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Letter from the Editor

It is my pleasure to present the second issue of the Barnard-Columbia Urban Review. The Fall 2021 semester saw incredible successes for the BCUR team. At the end of the semester, we organized a guided tour of the Skyscraper Museum in Manhattan, giving urban studies majors and enthusiasts a chance to explore its exhibits in more depth. Our club was designated an official student group with Student Experience and Engagement, which will allow us to bring urban events to campus and spread awareness of urban issues. BCUR also embarked on a double-blind peer review process for the first time in our sophomore issue. With the incredible feedback and effort from our volunteer peer reviewers, we were able to enhance the already-stellar scholarship of the urban studies research presented here.

Our issue opens with Sophia Kato's powerful history of Japanese Americans' use of landscape architecture to resist racist internment. Kato reminds us that landscape design can both perpetuate and fight back against narratives of colonial domination. By centering Japanese Americans' agency in their architectural environment, Kato's argument leads us into Gabriel Agostini's critique of the literature on Brasilia's architecture. Agostini focuses on new ways of viewing the city of Brasilia, not as a failure of imported European modernism, but as representative of the continuity and influence of Brazil's own architectural traditions.

From here, we turn towards an urban spatial lens with Hana Mangat's maps of healthcare facilities by race in New York City. Mangat considers transit access and police responses to mental health crises, providing important recommendations for a multifaceted, racial justice-centered response to a crucial public health issue. Next, Micah Weese depicts a thought-provoking spatial correlation between de-industrialization and opioid addiction in Ohio towns. The spatial theme finishes with Karla De Jesus's maps of Chicago schools' police presence, mental health support resources, and prevalence of gun violence incidents. Together, these three articles' creative uses of GIS point to a need for major increases in cities' mental health and addiction treatment resources.

Finally, the issue ends with Margaret Barnsley's personal history of racial and wealth inequality in New York City. In the opening year of the Undesign the Redline exhibit at Barnard, Barnsley's narrative presents another reminder of the enormous disparities created by redlining and their enduring legacy.

BCUR's second issue is the result of many people's efforts in the Urban Studies program and beyond. We would like to thank the authors and peer reviewers, the staff and board of the journal, and the faculty, staff, and teaching assistants of the Urban Studies program, including associate director Aaron Passell and department assistant Valerie Coates. We would also like to thank the faculty and teaching assistants of the various other departments that support undergraduate urban research. Finally, thank you for reading our sophomore issue. We welcome your feedback and participation as BCUR continues to grow.

Sincerely,
Madeline Liberman
Editor-in-Chief | Barnard College, '23



*A Rose Among
Thorns: Shaping the
Landscape of
Control and
Domination at Heart
Mountain Relocation
Center*

Sophia Kato

In 1942, President Franklin Roosevelt signed Executive Orders 9066 and 9102, authorizing the development of military areas and the War Relocation Authority (WRA) for the removal and incarceration of “dangerous” American residents (Lillquist 2007, 12-14). Those of Japanese descent were targeted in these orders; 110,000 residents were transported to “assembly centers,” and then to one of ten WRA-administered “relocation centers” in California, Arizona, Colorado, Utah, Arkansas, and Wyoming (Lillquist 2007, 13-17) (Sandeen 2018, 285). This analysis will delve into the landscape at Heart Mountain Relocation Center, which was built on “...undeveloped portions of a federal reclamation project” in northern Wyoming (Lillquist 2007, 17).

The dull, desolate, and arid landscape of the Heart Mountain Relocation Center evoked the utilitarian vision of nature and deprived the internees of the romantic primitivist view of nature, further asserting the power of the American government and their control over internees. However, incarcerated Japanese Americans transformed parts of this space into farms and gardens for their own use, leisure, and survival, resisting the imposed environmental, physical, and socio-emotional conditions of their captivity.

Heart Mountain exemplified the landscape imagined and ingrained by colonial forces in the nineteenth century; the utilitarian interpretation of nature as a “howling wilderness” that is meant to be “discovered,” manipulated, and then used for the benefit of settlers (Marx 1989, 64). East Shoshone and Crow tribes used to live in the area -- the Shoshone River Basin --



1 : Yoshio Okumoto, Edge of Camp View of Heart Mountain with Guard Tower and Barracks. Photograph. Cody, Wyoming. Heart Mountain Wyoming Foundation, <https://ddr.densho.org/ddr-hmwf-1-230>.

but, with the arrival of European settlers, were cast away and confined, to this day, to the Crow Reservation and the Wind River Reservation (Lillquist 2007, 89). Their land was converted into a commodity of which the American government assumed ownership and unrestrained use, including agricultural production to sustain the regional and national (white) population and economy (Lillquist 2007, 104). Enlisted

internees labored to transform the arid, nutrient deficient, “rock-laden” soil into “usable” farmland (Baker 2018); they cleared shrub-steppe brush and worked on the Bureau of Reclamation’s Shoshone Irrigation Project (Lillquist 2007, 96-104). They also planted “victory gardens” that supplied civilians and troops (Baker 2018). While internees aided the “taming” and domestication of northern Wyoming nature through laboring on local farms and federal projects, they also built and nurtured their own farms. Their previous training and experience facilitated the growth of Japanese crops like adzuki, daikon, gobo, and shungiku, which in turn also provided opportunities for community and cultural practice (Lillquist 2007, 105). By 1943, the farms were supplying almost all of the camp’s food, and soon produced a surplus (Kate 2020). Therefore, through farming their own crops and sustenance, the internees expressed a small yet significant resistance to the landscape of American production, domination, and subjugation.

The landscape of Heart Mountain also intentionally deprived internees of the sensory experiences of nature that captivated white American and European landscaping practices in decades past (Olmsted 2010, 277). This confiscation of the primitivist vision of nature -- which presents nature as a self-aggrandizing embodiment of freedom and spontaneity -- was a tactic by the WRA and the American government to further control the conditions and experience of the space (Marx 1989, 66) (Ghoche 2021). Ex-internee Amy Ishii describes the space as “barren, open [...] For miles and

miles around, you could look as far as your eye could see and you couldn’t see the first tree. No trees, nothing green...there was this mountain just sitting behind us” (Mitson & Mitchell 1978, 67). Overall, the drab placelessness of the camp hindered the possibility of imagined or actual departure for internees. Nevertheless, Japanese Americans created gardens that derived a pleasurable experience of nature in prison; pathways and 3 structures abutted the thousands of trees and flowers, including hollyhocks, lilacs, and irises (Baker 2018) (Men, Women and Children 1944) (Lillquist 2007, 111). These



2: Yoshio Okumoto, *View of Hospital Complex with Chimney*. Photograph. Cody, Wyoming. Heart Mountain Wyoming Foundation, <https://ddr.densho.org/ddr-hmwf-1-201/>.

gardens allowed internees to partake in recreation, “maintain a sense of individuality...” and “...beautify the stark landscape” (Combined Victory 1943) (Lillquist 2007, 110-111). Therefore, the incarcerated farmers and gardeners visually remade the imposed landscape to nourish a collective sense of hope, empowerment, and joy. In performing this human practice of beautification, they highlighted and challenged their inhumane and unequal treatment.

Through promoting the utilitarian view and stripping the primitivist view of nature, the landscape of Heart Mountain Relocation Center encapsulated the long-standing American perspective and practice of domination. Although this heightened the conditions of imprisonment and injustice, internees were able to assert their agency in the landscape by creating community farms and gardens. Yet, only two structural features remained after the war in all ten camp locations: the agricultural fields and irrigation canals (Goto 2015, 64) (Camp, 2016, 169). The preservation of only these particular features confirms the intention of the prison landscape -- to enforce the American pursuit of power, control, and expansion -- which resembles one of the larger motivations for building incarceration camps; relocating Japanese American farmers meant reduced competition for white farmers on the West Coast and immense profit for California corporate agribusinesses (Krebs 1992, *Bitter Harvest*). Therefore, the northern Wyoming landscape today holds both the histories and present realities of racist confinement and exploitation, as well as community ingenuity and resilience. How the Japanese

American transformation of space will inspire future resistance to this depraved vision of nature, space, and people is still to be determined.



3: Yoshio Okumoto, *Woman Gardening Beside Barracks*. Photograph. Cody, Wyoming. Heart Mountain Wyoming Foundation. <https://ddr.densho.org/ddr-hmwf-1-86/>.

WORKS CITED

- Baker, Tessa. 2018. "Unearthing History at Heart Mountain." Powell Tribune. Powell Tribune. June 1, 2018.
<https://www.powelltribune.com/stories/unearthing-history-at-heart-mountain,5505>.
- Burton, Jeffrey F., Jeffery F. Burton, Irene J. Cohen, and Eleanor Roosevelt. 2011. Confinement and Ethnicity: An Overview of World War II Japanese American Relocation Sites. University of Washington Press.
- Camp, Stacey Lynn. 2016. "Landscapes of Japanese American Internment." Historical Archaeology 50 (1): 169–86.
<https://doi.org/10.1007/bf03377183>.
- Ghoche, Ralph. "The Invention of Wilderness" Barnard College, New York, NY, September 16, 2021
- Goto, Seiko. 2015. "On The Purpose & Role of Japanese Gardens in American Internment Camps ." North American Japanese Garden Association Journal. <https://najga.org/wp-content/uploads/2018/01/Purpose-and-Role-of-Japanese-Gardens-in-American-Internment-Camps.pdf>.
- Heart Mountain Sentinel. 1943. "Combined Victory Garden Grows Under Heart Mountain Shadow," July 3, 1943.
<https://www.loc.gov/resource/sn84024756/1943-07-03/ed-1/?sp=8&st=text>
- Heart Mountain Sentinel. 1944. "Men, Women and Children Grow Victory Gardens; Variety of Crops Planted," June 3, 1944.
<https://www.loc.gov/resource/sn84024756/1944-06-03/ed-1/?sp=8&st=text>.
- "Justice Deferred." n.d. ArcGIS StoryMaps.
<https://storymaps.esri.com/stories/2017/japanese-internment/index.html>.
- Kate. 2020. "Victory Garden." Heart Mountain. January 27, 2020.
<https://www.heartmountain.org/victory-garden/>.
- Krebs, A.V. 1992. "Bitter Harvest." The Washington Post. WP Company. February 2, 1992.
<https://www.washingtonpost.com/archive/opinions/1992/02/02/bitter-harvest/c8389b23-8 84d-43bd-ad34-bf7b11077135/>.
- Lillquist, Karl. 2007. "IMPRISONED IN THE DESERT: THE GEOGRAPHY OF WORLD WAR II-ERA, JAPANESE AMERICAN RELOCATION CENTERS IN THE WESTERN UNITED STATES." Central Washington University. Central Washington University. September 2007.
http://www.cwu.edu/geography/sites/cts.cwu.edu.geography/files/ja_relocation.pdf
- Marx, Leo. 1989. The American Ideology of Space. Cambridge, MA: Program in Science, Technology, and Society
- Mitson, Betty E, and Kristin Mitchell. 1978. Japanese American Project: An Interview with Amy Uno Ishii. Other. California State University, Fullerton Oral History Program.
http://texts.cdlib.org/view?docId=ft18700334&brand=calisphere&doc.view=entire_text.
- Okumoto, Yoshio. n.d. Camp Landscape. Photograph. View of Hospital Complex with Chimney. Cody, Wyoming. Heart Mountain Wyoming Foundation. <https://ddr.densho.org/ddr-hmwf-1-201/>
- Okumoto, Yoshio. n.d. Edge of Camp View of Heart Mountain with Guard Tower and Barracks. Photograph. Cody, Wyoming. Heart Mountain Wyoming Foundation.
<https://ddr.densho.org/ddr-hmwf-1-230/>.

- Okumoto, Yoshio. n.d. Woman Gardening Beside Barracks.
Photograph. Cody, Wyoming. Heart Mountain Wyoming
Foundation. <https://ddr.densho.org/ddr-hmwf-1-86/>.
- Olmsted, Frederick Law, and Robert C. Twombly. 2010. *Frederick Law Olmsted: Essential Texts*. New York: W.W. Norton & Company.
- Sandeen, Eric J. "The Japanese American Relocation Center at Heart Mountain and the Construction of the Post-World War II Landscape." In *Politics and Cultures of Liberation: Media, Memory, and Projections of Democracy*, edited by Hans Bak, Frank Mehring, and Mathilde Roza, 7:285–306. Brill, 2018.
<http://www.jstor.org/stable/10.1163/j.ctvbqs8h0.17>.

*Confluences of
the Past in
Brasília:
Another Plano
Piloto for Brazilian
Modernist
Urbanism*

Gabriel Agostini

One day before the inauguration of the new Brazilian capital city, president Juscelino Kubitschek delivered a speech to the workers who had brought up the buildings idealized by Oscar Niemeyer and Lucio Costa. “The brotherhood of those who worked here resembles the building of Middle Age cathedrals,” he said, “when anonymous artists, masters, and apprentices were animated by their faith in God to raise those architectural poems in His honor¹” (47). This association between Brasília and European architectural landmarks was probably alien to the presidential crowd of candangos on April 20th 1960, but much of the later scholarship on the city would rely on similar methods.

Planned and built entirely in the five years of Kubitschek’s presidency, Brasília was the result of a long aspiration for Brazilian integration. The city would represent “the materialization of the dreams and desires informing the life of Brazilian people in the 50s—dreams of rupture with archaic political and social structures” (Ceballos 5). The scholarly consensus of the late twentieth century, however, is to stress its failure. Lucio Costa and Oscar Niemeyer’s utopian promises of a new Brazil are analyzed as the days of a future past, as modernist ruins. To engage in this discussion, most scholars have viewed the capital’s unique architectural form under the lenses of European Modernism, as its construction was the first

time that the abstraction and the social agenda of modernism were applied to the national capital of a major country (Vale 121).

The figure of French architect Le Corbusier, constantly associated with modernist architecture, arises as a valid inspiration for Costa and Niemeyer. As architect Elizabeth Harris puts on her book *Riscos Brasileiros* [Brazilian Sketches], “Le Corbusier traveled the entire world throughout his career, but in few places he has left such a strong impact as in Brazil” (11). The trio have exchanged letters quite often² and collaborated in projects that include the Brazilian Ministry of Health and Education and the United Nations Headquarter. Despite any similarities, Brasília does not carry Corbusier’s signature. The original plan, often referred to as Master Plan or Plano Piloto, was presented by Costa and Niemeyer in a 1955 public tender that president Kubitschek organized. And, as much as it speaks little to the urban history of the main Brazilian cities, Brasília is by no means the sketch of a *Ville Radieuse*, in Le Corbusier’s standards.

Since the construction of the city, new interpretations of Brazilian modernist architecture have emerged. Those linking Niemeyer and Costa’s work to the Baroque movement or the Jesuit architecture are particularly strong, and have been employed on the analysis of buildings such as the Pampulha

¹All the works written in Portuguese are cited in my own translation unless specified.

²An extensive collection of the correspondences between Le Corbusier and Brazilian figures such as Oscar Niemeyer and Lúcio Costa can be found in *Le Corbusier e o Brasil*, organized by Santos.

Modern Ensemble, in Belo Horizonte, but have remained away from the capital. As schools of thought, the architectural bases that historians, political scientists, anthropologists, or any social scientists choose to write the history of Brasília upon influence their research. In this paper, I analyze the limitations of the Corbusian-centered scholarship produced about Brasília, and discuss the feasibility of adopting alternative and more independent approaches to Brazilian modernist architecture on the study of the capital.

To understand why architectural theory has had an important impact on the study of Brasília, it is striking to consider first the city's international repercussion. The overall tone with which scholarship produced outside Brazil approaches the capital is that "the founders of Brasília, rather than having planned a city, have actually planned to prevent a city" (Scott 126). A milestone in the study of Brasília is the 1986 James Holston's monograph *The Modernist City: Architecture, Politics, and Society in Brasília*³. He argues that Brasília's "design and construction were intended as means to create a new age by transforming Brazilian society," but that the utopian premises of the city ultimately "engendered a set of social processes that paradoxically yet unequivocally destroyed the planners' utopian intentions" (3). As an anthropologist, his main objective is to "provide an ethnographic description of

³Holston's work was further reviewed and published as book in 1989 by The University of Chicago Press, under the name *The Modernist City: An Anthropological Critique of Brasília*, to which some of the authors in this paper make references. I indistinctly refer to both works as *The Modernist*

Brasiliense society as it developed in relation to these premises" (3), and he lays the grounds for this ethnography in architecture.

Parts I and II of Holston's monograph establish "Brasília's pedigree as a modernist city" by setting out the "basic features of this city in its European and Russian context" (15). He claims that one can "easily demonstrate that the Master Plan of Brasília derives from CIAM [International Congress of Modern Architecture] proposals" (33), as its main functions are those of the Athens Charter: housing, work, recreation, and traffic. The anthropologist claims the Plan has a "hidden agenda," as Lúcio Costa hides that his superquadra housing solution derives from Le Corbusier's unit of habitation (89). Referring to the traffic solution, he notes that "the absence of the rite of passage of street corners is but one indication of a distinctive radical feature of Brasília's modernity: the absence of the streets themselves" (125). Holston's attack to the "death of the street" is a direct attack to Le Corbusier, who views the traditional street as an impediment to progress at the "Machine Age."

It is important to realize that *The Modernist City* is ultimately not about Brasília. The approach to Le Corbusier, as Holston himself puts, is "not to belittle either Costa's or Niemeyer's originality" (36), but to illustrate that Brasília follows

City since they are very close if not equal in content on their majority, but all citations and structural references come from the earlier one.

CIAM rules “with great clarity” (38). Holston writes that “Brasília serves in this dissertation as a case study of the modernist city proposed in the manifestos of the CIAM” (32). His piece is an ethnographic account which can, carefully, be universalized to many other cities just as a modernist city can be universalized to anywhere. His critique is a critique to the Corbusian model of the city. As much of the research on the capital by non-historians, Holston’s argument mainly uses Brasília to exemplify the modernist principles elsewhere in the world.

James Scott, a political scientist interested in governance and resistance, also reflects upon Brasília with this intention in his work *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*. Scott’s book is an ambitious worldwide collection of examples of failed state-led high-modernist endeavors. In the realm of urban planning, Scott discusses the figure of Le Corbusier and his “total city planning” (104) philosophy before introducing Brasília, “about the closest thing we have to a high-modernist city, having been built” (118). He then tries to explain why “people complain that Brasília lacks the bustle of street life, that it has none of the busy street corners and long stretches of storefront facades that animate a sidewalk for pedestrians” (125-126). His explanation relies on the urban history that the capital represents, that it “made no reference to the habits, traditions, and practices of Brazil’s past or of its great cities” (119). In terms of urban life, “Brasília was designed to eliminate the street and the square as places for public life” (120), and its

planners were acting according to Corbusier’s “death of the street” principle.

Scott then brings American activist Jane Jacobs into the conversation, as an opponent to Le Corbusier. A figure of respect in Urban Studies, Jacobs organized grassroots movements in Greenwich Village against the projects of architect Robert Moses. In her 1961 book *The Death and Life of Great American Cities*, she theorizes a “bottom-up” notion of urban planning. Scott analyzes Brasília’s failure using the critiques of Jacobs: the need for diversity, short blocks, aged buildings, among others. In doing so, he acknowledges that urbanity in Brazil can be explained by Jacobs’ idea of urbanity, that the death and life of Brasília is comparable to the death and life of at least a few great American cities. But, had the Village’s savior known she was going to argue for Carnaval blocks, perhaps she would have taken Moses’ side.

Similar to Scott, social scientist Lawrence Vale inserted Brasília in his book *Architecture, Power, and National Identity*. Vale writes that, different than “numerous single-city monographs on capital cities,” the quest of his work is “to explicate how the designs of particular parts of these places—the places of national government—help to clarify the structure of power in that society” (viii). His main point on Brasília revolves around the corrupted equality promised by the plan that originated the city. “Whatever the egalitarian tenets of its architects and planners, the economic and political realities of this iconically modern capital serve only to recapitulate an

ancient theme: distancing the mass from the seat of courtly power" (145), he claims.

This vision resonates with Holston's critique of Brasília's "inversions of the Plan," the unexecuted "argument that the lowest echelon employees of the government residing in Brasília ought to have the same right to the city as the highest officials" (Holston 94). Holston arraigates this justification on the modernist idea that "the creation of a new city/society entails the destruction of the older urban/social order" (95), an idea he claims is often advanced by the European modernists to justify their plans. It is imperative to consider that Holston is a bibliographical reference to many if not most authors on Brasília, including Vale himself. Scott even writes that *The Modernist City* is an "excellent book" through which "it is possible to analyze both the logic of the plan for Brasília and the extent of its realization" (118). Thus, it is valid to trace Vale's argument back to European modernism via *The Modernist City* as well as directly—since he mentions explicitly that "Niemeyer, like Costa, was a Brazilian disciple of Le Corbusier" (138). Similarly to how Scott incorporated the vision of Jane Jacobs, Vale incorporates Le Corbusier in the entirety of his analysis, even if indirectly. In the study of Brasília, modernity and urbanism are often concepts that refer to traditional North American, European, or even Soviet⁴ frames—but not properly Brazilian.

⁴I do not explore the influences of Soviet Urbanism on the historiography of Brasília, but a similar argument can be made. See Holston p. 40-42

Many scholars of Brasília incorporate these imported concepts in their works. In her 2005 dissertation *E a história se fez cidade...: a construção histórica e historiográfica de Brasília* [And history became city...: Brasília's historical and historiographical construction], the historian Viviane Ceballos reviews the literature on Brasília from a period that starts even before the city's construction, with the invented mythological dream of a new capital, until roughly the 80s. Different than the critiques I address in this paper, she notices that most early works treat the construction of Brasília as a signal of prosperity for Kubitschek's Brazil. "My intention," she says, "is to elucidate the contradiction, the plurality out of Brasília's image, usually seen as positive as if it were sacred" (5). Ceballos further notes, however, that there were facts appropriated by many scholars aiming at linearly explaining the history of the city, which, by itself, becomes an *a priori* conception of Brasília (6). She studies the satellite cities, and concludes that, through the view of their residents, one can better understand "the networks that built the homogeneous historiographical image" (135) of Brasília. For the later historiography, the *a priori* conception that Brasília is essentially an exemplar of the Corbusian modernist city becomes one of these networks, as it is incorporated in Holston and others.

This is the analytical perspective contemporary historians still take on Brasília, even in the scholarship

produced in Brazil. Cultural historian Sainy Veloso writes about the contrast of Brasília's modernist form and homelessness on the work *Composição: Pontos Pretos sobre Fundo Verde-Amarelo* [Composition: Black Dots over Green and Yellow Background]—a modernist title within itself, that plays with the works of Mondrian, Pollock, Kandinsky. Veloso explores the relationship between Le Corbusier and Brasília, and how homeless people in the city defy the principles of the Athens Charter. She understands the Charter and its rational principles of urbanism as integral parts of Brasília's architecture (80), and writes that some problems in Brasília arise due to an excessive attachment of Lúcio Costa to the document, such as the lack of planning for population growth (83). After interviewing homeless people in Brasília, Veloso understands that they seek visibility, and use a public space which was not designed for them “to express their necessity and deprivation” (172). She claims:

Against Le Corbusier's rationalist urbanism and “death of the street” principle, they use clever procedures as an existential strategy, integrating reason and desire, knowledge and action, on their urbanistic itineraries. Spaces carefully designed in Brasília to attend the basic needs of the Athens Charter city are now crossed by the experiences of homeless people, rescuing the diversity. This allows the presence of the outsider, the chance encounter with the ignored, the exchange between the

differents, the recognition of the similar, the multiplicity of uses and visions. (172-173)

Although Veloso's work is outstanding and necessary to bring attention to homelessness in Brasília, she frames it as a resistance against international Modernism. “Against the modernist structures,” she says, “they [the homeless people] create inexact forms, following the flux of the dynamic matter” (205). Similar to Holston and Scott, she anchors her critique to Brasília on the death of the street, as if the perhaps unintended daily “urbanistic itinerary” of a homeless person is a pure form of Jane Jacobs' ballet of the street. There lacks a definition of informality and informal residents of the city that is properly Brazilian, one that historians are currently looking for in the favelas in Rio.

Historian Ana Lúcia Gomes, on her 2007 work *Brasília: de espaço a lugar, de sertão a capital (1956-1960)* [Brasília: from space to place, from hinterland to capital], summarizes this trend in history writing as she remarks that only a few works still link the construction of Brasília to the Brazilian Modernist movement, to Oswald de Andrade's Anthropophagy (111). Her main goal is to explore the questionable *capitalidade* [“capitality”] of Brasília; that is, the capacity it has to represent Brazil and a Brazilian union, and she eventually delves into the architectural form of the city and how scholars have treated it. “The reference to the construction of modern Brasília are,” she says, “always the principles of Le Corbusier” (112). Gomes argues that the interpretation of Brazilian Modernism as a São

Paulo-centered movement, which only began to be reviewed on the 90s, influenced scholars not to associate Brasília with properly Brazilian forms (115). “Brasília is modernist on its wide avenues (...), modernist on its functional segregation (...), but equally modernist on its terraced houses inspired by colonial architecture from Minas Gerais” (160), she puts, arguing there is more to Brasília and more to Modernism than scholars usually remark.

As they write about Brasília through the static lenses of the European Modernism, historians may not understand the subtleties of Brazilianness. Written in 2005, the book *Transculturations: Cities, Spaces and Architectures in Latin America*, edited by Felipe Hernández and Mark Millington, brings a collection of essays and studies that reinterpret modernist urbanism in Latin America. Hernández writes in the introduction that, borrowing the term from Cuban anthropologist Fernando Ortiz, architecture in the region should be studied considering its *transculturation* of European art. Transculturation is a term that “redefines notions of centers and peripheries on a more democratic basis,” coined by Ortiz to “defy the assumption that cultures develop taxonomically and unidirectionally” (xi). It understands the process through which cultures interact without a hierarchical bias, as Hernández wants art historians to do in Latin America. He claims that “Latin American architectural history and theory still rely heavily on essentialist and genealogical structures that allow architects to create systems of referentiality with which to judge architectural production,” developing a univocal architectural narrative,

“which has generally depended only upon the features of a few paradigmatic buildings comparable with hegemonic architectural Euro-American models” (xx). The approach to the study of Brasília, so far, has little or no transcultural element. But, in the early XXI century, transculturation has reached the scholars of Brazilian Modernism, and it can potentially be adopted as a method by historians of the capital.

An initial revolutionary interpretation of Modernism links it to the Brazilian Baroque. The Baroque achieved its full expression not in Europe but in the Latin America of the late seventeenth and eighteenth centuries. Architectural theorist Sandra Vivanco, in her essay “Trope of the Tropics,” included in *Transculturations*, proposes “the Baroque as a lens through which we may re-examine Latin American Modernism to understand it as a symptomatic process of transculturation and hybridity” (190). She identifies the Baroque as a point of origin, an “autochthonous” art style that replaced the lacking significant pre-Columbian architecture (191). Vivanco works her argument around the writings of Lúcio Costa himself, who praised the work of Brazilian Baroque architect Aleijadinho for embodying the “Brazilian values of miscegenation and nationalism” (193). She identifies tropes in Costa’s architecture that resemble more the Brazilian Baroque than the European Modernism, arguing that the modernist architects in Brazil were more interested on legitimizing the country’s “illustrious colonial past by using nationalist arguments” (200) than to display an imported technological modernity.

Vivanco's proposal has also been defended by other historians and architects⁵. Oscar Niemeyer himself has said he looked for inspiration in the curves of the colonial churches in Minas Gerais to design the Pampulha Modern Ensemble. This Ensemble was developed in 1940 by Niemeyer, Cândido Portinari, and landscape architect Ricardo Burle Marx, and it includes a church, a casino (now an art museum), a ballroom and a yacht club. As other contemporary scholars, Vivanco believes that "Pampulha presented to the world in 1942-1943 the promise of a *Brazilian* architecture" (196). It is built under the modernist Corbusian style, but it does not let the Baroque aside. The church, for example, brought Portinari *azulejos* that "referenced Baroque ecclesiastical architecture" and deemed an "otherworldly scale to the back wall" (197). Corbusier himself did compliment Niemeyer for Pampulha's project—by telling the Brazilian architect he "does the Baroque very well" (Vivanco 197).

Whereas Vivanco's remarks are those Ana Gomes was looking for when she explored the relationship between Brasília's terraced houses and the architecture of Minas Gerais, it would be a simplistic generalization to associate all of Niemeyer's architecture to the Baroque. There are, in Brasília, inside and outside inversions, integration of art and

⁵ Further on the scholarly association of Niemeyer and Costa's work with Brazilian Baroque, see Lemos pp. 231-236 and Lara pp. 215-218. For the architects' own saying in the question, see Niemeyer's autobiography *The Curves of Time* and the answer of Lúcio Costa to Max Bill's critique of the Ministry of Health and Education,

architecture, and a spatial hyper-awareness of theatricality—all principles that Sandra Vivanco claimed to be connecting Baroque and Modernism (195). But, if the Baroque style could be employed to explain the hyperbolic curves in Niemeyer's Metropolitan Cathedral, it might not be the best style to describe Costa's strictly geometric *superquadra* or the emptiness of the Three Powers Plaza. The Baroque is a block towards understanding that "the search for modernity in Brazil travelled inward from the beginning (...) as a rejection of imported modern models [that are] foreign and inappropriate" (Vivanco 200). This new lens, then, can be used to look for the transculturation of Brasília further within Brazilian architectural history, even back in the early colonial period.

It was Lúcio Costa himself one of the first scholars who looked for this colonial root. In his 1953 article entitled *A Arquitetura dos Jesuítas no Brasil* [Jesuit Architecture in Brazil], the architect claims that the legacy of the Jesuit priests—who have acted in Latin America between the sixteenth and eighteenth centuries—to our Brazilian art is "what we have of true antiquity" and "one of the most significant contributions we might have" (128). Besides his appraisal of the Jesuit churches and of their urbanistic model of the block, it is interesting to see how the urbanist discusses the nuances of classifying Jesuit

Oportunidade Perdida, originally published in 1953. For a not particularly Baroque-centered, yet interesting challenge of the association between Le Corbusier and the Brazilian Modernism, see Comas.

art. The altarpieces, for example, “are still not properly baroque, but are not renascentist anymore” (152). Costa argues that these pieces belong to a “transitory phase,” in which the renascentist and baroque traits are juxtaposed, “a kind of no man’s land” in Art History (152). Reading this article after the construction of Brasília adds a deeper meaning to Costa’s classification. In the capital, his straight line is juxtaposed to Niemeyer’s sensual curves. The plan of Brasília does bring the European influence, but it also subverts it in a Brazilian way of defining modernity. Similarly, European Jesuits adapt their own post-classical style by transitioning into the Baroque and forming Brazilian antiquity.

Further studies focusing on the urban typology of the Jesuit reductions took Costa’s interest as motivation to study the connections between those spaces and the greater architectural history of Brazil. Architect and urban planner Luiz Custódio, in his 2002 dissertation *A Redução de São Miguel Arcanjo: Contribuição ao Estudo da Tipologia Missionária* [The São Miguel Reduction: A Contribution to the Study of the The Reduction Typology], brings the idea that the Jesuit reductions have been regarded as an original urban utopia of Latin America, “in what refers to their political, economic and social organization as much as its spatial design” (22). He studies the urban model developed by the Jesuits, and highlights the orthogonality of the streets forming a cross (114-115), the large and empty quadrilateral square (116), and the “unities of collective living” that the rectangular blocks represented (117). These elements are themselves present in the plan of Brasília,

a relationship that Architect Rogério Entringer further explores on his 2015 work *A Cruz e a Quadra na Arquitetura dos Jesuítas no Brasil* [The Cross and the Block in Brazilian Jesuitic Architecture]. About Brasília, Entringer writes:

Brasília’s plan, like the plans for the jesuit reductions, has a cross-like axis. It is centralized not by a large square culminating on the church, which symbolized the regal and ecclesiastical power dualistic relationship, but by the Plano Piloto, which symbolized the political power of a secular republican state. It is surrounded not by blocks made of indian dwellings, but by superquadras north and south that define the familiar dwellings. However, it is also rationally organized with regard to functional segregation, with symmetry and monumentality. (23)

Considering the Jesuit reductions Brazil’s architectural past, Entringer considers Brasília to be the revival and reinterpretation of this antiquity. Costa’s *Plano Piloto* is no more than the cross and the block, the empty square and the orthogonal lines. Under the Jesuit analysis, the city is the revival of a Brazilian original utopia rather than the imposition of a new European one. And, however alien it may be for the Brazilian historian, interpreting the contemporary urban history of Brasília as a consequence of the XVII century Jesuit architecture and Baroque mentality has precedents in the historiography of Spanish America. Literary critic Angel Rama,

in his consecrated book *The Lettered City*, traces the shaping of twentieth century Latin American cities back to the imposition of a hierarchical order by the Spanish colonizer. He claims that a “city of letters” exists since the colonial period, and a class of *letrados* has controlled urban planning with different forms of power since. Rama presents the Jesuits as the generators of this inner city because of their roles as educators. “They trained specialists in the manipulation of symbolic languages to staff colonial administrative and ecclesiastical structures in direct subordination to the metropolis. This administrative function established the norms for urban expansion and determined the material characteristics that framed community life” (17). *Letrados* originated by this urban expansion became the literary producers of the Baroque period, and “we can glimpse the conservative influence of the city of letters, relatively static in social makeup and wedded to aesthetic models that kept the *letrados* constantly harkening back to the period of their collective origin” (21). Weaving together the Baroque and the Jesuit interpretations of modernist architecture, Rama understands the architectural forms of Latin American cities as a continuous and nonlinear canon that always memorates its own antiquity.

Brasília’s *Plano Piloto* is a lettered city. It is a bureaucratic inner city, designed for and ruled by some of the most influential *letrados* in Brazil. Historians of the capital who take a perspective similar to Rama’s could understand Brasília as the confluence of Brazilian urban traditions rather than the lack thereof. Although daring, it is an approach that focuses

more on the power structures and social definition of a city than on the pure architectural form. In 2002, Sociologist Helena Bomeny made the claim for such an approach in her essay *Utopias de Cidade: as Capitais do Modernismo* [City Utopias: Modernism Capitals]. “It would be naive,” she writes, “to suppose that the spatial configuration isolated from the political action could answer for the interactive functions that are built on daily life” (220). She criticizes Holston’s critique of Brasília, as it leaves little space for intervention. Bomeny suggests that, by concentrating the contemporary critiques on the modernist project, scholars disburden the public men of their responsibility to conduct the country’s social and political life (220). What she proposes is a shift on the focus of the historiography of Brasília—a shift that Gomes had already judged necessary—away from the homogeneous idea that the capital’s form dictates its failure.

Alternative transcultural interpretations to modernist architecture encompass more the Brazilian processes that generated Brasília than the Corbusian centered analysis. Through the end of the twentieth century, the historiography of the capital was consolidated around the assumption that Niemeyer and Costa’s work was an adaptation of the Athens Charter to the Brazilian context. More recently, historians have acknowledged this homogeneous and biased preconception, but they have not yet significantly incorporated other methods into their works. And, even in recent works such as Veloso’s *Composição*, the emphasis of the analysis remains on the resistance of the people against the form—not against the

people. Studying Brasília does require attention to the form, but only because of the political and social symbols it represents. Understanding Brasília as a conturbated confluence of a Brazilian architectural past, not necessarily linear, approximates much more the form to the ideology behind it.

As more Historians choose to study Brasília, they now bear a few tools that allow for this remembrance of the past. The Baroque and the Jesuit architectural influences over Modernism are two avenues through which they can explore the interaction between the social structures of Brazil's colonial period and the twentieth century. Sandra Vivanco, defending the transcultural lens, puts that "Latin America's artistic production cannot easily ignore the trauma of slavery, missionary conversions, language erasure, dictatorship, and repression" (189). These principles are not yet fully incorporated in historiography of Brasília, but they are essential to understanding Brazilian national identity. Only through redefining Modernism it is possible that Historians will be able to redefine Brasília's success.

WORKS CITED

- Bomeny, Helena. "Utopias de Cidade: as Capitais do Modernismo." *O Brasil de JK*, edited by Angela de C. Gomes. São Paulo: FGV, 2002, pp. 201-223.
- Ceballos, Viviane G. de. *E a história se fez cidade...: a construção histórica e historiográfica de Brasília*. Campinas: Universidade Estadual de Campinas IFCH, 2005.
- Comas, Carlos E. D. "Niemeyer's Casino and the Misdeeds of Brazilian Architecture." *Transculturation: Cities, Spaces and Architectures in Latin America*, edited by Felipe Hernández and Mark Millington, vol. 27, Brill, 2005, pp. 169–188. Critical Studies
- Costa, Lúcio. "A arquitetura dos jesuítas no Brasil." *ARS* São Paulo, v. 8, no. 16. São Paulo, 2010, pp. 127-195. Available in dx.doi.org/10.1590/S1678-53202010000200009, access on 01 May 2019.
- Costa, Lúcio. "Max Bill e a arquitetura brasileira vistos por Lucio Costa : Oportunidade Perdida" *Arquitetura e Engenharia*, vol. 5, no.26. Belo Horizonte, May-June 1953. Available in icaadocs.mfah.org/icaadocs/ELARCHIVO/RegistroCompleto/tabid/99/doc/1110331, access on 14 May 2019.
- Custódio, Luiz Antônio B. *A Redução de São Miguel Arcanjo: Contribuição ao Estudo da Tipologia Urbana Missionária*. LUME Repositório Digital, 2002. Available in hdl.handle.net/10183/3840, access on 08 May 2019.
- Entringer, Rogério. *A Cruz e a Quadra na Arquitetura dos Jesuítas no Brasil: um discurso fotográfico*. São Carlos: Instituto de Arquitetura e Urbanismo USP, 2015.
- Gomes, Ana Lúcia de A. *Brasília: de espaço a lugar, de sertão a capital (1956-1960)*. Brasília: Universidade de Brasília PPGHIS: 2008.
- Hernández, Felipe. "Introduction: Transcultural Architectures in Latin America." *Transculturation: Cities, Spaces and Architectures in Latin America*, edited by Felipe Hernández and Mark Millington, vol. 27, Brill, 2005, pp. ix–xxv. Critical Studies.
- Holston, James. *The Modernist City: Architecture, Politics, and Society in Brasilia*. New Haven: Yale University Press, 1986.
- Kubitschek, Juscelino. "Discurso na praça dos Três Poderes, dirigindo-se aos operários que construíram a capital." *Discursos Selecionados do Presidente Juscelino Kubitschek*, edited by Luíza Helena N. Pinto. Brasília: Fundação Alexandre Gusmão, 2009, pp. 47-50.
- Lara, Fernando Luiz. "One Step Back, Two Steps Forward: The Maneuvering of Brazilian Avant-Garde." *Journal of Architectural Education*, vol. 55, no. 4, 2002, pp. 211–219. Available in jstor.org/stable/1425722, access on 14 May 2019
- Lemos, Celina Borges. "The Modernization of Brazilian Urban Space as a Political Symbol of the Republic," translated by Elizabeth A. Jackson. *The Journal of Decorative and Propaganda Arts*, vol. 21, 1995, pp. 219–237. Available in jstor.org/stable/1504140, access on 14 May 2019.
- Niemeyer, Oscar. *The Curves of Time: The Memoirs of Oscar Niemeyer*. London: Phaidon, 2000.
- Rama, Angel. *The Lettered City*, translated by John C. Chasteen. Duke University Press, 1996.
- Santos, Cecília R. *Le Corbusier e o Brasil*. São Paulo: Tessela/Projeto, 1987

- Scott, James C. *Seeing like a State: How Certain Schemes to Improve the Human Condition Have Failed*. New Haven: Yale University Press, 1998.
- Vale, Lawrence J. "Designed capitals after World War Two: Chandigarh and Brasília." *Architecture, Power, and National Identity*. 1992. New York: Routledge, 2008.
- Veloso, Sainy C. B. *Composição Pontos Pretos Sobre Fundo Verde-Amarelo: a visibilidade dos sem-teto em Brasília de 2000 a 2007*. Brasília: Universidade de Brasília PPGHIS, 2007.
- Vivanco, Sandra I. "Trope of the Tropics: The Baroque in Modern Brazilian Architecture, 1940-1950." *Transculturation: Cities, Spaces and Architectures in Latin America*, edited by Felipe Hernández and Mark Millington, vol. 27, Brill, 2005, pp. 189–201. Critical Studies

Mental Healthcare Access in NYC: Mapping the Intersections of Race, Mental Health Service Facilities, and Policing

Hana Mangat

Introduction

Mental health care is more important now than ever. Prior to the coronavirus pandemic, an estimated 47.1 million Americans (one in five) were living with a mental health condition (“Mental Health in America - Printed Reports”). With the added health & economic crises of COVID-19, and increased isolation, rates of Americans reporting signs of anxiety and/or depression are hitting record highs. For instance, of the 1.5 million people that use Mental Health America’s screening tools, anxiety screens rose by 634% from January to September of 2020 and depression screens went up by 873% (“Mental Health in America - Printed Reports”). There has never been a more urgent moment to make care as accessible as possible.

Rates of mental health conditions in New York City—one of the primary epicenters of the pandemic—mimic that of the rest of the nation. It is estimated that about one in five New Yorkers are experiencing a mental illness in any given year (*Mayor’s Office of Community Mental Health / Data Dashboard*). For this reason, in 2015, Mayor Bill de Blasio launched ThriveNYC, a partnership with thirteen city agencies and two hundred nonprofit organizations to ‘close critical gaps in mental healthcare’ (“Home”). ThriveNYC seeks to reach those with the highest need by providing free services, regardless of immigration and insurance status.

However, since ThriveNYC’s launch, there has been little data available to indicate its effectiveness, leading many New Yorkers to be skeptical (Eisenberg). Similarly, one of the

agency partners of ThriveNYC is the New York City Police Department (NYPD), which is especially concerning, considering the NYPD’s history of violence against people with mental illnesses (Smith).

While ThriveNYC has the potential to model accessible mental health care for other cities, an inadequate program could also be a very harmful first experience for those seeking help. For this reason, in this project I examine ThriveNYC’s Mental Health Service Finder alongside race and policing data, to explore the program’s accessibility across different demographics. My goal is to answer the following two questions: 1) Where are mental health care facilities, as provided by ThriveNYC, located and concentrated? 2) What is the spatial relationship between mental health care, policing, and race?

Mental Health Service Finder Facilities

One of ThriveNYC’s programs is NYC Well, a service used to help connect New Yorkers with mental health care (*NYC Well – Talk. Text. Chat. 24/7*). NYC Well features a Mental Health Service Finder that allows users to search for behavioral health and substance use services. It is meant to provide treatment services to New Yorkers in all five boroughs, and includes:

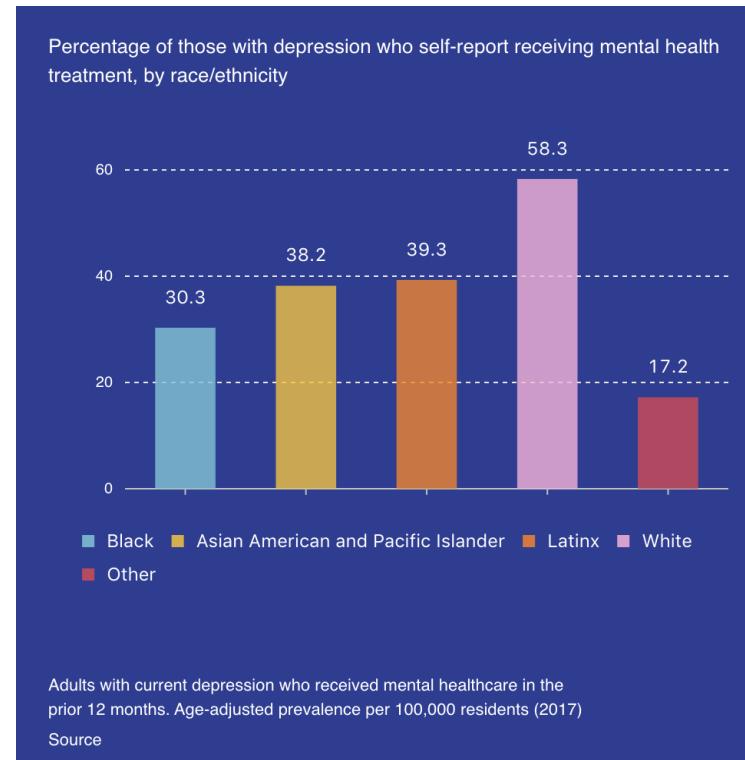
- A. “Programs, services, and/or providers that offer
 - Support/ harm reduction
 - Care coordination
 - Individual/group/family therapy

- Psychiatric or substance use rehabilitation
- Psychotropic medication
- Medication assisted treatment
- Withdrawal management (detox) for those experiencing or at risk of experiencing mental health or substance use issues
- Mutual support groups

B. Assistance with basic needs and social determinants of mental health and substance use that can be accessed by the public (domestic violence shelters, supportive housing resources, food access, rehabilitation, legal services)" (*Provider Updates and Additions – NYC Well*).

However, due to the program's focus on providing services regardless of insurance status, the Service Finder does not include private practices.

SPATIAL ANALYSIS OF THE MENTAL HEALTH SERVICE FINDER & RACE:



(*Mayor's Office of Community Mental Health / Data Dashboard*)

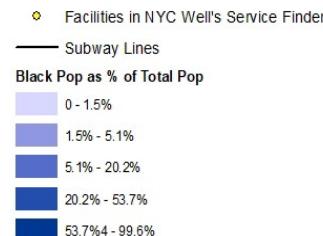
Data indicates that “Black, Latinx, and Asian and Pacific Islander New Yorkers are less likely to be connected to mental healthcare than white New Yorkers,” so I examined the Mental Health Service Finder to see if it complicated the relationship between race and access to care (*Mayor’s Office of Community Mental Health / Data Dashboard*).

I began by mapping the coordinates of the facilities from the Service Finder onto the five boroughs. Then, I added data on race and ethnicity from the U.S. census to create choropleth maps of race by percentage of the total population in any given census tract. I repeated this process until I created maps of non-Hispanic white populations, Asian populations, Black populations, and non-white Hispanic/Latinx populations.

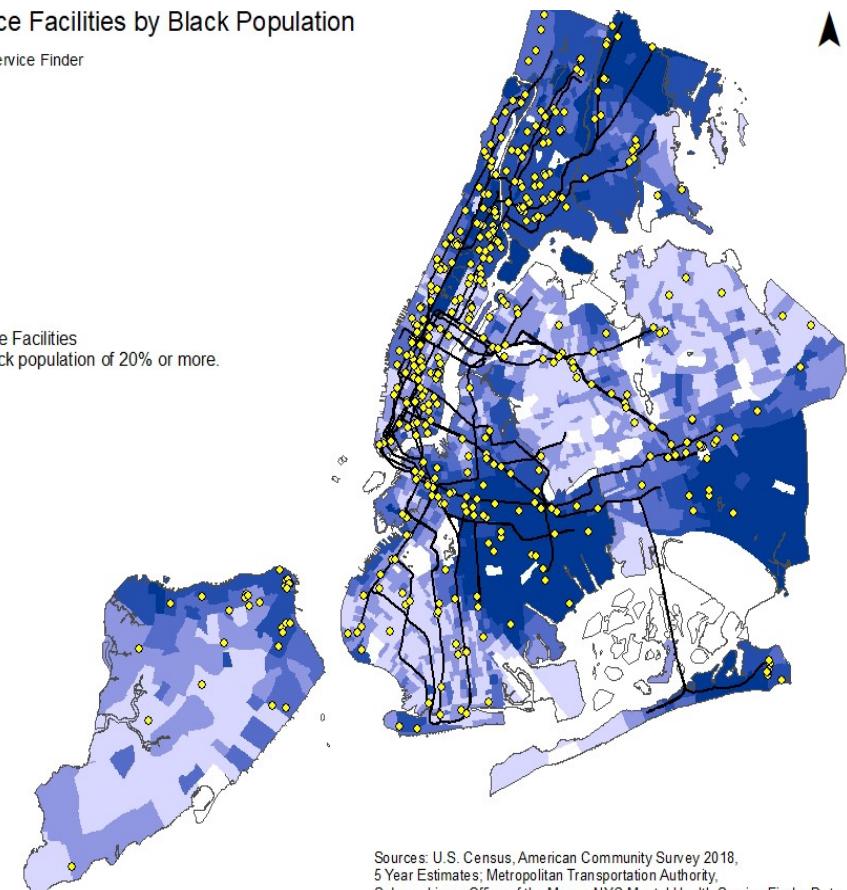
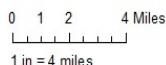
Then, I compared the location of facilities in relation to the concentration of different racial groups. First, I selected the census tracts that had X percentage of a population of a particular race/ethnicity, and then I computed how many facilities existed in the selected tracts. For communities of color (in this case Black, non-white Hispanic/Latinx, and Asian communities), I used a threshold of 20% of the total population to determine ‘significant’ presence of the selected group.

Originally, I did not include the subway lines on the map for reference, but after noticing a significant pattern of facilities inside vs. outside Manhattan, I decided to include subway lines for further analysis.

Mental Health Service Facilities by Black Population



43.9% of Mental Health Service Facilities are located in areas with a Black population of 20% or more.

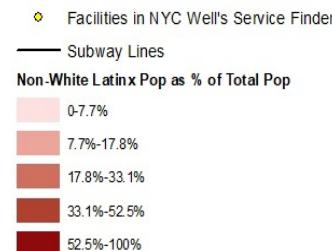


Sources: U.S. Census, American Community Survey 2018, 5 Year Estimates; Metropolitan Transportation Authority, Subway Lines; Office of the Mayor, NYC Mental Health Service Finder Data

Initial analysis for tracts with significant Black populations was surprising, with 43.9% of facilities located in areas with Black populations of 20% or more. The most significant overlaps between large Black populations and Service Finder facilities appear to be in Upper Manhattan and the Bronx. It is important to note that Black Latinx populations are included in this map, especially as we compare to the non-white Latinx population map below—in other words, Black Latinx populations are reflected in both datasets.

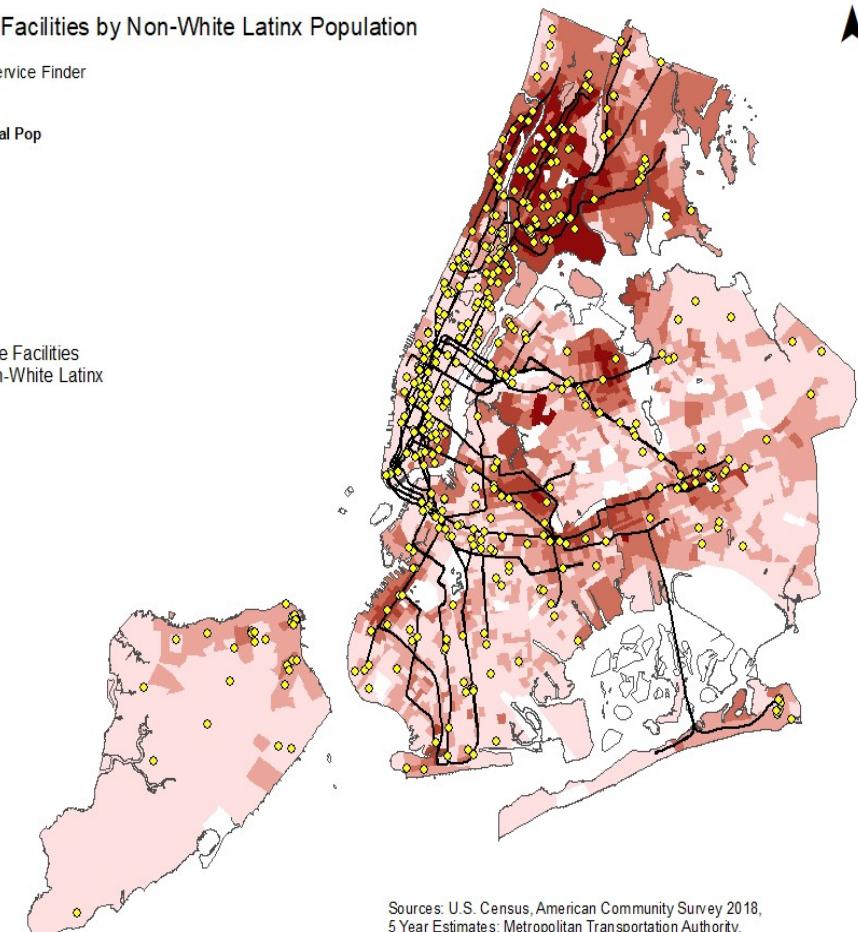
The percentage of overlap for high non-white Latinx tracts and Service Finder facilities was slightly lower, with only 33.9% of facilities located in areas with Latinx populations of 20% or more. The highest concentrations appear to be in the Bronx, where approximately 17.1% of the Service Finder facilities are located.

Mental Health Service Facilities by Non-White Latinx Population



33.9% of Mental Health Service Facilities are located in areas with a Non-White Latinx population of 20% or more.

0 1 2 4 Miles
1 in = 4 miles



Sources: U.S. Census, American Community Survey 2018, 5 Year Estimates; Metropolitan Transportation Authority, Subway Lines; Office of the Mayor, NYC Mental Health Service Finder Data

The lowest rates of overlap of all racial groups with Service Finder facilities was for tracts with high Asian populations. Only 20.1% of facilities are located in areas with an Asian population of 20% or more. A possible reason for this disparity may come from the lack of facilities located in Queens, which contains the most heavily Asian-populated census tracts. In fact, out of the five boroughs, 17.3% of facilities are located in Queens (almost the same percentage that are located in the Bronx). Interestingly, the Queens facilities appear to follow the subway lines fairly tightly. The same phenomenon does not seem to appear in the Bronx, or the other boroughs, but it is difficult to tell because there are more subway lines in those areas. Nonetheless, the correlation between the location of facilities and the subway is indicative of how the city may be failing to serve large segments of the (Asian) population in Queens, both with transit and the NYC Well program.

I suspected that areas with large white populations would have more Service Finder facilities. For this reason, I ran my analysis with the same 20% threshold that I did for the communities of color, but also ran a second analysis for tracts with white populations of 50% or more. My suspicions proved correct, as the majority (51.8%) of Service Finder Facilities are located in areas with a white population of 20% or more. Notably, 35.1% of facilities are located in areas with white populations of 50% or more. This means that a greater percentage of facilities are located in tracts with a majority white population than are located in areas with a 20% Latinx or 20% Asian population.

Interestingly, Staten Island appears to be the darkest shade of orange, meaning that it has a significant number of Census tracts that have predominantly white populations. However, the fewest (only 6%) Service Finder facilities are located in Staten Island as compared to any other borough. Therefore, while it appears that facilities are located in tracts with higher white populations overall, things become more complicated when considering Staten Island and the other boroughs outside of Manhattan.

Mental Health Service Facilities by Asian Population

Facilities in NYC Well's Service Finder

Subway Lines

Asian Pop as % of Total Pop

0-1.7%

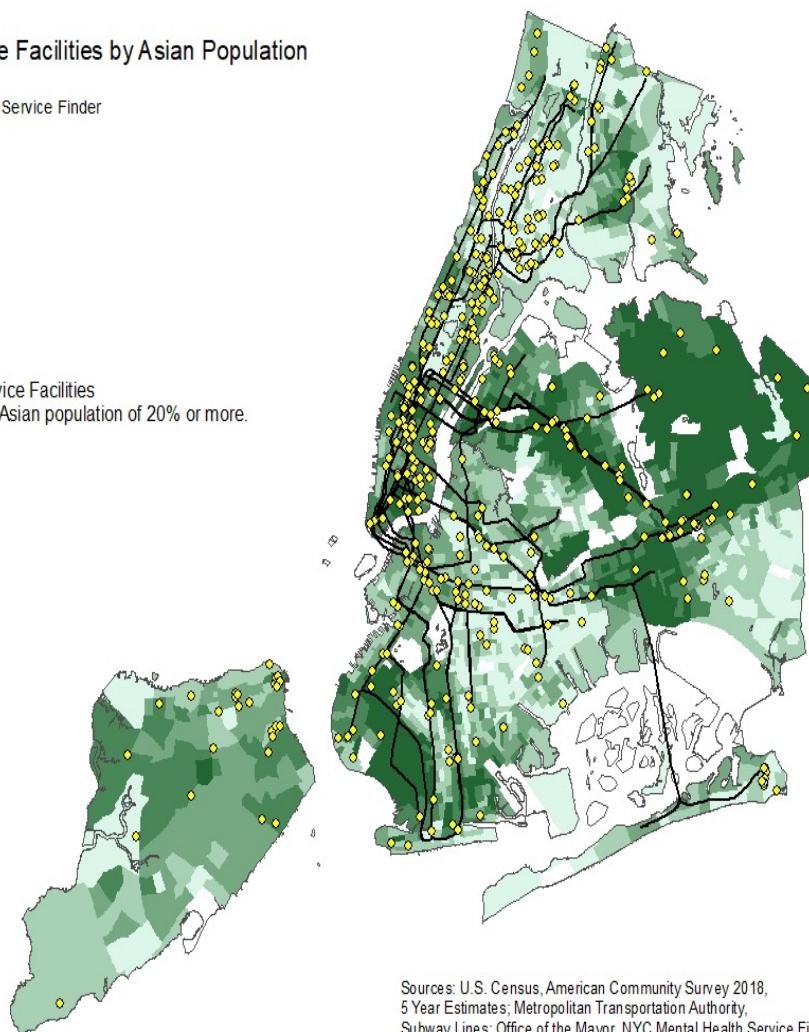
1.7%-4.8%

4.8%-10.9%

10.9%-24.4%

24.4%-85.2%

20.1% of Mental Health Service Facilities
are located in areas with an Asian population of 20% or more.



Sources: U.S. Census, American Community Survey 2018,
5 Year Estimates; Metropolitan Transportation Authority,
Subway Lines; Office of the Mayor, NYC Mental Health Service Finder Data

Mental Health Service Facilities by Non-Hispanic White Population

Facilities in NYC Well's Service Finder

Subway Lines

White Pop as % of Total Pop

0-2.8%

2.8%-12.8%

12.8%-37.6%

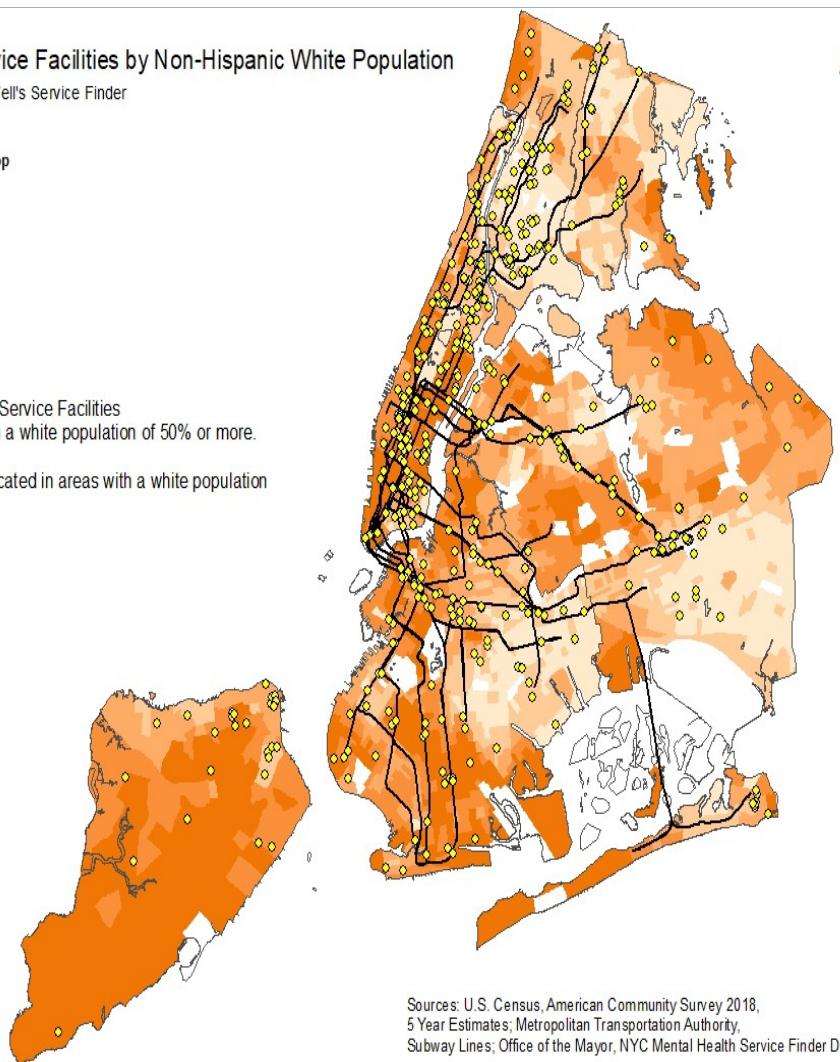
37.6%-64.6%

64.6%-100%

35.1% of Mental Health Service Facilities
are located in areas with a white population of 50% or more.

51.8% of facilities are located in areas with a white population
of 20% or more.

0 1 2 4 Miles
1 in = 3 miles



Sources: U.S. Census, American Community Survey 2018,
5 Year Estimates; Metropolitan Transportation Authority,
Subway Lines; Office of the Mayor, NYC Mental Health Service Finder Data

NYPD Interference

As mentioned above, the NYPD has a long history of violence towards people with mental illnesses (Smith). Interactions between the NYPD and folks dealing with mental health issues often occur during what the NYPD classifies as calls responding to “emotionally disturbed persons” (EDP). Moreover, the number of 911 calls that turn into NYPD EDP responses have doubled over the last decade, rising annually in every precinct (Smith). And as of 2019, the NYPD had killed 14 people with mental illnesses in a span of only three years (Smith). It is clear that responding to mental illness with policing is ineffective, violent, and often deadly.

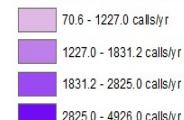
As somebody who grew up with a brother who has bipolar disorder and has seen his mental illness be met with police violence far too many times, adding the lens of NYPD interference to this project was very important to me. I began by mapping the average annual number of EDP calls in each police precinct, using NYPD data from 2014–2018. The EDP call data is not indicative of rates of mental illness or crisis within a community, but rather demonstrates rates of policing of mental health related issues in particular neighborhoods. I defined a ‘high EDP call’ area as a precinct that was receiving more than 2000 calls a year, or at least five a day. Then, I added the aforementioned Mental Health Service Finder facilities to investigate the relationship between ‘high EDP call’ areas and facility locations.

Location of Mental Health Service Facilities by NYPD Calls for Emotionally Disturbed Persons (EDP)

by: Hana Mangat

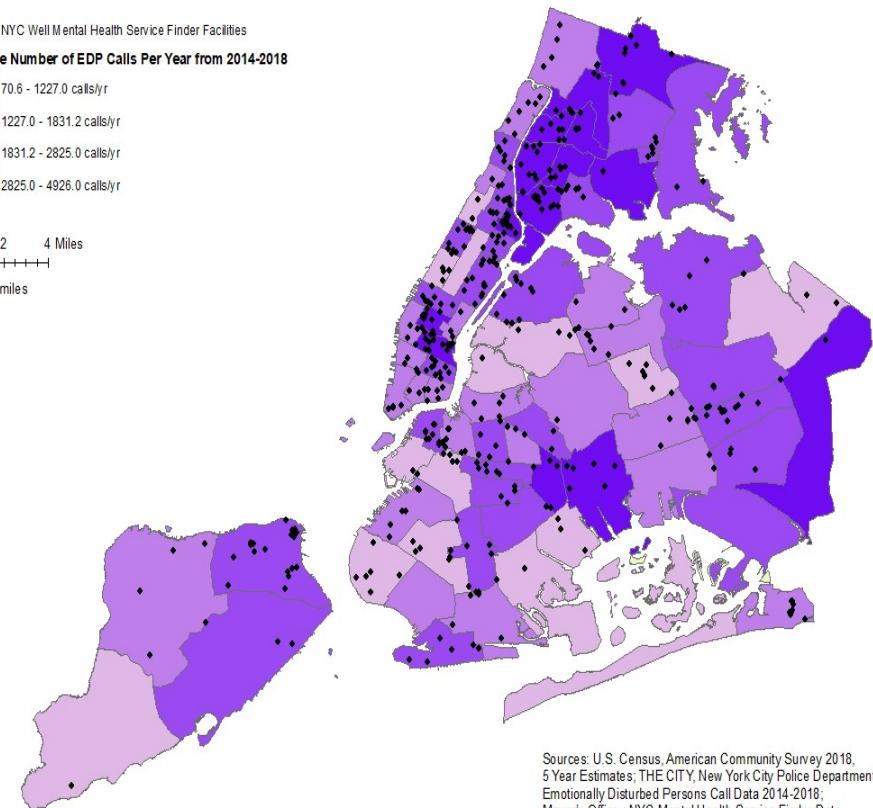
NYC Well Mental Health Service Finder Facilities

Average Number of EDP Calls Per Year from 2014-2018



0 1 2 4 Miles

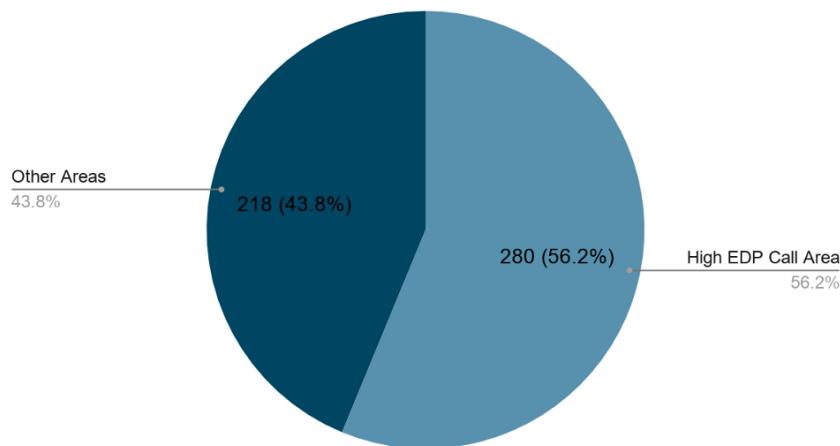
1 in = 4 miles



Sources: U.S. Census American Community Survey 2018, 5 Year Estimates; THE CITY, New York City Police Department Emotionally Disturbed Persons Call Data 2014-2018; Mayor's Office, NYC Mental Health Service Finder Data

I found that the majority of Service Finder facilities (56.2%) were located in precincts averaging more than 2000 EDP calls a year. While this was a higher percentage than I anticipated, it is difficult to further analyze the relationship because of the limited data available about the types of facilities NYC Well includes. Often, those experiencing mental health crises are the ones met with police violence (Smith). Because the data does not delineate which facilities provide emergency treatments, or which ones specialize in mood disorders (or other highly policed illnesses), it is difficult to determine the relationship between the facility locations and EDP calls.

Facilities in Areas with > 2000 EDP calls/year



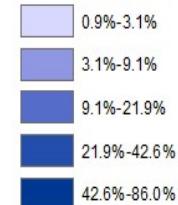
However, as is often the case with policing, clearer patterns arise when race is factored in. In order to add in racial analysis, I had to convert the available census data on race from census tract to police precinct. I did this using the Feature to Point tool in ArcMap, which aggregated the racial data within a census tract to be contained in a singular point or centroid. Then, using a spatial join, I added up all of the census tracts within a particular police precinct to estimate the racial composition of each precinct.

Next, I created a choropleth map using the estimated data on race, and then symbolized the frequency of EDP calls using red circles, with larger symbols indicating more frequent calls. Unfortunately, the tract-to-precinct conversion was only successful with data on Black and Asian populations, meaning that I am missing analysis for white and Latinx populations. However, the data still proved to be useful.

NYPD Calls for Emotionally Disturbed Persons (EDP) by Black Population

by: Hana Mangat

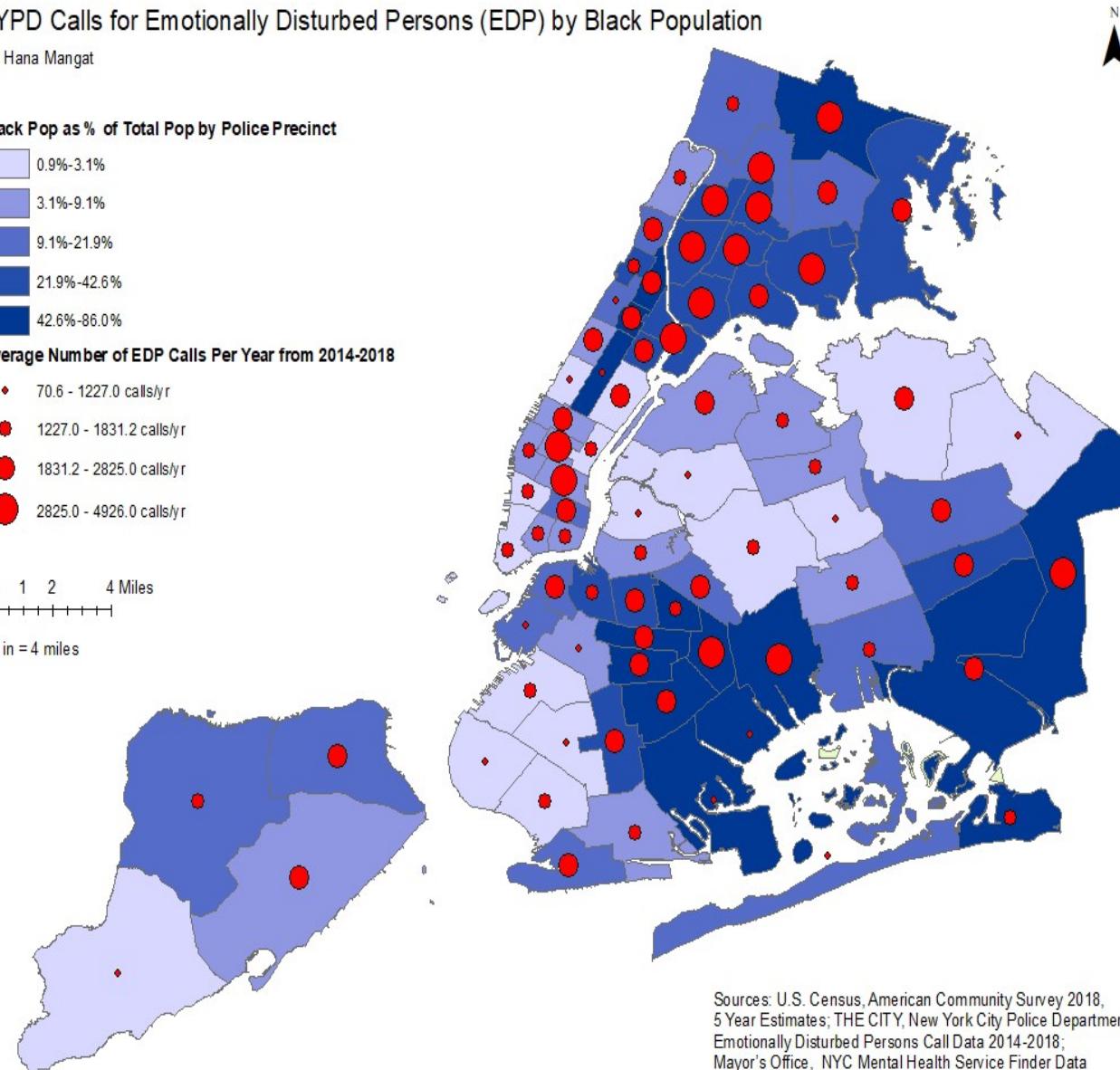
Black Pop as % of Total Pop by Police Precinct



Average Number of EDP Calls Per Year from 2014-2018



0 1 2 4 Miles
1 in = 4 miles



Sources: U.S. Census, American Community Survey 2018, 5 Year Estimates; THE CITY, New York City Police Department Emotionally Disturbed Persons Call Data 2014-2018; Mayor's Office, NYC Mental Health Service Finder Data

NYPD Calls for Emotionally Disturbed Persons (EDP) by Asian Population

by: Hana Mangat

Asian Pop as % of Total Pop

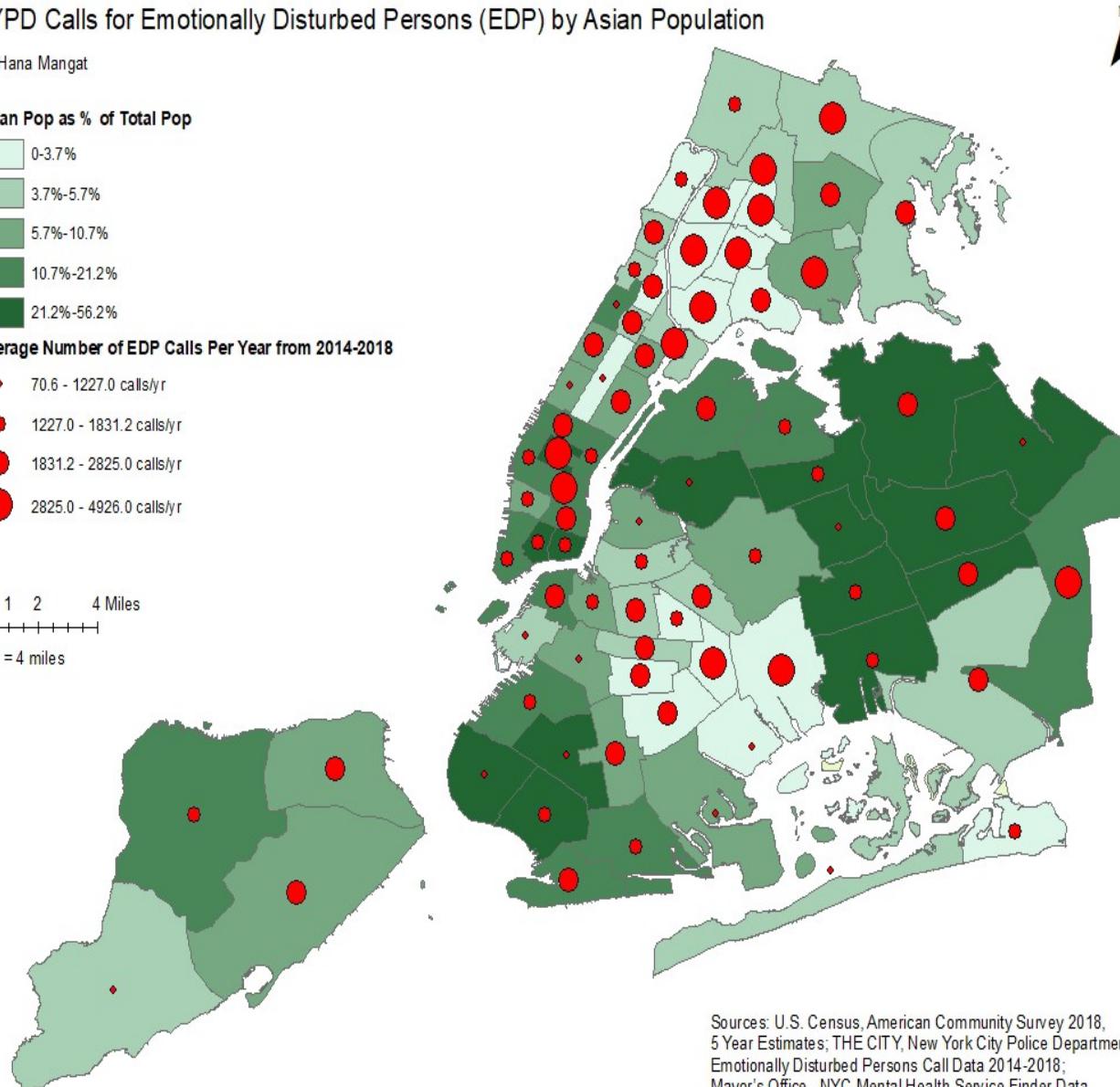
-  0-3.7%
-  3.7%-5.7%
-  5.7%-10.7%
-  10.7%-21.2%
-  21.2%-56.2%

Average Number of EDP Calls Per Year from 2014-2018

-  70.6 - 1227.0 calls/yr
-  1227.0 - 1831.2 calls/yr
-  1831.2 - 2825.0 calls/yr
-  2825.0 - 4926.0 calls/yr

0 1 2 4 Miles

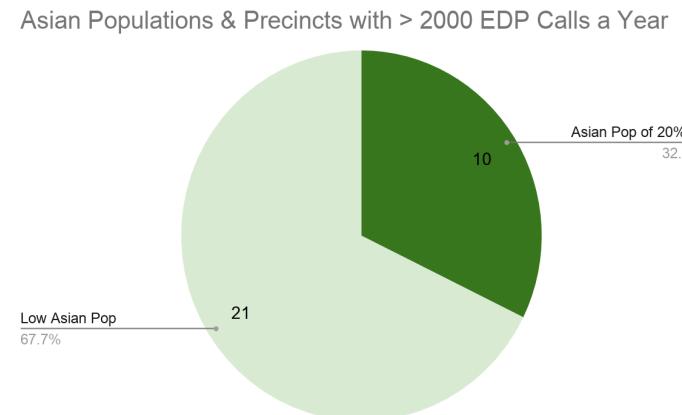
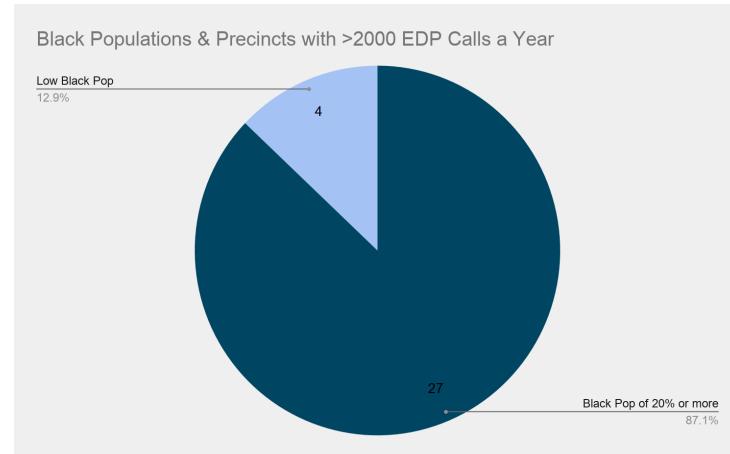
1 in = 4 miles



Sources: U.S. Census, American Community Survey 2018,
5 Year Estimates; THE CITY, New York City Police Department
Emotionally Disturbed Persons Call Data 2014-2018;
Mayor's Office, NYC Mental Health Service Finder Data

Rather, the precincts shaded the darkest green (with the highest Asian populations) had the smallest and medium sized circles (meaning that they had the lower quartiles of EDP calls). Out of the thirty-one precincts with high EDP calls, ten had an Asian population of 20% or more. While this is still a significant number—especially considering that perhaps the NYPD should not be responding to *any* EDP calls—it is significantly lower when compared to areas with high Black populations.

As mentioned above, it is important to note that this data does not indicate that Black New Yorkers are experiencing mental health crises at a higher rate than Asian New Yorkers. Rather, the spatial analysis seems to indicate that areas with high Black populations are policed more, especially when it comes to EDP calls, than areas with high Asian populations.



Conclusion and Recommendations

My spatial analysis was able to answer both of my initial research questions:

1. Where are mental health care facilities, as provided by ThriveNYC, located and concentrated?
 - The majority of Service Finder facilities are located in areas with a white population of 20% or more. A smaller percentage of facilities are located in areas with significant (20% or more) populations of communities of color: descending from Black communities at 43.9%, Latinx communities at 33.9%, and Asian communities at 20.1%.
 - Significantly more facilities are located in tracts with a majority (over 50%) white population than are located in areas with a 20% Latinx or 20% Asian population.
 - I found that the Service Finder also favors particular boroughs, such as Manhattan, where 35.5% of facilities are located. About 22.5% are located in Brooklyn, 17.3% in Queens, 17.1% in the Bronx, and 6% in Staten Island.
2. What is the spatial relationship between mental health care, policing, and race?
 - I found a clear pattern between police response to mental health crises and race, with Black populations experiencing more policing by EDP calls than Asian populations. Of the 31 precincts

receiving at least five EDP calls a day, 27 of them had high Black populations. On the contrary, only 10 had high Asian populations.

- There was a less clear pattern in regards to the location of mental health care facilities and policing. However, it is interesting to note areas with high Black populations had a greater percentage of facilities located near them (43.9%), than the areas with high Asian populations (20.1%). Yet, the areas with high Black populations still experienced much higher rates of policing by EDP calls.

For ThriveNYC to make mental health care more accessible, the city should greatly expand the service options offered outside of Manhattan (particularly in Queens, the Bronx, and Staten Island). Similarly, NYC Well should examine the accessibility of facilities for all communities of color, paying close attention to the spatial accessibility for Asian communities in particular. Finally, I believe ThriveNYC should eliminate all partnerships with the NYPD, considering the organization's history of violence against people with mental illnesses and the clear disproportionate policing of mental illness within Black communities using EDP calls. Only then will ThriveNYC have the potential to be truly equitable and be one step closer to offering every New Yorker quality, accessible, police-free mental health care.

WORKS CITED

- Amanda Eisenberg. "With Opaque Budget and Elusive Metrics, \$850M ThriveNYC Program Attempts a Reset." *Politico PRO*, <https://www.politico.com/states/new-york/city-hall/story/2019/02/27/with-opaque-budget-and-elusive-metrics-850m-thrivenyc-program-attempts-a-reset-873945>. Accessed 10 Nov. 2021.
- "Home." *Mayor's Office of Community Mental Health*, <https://mentalhealth.cityofnewyork.us/>. Accessed 10 Nov. 2021.
- Mayor's Office of Community Mental Health | Data Dashboard*. <https://thrivenyc.cityofnewyork.us/dashboard/?q=34964534045>. Accessed 10 Nov. 2021.
- "Mental Health in America - Printed Reports." *Mental Health America*, <https://www.mhanational.org/issues/mental-health-america-printed-reports>. Accessed 20 Oct. 2021.
- NYC Well – Talk. Text. Chat. 24/7*. <https://nycwell.cityofnewyork.us/en/>. Accessed 10 Nov. 2021.
- Provider Updates and Additions – NYC Well*. <https://nycwell.cityofnewyork.us/en/providers/provider-updates-and-additions/>. Accessed 10 Nov. 2021.
- Smith, Greg B. "SPECIAL REPORT: NYPD's Mental-Illness Response Breakdown." *Intelligencer*, 21 Mar. 2019, <https://nymag.com/intelligencer/2019/03/special-report-nypds-mental-illness-response-breakdown.html>.

Mapping Post- Industrial Addiction in North Central Ohio

Micah Weese

Introduction

The turn of the twenty-first century marked the beginning of a national crisis, as overdoses from prescription opioids and their elicit analogs began a two-decade climb (Centers for Disease Control and Prevention). Since then, over 500,000 Americans have died from opioid overdoses, the single largest source of overdose deaths in America (Department of Health and Human Services). In 2018 alone, cases of opioid misuse numbered in the millions, with prescription painkillers like Codeine, Oxycontin, and Vicodin accounting for 9.9 million of the 10.3 million total cases (Department of Health and Human Services). The opioid epidemic is spread widely but not evenly. Its geography is asymmetrical, with overdose deaths concentrated at particular nodes: abandoned coal mines, shuttered auto plants, and shrinking towns, to name a few (Metcalf et al.; Venkataramani et al. 258; Feinberg 165). This research attempts to locate such nodes in North Central Ohio's post-industrial landscape, visualizing the overlapping geographies of opioid addiction and former industry.

Literature Review

Deeply entangled with issues in politics, economics, and health care, opioid research spans several disciplines: psychology, economics, public health, political science, and social work. A survey of the literature yields two prevailing paradigms: a supply-side paradigm, concerned with *how* Americans get addicted, and a demand-side paradigm, concerned with *why* Americans get addicted. Supply-side theorists root the opioid crisis in over-prescription—as

physicians prescribe too many opioids, too often, the risk of overuse and abuse increases with each excessive dose (Makary et al. 1-2). Demand-side theorists root the opioid crisis in deindustrialization—as plant closures erode community and opportunity, the unemployed turn to opioids as a coping mechanism (Venkataramani et al. 260).

Too often, these paradigms are in tension, presented as conflicting accounts of the opioid epidemic. Demand-side theorists are accused of covering for an irresponsible and injudicious medical community, “let[ting] Big Pharma off the hook too easily” (Khazan). Some contend that demand-side research is a political dead-end, as deindustrialization has already taken hold. Policymakers “can’t snap their fingers and reopen...factories,” argues one lead researcher; “we should focus on changes we can actually make” (Khazan). Conversely, supply-side theory is panned as reductionist and symptomatic, preoccupied with the profusion of painkillers, but not with the prevalence of pain (Feinberg 165).

But the opioid epidemic—emerging at the intersection of economic, political, and medical phenomena—does not conform neatly to one academic paradigm, constituting what sociologist Jennifer Silva calls an “everything problem” (Khazan). The artificial antagonism forced between supply- and demand-side paradigms impedes the explanatory power of both, precluding the multidimensional analysis necessary to reckon with the full scope of the opioid crisis. This research attempts to reconcile these paradigms, illustrating how over-

prescription (the supply) and deindustrialization (the demand) spatially converge to produce the opioid crisis.

Methodology

The site chosen for this research, North Central Ohio, encompasses five counties and fifty-five ZIP codes, with the lakeside city of Sandusky at its core. The region's diverse landscape makes it suitable for spatial analysis, with both rural and urban environments, agricultural and industrial economies, and low and high opioid prescribing rates. This provides the necessary conditions to test for a positive correlation between deindustrialization and over-prescription. Should such a correlation exist, communities affected by deindustrialization would exhibit higher prescribing rates; conversely, communities not affected by deindustrialization would exhibit lower prescribing rates.

Both variables—over-prescription and deindustrialization—need proxies to quantify their prevalence. Opioid prescribing rates, calculated as the percentage of Medicaid prescription claims filed for painkillers, offer a reliable indicator of opioid over-prescription (Centers for Medicare and Medicaid Services). A prescribing rate approaching or above the national average of 5.05% suggests a greater risk of over-prescription, overuse, and overdose (Guy et al. 688-689). Opioid prescribing rates as recent as 2017 are available by ZIP code, with data published by the Centers for Medicare and Medicaid Services. Symbolized with a choropleth map, the variability of prescribing rates across North Central Ohio ZIP codes becomes immediately apparent.

Deindustrialization proved more difficult to quantify, as the region lacks a comprehensive catalog of shuttered factories. To construct one required archival research in local newspapers like the Sandusky Register, Toledo Blade, and Fremont News-Messenger as well as industry periodicals like Glass International, Aftermarket News, and Plastics News. From these, an inventory was built, with each shuttered factory indexed by address, employee count, and year of closure (see appendix I). To ensure their relevance to the opioid crisis, factories were only indexed if shuttered after 1978—the year Vicodin, America's most commonly prescribed painkiller, first hit the market (Moore et al. 530). As this data is limited to the journalistic record, it can not be guaranteed that this catalogue is complete or comprehensive—it merely provides a survey of the closures significant enough to merit their publication. Symbolized as black points atop a choropleth map, shuttered factories and prescribing rates overlap to expose the converging geographies of deindustrialization and over-prescription.

Findings and Analysis

In figure 1, shuttered factories are shown to cluster in ZIP codes with higher opioid prescribing rates. Though they make up only six of the fifty-five ZIP codes, those with prescribing rates above the national average house 51% of all shuttered factories—a disproportionate share. ZIP codes with the highest prescribing rates (6.5-10%) have an average of six times the shuttered factories of ZIP codes with the lowest prescribing rates (0-2%). Here, the overlapping geographies of

over-prescription and deindustrialization are on full display, as the most opioid-saturated areas exhibit the most factory closures.

Furthermore, the impact of a factory's closure is mediated by the size of its former workforce. In figure 2, two adjacent ZIP codes in Erie County experience factory closures of markedly different magnitudes: while the township of Huron lost two plants and 241 jobs, the city of Sandusky lost a total of five plants and 2567 jobs, dwarfing its eastern neighbor. Here, fewer factory layoffs correspond with fewer opioid prescriptions, as Huron retains a relatively low prescribing rate: 1.78% to Sandusky's 5.04%. In North Central Ohio, ZIP codes with lower prescribing rates sustained not only the closure of *fewer* factories but the closure of *smaller* factories.

A crucial feature in landscapes of addiction are spaces of recovery—the treatment centers, support groups, and methadone clinics that treat Opioid Use Disorder. A catalogue was compiled of every recovery institute in the Sandusky area with a publicly available address (see appendix II). In figure 3,

Figure 1: Factory Closure and Opioid Abuse in North Central Ohio

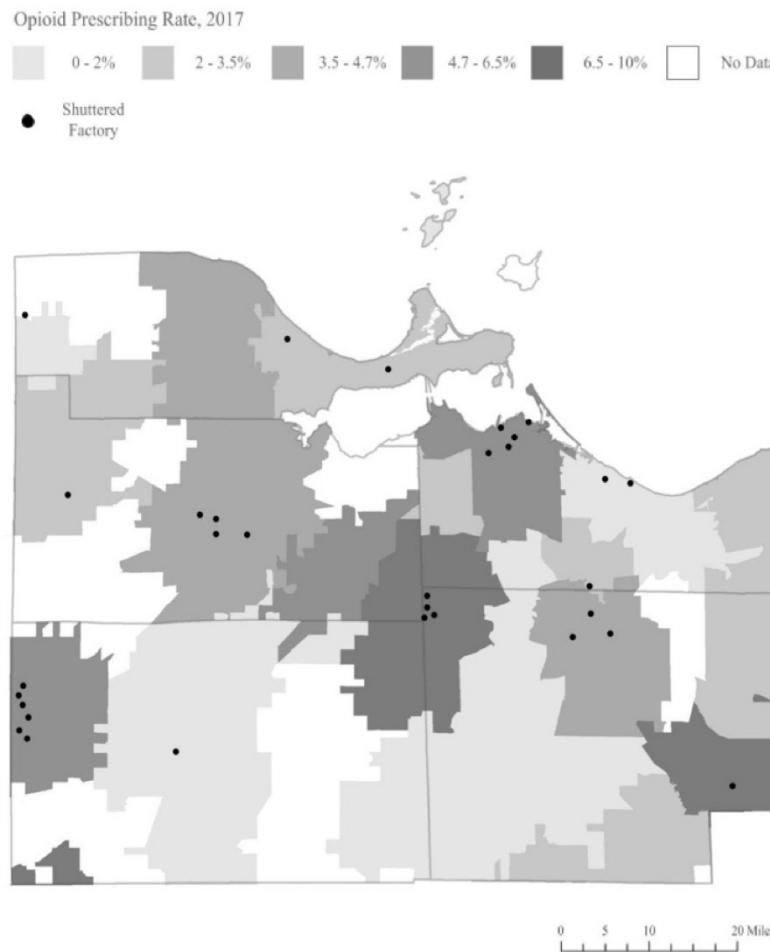


Figure 2: Closure-Related Layoffs and Opioid Abuse in Erie County

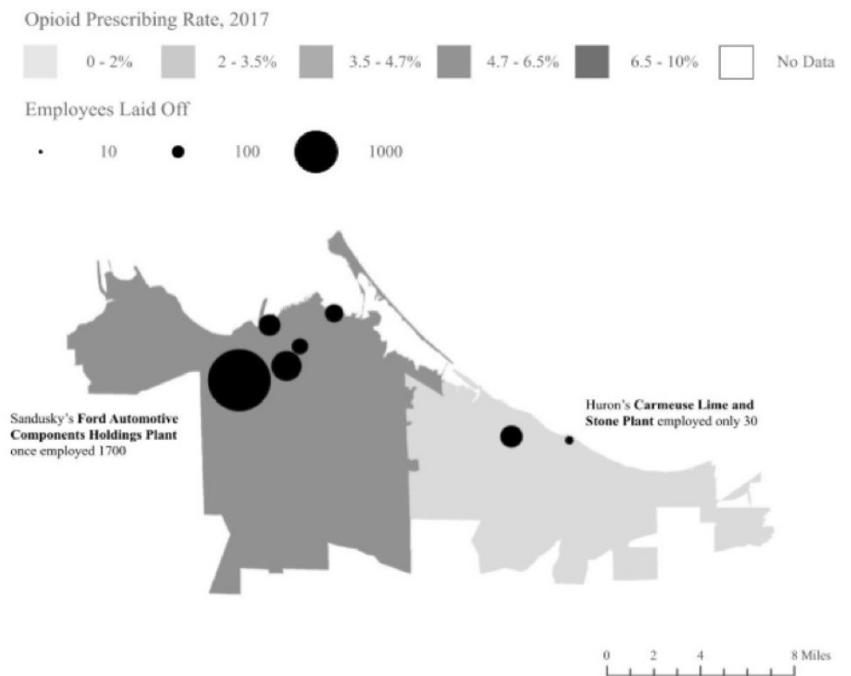


Figure 3: Proximity of Shuttered Factories and Treatment Centers in Sandusky, OH



Findings and Analysis

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recovery institutes, symbolized in white, cluster around former industry, symbolized in black. In the Sandusky area, most shuttered factories are within a one-mile radius, and all are within a three-mile radius, of a recovery institute. The proximity of treatment centers and shuttered factories reveal how geographies of addiction and recovery parallel Sandusky's post-industrial landscape.

Limitations

Due to methodological limitations, this data lacks a certain texture; missing variables leave outliers and confounders unaccounted for. Spanning only thirty-one factories and fifty-five zip codes, limitations in sample size preclude the data's extrapolation beyond North Central Ohio. Additionally, given opioid addiction's many causes, there exist considerable confounding variables, including workplace injury, job loss, and untreated depression, all of which are known risk factors for Opioid Use Disorder (Asfaw and Boden 652; Dean and Kimmel 7; Khazan). Published only for 2013 and 2017, opioid prescribing rates could not be determined at the date of each factory's closure, precluding a longitudinal analysis. In future research, the introduction of a control variable may clarify this data, using operational factories as a control for shuttered factories, or other addictions as a control for opioid addictions.

WORKS CITED

Asfaw, Abay, and Leslie I Boden. "Impact of Workplace Injury on Opioid Dependence, Abuse, Illicit Use and Overdose: A 36-Month Retrospective Study of Insurance Claims." *Occupational and Environmental Medicine*, vol. 77, no. 9, 24 Sept. 2020, pp. 648–653., <https://doi.org/10.1136/oemed-2020-106535>.

Dean, Adam, and Simeon Kimmel. "Free Trade and Opioid Overdose Death in the United States." *SSM - Population Health*, no. 1007142 , Aug. 2019, pp. 1–8., <https://doi.org/10.1016/j.ssmph.2019.100409>.

Feinberg, Judith. "Tackle the Epidemic, Not the Opioids." *Nature*, vol. 573, no. 7773, 2019, pp. 165–165., <https://doi.org/10.1038/d41586-019-02671-9>.

Guy, Gery P., et al. "Vital Signs: Changes in Opioid Prescribing in the United States, 2006–2015." *MMWR. Morbidity and Mortality Weekly Report*, vol. 66, no. 26, July 2017, pp. 697–704., <https://doi.org/10.15585/mmwr.mm6626a4>.

Khazan, Olga. "How Untreated Depression Contributes to the Opioid Epidemic." *The Atlantic*, Atlantic Media Company, 15 May 2017, <https://www.theatlantic.com/health/archive/2017/05/is-depression-contributing-to-the-opioid-epidemic/526560/>.

Khazan, Olga. "The True Cause of the Opioid Epidemic." *The Atlantic*, Atlantic Media Company, 2 Jan. 2020, <https://www.theatlantic.com/health/archive/2020/01/what-caused-opioid-epidemic/604330/>.

Makary, Martin A, et al. "Overprescribing Is Major Contributor to Opioid Crisis." *BMJ*, vol. 359, no. 8126 , 19 Oct. 2017, <https://doi.org/10.1136/bmj.j4792>.

"Medicare Part D Opioid Prescribing Mapping Tool Methodology," Centers for Medicare and Medicaid Services, published April 23, 2019, https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/Downloads/Opioid_Methodology.pdf.

Metcalf, Gilbert, and Qitong Wang. "Abandoned by Coal, Swallowed by Opioids." *Milken Institute Review*, 23 Apr. 2020, <https://www.milkenreview.org/articles/abandoned-by-coal-swallowed-by-opioids>.

Moore, Paul A., et al. "Why Do We Prescribe Vicodin?" *The Journal of the American Dental Association*, vol. 147, no. 7, July 2016, pp. 530–533., <https://doi.org/10.1016/j.adaj.2016.05.005>.

“Understanding the Epidemic.” Centers for Disease Control and Prevention, Centers for Disease Control and Prevention, 17 Mar. 2021,
<https://www.cdc.gov/opioids/basics/epidemic.html>.

“Opioid Crisis Statistics,” Department of Health and Human Services, last modified August 30, 2020, [#~:text=In%202018%2C%20an%20estimated%2010.3,opioids%20in%20the%20past%20year.](https://www.hhs.gov/opioids/about-the-epidemic/opioid-crisis-statistics/index.html#:~:text=In%202018%2C%20an%20estimated%2010.3,opioids%20in%20the%20past%20year.)

Venkataramani, Atheendar S., et al. “Association between Automotive Assembly Plant Closures and Opioid Overdose Mortality in the United States.” JAMA Internal Medicine, vol. 180, no. 2, 2020, p. 254., <https://doi.org/10.1001/jamainternmed.2019.5686>.

Appendix I

Factory Name	Employee Count	Year Of Closure	Address	City	State	ZIP Code
Ford Automotive Components Holding Plant	1700	2007	3020 Tiffin Ave	Sandusky	OH	44870
Georgia Pacific Thermoforming Plant	206	2004	400 Broadway St	Sandusky	OH	44870
Dixon Ticonderoga Plant	115	2002	1706 Hayes Ave	Sandusky	OH	44870
KBI Bearings Plant	396	2017	2509 Hayes Ave	Sandusky	OH	44870
Sandusky Vinyl Products Corporation	150	1991	1321 1st St	Sandusky	OH	44870
Tenneco Elastomer Plant	80	2008	33 Lockwood Rd	Milan	OH	44846
International Automotive Components Plant	211	2020	1608 Sawmill Pkwy	Huron	OH	44839
Carmeuse Lime & Stone Plant	30	2018	100 Meeker St	Huron	OH	44839
Norwalk Furniture Factory	500	2008	100 Furniture Pkwy	Norwalk	OH	44857
Commercial Vehicle Group Plant	150	2010	55 N Garfield Ave	Norwalk	OH	44857
EPIC Technologies	85	2014	200 Bluegrass Dr E	Norwalk	OH	44857

Overlake Manufacturing	3	2018	171 N Main St	New London	OH	44851
Atlas Industries Machine Tools Division	60	2019	401 Wall St	Tiffin	OH	44883
GE Bellevue Lamp Plant	700	1985	420 Monroe St	Bellevue	OH	44811
A. Schulman Vinyl Chloride Compounding Plant	70	2012	350 N Buckeye St	Bellevue	OH	44811
Allied Air Enterprises Plant	400	2006	421 Monroe St	Bellevue	OH	44811
Progress Plastics Products Factory	50	2008	403 Monroe St	Bellevue	OH	44811
Fremont Plastics Plant	200	2018	2101 Cedar St	Fremont	OH	43420
Atlas Industries Machining Facility	100	2019	1750 E State St	Fremont	OH	43420
Kelsey-Hayes Kingsway Manufacturing Facility	270	2006	1017 Dickinson St	Fremont	OH	43420
Eveready Battery Manufacturing Plant	250	1998	1701 W State St	Fremont	OH	43420
ThyssenKrupp Atlas Crankshaft Plant	376	2008	501 Lynn St	Fostoria	OH	44830
Fostoria Industries	100	2009	1200 N Main St	Fostoria	OH	44830
AmeriKart Rotational Molding Plant	54	2010	425 County Line St	Fostoria	OH	44830
Uniboard Fostoria	40	2008	1600 N Main St	Fostoria	OH	44830

Honeywell Autolite Spark Plug Plant	1000	2017	1600 N Union St	Fostoria	OH	44830
Fostoria Glass Company	1000	1986	319 S Vine St	Fostoria	OH	44830
InterMetro Industries Plant	100	2011	1150 State St	Fostoria	OH	44830
Atlas Industries Gibsonburg Plant	60	2019	1520 Co Rd 42	Gibsonburg	OH	43431
Guardian Glass Plant	100	2019	24145 W Moline Martin Rd	Millbury	OH	43447
Silgan Plastics Blowmolding Plant	150	2010	5225 W Lakeshore Dr	Port Clinton	OH	43452
BPB Celotex Plant	96	2001	795 S Plasterbed Rd	Port Clinton	OH	43452

Appendix II

Facility Name	Address	City	State	ZIP Code
Sandusky Treatment Services	1036 Cleveland Rd W	Sandusky	OH	44870
Recovery Institute of Ohio	1019 Pierce St	Sandusky	OH	44870
Zenful Sober Solutions	191 Marina Point Dr	Sandusky	OH	44870
Firelands Counseling and Recovery	1925 Hayes Ave	Sandusky	OH	44870
Sandusky Artisans Recovery Community Center	138 East Market Street	Sandusky	OH	44870

Mental Health & Recovery Board of Erie and Ottawa Counties	1907 E Perkins Ave	Sandusky	OH	44870
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Mapping the Priorities of Chicago Public Schools and Gun Violence

Karla De Jesus

Introduction

Spatial thinking is a valuable tool when thinking about the many Black and brown people affected by gun violence in Chicago. GIS methods and mapping allow for conclusions to be made about the areas in the city of Chicago that are most affected by gun violence. GIS methods also allow for the analysis of spatial patterns that exist at a particular time. This project intends to capture the gun violence incidents that occur throughout the city of Chicago that involve minors and the way that the Chicago Public School (CPS) system funds its public high schools. Additionally, this project aims to highlight the efforts of Black and brown youth in Chicago who have fought to change the distribution of Chicago Public Schools' funding through the #CopsOutCPS campaign.

Context:

In 2019, the Chicago Board of Education (BoE) approved a \$33 million contract with the Chicago Police Department. This contract would create a partnership between both parties through the School Resource Officer program, where Chicago police officers are assigned to CPS schools (Kunichoff). As a result of this contract approval, multiple grassroots organizations around the City of Chicago formed a coalition, #CopsOutCPS. This coalition aims to pressure CPS to terminate existing contracts with the Chicago Police Department; remove all School Resource Officers (SROs) from Chicago Public Schools; re-invest the money that Chicago Public Schools was given to the Chicago Police Department into non-police supportive services; and continue to ensure

that, during the COVID-19 pandemic, students have access to the resources they need for school (Ortiz et al. 7).

Last year, the coalition produced a public report about the harm that SROs have on Black students and other students of color. According to this report, "more than 95% of police incidents in CPS involve students of color," and "Black students currently make up 35.9% of all CPS students, yet 65.77% were the subject of Police Notifications from 2011/12 to 2017/18" (3). Complementary to this report, the coalition produced an interactive map that shows the misconduct complaints that each SRO has. Their research found that the 180 School Resource Officers and 21 School Liaison Supervisors have a combined total of 2,354 misconduct complaints records against them (6). The officers placed in schools with children have killed, tased, and neglected people while on duty.

The #CopsOutCPS coalition organized various direct actions to pressure the BoE to vote to remove SROs for the 2020-2021 school year. Leading up to the vote, young people in this coalition used a variety of tactics to escalate the pressure for their demands. Direct actions included teach-ins outside the home of BoE members, marching in their neighborhoods, holding rallies at their schools, having joyful socially distant block parties, and blocking the streets where the CPS headquarters are located. Ultimately, on June 24th, after six hours of debating and public testimony, the six-hour meeting ended with a 4-3 vote, failing to remove police from schools (Garcia). After this initial vote, Mayor Lightfoot and the CEO of Chicago Public Schools Janice Jackson announced that

individual Local School Councils (LSCs) would be able to vote to maintain or remove their SRO program. Additionally, the BoE announced that they would vote on the SRO program again in August of 2020.

What occurred at different LSCs was reported at a minimal level. However, as a member of the coalition, I was present for many of these LSC meetings. The concerns many parents, teachers, and community members expressed about removing the SRO program were based on concerns of safety. In the LSC meetings of schools like Lindblom Math and Science Academy, located in the Southside of Chicago, many concerns were expressed about the gun violence that the neighborhood faces. Some parents argued that SROs maintained order and prevented students from getting into dangerous situations. The concerns heard at this particular meeting drove my interest in pursuing this topic. As someone whose family has been directly affected by gun violence and as a member of the #CopsOutCPS coalition, I believe that to reduce gun violence we have to center Black and brown youth. Placing police officers with multiple misconduct complaints with students is not a preventive measure. This project explores two school years and aims to show the disparities that exist between funding given to SROs and mental health support. As of August 17th, 2020, 55 schools chose to maintain SROs while 17 schools chose to remove SROs (School Resource Officer Program Information). The second BoE vote resulted in the maintenance of the SRO program with the contract between CPS and CPD reduced by 50% to \$12 million (Materson).

Methodology

The most significant components of the maps for this project include gun violence data and the distribution of funds from CPS to both police and non-police high-school employees. For the scope of this project, the definition of gun violence is taken by the Gun Violence Archive as a definition that is "intended to be fully inclusionary of disparate elements of gun-related incidents, in that, all types of shootings are included, whether OIS [officer-involved shooting], accidental, children shooting themselves, murders, armed robberies, filicide, mass shootings, DGU [defensive gun use], Home Invasions, drivebys and everything else" (Gun Violence Archive). For their age groups, the Gun Violence Archive uses the subcategories of children (0-11 years old), teens (12-17 years old), and adults (18+). For this project, to determine how Chicago Public School directly or indirectly responds to gun violence incidents, it was determined that teens (12-17 years old) would be the most appropriate age group. For this map, the purpose is not only to show that incidents occurred, but also the outcome of a given incident. To tie the data directly to Chicago Public Schools, I only included data that occurred from the first day of classes to the last for the 2019-2020 school year and from the first day of classes to April 18th for the 2020-2021 school year. Using dates where schools are operating allow for one to see how gun violence is affecting students while they are going to classes.

To quantify the funding given to SROs and CPS employees who specialize in mental health, the total amount of

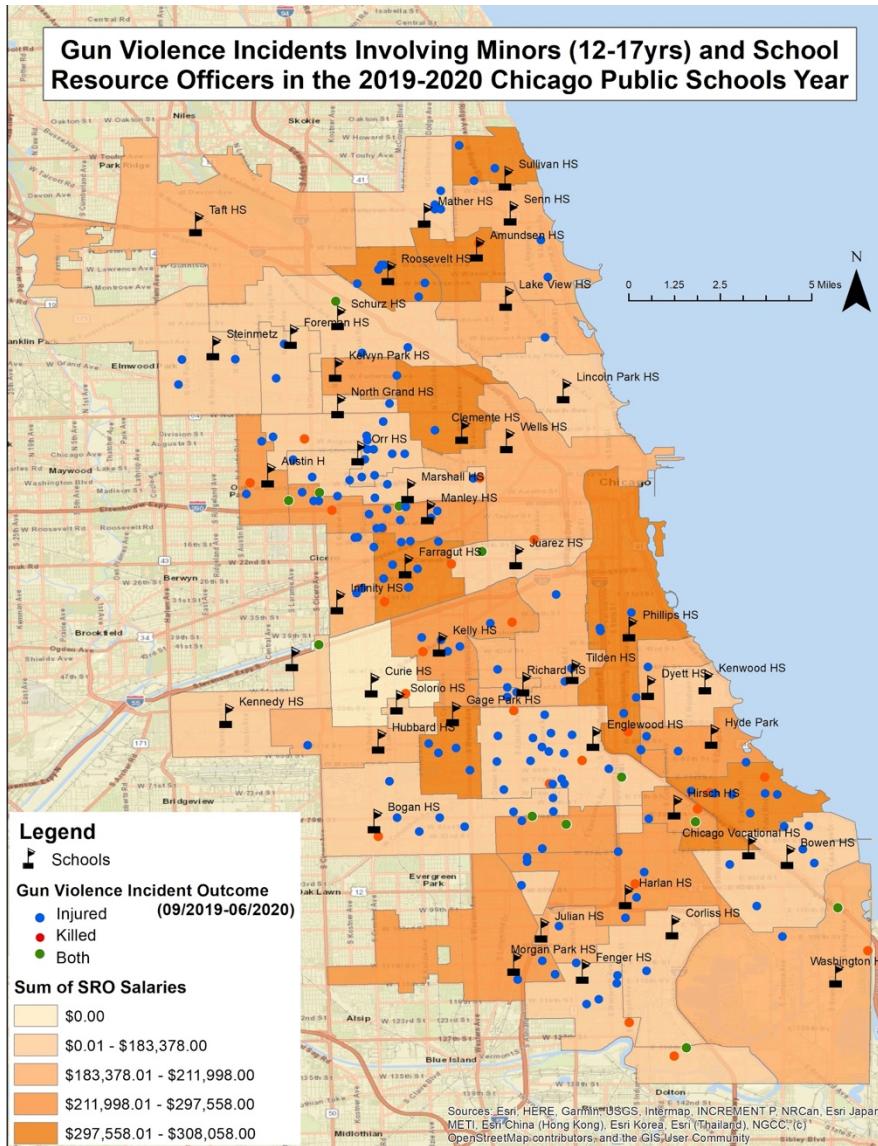
salaries was taken for both fields. #CopsOutCPS submitted a Freedom of Information Request for the names of SROs located at each school. I matched the names from the data given to us to another dataset that includes the salaries for each CPD officer. If schools do not have an SRO program, I plotted that data as \$0 for the sum of salaries. A similar method was conducted to get the sum of salaries for employees who specialize in mental health. In order to determine which positions were appropriate for this project, I read through the various positions that are held at CPS high schools. I decided to include salaries of the following employees: Social Worker, Social Worker Assistant, Refugee Social Worker, School Psychologist, At-Risk Student Coordinator, Conflict Resolution Specialist, Restorative Justice Coordinator, and Students in Temporary Living Situations Advocate. The job descriptions of these positions in CPS's high schools all indicate that there is a primary focus on mental health support. Although additional funding towards school counselors is a demand made by #CopsOutCPS, I did not include school counselors in this project. This is due to my reflections as a CPS alum and continuous conversations I have had with students about the support they have received from school counselors. School counselors provide more academic based support, rather than mental health support.

Initially, this map was going to include police district boundaries. However, there can be multiple schools in a singular district, as well as districts that have no schools that fall within their boundaries. Instead, it was decided that

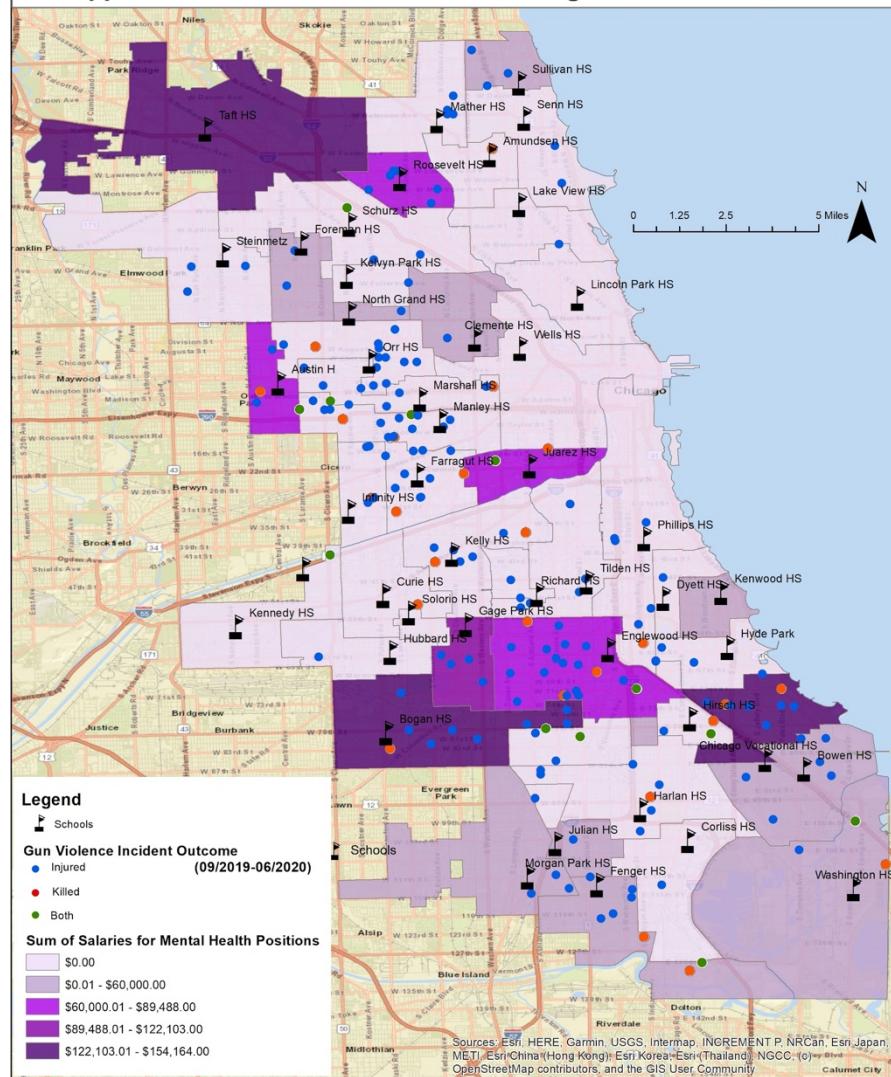
attendance boundaries for open enrollment high schools would be the best way to indicate and visualize how young people are affected by gun violence and how the schools that they are most likely to attend are funded. This project excludes selective enrollment, military, charter, and private high schools. The excluded school types include a separate application and their student body could be composed of students from all over the city. Including these schools would then make it more likely for funding to not reflect a direct response to the violence that students from that area would face. Mapping only the boundaries for open enrollment schools provides a higher likelihood that students who attend these schools also live in the neighborhood where these incidents occur.

GIS Application

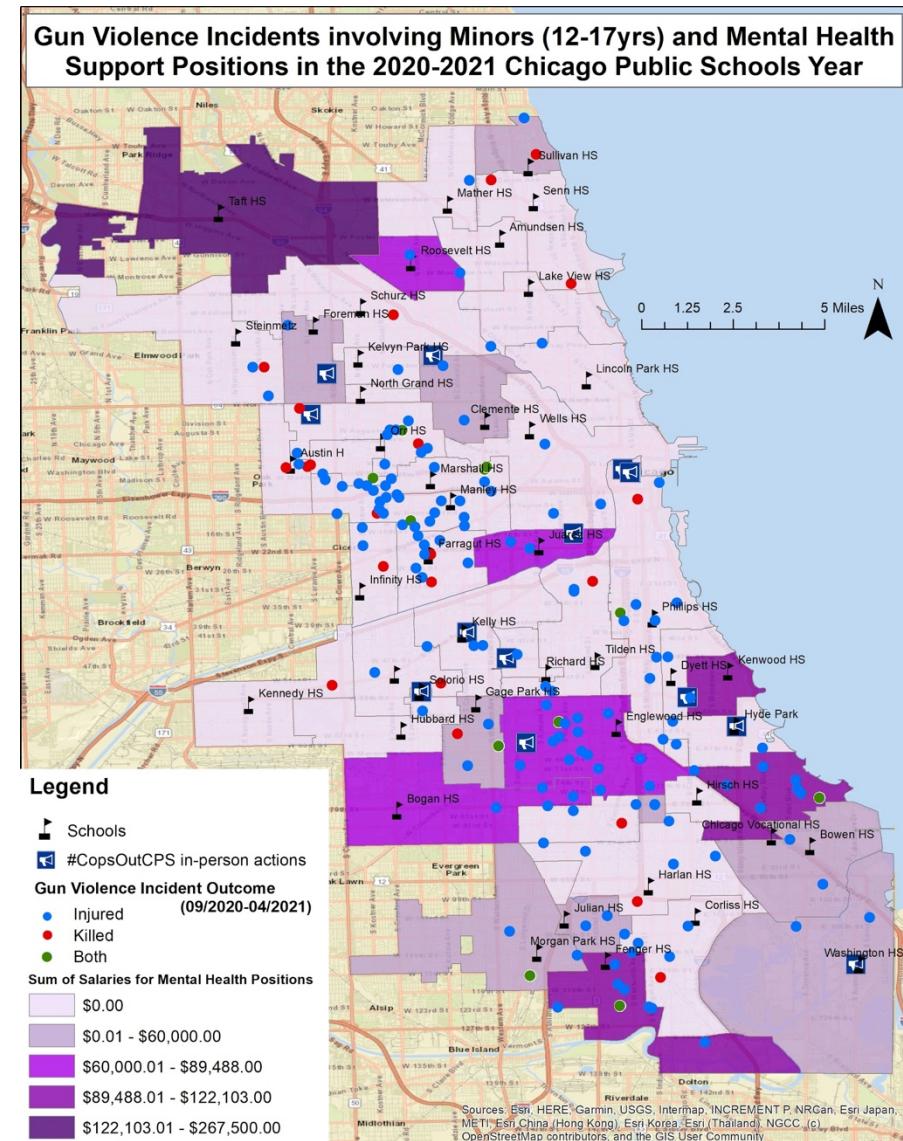
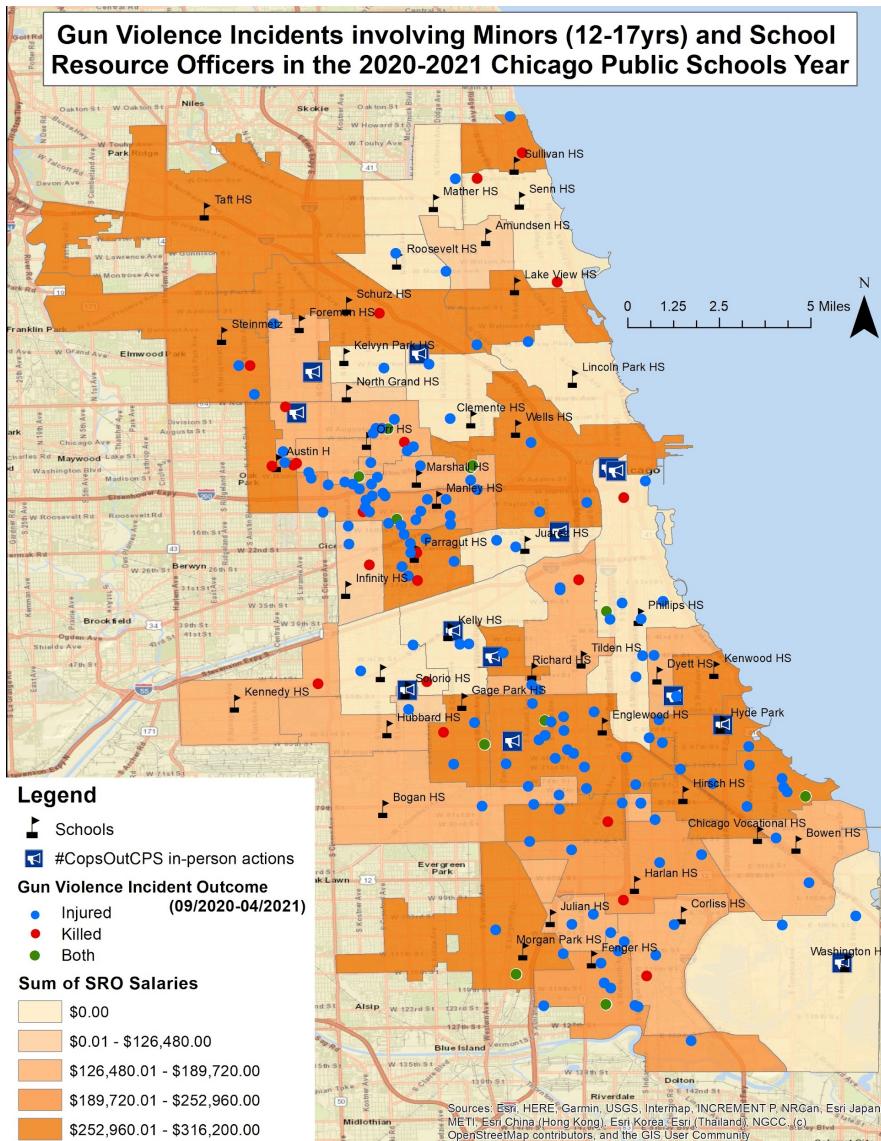
For the four maps that resulted from this project, the Open Streets base map was used to best indicate the location of all map items. Gun violence incidents were plotted by points, and three different feature classes were used to differentiate between incident outcomes. The location of schools was then added using the point feature to show where within their attendance boundary they are located. The school attendance boundary was then added as a layer and the join feature was used to join the layer with an Excel spreadsheet containing the sum of SRO funds. This step was repeated for an Excel spreadsheet containing the sum of salaries for CPS employees who have a specialization in mental health support. The number of funds that schools were given for SROs and mental health support was shown through a choropleth map.



Gun Violence Incidents Involving Minors (12-17yrs) and Mental Health Support Positions in the 2019-2020 Chicago Public Schools Year



To show the difference and the impact of the #CopsOutCPS coalition, two additional maps were created. In addition to data for the 2020-2021 school year, in-person actions organized by #CopsOutCPS were mapped.



Analysis

These four maps indicate that gun violence incidents involving youth are concentrated in the south and west sides of the City of Chicago. These areas have historically been populated by Black residents. With about three months left of the 2020-2021 school year, gun violence incidents that involve minors have already surpassed the 200 mark. The datasets indicate that a week does not go by without at least one incident occurring. While these incidents are not all tracked and known by Chicago residents, they are discussed in the media and are felt by community members. The age range of youth who are involved in these incidents is the same as students in high schools. There is an assumption that these students attend school and therefore incidents are getting reported. However, instead of investing in what #CopsOutCPS argues as preventive measures, CPS' funding indicates the prioritizing of SROs over mental health support.

The 2019-2020 maps indicate that most Chicago public high schools had SROs on their campus but no staff that specialized in mental health support. Additionally, the legends show that there was much more funding that was funneled into the SRO program with the greatest sum being more than \$300,000, while the great sum for mental health support staff was a little over \$154,000. The 2020-2021 maps show the results from the removal of SROs from many public high schools. Although the gun violence data from this school indicates that those who chose to remove their SRO program were not in areas that are the most impacted by gun violence,

the data indicates that schools that kept SROs continue to see young people injured and killed by gun violence. Moreover, there was hardly any drastic change seen in the maps that show mental health support staff salaries. While SROs were removed from school, that money does not seem to have been relocated to supporting students who are affected by violence. These maps indicate the necessity of preventive measures and demonstrate the high rate at which youth are being injured or killed by gun violence within the months that they are in school. Additionally, these maps indicate that CPS currently prioritizes and funds police officers in schools rather than staff who specialize in mental health support, a supportive role needed for children who constantly face violence.

Limitations

A limitation to this project is that not all gun violence incidents can be measured. The Gun Violence Archive uses resources like police scanners, news articles, and other police data. However, some incidents may go unreported due to the nature of where they happened and what responses came from the incident. Additionally, this project only maps open-enrollment CPS high schools. Thus, one is not able to tell if there exists a disparity between the funding that selective enrollment, military, charter, or private schools and open-enrollment schools have. This disparity could be useful in demonstrating the way that CPS funds open enrollment and the way it funds selective enrollment. Finally, there are other staff members in schools who act as the mental health support for many students. These staff members may aid students in

processing and healing from traumatic events and the violence that they face. However, it is important to note that teachers are not primarily hired as mental health support and it is difficult to measure these connections through salary data.

Conclusions

Mapping gun violence is extremely important to determine which communities need trauma-responsive resources. As young people spend the majority of their time at schools, their schools need to aid in preventing violence and helping children who lose community members, or who themselves are harmed by violence.

These maps aid the arguments and demands presented by the #CopsOutCPS coalition. The coalition has already mapped the number of misconduct complaints on the record of each SRO and put out a report of the harm that SROs have caused to Black students and other students of color. People who advocate for the maintenance of the SRO program center their argument around the safety of students. These maps demonstrate that despite having SROs in schools, gun violence incidents that involve youth are still too high to be acceptable. This project also demonstrates that decreasing SROs in schools is not the only solution to keeping students safe, but it is a start. The data suggests that the SRO program does not decrease gun violence and therefore CPS should look at other solutions that prioritize safety.

Moving forward, to measure how effectively school funding is providing for the safety of students, gun violence must be considered. As a pressing issue in our communities and an

indicator of safety, people should strategize to uncover how funding directly affects the number of incidents that occur. Funding can be tracked throughout the years, and the number of gun violence incidents can indicate how funding affects the incidents that impact youth.

WORKS CITED

“Chicago Public Schools Employee Position File—Which Lists the Names, Job, Titles, Departments, and Salaries of All Full-Time CPS Employees. .”
<Https://Www.cps.edu/about/Finance/Employee-Position-Files/>, 2020.

“Chicago Public Schools Employee Position File—Which Lists the Names, Job, Titles, Departments, and Salaries of All Full-Time CPS Employees. .”
<Https://Www.cps.edu/about/Finance/Employee-Position-Files/>, 2021.

Chicago Police Department. “Current Employee Names and Salaries, Chicago Police Department.” 2020.

Chicago Police Department. “Current Employee Names and Salaries, Chicago Police Department.” 2021.

#CopsOutCPS: Chicago Students Demand #PoliceFreeSchools, 2020,
<copsoutcps.com/>.

“Find the Cops in Your School.” #CopsOutCPS, #CopsOutCPS Coalition, 2020.

Garcia, Kelly. “After a Failed CPS Board Vote to Remove CPD from Schools, Youth Activists Vow to Keep Fighting.” *The Culture*, The TRiiBE, 25 June 2020, <thetriibe.com/2020/06/after-failed-cps-board-vote-to-remove-cpd-from-schools-youth-activists-vow-to-keep-fighting/>.

to-remove-cpd-from-schools-youth-activists-vow-to-keep-fighting/.

“General Methodology.” *Gun Violence Archive*, Gun Violence Archive, <www.gunviolencearchive.org/methodology>.

Gun Violence Archive. “Gun Violence Incidents Involving Youth 12-17 Years Old from September 3rd, 2019 to June 16th, 2020.” Chicago, IL.

Gun Violence Archive. “Gun Violence Incidents Involving Youth 12-17 Years Old from September 8th, 2020 to April 18th, 2021.” Chicago, IL.

Kunichoff, Yana. *Chicago Approves \$33 Million School Police Contract*. 29 Aug. 2019, <chicago.chalkbeat.org/2019/8/28/21108769/chicago-approves-33-million-for-school-police-despite-student-criticism>.

Masterson, Matt. “Board of Education Renews SRO Contract With Chicago Police.” *Education*, Wttw News, 26 Aug. 2020, <news.wttw.com/2020/08/26/board-education-renews-sro-contract-chicago-police>.

Ortiz, Andrea, et al. CopsOutCPS Coalition, 2020, #CopsOutCPS. 14. *School Resource Officer Program Information*. Chicago Public Schools, 17 Aug. 2020,



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www.cps.edu/about/local-school-councils/school-resource-officer-program-information/.

Urban Inequality: On Fleeing and Returning to the City

Margaret Barnsley

My mother was born in Rosedale, Queens on November 7, 1967. Her mother, a homemaker, and her father, a ticketer for American Airlines at JFK, had both grown up in the Ozone Park neighborhood in Queens as the children of immigrant families. After marrying, my grandparents moved to Rosedale to settle down and raise their children. This neighborhood was solidly white and lower-middle-class, separated by the Belt Parkway, a highway built by Robert Moses, from the next neighborhood over, Laurelton. Laurelton, as my grandmother recalls, was a mixed neighborhood. She described it as “an exclusive neighborhood,” now becoming a home to well-educated and high earning Black people (Parisi).

Nevertheless, to my grandparents, this presented a problem. For sixth grade and above, Rosedale children would have to be bussed to Laurelton for school, as Rosedale did not have its own public middle school. While my grandmother recalls that Laurelton attracted highly educated and relatively high-earning Black families, she also recalls a presence of crime in the area, and did not want to send her children to the integrated school in Laurelton. My grandparents’ internalized racism and the racism inherent in the U.S. opportunity structure led them to flee the city, the diversifying area, and the integrated school. They fled to a white suburb in upstate New York called Carmel. There, my mother and her siblings attended an almost entirely white and very well-funded public school. With this education and the resources of her new neighborhood, my mother was able to become a first-

generation college student, then a first-generation law school student, and now a lawyer who works on Wall Street.

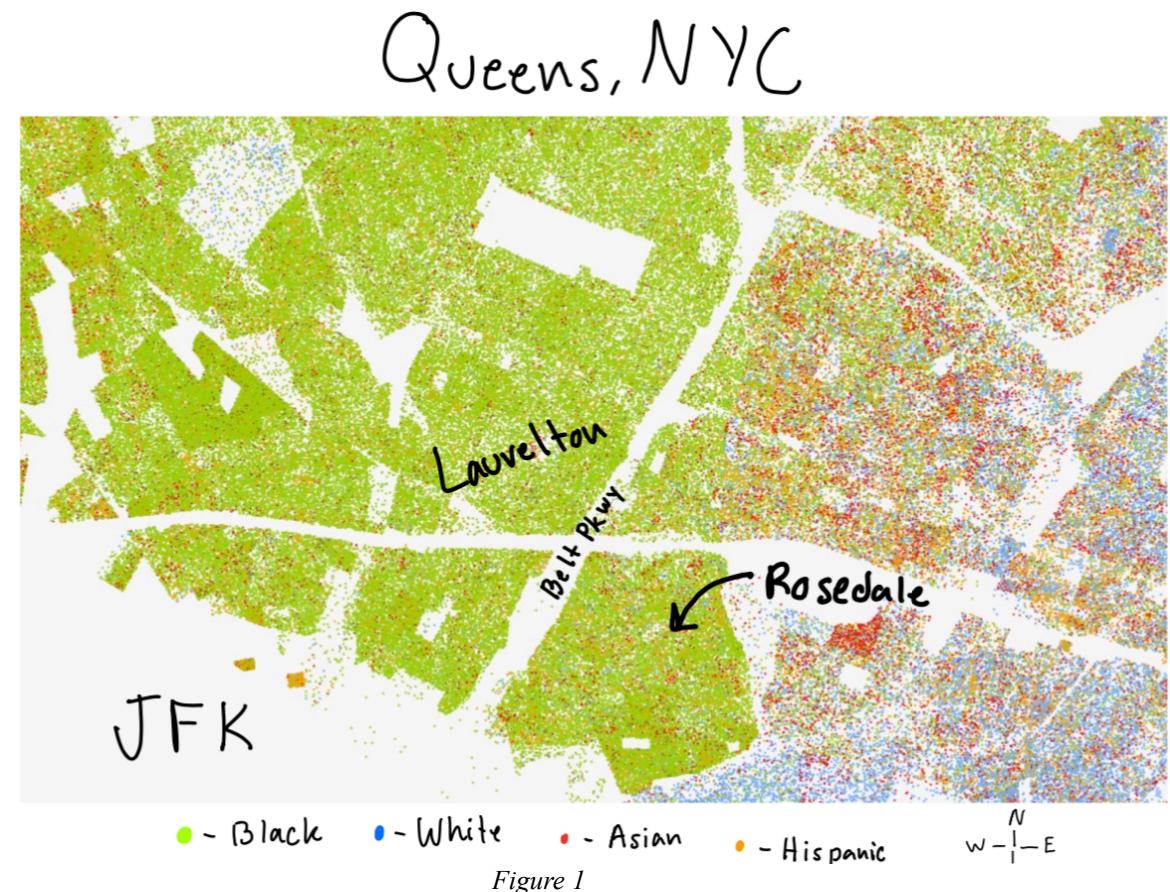
Today, I am able to attend Barnard because of this history. The incredible upward mobility my family experienced and the opportunities that led to it would not exist without the axes of inequality in New York City and the surrounding area. My white family’s wealth is subsidized by those who have had their wealth stripped from them. My childhood spent on the Upper West Side of Manhattan and my mother’s in Carmel are both predicated on the white flight New York City experienced, the subsequent complete depletion of resources to the city, and finally the deeply inequitable distribution of resources within the city today.

The opportunity to flee the city, as well as the very motivation to, was entirely based on race, our first axis of inequality. While my grandparents were lower-middle-class and could not afford to move to highly desirable suburbs like Westchester, they were still able to move, made possible by the mortgages revolutionized by the Federal Housing Administration (FHA). Their move was further facilitated by the FHA’s internal policy shift in 1966:

In 1966 FHA drastically shifted its policies with a view towards making much more mortgage insurance available to inner city neighborhoods. Ironically, the primary effect of the change was to make it easier for white families to finance their escape from areas experiencing racial change... The only people to benefit

were contractors and white middle-class homeowners. (Jackson 214)

Their move from the city in the early 1970s was almost certainly made directly possible by this policy shift. By no longer considering the “stability of the neighborhood in which the property was located”—in other words, the Home Owners Loan Corporation’s neighborhood ratings—my grandparents’ yellow-rated “definitely declining” neighborhood of Rosedale experienced some potential in the housing market for the first time in a while, allowing my grandparents to sell their house in order to move (Mapping). Even with this increased potential in the housing market, my grandmother still recalls difficulty in selling their Rosedale home, as well as the pressure to not sell to Black families. Today, Rosedale, along with Laurelton, is almost entirely Black as shown by the racial dot map in Figure 1 (ZCTA5 76126).



Carmel, on the other hand, is about 80% white and only 3% Black, telling a very strong story on how moving to the suburbs both made anew and solidified already-existent residential segregation (ZCTA5 10512). Relevant to my family history and New York City as a whole, race acts as an axis of inequality because it starkly and substantially divides people spatially, thus determining their opportunities. Had my mother stayed in Rosedale as crime rose, violence increased, and the city lost precious tax revenue, she would certainly not have had the same life path, almost certainly not being as upwardly mobile as she was. Her family's whiteness granted these opportunities to her, while Black families were left stuck.

Our second axis of inequality is class. With her two degrees and corporate job, my mother returned to the city as an adult, raising my sister and I on the Upper West Side of Manhattan. However, the city I experienced is very different from hers, with the lone modifier of class. While both of our neighborhoods in the city were overwhelmingly white, the neighborhood I lived and went to school in has a median household income of \$143,623 (ZCTA5 10024). Those white families like mine that returned to the city only did so with significant means, in stark contrast to the Black families still living in NYC who were stripped of their wealth, never able to leave. Today, New York City comes in second place for “most unequal county in the United States” with the top 1% making 113 times more than the bottom 99% of people (Sheridan). Class—deeply dependent on one’s race as demonstrated by the historical opportunity structure—then gives way to all sorts

of other inequalities. It is deeply predictive of one’s health outcomes and lifespan, it determines where you go to school, as institutions like Barnard and my primary school charge high tuition fees, but most importantly, it is predictive of what one’s future class status might be.

As inequality reproduces itself, it is solidified—further entrenched and made more exclusive, continuing to hoard resources in the hands of relatively small groups of people. As post-World War Two housing policy institutionalized racist thinking, installing deeply racialized class barriers all over the U.S., those barriers came to harden in the heart of my city over generations, defining both mine and my mother’s experiences as New Yorkers. These axes of inequality, as well as my family’s illustrative history, matter because they allow us to grapple with exactly where and how power hoards itself, and in turn, where it could be redistributed. Studying inequality allows for a space where that inequality might be lessened, and a better world built. My childhood spent in New York made possible by the ugly history of white flight has made me deeply indebted to New York as a place, as well as deeply in love with it. I, like many others, want to work to undo the effects of this racist history, and to fight for all the possibilities of what New York could be: more equal, more vibrant, and more just.

WORKS CITED

"How Are Income and Wealth Linked to Health and Longevity?"
Urban Institute,
<https://www.urban.org/sites/default/files/publication/49116/2000178-How-are-Income-and-Wealth-Linked-to-Health-and-Longevity.pdf>.

Jackson, Kenneth T. *Crabgrass Frontier: The Suburbanization of America*. Oxford University Press, 1985.
"Mapping Inequality." *Digital Scholarship Lab*,
<https://dsl.richmond.edu/panorama/redlining/#loc=14/40.668/-73.735&mapview=graded&city=queens-ny&area=C98&adview=full>.

Nourse, Hugh O, and Donald Phares. *The Impact of FHA Insurance Practices on Practices on Urban Housing*

"ZCTA5 10024." *Social Explorer Profiles*,
https://www.socialexplorer.com/profiles/essential-report/zcta5-10024.html#_tabEconomics

"ZCTA5 10512." *Social Explorer Profiles*,
<https://www.socialexplorer.com/profiles/essential-report/zcta5-10512.html#>.

"ZCTA5 11413." *Social Explorer Profiles*,
<https://www.socialexplorer.com/profiles/essential-report/zcta5-76126.html>.

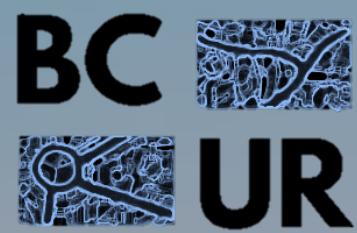
Markets in Transition.

<https://core.ac.uk/download/233190395.pdf>.

Parisi, Heidi. Personal interview. October 2nd, 2021.

"Pursuing the American Dream." *Pew Charitable Trusts*,
<https://www.pewtrusts.org/~/media/legacy/uploadedfiles/wwwpewtrustsorg/reports/economic mobility/pursuingamericaandreampdf>.

Sheridan, Johan. "Infographic Shows New York Has the Highest Income Inequality." *WETM - MyTwinTiers.com*, WETM - MyTwinTiers.com, 17 Sept. 2020,
<https://www.mytwintiers.com/news-cat/infographic-shows-new-york-has-the-highest-income-inequality/>.



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