Urban Planning and the Destruction of Black Neighborhoods in the United States

A Sociotechnical Research Paper presented to the faculty of the School of Engineering and Applied Science University of Virginia

by

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On my honor as a University student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments.

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Preface

There are over 57,000 miles of roadways that need to be maintained by the state of Virginia and the Virginia Department of Transportation. These roadways are crucial to transportation efficiency and the daily lives of the public. This University of Virginia spacecraft design capstone project will develop solutions to address Virginia's transportation problems using data fusion and remote sensing methods. However, the urban planning of these infrastructures did not consider the social aspects of minority groups.

The students in the Spacecraft Design Course at the University of Virginia were tasked with a problem statement that focused on developing solutions to alleviate weather-related traffic congestion and improving roadway efficiency and safety in Virginia by sending predicted weather and traffic data to roadway users through a combination of the state-of-the-art that includes a combination of spacecraft, aircraft, and ground-based systems. A summary of the problem assigned to the real time weather data sub team is contained. Following that, are the findings that emerged from meetings with key stakeholders and subject matter experts, a literature review, and an advanced analysis. The solution requirements, data streams, and solution approach pertaining to this project are included as well.

Minority groups have been overlooked when it comes to the development of infrastructure. It seems as if city planners, engineers, and architects did not consider the social aspect of the urban planning process. Mainly, Black neighborhoods were displaced, and their sense of community was disrupted due to the excess of urban renewal projects. This paper examines the effects of these urban renewal projects on Black communities using Vinegar Hill, a predominantly black community in Charlottesville, Virginia that was all destroyed due to an urban renewal project, as a case study

INTRODUCTION

Black Americans have experienced racism in many facets since this country's beginning. Within the past 80 years, this systemic racism shows itself in the urban planning of roadway infrastructure, which reflected and reinforced segregation. Since the 1940's the rise of the automobile was a response to growing road capacity. Alana Semuels (2016) uses an analogy in The Role of Highways in American Poverty that Joseph DiMento, a professor from The University of California Irvine, who studied highway construction, explains the reason behind the mass production of roadways. She says that policymakers thought that cities function as human bodies. The bodies had a disease, which were the amount of people buying cars. Due to the number of people who were moving and travelling to the suburbs of cities, a technological system needed to be created to transfer people from the heart to the body. Because of this, traffic was formed, and the cure was deemed to be the production of highways (Semuels, 2016). Black Americans were victims of systemic racism such as redlining, and residential segregation. These racist acts prohibited Black Americans from freely living in areas of interest, due to denied loans, and lack of job opportunities. Therefore, this left part of the city overpopulated with black people. Furthermore, city makers thought that the overpopulation was a problem and, in many cities, built infrastructure through these neighborhoods, clearing people of color from them (Semuels, 2016).

The consequence results in black neighborhoods being displaced, destroying the sense of community within these areas. This problem shows how the black citizens of the United States have been oppressed and discriminated against no matter the circumstances. The problem does not receive much recognition, but it is necessary to address how the production of roadway infrastructure in the United States led to the destruction of black neighborhoods, in order to

create solutions that can prevent this from continuing. Although one would not adjudge infrastructure as political, its urban planning caused problems in minority communities, deeming this issue diplomatic. Black Americans lost their homes, businesses, and communities due to the establishment of roadway infrastructure, which can be modeled under the techno-politics framework.

REVIEW OF RESEARCH

SYSTEMIC RACISM: THROUGH THE YEARS

Infrastructure has more than a technological purpose and it can affect social groups negatively. There are many documented instances which proves that infrastructure is typically built-in low-income areas, typically where the population of black Americans are high, segregating them from higher income neighborhoods. In the midst of the events that surpassed in the 1940's was the decentralization of populations. Thus, causing the suburbs to grow. Mohl (2001) suggests that southern black citizens migrated to the "promise land" of urban America, causing demographic shifts within politics, economies, and residential outlines (pg. 8). Racial segregation was still dominant during this time, and Black Americans moving to the central cities made that even more prominent, while also increasing the demand for housing options. Practices such as redlining, residential segregation were used to maintain racial zoning. Bleeding into the next twenty years, racial zoning continued with the rise of the black population in central cities causing changes with urban development policies.

Urban renewal and interstate expressway construction usually targeted inner-city black areas, demolishing housing on a massive scale. By the 1960s, for instance, federal highway construction alone destroyed some 35,000 housing units each year...in 1954, over

400,000 residential units had been destroyed in the inner cities - a process that soon came to be labeled 'Negro removal'" (Mohl, 2001, pg. 13).

This example gives great detail of the history Black Americans had to face in terms of racial zoning, and technology being used as a means of segregation.

Based on Joseph F.C. DiMento et al. (2013) Changing Lanes, infrastructure projects in the mid 90's caused many Americans to relocate, especially Black Americans as urban planning was punitive towards them and supplanted their neighborhoods. Although urban planners, engineers, and architects were trying to solve issues regarding congestion in central cities, they lacked consideration of the lives and communities of the Black American living in the areas where these expressways were built. Many people fled inner cities for a suburban lifestyle, giving room for planners and politicians to redesign old cities centers. "Building a new network of high-speed roads atop the old city grid seemed a critical part of this metamorphosis" (DiMento et al., 2013). Planning of freeways did not gain support until the 1950's in hopes of accommodating the rise of the automobile. DiMento et al. thus denotes that three things arose from urban planning regarding race: segregated suburbanization, displaced Black Americans, and disproportionated non construction costs, such as "blighting effects, noise, pollution, visual intrusion, community disruption" (2013, pg. 126). Subsequently, in Changing Lanes, Dimento et al. explains instances of this systemic racism in Chapter Six Urban Freeway Tales: Three Cities among Dozens, one of which is the tale of Vieux Carré Riverfront Expressway. The mastermind behind this project is Robert Moses, an infamous racist urban planner. He planned to construct a freeway in the Vieux Carré District in order to create more street space for docks and warehouses, however the pan failed to be implemented (DiMento et al., 2013). Although this

plan failed to go through, another one was implemented, I-10, which displaced many Black businesses and citizens in 1966 in the North Claiborne area of New Orleans, Louisiana.

Detroit's 8 Mile neighborhood in the 1940's where a wall was built to segregate black Americans from a white neighborhood (Miller, 2018). Capturing the audience with a personal story of an 8-mile community native from Detroit, Teresa Moon, Miller outlines how she had no clue of the purpose of the wall built in her community. As she got older, she realized it was built in the 1940's in order to segregate two communities of different race. An occurrence of when infrastructure destroyed a neighborhood is seen in the mid 1950's when President Eisenhower enforced the road building campaign.

The plan, as outlined by President Eisenhower, would urbanize rural areas due to the increase of roadways, and would provide jobs in construction and manufacturing, therefore acting as a needed tool. However, African Americans were negatively affected by these implementations of the Interstate Highway System because typically the roadways built, were built through black communities, destroying that sense of community (Karas, 2015). Riots broke out in Tennessee once it was announced that interstates would be built in the city of Memphis, while destroying a park in the process. Protestors were able to convince the city's policy makers to not destroy the park and therefore, they decided to build through black neighborhoods, therefore destroying a sense of community and safe haven for Black Americans.

STS FRAMEWORK: TECHNO-POLITICS

Technology has politics and can govern the lives of those with direct contact. In *Does Artifacts Have Politics*, Winner (1980) argues that artifacts have politics by giving two case studies as evidence. He says that artifacts can either be designed in order to solve a problem in a

community, or that they require, in order to survive, political relationships. Winner supports these claims with two case studies, and one focuses on the design of bridges that resulted in the exclusion of minority groups from recreational areas. Winner draws from Robert A. Caro's biography of Robert Moses and offers evidence of Moses' social class bias and racial prejudice and how that informed the bridge design. Moses specifically built highways and bridges in hopes of prohibiting Black Americans and poor people from enjoying the benefits from recreational areas in Long Island, New York. Winner says that architectures and other planning of cities and public areas can provide many examples as to how physical arrangements can contain implicit or explicit political purpose (Winner, 1980, p.124). Winners claims and perspectives on technology can be seen in other examples such as the Detroit Mile Neighborhood, or the black neighborhoods in Tennessee. These examples show how technology exert political will and control segments of the populace differently through the design of technological infrastructure.

Similarly, Rider Foley et al (2020) states that cities are shaped by "architectural standards and building codes" (pp. 309). He goes on to say that cities are like hubs that governs everyday life with the use of techno-political activities. Urban planning decisions made are for long term results that affect current and future residents. In the case of black neighborhoods, urban planners sacrificed black communities for the development and capitalist formation of cities.

"Techno-politics are often developed and performed by technopolitical regimes that are 'grounded in institutions, and [they] consist of linked sets of people, engineering and industrial practices, technological artifacts, political programs, and institutional ideologies which act together to govern technological development and pursue technopolitics' (Foley et al, 2020, pp. 310).

With techno-politics in the lens of urban planning comes technological risks. Moreover, urban planners risked destroying black neighborhoods and succeeded in doing that during the rise of highways. Political power exists in infrastructure, especially when it comes to segregation: race, ethnicity, and social status.

The framework, as outlined by Winner and Foley, addresses issues of past technology possessing racial biases towards specific groups, which is why it serves as a model for the research problem. Techno-politics is presented as a socio-technical approach to analyze if and how technology governs society. In this specific case, it can show how roadway infrastructure was used as a means to segregate communities. This framework is crucial in understanding two case studies that are based in Charlottesville Virginia, regarding black neighborhoods being destroyed in the urban planning of infrastructure.

Prior research failed to state where Black Americans were displaced to. If they moved as a unit to other areas or were the dispersed throughout the city. Prior research also failed to give a visual representation of the racial zoning that happened at the beginning of urban planning, which would help prove that this problem exists. Using the techno-politics framework and two case studies addressed, techno-politics can be modeled in discussing the events that surpassed and help give a better understanding of the problem. Visual mapping and geographical analyses will be able to show the aftermath of the inconsideration of urban planning, while further research will be able to depict how task forces are handling this problem currently.

URBAN PLANNING AND TECHNO-POLITICS

VINEGAR HILL NEIGHBORHOOD: HISTORY

In 1965, the city of Charlottesville decided to destroy the Vinegar Hill community, as it was located in between the University of Virginia, and downtown (Smith, 2017). Kathy Johnson Harris, a former resident of this community, provides a first-hand response saying that she remembers her mom giving orders to movers on what to do with their belongings. "But the house was stated to be bulldozed by the city of Charlottesville, as were 139 other black families' homes, 30 black-owned businesses, and a church in the Vinegar Hill neighborhood" (Smith, 2017, para. 3).

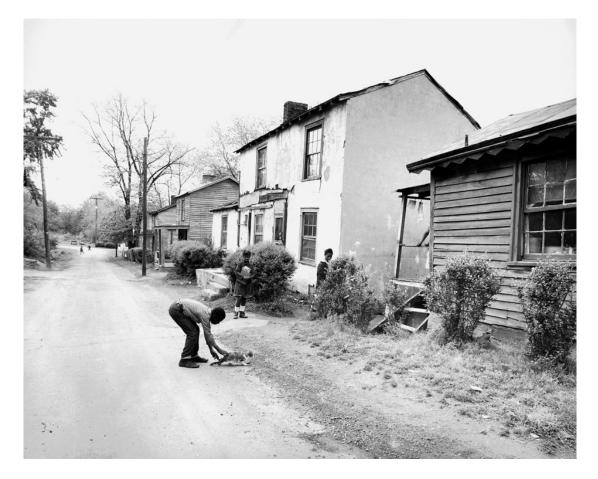


Figure 1: Vinegar Hill before the demolition. Photo: Albemarle Charlottesville Historical Society

Smith also states that there were many businesses such as restaurants, a night-club, clothing stores and more (2017). Vinegar Hill was a thriving black neighborhood. However, due to its valuable land, it was stated to be suitable for better homes and businesses, and wider roads. After Vinegar hill was demolished, the land remained empty, and much of the property became parking lots (Smith, 2017). This causes one to raise an eyebrow at the true meaning to the destruction of this thriving Black neighborhood.

From an interview with Mrs. Kathy Johnson Harris, she tells the story from her perspective. She mentions that there were some residents of the neighborhood that didn't have household toilets, and that was one of the reasons city officials deemed the area unsanitary and unsafe. However, everyone's yards and houses were kept up, and the ones that were less appealing were those of white landlords. She states that the "neighborhood was destroyed, and a sense of community was gone." (Kathy Johnson Harris, 2021). Continuing on, she said that many residents from Vinegar Hill moved into West Haven, which many residents thought was a step up from the Vinegar Hill. Mrs. Harris mentions that her family went to view the new housing, but decided to buy their own land, because it was smaller than the house they previously had. Also, she said that her father would check on the people they knew who moved there, but the sense of community was not the same.



Figure 2: Vinegar Hill Before and After Demolition Photo: Sean Tubbs

Racism was very prominent when Vinegar Hill was destroyed. Mrs. Harris says that her father tried to fight the city about the project but did not have enough power. The poll taxes were so high that individual people did not have enough money to do anything, and many Black Americans were blocked from having a vote or say in the decisions of the urban project. She says that the city officials deemed the 20 acres of land was very important and wanted to create a new urban area for the town, but she believes that the university did not want white students to have to walk through a Black neighborhood to get downtown.

RESULTS

The city officials of Charlottesville used the "widening of roads" as a means to destroy a thriving Black Community, thus supporting the fact that technopolitical regimes govern technological development. Urban renewal projects were the result of 800 black communities being displaced by 1962. From an interview with Sean Tubbs, he states that engineers did not think much of the societal impact of their actions, and that the city council did not have the best intentions when it came to urban renewal projects, that were set to be developed in lower income areas (Sean Tubbs, 2021). The residents of Vinegar Hill had housing accommodations; however, they were run down by mid 1980's (Smith, 2017). Plus, the sense of community was not the same (Kathy Johnson Harris, 2021). Vinegar Hill lies in between the University of Virginia and Downtown Charlottesville, and now home to many shops and businesses and acts as a main road for Charlottesville residents.

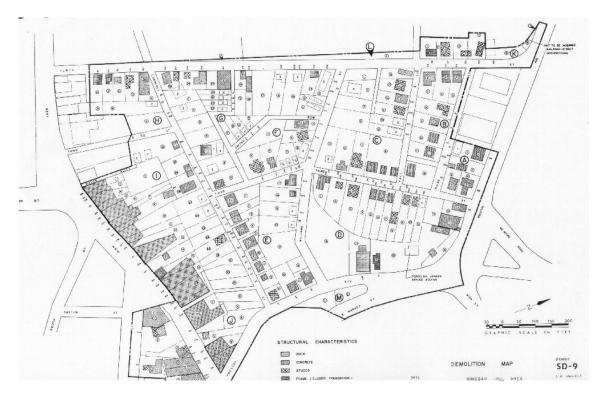


Figure 3: Demolition of Vinegar Hill in 1965. Source: Charlottesville Housing Authority

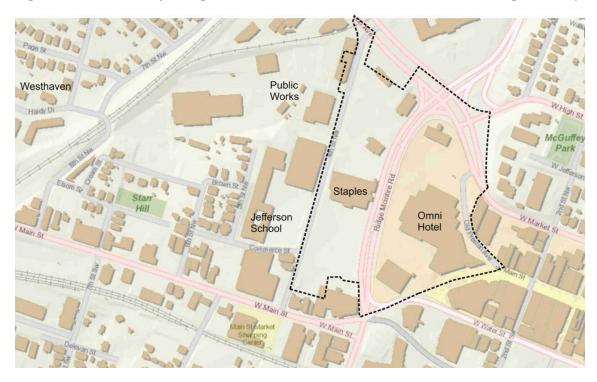


Figure 4: Demolition of Vinegar Hill in terms of Current Charlottesville

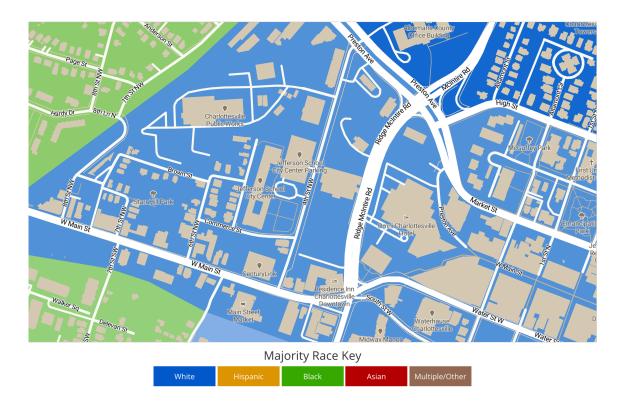


Figure 5: Charlottesville by Race Currently: Source: Best Neighborhood.Org

The demolition of Vinegar hill displaced black Americans, but the racism still exists. This case study goes to show how racism was embedded in technopolitical decisions and can simply be seen by the figures above. The area has been commercialized, and filled with homes, businesses, and communities that are dominated by those of White descent. Kathy Johnson Harris, the resident from Vinegar Hill is still active in a task force that is seeking to make recommendations about federal funding for infrastructure designated for Ridge Street, which is immediately south of the intersection with Main Street in Charlottesville. Although she is helping on this task force, she still feels as though the City of Charlottesville is not considerate of Black Americans. The areas where Black Americans live where they once were not allowed to such as: Cherry Avenue and Main Street, most of them are renting and only making \$30,000 to \$35,000. Therefore, many people of color live in the Monticello area, because they can afford housing (Kathy Johnson Harris, 2021). It is almost as if the city of Charlottesville does not want black citizens within its' city limits.

Although she was a victim of racism and continues to see racism moving within the city of Charlottesville it is a pleasure to witness that there are people who are being considerate with the power they possess. Kathy Johnson Harris uses her power to do good for the community in Charlottesville in light of the events she, her family, and other members of Vinegar Hill went through. She says that her task force, specifically, asks citizens what kind of things they would want to see in infrastructure in their communities, making It very inclusive, something members of Vinegar Hill did not have the option to do.

CONCLUSION

As outlined by prior research and the Vinegar Hill case study, many Black neighborhoods were destroyed under the excuse of urban renewal. In each example, minority groups were put out of their homes, and lost their communities due to technology. Thus, this topic supports that technological artifacts has politics as outlined by Winner and Foley, and as seen from the past, many individuals with the power to govern these technological artifacts did not have the best interest for minority groups, especially those of black descent. As mentioned, there exists a task force in the Charlottesville community that seeks to help citizens that cannot afford standard housing, but there also exists other groups and institutions with the same mission such as The Equity Center at the University of Virginia, and the Interfaith Movement Promoting Action by Congregations Together whose missions are to address systemic injustices and inequity in both the University and Charlottesville communities. These groups and task forces also seek to stitch together these different communities, forming unity between them.

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