endemic infrastructural failures. For example, upon registration in Kutupalong Refugee Camp, Rohingya families are given sheets of plastic and sticks of bamboo with which to construct their shelters.⁴⁷ Since these materials are not weather-resistant, and Bangladesh has a tropical monsoon climate, shelters are commonly destroyed in floods.⁴⁸ Worse, because Kutupalong Refugee Camp is located near the coast, flooding damage is exacerbated.⁴⁹ In an ironic twist of fate, the camp's location near the coastline makes it simultaneously easier for Rohingya to reach it by boat, yet increases the intensity of water damage as well as the incidence of water-borne diseases among the Rohingya population.

For instance, due to poor construction of water wells and sanitation facilities, diseases such as cholera and diarrhea run rampant in Kutupalong Refugee Camp.⁵⁰ An academic study on water security in Cox's Bazar blames poor water infrastructure on UNICEF's water, sanitation, and hygiene (WASH) teams' practices. According to the study, WASH rushed the installation of latrines due to the rapidly expanding Rohingya refugee population, accidentally placing latrines close to sources of drinking water.⁵¹ Moreover, with one toilet per approximately one hundred people,⁵² the vast majority of camp residents are unable to access restrooms when needed. This lack of restrooms may encourage children to hold their bladder, resulting in urinary tract infections. Without prompt medical treatment—which, given resource constraints, may

be difficult to find in the camp—these infections can lead to kidney complications and even death.⁵³ However, relieving oneself outside of crowded restrooms and latrines may also harm health, as water contamination from unhygienic waste disposal is an ongoing issue in Cox's Bazar.⁵⁴ Therefore, humanitarian and government stakeholders must invest significantly in water and sanitation facilities to avoid children from developing health problems that encumber them attending learning centers.

Lastly, there is a more sinister and gendered aspect to the avoidance of restrooms in Kutupalong Refugee Camp. As a German journalist reports, after humanitarian workers leave the camp after dusk, "Toilets ... are places where sexual harassment and even rape are commonplace" for women and girls in the camp.⁵⁵ If a restroom is available, females are discouraged from using it due to the risk of gender-based violence. However, as with Rohingya men in the camp, they also face health and contamination problems from holding their bladder or using an undesignated area for waste disposal. In total, Kutupalong Refugee Camp's extant hygiene landscape inhibits the ability of all Rohingya children, particularly girls, from safe relief practices. In light of these hazards, camp administrators may seek inspiration from Kutupalong Refugee Camp resident Kemal, who established a family reunification center after losing his brother in a crowd and has united over seven hundred children with their families to date.⁵⁶ More specifically, camp operators should assess the feasibility of child safety programs in a sanitation context, such as a small hourly stipend for supervising a restroom line or a child-only bathroom associated with each learning center. Whether they face long lines, bacterial contamination, or gender-based violence, many children have no option but to endanger their health and bodily autonomy to fulfill their basic biological needs, in turn endangering their ability to access schooling.

In addition to substandard conditions for sanitation, drinking water, and shelter, the poor quantity and quality of food provided to the residents of Kutupalong Refugee Camp

46 Macdonald, Mekker, and Mooney, *Conflict Dynamics*, 5-6 and 10-11.

47 Malteser International, *Inside the Kutupalong refugee camp, Cox's Bazar* (Colonge, Germany: Sovereign Military Order of Malta, n.d.), <https://www.malteser-international.org/en/our-work/asia/bangladesh/life-in-a-refugee-camp.html>.

48 Kaamil Ahmed, "A sample of hell: Rohingya forced to rebuild camps again after deadly floods," *Guardian*, August 7, 2021, <https://www.theguardian.com/global-development/2021/aug/07/rohingya-rebuild-camps-again-21000-displaced-floods-bangladesh-coxs-bazar>.

49 Majeed, "How UNICEF Supports Rohingya Refugees in Bangladesh."

50 World Health Organization, "Battling Cholera: WHO's lifesaving efforts in Rohingya Camps amid global resurgence!" *World Health Organization*, July 23, 2024, <https://www.who.int/bangladesh/news/detail/23-07-2024-battling-cholera-who-s-lifesaving-efforts-in-rohingya-camps-amid-global-resurgence>; Doctors Without Borders South Asia, "Bangladesh: Poor water and sanitation services expose Rohingya community to disease," *Doctors Without Borders*, October 19, 2022, <https://msfsouthasia.org/bangladesh-poor-water-and-sanitation-services-expose-rohingya-community-to-disease/>.

51 Mehreen Akhter and Sayed Mohammad Nazim Udin and Nazifa Rafa and Sanjia Mariam Hridi and Chad Staddon and Wayne Powell, "Drinking Water Security Challenges in Rohingya Refugee Camps of Cox's Bazar, Bangladesh," *Sustainability* 12, no. 18 (2020): 5-6, <https://doi.org/10.3390/su12187325>.

52 "Rohingya refugee crisis: Life in Bangladesh's largest refugee camp" YouTube video, timestamp 1:57-2:04, from televised British news program [2017], posted by Channel 4 News, October 24, 2017, <https://www.youtube.com/watch?v=E7LtEhoH6Xo>.

53 Heidi Tyline King, "Is It Dangerous To Hold in Your Urine?" *Keck Medicine of USC*, April 23, 2024, <https://www.keckmedicine.org/blog/is-it-dangerous-to-hold-in-your-peel/>.

54 Doctors Without Borders South Asia, "Bangladesh: Poor water and sanitation services."

55 DW Documentary, "Rohingya women fight," timestamp 4:50-5:03.

56 "Rohingya refugee crisis: Life in Bangladesh," timestamp 0:45-1:43.

also poses severe problems for the educational outcomes of Rohingya children. According to 2024 data from the International Rescue Committee, about half of Rohingya children in Cox's Bazar show symptoms of malnutrition, and the vast majority of children eat fewer than three meals per day.⁵⁷ Despite this, due to a reduction in international funding, food rations have been reduced further in the past year.⁵⁸ Since malnutrition has been shown to impede a child's ability to learn,⁵⁹ the acute hunger within Kutupalong Refugee Camp paints a troubling portrait for Rohingya children's capability to pursue and retain knowledge, whether in the UNICEF learning centers or government-run schools. Overall, the Rohingya population, particularly children, are vulnerable to layered infrastructural and nutritional challenges, including inadequate toilets, water contamination, weather-susceptible shelter, and malnutrition, which obstruct Rohingya youth's—especially girls'—ability to learn and succeed in school.

Pragmatic Considerations and Interventions for Rohingya Children's Learning

Mental Health for Rohingya Children in Kutupalong Refugee Camp

On par with the variety of existential challenges the Rohingya people have faced in Burma, on their journey to Bangladesh, and in Cox's Bazar, the incidence of mental health conditions among Rohingya people is staggeringly high—in fact, over 60 percent of Rohingya adults surveyed for a Conflict and Health study indicated symptoms of post-traumatic stress disorder⁶⁰, and 84 percent endorsed symptoms of clinical anxiety or depression.⁶¹ Unfortunately, witnessing Bangladeshi police officers in Kutupalong Refugee Camp can easily resurface their traumatic memories, as the local police and an infantry of the Burmese military wear eerily similar uniforms.⁶²

As an academic field, developmental psychology has long postulated that “[c]hildren thrive in stable and nurturing environments where they have a routine and know what to expect. ... [L]ack [of] choice or control over

change ... escalates to extreme levels [of stress and] can be detrimental to children's mental health and cognitive functioning.”⁶³ Given the instability Rohingya children have faced since birth, they likely face mental disorders at similarly high rates as Rohingya adults, compounded by temporal trauma from their physical vulnerability in the dense, unsafe camp environment and the need to conceal their identities if they attend a local school. To address ubiquitous youth trauma while contending with budget constraints that hinder agencies from bringing licensed clinicians to Kutupalong Refugee Camp, UNICEF and other actors in the camp's education sector should consider incorporating low-cost art therapy into the routine curriculum in all learning centers. Not only is art therapy a proven intervention in adolescent mental healthcare,⁶⁴ but activities such as drawing, acting, and singing can offer Rohingya children age-appropriate outlets for self-expression, creativity, and control in their unstable environment. Even more, communal forms of art therapy such as murals or choirs can foster bonds among Rohingya children, helping rekindle a sense of community among the fragmented Rohingya population after they were forcibly uprooted from their homes and scattered across an unfamiliar environment.

Curriculum Design and Education Interventions in Kutupalong Refugee Camp

Regarding learning center curricula, the difficulty of planning lessons that help children feel prepared for their future—when neither they, their teachers, nor their host country can predict their socio-political status in the following year—cannot be understated. School curricula often vary between country, state, and town, and curricula from one institution may contradict lesson plans from another, depending on their purposes. For instance, if Rohingya children are granted permission to stay in Bangladesh, then learning center staff may decide to teach them Bangla so they can pursue further education or employment in Bangladesh. However, since the Bangladeshi government staunchly opposes permanent Rohingya residency, UNICEF's learning centers currently teach Rohingya children Burmese using the Rohingya

57 IRC Global Communications, “New IRC data shows that hunger has increased for Rohingya refugees by nearly 60% in one year,” International Rescue Committee, August 23, 2024, <https://www.rescue.org/press-release/new-irc-data-shows-hunger-has-increased-rohingya-refugees-nearly-60-one-year>.

58 DW Documentary, “Rohingya women fight,” timestamp 8:43-8:50.

59 World Food Program USA, “The Effects of Child Nutrition on Academic Performance: How School Meals Can Break the Cycle of Poverty,” World Food Program USA, September 21, 2023, <https://www.wfpusa.org/articles/effects-child-nutrition-academic-performance-how-school-meals-can-break-cycle-poverty/>.

60 Andrew Riley and Yasmin Akther and Mohammed Noor and Rahmat Ali and Courtney Welton-Mitchell, “Systematic human rights violations, traumatic events, daily stressors and mental health of Rohingya refugees in Bangladesh,” *Conflict and Health* 14, no. 60 (2020): 7, <https://conflictandhealth.biomedcentral.com/articles/10.1186/s13031-020-00306-9>.

61 Andrew Riley et al., “Systematic human rights violations,” 9.

62 “Rohingya crisis: The Children suffering,” timestamp 5:28-5:42.

63 Heather Sandstrom and Sandra Huerta, *The Negative Effects of Instability on Child Development: A Research Synthesis* (Washington, DC: Urban Institute, 2013), 5, <https://www.urban.org/sites/default/files/publication/32706/412899-The-Negative-Effects-of-Instability-on-Child-Development-A-Research-Synthesis.PDF>.

64 Liesbeth Bosgraaf and Marinus Spreen and Kim Pattiselanno and Susan van Hooren, “Art Therapy for Psychosocial Problems in Children and Adolescents: A Systematic Narrative Review on Art Therapeutic Means and Forms of Expression, Therapist Behavior, and Supposed Mechanisms of Change,” *Frontiers in Psychology* 11, no. 584685 (2020): 3, <https://pmc.ncbi.nlm.nih.gov/articles/PMC7578380/>.

language to uphold their prospects in Burma. Use of a particular language in learning centers is further complicated by fluctuating factors, such as a host government unexpectedly permitting or restricting their national language after a learning center's curriculum has already been approved, generational language loss in an instructional language as the adults who fluently speak an endangered indigenous language—such as Rohingya—perish, and a refugee child's resolve to learn another language and improve their future prospects even if officially prohibited from doing so—just like Hafsa. In such ways, refugee education, such as inside Kutupalong Refugee Camp, must evaluate children's hopes for their futures with pragmatism as well as the legal regulations of their host country—a high impossible task.

After persistent negotiations with the Bangladeshi government, UNICEF was recently granted permission to launch a “Myanmar Curriculum Pilot” inside their learning centers in Kutupalong Refugee Camp. As the name suggests, for the first time, Rohingya children are allowed to learn based on their home country's national standards. While less than 1 percent of forcibly displaced people worldwide have been resettled,⁶⁵ allowing Rohingya children to study under their home country's national curriculum can still provide numerous benefits. Not only does learning under the Burmese curriculum help maintain their sense of national identity and preserve a connection to their homeland while they live abroad, but it may also inculcate academic success if they plan to pursue university education in a third country outside of Burma and Bangladesh—the standards of a certified national curriculum are likely much more rigorous than a curriculum designed for temporary use in humanitarian contexts. As a result of the Myanmar Curriculum Pilot, teenagers like Hafsa no longer need to resort to criminal activity to continue their education because the new curriculum considerably enlarges the age groups UNICEF is permitted to teach in their learning centers, with grade-by-grade standards set for children from grades one through nine.⁶⁶ To these ends, while ascertaining definitive success rates for learning centers in Kutupalong Refugee Camp is difficult, the Myanmar Curriculum Pilot has certainly succeeded in substantially expanding Rohingya children's access to formal education—and, thus, prospects outside of a refugee camp context.

In spite of the significant obstacles in their path, many Rohingya children have displayed remarkable resilience and passion for learning. For example, after aging out of the UNICEF learning center, one teenage boy in Kutupalong Refugee Camp has started tutoring younger Rohingya

children in his camp neighborhood using his experience with the Burmese national curriculum. As he explains, “Teaching is [my] way of remembering what [I] learned [at home].” Moreover, he ties teaching to his sense of national identity, saying, “I am teaching [other children] so that they can do something for our nation [Burma]... and prosper in life.”⁶⁷ While teenagers like him and Hafsa were out of luck for years, having aged out of UNICEF's learning centers and barred from work, UNICEF recently introduced vocational skills workshops for teenagers and young adults in Cox's Bazar. Skills taught include computer-based research, phone repair, and sewing skills.⁶⁸ While these offerings are limited, they provide a crucial avenue for Rohingya youth and adults alike to participate in and contribute to their community, develop practical skills, and gain access to legal streams of revenue.

Given the nutritional and hygiene challenges in Kutupalong Refugee Camp, learning center administrators may also consider providing needed items such as meals, clothing, or toiletries to students to encourage parents to send their children to learning centers. Similar interventions were successful in Madagascar, where school attendance increased 10 percent within two years after schoolchildren were handed food rations to bring home. In Bangladesh itself, the World Food Program USA discovered distributing nutrient-fortified biscuits “improved school enrollment by 14.2 percent and reduced the probability of drop-outs by 7.5 percent.”⁶⁹ Moreover, such interventions can simultaneously reduce the culture-based gender disparity in learning centers in Kutupalong Refugee Camp. According to the United Nations World Food Programme's school feeding director Carmen Burbano de Lara, “Everywhere we implement school feeding, we see that disproportionately girls stay in school for longer... The longer a girl stays in school, the less likely she is to marry or have children very early in life.”⁷⁰ Because current literature from NGOs operating in Cox's Bazar does not highlight the existence of similar programs in Kutupalong Refugee Camp's learning centers, in conjunction with establishing culture-sensitive learning centers, apportioning the limited aid available to incentivize learning center attendance may enable international actors to substantially increase education rates among Rohingya children—particularly Rohingya girls, who may not otherwise receive any form of schooling.

Grassroots movements by the Rohingya refugees themselves must also be lent greater credence and support by international actors, as they address the Rohingya people's pressing concerns from an informed perspective. For example, take Kutupalong Refugee Camp resident Shahida's objective

65 United Nations High Commissioner for Refugees, Refugee Data Finder (Geneva, Switzerland: UNHCR, 2024), <https://www.unhcr.org/refugee-statistics>.

66 United Nations Children's Fund, “UNICEF: Education milestone for Rohingya children.”

67 PBS NewsHour, “Rohingya Children Face a Desperate Choice,” timestamp 4:42–4:58.

68 PBS NewsHour, “Rohingya Children Face a Desperate Choice,” timestamp 5:56–6:03.

69 World Food Program USA, “The Effects of Child Nutrition.”

70 World Food Program USA, “The Effects of Child Nutrition.”

to start a school for girls in her shelter. While she was making progress toward enrolling her first students, a Rohingya militant group attacked her for promoting girls' education,⁷¹ so she was forced to close her school before it ever opened. Here, humanitarian assistance in the form of temporarily enhanced protection, the establishment of a crime hotline, or even placing a faux agency-branded camera outside her tent may have deterred her attackers as she prepared to start teaching. Fortunately, with her literacy skills, she was able to pivot to penning a memoir about living as a Rohingya woman in Kutupalong Refugee Camp,⁷² which, when completed, will be one of the few autobiographical accounts of an experience nearly one million people share. Her story, inspiring and maddening, further underscores the need to address the widespread gender-based violence in the camp as both an end in itself and instrument for girls' education.

Interventions for Infrastructural Deficits in Kutupalong Refugee Camp

The prevalence of gender and child-centered violence also cannot be ignored in NGOs' mission to provide equal access to education. As Australian educator and aid worker Dayna Pérez hears, gender-based violence including domestic assault, rape, sexual assault, sexual harassment, and even child marriage is "prevalent" in the camps after she leaves at 5 PM daily.⁷³ Furthermore, kidnapping by militant groups operating in the camps is a grave concern for parents and children. In fact, one woman's son was kidnapped for ransom and threatened with death if the mother could not scrounge up thousands of Euros to release him.⁷⁴ Camp administrators must set security measures in place to protect highly vulnerable populations, such as women and children, in Kutupalong Refugee Camp after dark. Whether that means NGOs raising funds to install security cameras or lighting at hotspots of gender-based and child-centered violence—for example, near latrines, toilets, and water wells—as well as along the path to learning centers, incentivizing other residents to chaperone bathroom visits, or introducing discreet reporting mechanisms for people who are sexually harassed or assaulted in the camp, humanitarian and government actors must dedicate more resources to rectifying the unsafe camp environment. With such interventions in place, parents will likely have more confidence in sending children outside of their shelter, whether to attend a learning center, drink water, or even simply relieve themselves.

Conclusion

As delineated throughout this research paper,

Rohingya children face a variety of obstacles to not only their education, but their development overall. However, promising interventions exist, such as recruiting and training Rohingya women to become teachers for girls who cannot learn alongside boys after puberty, promoting public health by redirecting resources to build higher-quality water, sanitation, and shelter facilities, incorporating art therapy into learning center curricula to address trauma-induced mental disorders among Rohingya children, and allocating a portion of food aid to learning centers to incentivize attendance.

While the Rohingya people continue to face ethnic cleansing in Burma and multifaceted difficulties in Bangladesh, one would be incorrect to label them hapless victims. On the contrary, this research paper foregrounds several remarkable refugee-led and child-centered efforts originating from residents of Kutupalong Refugee Camp, including teaching girls in accordance with purdah, pursuing an education outside the camp illegally, and forming a family reunification center for lost children.

However, as Shahida's attempts to open a school for girls illustrates, although inspiring, there are limitations to the power of refugee-led movements. This is why it is imperative for all humanitarian stakeholders in Kutupalong Refugee Camp—including NGOs, IGOs and government bureaus—to partner with, not simply for, Rohingya refugees, and empower them to ameliorate pressing issues in their community, including education access. Rohingya people have already demonstrated exceptional resourcefulness, intelligence, and resilience by surviving unspeakable horrors in Burma and difficult conditions in Bangladesh. It is now up to all parties involved in Kutupalong Refugee Camp to provide the next generation of Rohingya children the most enduring tool of all—education—so they are equipped for a brighter, not even bleaker future.

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Small Molecule Stabilization of the CARD11 G-quadruplex Represses Transcription: Developing a Therapeutic Target for Diffuse Large B Cell Lymphoma

Aarohi Sonputri

Abstract

Diffuse large B cell lymphoma (DLBCL) involves abnormal B cell growth in the lymphatic system. Abnormalities such as recurrent genetic mutations cause critical components of the B-Cell Receptor signaling pathway to be overactive. This constitutes an oncogenic defect that drives uncontrolled B cell growth. Caspase recruitment domain-containing protein 11 (CARD11) is a scaffold protein critical to BCR pathway, and its recurrent gain-of-function mutations are frequently found in DLBCL. This study aims to investigate the potential of *CARD11* gene silencing as a therapeutic for DLBCL treatment by targeting the DNA secondary structure-G-quadruplexes (G4s) formed within the gene, as G4s usually act as physical barriers to gene expression. Using circular dichroism (CD), stable G4's were identified within the highly guanine-rich promoter region. Small molecules were screened using a fluorescence-resonance energy transfer (FRET) assay to identify compounds that stabilize G4 structures. To quantify the effects of G4 stabilization on gene expression, qPCR was then used to determine that stabilization of G4s led to repression of transcription and subsequent reduction in mRNA levels of the oncogene *CARD11* and a few others, which are crucial for DLBCL progression. This silencing extended to co-regulated oncogenes (*BCL2*, *MYC*), disrupting survival signals in the NFκB pathway. The small molecule R575 demonstrated dose-dependent efficacy across DLBCL cell lines of varying biopsy origins, suggesting applicability to relapsed/refractory cases. These findings indicate that stabilizing the G-quadruplex structures formed in the *CARD11* promoter region could inhibit DLBCL growth by silencing *CARD11* gene expression and downstream oncogenic signals in the BCR pathway.

1. Introduction

Diffuse large B cell lymphoma (DLBCL) is a

highly aggressive and heterogeneous subtype of non-Hodgkin lymphoma, characterized by the uncontrolled growth of abnormal B cells in the lymphatic system. DLBCL represents the most common form of non-Hodgkin lymphoma, accounting for approximately 30-40% of cases [1,5]. Despite significant advancements in DLBCL treatment, 60% of DLBCL patients still remain refractory to the standard combinatory treatment R-CHOP (*rituximab*, *cyclophosphamide*, *doxorubicin*, *vincristine*, and *prednisone*), or experience relapse after achieving initial remission [1,4,7]. The B cell receptor (BCR) signaling pathway plays a crucial role in DLBCL development and progression [6]. Upon encountering specific antigens, B cells activate their BCRs, leading to intracellular signaling cascades that promote cell survival and proliferation [1,2,3]. In Activated B cell (ABC) DLBCL, this pathway is constitutively active due to genetic mutations in other key component proteins of the BCR signaling pathway, such as *BCL2* and *MYC*, resulting in enhanced BCR signaling independent of antigen binding [3,6]. Upon activation, BCR sends signals downstream through a multi-protein complex that in turns activates other signaling pathways like the NFκB pathway, which is critical for cell survival and proliferation. The aberrant propagation of survival signals from uncontrolled BCR signaling is a key factor promoting the initiation and progression of DLBCL [1].

The present research focuses on the CARD11 protein, an important component of the multi-protein signaling complex. Since *CARD11* sits at a critical signaling node and its mutations play a vital role in driving lymphoma growth, it represents a promising therapeutic target [1,2,4]. Specifically, silencing *CARD11* could overcome a central DLBCL growth mechanism by cutting off key survival signals at their origin--the mutated CARD11 protein itself. Stabilized G-quadruplex structures (G4s), which

are guanine-rich DNA or RNA sequences folded into stacked tetrads, within the *CARD11* gene promote likely downregulate *CARD11* and other oncogenes by physically blocking transcriptional machinery and interfering with regulatory elements, leading to reduced gene expression (Figure 1). These double stranded DNA secondary structures are extremely stable and can inhibit gene expression when localized to promoter regions, acting as roadblocks to RNA polymerases and other proteins attempting to bind. By screening a library of small molecules for the ability to selectively bind to and stabilize G4 structures, this innovative approach aims to silence the expression of genes involved in the development of DLBCL, offering a promising avenue for developing novel therapeutic strategies for aggressive DLBCL.

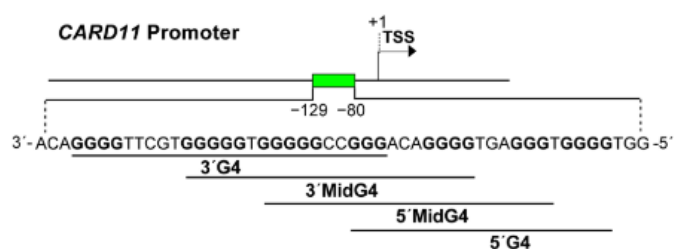


Figure 1. The *CARD11* promoter has potential G4-forming motifs near the transcription start site.

II. Materials and Methods

A. Oligonucleotides

Oligos from IDT and Eurofins were used for circular dichroism (CD) and fluorescence-resonance energy transfer (FRET) experiments. Their concentrations were determined by absorbance measurements at 360 nm using a nanodrop spectrophotometer and calculating the molar absorptivity (ϵ) via the Beer-Lambert law. Both CD and FRET samples were stored at 4°C to account for variation errors.

B. CD Spectroscopy Analysis

CD analysis with varying KCl concentrations was used to test G4 formation. Previous research has revealed that potassium ions stabilize G4 structures, so varying potassium chloride concentrations would allow us to determine the optimal stability conditions of G4 and analyze the G4 folding dependence on potassium levels (Figure 2). Oligos were heated and cooled, and CD spectra data was collected at 263 nm using a Jasco-1100 spectropolarimeter. Data was baseline-corrected, smoothed using the Savitzky-Golay method, and thermal stability was then assessed by increasing the temperature by 1°C/min while recording molar ellipticities, allowing T_m determination within $\pm 1^\circ\text{C}$ using Prism software.

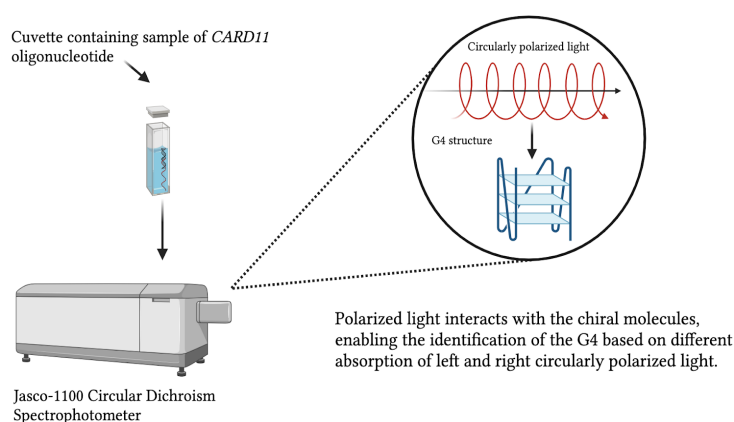


Figure 2. Visual representation of CD methodology to identify G4 structures within the *CARD11* oligonucleotide samples.

C. Small Molecule Screening

Custom Fluorescence Resonance Energy Transfer (FRET) probes were created to target the specific *CARD11* gene sequence, enabling assessment of G4 stability changes induced by small molecules. Probes were prepared with 8 small molecules at 40 μM in Dimethyl sulfoxide (DMSO) at 16% mixed with FAM/TAMRA-labeled *CARD11* probes in 10mM Sodium Cacodylate and 20mM KCl buffers to provide appropriate salt conditions known to facilitate G-quadruplex formation while enabling testing of the small molecule conditions. The probes underwent gentle centrifugation at 2000 rpm to mix the components while avoiding disruption of structure. Transferal to 96-well plates enabled high-throughput and controlled testing of multiple small molecule conditions simultaneously. The FRET assay was performed at 95°C, slightly below melting temperature, to potentially evaluate stability modulations detectable by FRET signal changes. Data normalization on a 0-1 scale enabled standardized comparison across probes and conditions for comprehensive analysis. Curve fitting analysis was utilized to determine the logIC50 values for each small molecule, quantifying the molar concentration required to inhibit 50% of G-quadruplex structure stability. Comparison of the logIC50 values provided key insights into whether the small molecules preferentially disrupt or stabilize G4 structures, based on their binding affinity and potency.

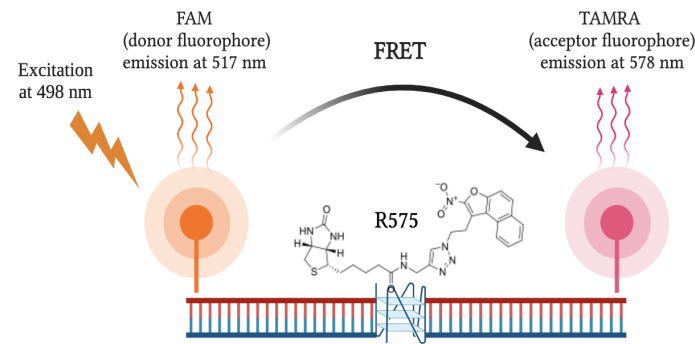


Figure 3. Visual representation of the FRET methodology to test for G4 stabilizing small molecules. R575 used as an example small molecule. In the FRET assay, the G-quadruplex folds upon cooling, bringing the FAM and TAMRA tags on the *CARD11* DNA together, while R575 binding further stabilizes the structure - keeping the tags consistently in close proximity and enabling ongoing energy transfer between them.

D. Human Cell Lines

The cell lines RIVA, HBL1, VAL, SUDHL6, and GM16113 from ATCC and DSMZ were stored in RPMI 1640 media with 10% FBS and 1% penicillin-streptomycin. They were grown at 37°C with 5% CO₂. Using these diverse DLBCL cell lines allows the testing of small molecule stabilization of the *CARD11* G4 on malignant cells from varying origins across patients (see Table 1).

Table 1. Cell lines used along their biopsy origins

Cell line	Cell line origin (biopsy status)
RIVA	Peripheral blood
HBL1	Pleural effusion
VAL	Bone marrow
SUDHL6	Peritoneal effusion
GM16113	Peripheral vein
GM22673	Peripheral vein

E. Gene Expression Measured Using qPCR

Lymphoma cell lines were treated with small molecules 9037 or R575 to measure relative gene expression. TaqMan probes for genes including *CARD11* were used in vitro for this qPCR experiment. Master mixes were prepared with added cDNA for the qPCR. The cycle threshold (Ct) values were normalized to housekeeping gene TBP and compared to untreated controls, yielding $\Delta\Delta C_t$ values. The relative gene expression changes were assessed based on these values.

F. Statistical Analysis

Data analysis was conducted using GraphPad Prism Software v 9.94. All experiments were performed in triplicate to ensure statistical significance and data reliability. GraphPad Prism facilitated descriptive statistics, t-tests, ANOVA, and non-linear regression analyses. Visualizations, such as bar graphs and scatter plots, aided in interpreting trends and relationships within the data.

III. Results

The guanine-rich promoter oligonucleotide of *CARD11* displayed distinctive G4 CD peaks at ~260 nm (Figure 4A). Additionally, both these peaks and the oligonucleotides' melting temperatures were affected by the presence of a K⁺ gradient (Figures 4A-B). Consequently, the *CARD11* gene exhibits a Guanine rich sequence (3-4 runs of G consecutively), which is consistent with G4 formation (Figure 1). As the concentration of KCl increases initially, the molar ellipticity decreases, indicating a decrease in the stability of the G4 structures formed by the *CARD11* gene (Figure 4A). The peak at ~260 nm with 100mM KCl exhibits the highest molar ellipticity, suggesting that the G4 structure is most stable at this concentration (Figure 4A). As the KCl concentration decreases, the T_m values also decrease, indicating lower stability of the G4 structures, further demonstrating that G4 is most stable at 100mM KCl (Figure 4B).

FRET analysis was performed with the non-interactive small molecule 9037, and we see that 9037 decreased G4 stability in *CARD11*, *BCL2*, and *MYC* genes--confirming its non-stabilizing nature (Figure 4C). To further demonstrate 9037 as a non-interactive small molecule, qPCR was performed to reveal that 9037 did not significantly lower the fold change values in the key gene's expression while in comparison to the vehicle treatment control (VTC) of DMSO at 16% and no treatment control (NTC) which is distilled water (see Figure 4D). Thus, in subsequent experiments, 9037 was used as a negative control to validate that the screening methodology could differentiate when a small molecule does not stabilize or silence *CARD11* G-quadruplex structures, in contrast to the positive impacts of stabilizing small molecules identified by the screen.

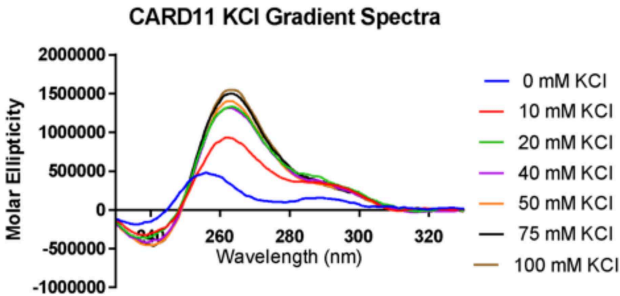
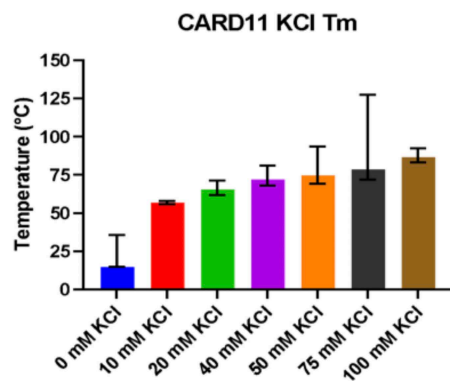
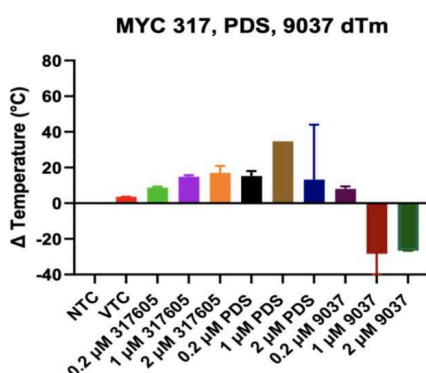
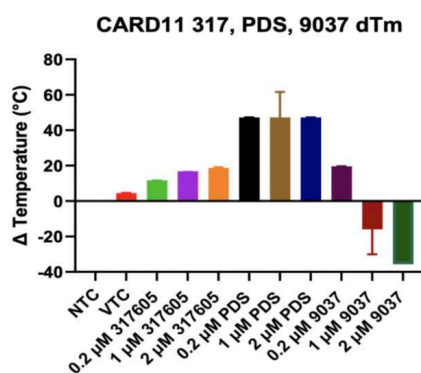
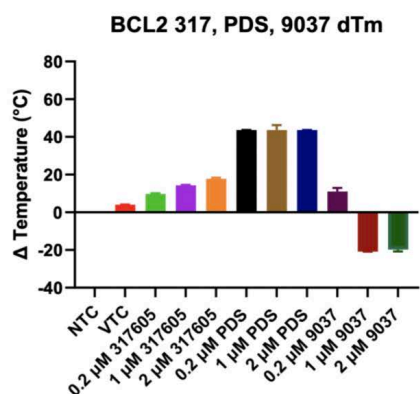
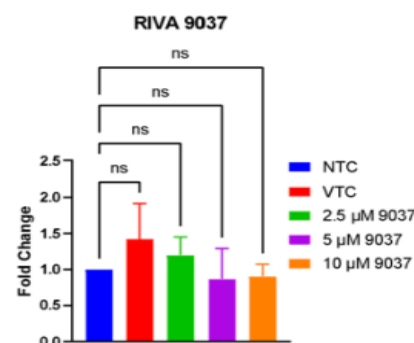
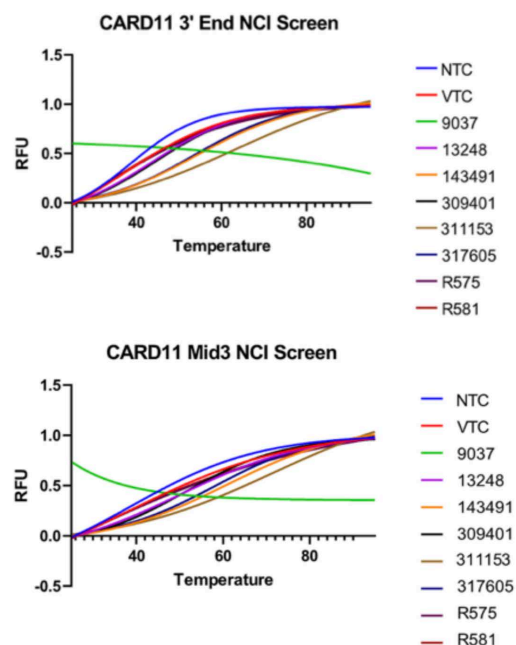


Figure 4A. Upstream G-rich sequence forms a K⁺-influenced G4 structure, confirmed by circular dichroism peak at ~260 nm.

Figure 4B. Corresponding T_m values graphed.Figures 4C. FRET analysis compared the 9037 impacts (on key oncogenes alongside *CARD11*) to Puromycin Dihydrochloride Salt (PDS, 317605, NTC, and VTC).Figure 4D. Fold change *CARD11* mRNA with qPCR data with 9037 tested on RIVA cell line.

FRET assay revealed small molecules R575, 311153, 147481, and 317605 significantly increase G4 T_m , reinforcing structural stability. Small molecules 13248 and 309401 also stabilize G4 but to a lesser extent. Differences arise from diverse chemical structures, binding affinities, and interactions with *CARD11* promoter's G4 motifs. Molecular forces, functional groups, and configurations impact binding.

Figure 5. FRET melt curves obtained for small molecules compared to probe + 16% DMSO (vehicle control) at 2.5 μM concentration. Shifts rightwards indicate T_m increase $\geq 4^\circ\text{C}$, identifying potential candidates. FRET screen used probes in 10 mM NaCac and 20 mM KCl buffer, mimicking the *CARD11* gene's G4-forming conditions.

According to the FRET analysis, small molecule R575 enabled the FAM and TAMRA tagged *CARD11* DNA sequence to retain a consistent 0.7 raw fluorescent unit (RFU) energy transfer plateau from 60°C up to the

highest tested temperature of 100°C, without exhibiting the rapid signal decrease that indicates structure melting seen for other small molecules (Figure 5). We thus conclude that R575 allows for stabilized G4 rigidity and continued folding across an expanded temperature range. This exceptional thermal stability ($\geq 100^\circ\text{C}$) suggests R575 binds the *CARD11* G4 with high affinity, likely through interactions with the G-tetrad core or loop regions, as observed in other G4-stabilizing ligands [7]. The lack of melting plateau loss contrasts sharply with destabilizing controls (e.g., 9037; Figure 4), reinforcing R575's selectivity.

Small molecule R575 was then investigated for its impact on genes *KRAS* and *TERT* (which contain G4 structures), and *UBC* and *EEF1A1* (which do not contain a G4 structure). In the RIVA cell line, derived from peripheral blood, 10 μM of R575 led to significant downregulation of *BCL2* and *CARD11* genes, indicating effective silencing (top panel, Figure 6). This suggests R575's potential to modulate *CARD11* gene expression, crucial in DLBCL progression. Similarly, the VAL cell line, derived from bone marrow, showed reduced *BCL2* expression with R575 (middle panel, Figure 6). Cell line GM16113, derived from peripheral vein, also experienced silencing effects on *BCL2*, *CARD11*, and *MYC* genes with R575 (bottom panel, Figure 6). The consistent silencing of *CARD11* and co-regulated oncogenes (*BCL2*, *MYC*)—but not non-G4 genes (*UBC*, *EEF1A1*)—across all cell lines (RIVA, VAL, GM16113) underscores R575's specificity for G4-containing promoters. This aligns with the FRET stability data (Figure 5) and suggests downstream disruption of NF κ B signaling, a key survival pathway in DLBCL [1,3].

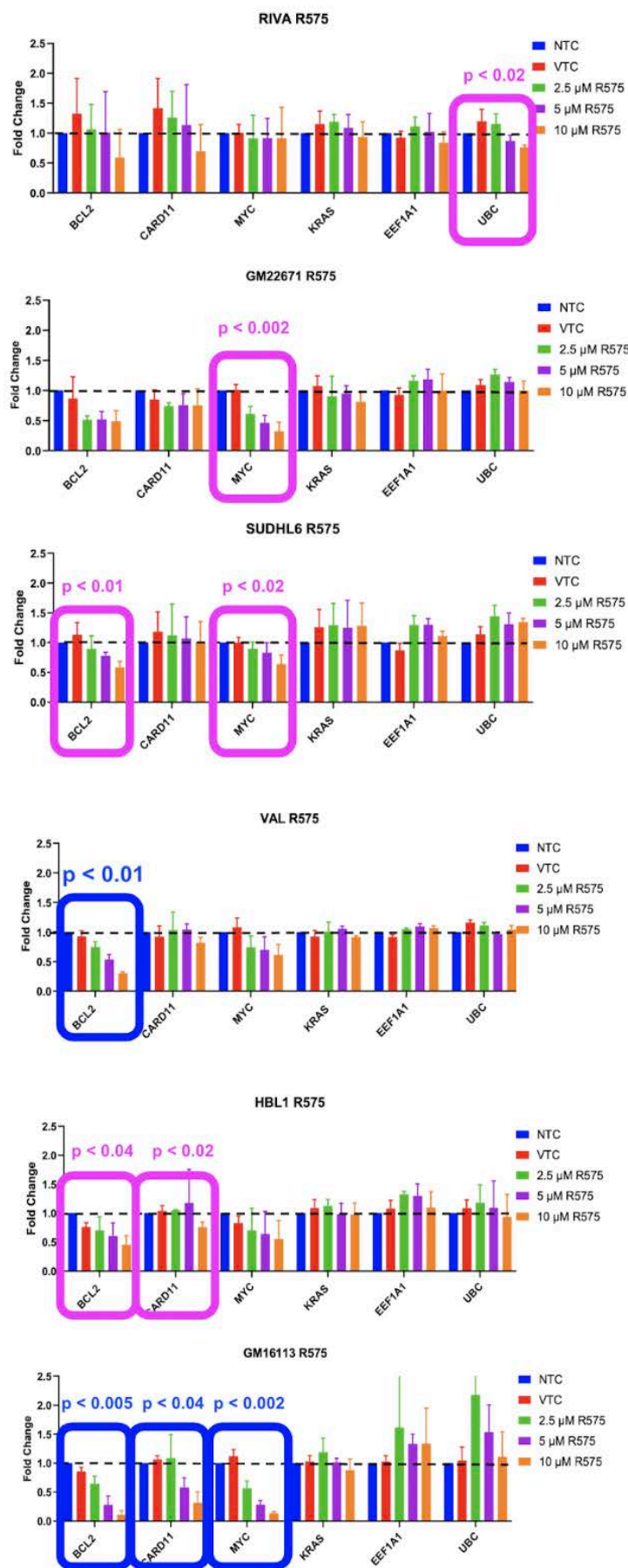


Figure 6. qPCR results for genes *BCL2*, *CARD11*, *MYC*, *MYD88*, *KRAS*, *TERT*, *UBC*, and *EEF1A1* in the RIVA (A), VAL (B), and GM16113 (C) cell lines with varied concentrations of small molecule R575. Boxed experiments show dose-dependent reduced levels of gene expression using ANOVA (purple) or two-sample t-tests (VTS vs. highest dose, pink) statistical analyses. Figures generated by student researcher.

IV. Conclusions

This study demonstrates the potential of targeting G-quadruplex structures within the *CARD11* promoter as a therapeutic strategy for DLBCL. We investigated G-quadruplexes forming in the *CARD11* gene using circular dichroism, identifying stable structures that can act as gene expression barriers. Through screening, the study found a small molecule R575 that substantially stabilizes G4. As stabilized G4 leads to gene silencing, there is no surprise that gene expression analyses revealed that R575 consistently downregulates *CARD11* across DLBCL cell lines, indicating potential for modulating oncogenic BCR signaling. We thus propose G4 in the *CARD11* promoter as a prospective therapeutic target for silencing *CARD11* and disrupting downstream signaling in DLBCL. Small molecule stabilization of these structures shows promises for precise, personalized treatment strategies. Further translational research on G4-targeted therapeutics *in vivo* is warranted to validate and optimize findings toward improved patient outcomes. This innovative approach signifies a potential paradigm shift towards direct DNA/RNA targeting to limit translation of key oncoproteins driving aggressive DLBCL growth.

Acknowledgment

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CRISPR-Cas9: A Testament to the Value of Basic Research

Ray Wang

Abstract

The CRISPR-Cas9 system is a programmable method of editing DNA sequences and its discovery has transformed the fields of medicine, agriculture, and biotechnology, to name a few. While it has revolutionized modern gene editing approaches, its discovery was not the result of targeted studies. Rather, it was based on years of basic scientific research and the motivation and curiosity of passionate investigators to understand basic biological phenomena. By highlighting key studies, this review traces the historical and experimental trajectory from prior gene-editing techniques, such as restriction enzymes and zinc finger nucleases (ZFNs), to the discovery of the CRISPR-Cas9 system. The story of CRISPR-Cas9, from being investigated as a form of bacterial adaptive immunity to the dawning realization of its massive potential, symbolizes the value and necessity of continued investment in basic scientific research.

Introduction

Since his inauguration on January 20th, President Trump and his administration have enacted policies that significantly reduced federal support for science, signing executive orders that froze billions of dollars in research funding (Glenza, 2025; Nature, 2025). These actions have called into question the national commitment to the advancement of scientific knowledge, once deemed an “essential key to our security as a nation” (Tollefson et al., 2025). In a time when the importance of science has somehow become debatable, basic research, or “a systematic study directed toward greater knowledge of phenomena without specific applications in mind” is under even greater threat, as parties interested in shaving off government inefficiencies may view basic research studies as aimless ventures that waste taxpayer dollars (NIAID, 2023). However, as evidenced by our understanding of the revolutionary gene-editing CRISPR-Cas9 system, which can be programmed with RNA to make precise, sequence-specific cuts in DNA, this view of basic research could not be further from the truth. The discovery of CRISPR-Cas9 has opened worlds of new possibilities in fields such as medicine, agriculture, and

bioenergy, and it was discovered through basic research.

Prior Approaches to Gene Editing

A gene-editing tool that could be programmed to modify specific sequences of DNA was sought after by biologists for many decades. At the heart of potential gene-editing technologies were nucleases, enzymes able to cleave DNA or RNA, which are found in bacterial restriction enzymes. A vast range of restriction enzymes exist in nature, each of which recognizes and cleaves its own unique DNA sequence, but they cannot be modified to recognize different sequences. Some researchers attempted to create a programmable nuclease by linking zinc finger proteins, a class of DNA-binding proteins that recognize specific nucleotides, to the Fok I endonuclease, creating a zinc finger-nuclease (ZFN) hybrid (Kim et al., 1996; Urnov et al., 2005). The Kim group confirmed with SDS/PAGE that cleavage at the desired sequence was achieved with their “hybrid restriction enzymes” (Kim et al.). However, in one of their sample lanes demonstrating the success of the CP-QDR ZFN, there were two additional products present (at ~9.2 kb & ~15 kb) that were not addressed or acknowledged in the article. This calls into question the specificity and fidelity of the CP-QDR ZFN. The Urnov group advanced the applications of ZFNs by demonstrating that these enzymes could be used to create double-stranded breaks in human lymphoblast cells. These types of breaks induce homologous recombination (HR), a natural DNA repair process that uses a matching DNA template to fix broken strands, to correct mutations in the gene responsible for the SCID genetic disorder (IL2R γ). Successful HR introduced a restriction enzyme cut site into the genomic DNA, which after being digested, presented itself as a distinct band on PAGE: using this method, they found that HR occurred at a frequency of 18% (Urnov et al.). Using RT-PCR, a method used to detect RNA expression levels, they confirmed that the production of γ C mRNA was restored in cells where HR was able to successfully restore both copies of the IL2R γ gene, demonstrating the therapeutic potential of ZFNs (Urnov et al.). However, a few inherent problems with

ZFNs remained. First, to target a novel sequence of DNA, a new ZFN must be made from scratch by linking a set of zinc finger proteins to Fok I, which is a laborious and time consuming process. Next, the specificity and efficiency of ZFN cleavage is not robust, as demonstrated by the additional CP-QDR products and the low HR frequency.

Discovery of CRISPR Arrays

Unlike ZFNs, which require labor-intensive protein engineering for each new target, the CRISPR-Cas9 system can be easily reprogrammed by simply altering the guiding RNA sequence, allowing for faster and more versatile gene editing. Clustered, regularly interspaced, short palindromic repeats (CRISPR) are short DNA repeat sequences separated by spacer DNA sequences; together, these stretches of CRISPR and spacer sequences are known as CRISPR arrays. To elucidate the function of these motifs, Francisco Mojica, a microbiologist at the University of Alicante in Spain, used BLAST, a bioinformatics technique, to identify any homology that these spacer sequences shared with known genes and found significant similarities between 47 spacers and bacteriophage genomes (Mojica et al., 2005, Table 2). This finding, along with previous studies showing that strains of phage-resistant bacteria containing a spacer similar to a viral gene were resistant to said virus, led Mojica to be the first to suggest a relationship between the CRISPR array and bacterial adaptive immunity. Mojica's findings and hypotheses were read by food science biologists working at Danisco, one of the world's largest producers of food ingredients and pharmaceutical excipients, who observed that some of the bacteria that they were using as dairy cultures were randomly developing resistance to phage attacks. Could it be possible that, in accordance with Mojica's hypothesis, the CRISPR array was somehow involved in conferring resistance to these mutant strains? After sequencing the CRISPR loci of the phage-resistant strains, the Danisco researchers found that the resistant strains contained spacers homologous to genes found within the bacteriophages responsible for the phage attacks on their dairy cultures (Barrangou et al., 2007). To determine whether this exciting association between spacer and phage resistance was due to a causal relationship, they altered the CRISPR locus both by adding homologous spacers to a non-resistant strain, which granted resistance, and deleting the spacers from a resistant strain, which restored susceptibility to phage attack. This established that the spacers were responsible for phage resistance. While their primary focus was on the spacer DNA sequence, they also generated another mutant in which they disrupted the *cas5* gene, which encodes an enzyme containing an HNH-type nuclease motif. This strain lost its resistance, despite

containing the spacers responsible for phage resistance. They didn't know it at the time, but the Danisco researchers had identified the nuclease responsible for CRISPR activity.

CRISPR-Cas as a Programmable System

In addition to functioning as a method of adaptive immunity, CRISPR was also demonstrated to interfere with horizontal gene transfer (HGT) between bacteria (Marraffini & Sontheimer, 2008). After observing a CRISPR locus in a clinically isolated strain of *Staphylococcus aureus*, the researchers were interested in the requirements for HGT interference, specifically the target of CRISPR interference. After introducing silent mutations to the target gene in the conjugative plasmid, which was identified by its homology with a spacer in the isolated strain's CRISPR locus, CRISPR interference activity was lost. To determine whether this was the result of DNA or mRNA interference, a self-splicing intron was introduced into the target gene, modifying the DNA target, but leaving the mRNA product unchanged. This change disrupted CRISPR interference, indicating that the target of CRISPR is DNA. The findings about the DNA target of CRISPR and the importance of the *cas5* HNH nuclease-like enzyme for phage resistance came together when Garneau et al. were able to demonstrate that the CRISPR-Cas system was cleaving DNA (2010). After introducing a plasmid containing proto-spacers (pNT1) to *S. thermophilus*, which contains its own CRISPR locus, they were able to use both gel electrophoresis and Sanger sequencing to confirm that the pNT1 plasmid was being precisely cut three bases upstream of the proto-spacer adjacent motif (a PAM sequence, essential for CRISPR-Cas9 target recognition). When *cas5* was disrupted, in accordance with Barrangou's findings, cleavage of pNT1 failed. Garneau's group concluded their paper by suggesting that the CRISPR-Cas system can be used to generate organisms with increased bacteriophage resistance, not knowing that their results would soon help redefine the boundaries of gene editing.

Conclusion

The programmability of the CRISPR-Cas system was discovered when the specificity of the *cas5* enzyme (now known as *cas9*) was determined to be dictated by crRNA, the transcribed products of spacer sequences (Jinek et al., 2012). RNA constructs ('chimeras') were synthesized, linking crRNA to tracrRNA, which activates crRNA, and when they were used to program the Cas9 nuclease, they found that the Cas9 was able to successfully cleave their desired DNA target. The long-awaited, heavily-anticipated, programmable nuclease had finally arrived, and it was the product of decades of basic research. If not for the curious biologists, geneticists, and biochemists tinkering with

conserved bacterial DNA motifs and invisible-to-the-naked-eye nuclease enzymes, the revolutionary CRISPR-Cas9 technology would never have been discovered. Basic research is more than a venture to appease curious scientists; it is practically essential for future innovation and the advancement of humankind.

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