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SHINY OBJECTS, HIDING PLACES: EXAMINING COMMUNITY-ENGAGED DATA PRACTICES IN LEXINGTON, KY

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SHINY OBJECTS, HIDING PLACES: EXAMINING COMMUNITY-ENGAGED
DATA PRACTICES IN LEXINGTON, KY

THESIS

A thesis submitted in partial fulfillment of the
requirements for the degree of Master of Arts in the
College of Arts and Sciences
at the University of Kentucky

By

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ABSTRACT OF THESIS

SHINY OBJECTS, HIDING PLACES: EXAMINING COMMUNITY-ENGAGED DATA PRACTICES IN LEXINGTON, KY

As local governments increasingly turn to data-driven solutions to help address some of their most acute challenges, from entrenched poverty to affordable housing, they often call on community-engaged researchers as collaborators, analysts and experts. While critical scholarship has highlighted the problematic logics underpinning this turn to data and digital technologies as the solution for urban issues, university-community partnerships offer a unique opportunity to further explore not only how these discourses materialize, but also how they are being actively negotiated and re-imagined in spaces of local government.

In this thesis, I explore one such university-community partnership and its efforts to critically apply data-driven narratives to discussions of gentrification and affordable housing in Lexington, KY. Examining the positioning of academic contributions, the centrality of politics within urban planning processes, and the need to interrogate the securitization of whiteness within data-driven narratives, I ultimately argue that embracing data as inextricably saturated with power and politics creates possibilities to enliven a more progressive praxis that resists the certainty of a stratified, unequal and gentrified city. Importantly, this requires data practices that move beyond simply acknowledging the presence of power and politics, to actively, and indeed critically, embracing their very imbrication with data.

KEYWORDS: affordable housing, critical race theories, smart cities, university-community partnerships, urban planning

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05/01/2020

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CHAPTER 1. INTRODUCTION

Good data is the foundation of good decision making. At least, that is the assumption. In this thesis, I take on this assumption to explore the tensions and possibilities that emerge when data-driven narratives are used to inform politically charged decision-making processes within urban planning. More specifically, I examine how a local government task force in Lexington, KY turned both to data-driven solutions to navigate conversations of gentrification and affordable housing, and how they embraced community-engaged researchers as their data collaborators, analysts and experts. Building upon critical scholarship that has highlighted the problematic logics underpinning this turn to data and its associated digital technologies in urban governance (Elwood 2020; Leszczynski 2016; Safransky 2019), I explore this university-community partnership as a lens to further examine not only how data-driven discourses materialize, but also how they are being actively negotiated and re-imagined in spaces of local government.

In doing so, I delve into and trouble the statement that “while a shiny object, data is also a hiding place”. Expressed to me during an interview, this statement embraces many of the conflicts at the heart of this thesis. The objectivity, neutrality, and magnitude of data make it an alluring avenue for emotively and politically charged conversations of gentrification, inequality and social justice. But, these shimmering qualities also disguise the politics and power dynamics underpinning these very conversations. Rather than discounting these two qualities as irreconcilable and abandoning data-driven processes, I instead ask, what happens when we uncover and meaningfully account for these hiding places? What types of power and politics do they hide? Who do they hide? How does uncovering these very places create opportunities for data to be truly shiny, not simply

gilded? Exploring these questions throughout this thesis, I ultimately argue that embracing data as inextricably saturated with power and politics creates possibilities to enliven a more progressive praxis that resists the certainty of a stratified, unequal and gentrified city. Importantly, this requires data practices that move beyond simply acknowledging the presence of power and politics, to actively, and indeed critically, embracing their very imbrication with data. This requires us to flip the framing of our statement: while data has hiding places, it is also shiny.

1.1 The Affordable Housing Crisis

Securing safe and affordable housing is one of the most pressing issues currently faced by cities across the world. The United States alone is experiencing high rates of evictions, rising rates of homelessness, and periodic and systematic displacement and dispossession of structurally vulnerable populations. Although it is true that America is no longer witnessing the rates of foreclosure experienced after the collapse of the 2008 housing bubble, contemporary cities remain irrevocably marred by the flows of real estate capital. In fact, urban geographer Samuel Stein (2019) has argued that cities are increasingly run by the real estate state: a powerful political formation in which real estate capital has inordinate influence over the shape of cities, parameters of politics, and the lives we lead. This means that public policies increasingly contribute to raising property values and are operated under a logic where the continuing growth of the real estate market is not just good, but “growth is God” (Stein 2019: 39).

Importantly, however, concerns over safe and affordable housing are not limited to cities that are experiencing unprecedented growth or increases in affluence. While much scholarship exists on gentrification (see for example Brown-Saracino 2010; Lees, Slater,

and Wyly 2010), the same processes that lead to displacement in cities like New York, Los Angeles and Seattle are also creating huge vacancies, zombie properties and city blocks cut through by housing demolitions in Detroit, Syracuse, Cincinnati and elsewhere. In other words, while often viewed as separate, gentrification and urban blight are intertwined processes underpinned by the profit logics of the real estate market and its interlocking racial capitalism (Elwood, Lawson, and Sheppard 2017; Gilmore 2007; Robison 2000). I use the term racial capitalism to highlight the ways in which racism is not merely a consequence of unequal social relations structured by capitalism, but rather that the emergence, development and organization of capitalism itself rests upon racialized inequalities. Such an approach calls attention to the ways in which capitalism is sustained by systemic inequality that is not only a matter of class, but also race. This is evident, for example, in lists that consistently cite Syracuse, NY as one of the most affordable and attractive places to live, especially for white, middle-class families. This is despite the fact that Syracuse also tops lists on rates of concentrated and entrenched poverty within communities of color, under performing schools, a city governance on the verge of financial collapse, and is struggling to grapple with the devastating community-wide effects of violence and gun crime (see for example Herbert 2017 and Breidenbach 2018). While indeed Syracuse leaders and community residents are actively grappling with these tensions, they nevertheless reveal the underlying connections between growing affluence, structured inequality and the ripples of racialized investment and disinvestment.

For moderate to low-income households, the affordable housing crisis has resulted in increased precarity and uncertainty. Rising taxes, aggressive uses of code enforcement, an influx of short-term rental properties, and predatory realty and lending practices, to name but a few symptoms of the housing crisis, are all contributing to an environment of fear, hostility and insecurity. For rental households, these concerns are further magnified due to legacies of neglect and marginalization in federal housing policies (Dreier 1982; Rothstein 2017; Shlay 2006). Tied to the American Dream and imbued with often highly problematic framings of morality and white heteronormativity (Cross 2000; Harris 1993; Stern 2011), homeownership and closing the homeownership gap has for decades been the gold standard of U.S. federal housing policy and advocacy (Correa 2014; Shlay 2006). For renters, this has meant that more funding has flowed to homeowners, while rental housing subsidies remain underfunded, undervalued, and as such rental housing remains highly volatile and exploitable.

Indeed, while there is much to be said on the effects of rising housing prices on homeowners, perhaps the most significantly impacted, but still underserved population is renters. This is evident in the federal income tax law that allows all interest payments, including mortgage payments, to be tax deductible and therefore subsidizes homeownership. One of the country's costliest tax expenditures, this tax policy is exceedingly regressive, incentivizing the purchase of larger homes and thus more costly mortgages. It also widens the economic gap between tenants and homeowners, because the rental housing market forces renters to pay a higher proportion of their income not only for housing, but housing of a lower quality (Dreier 1982; Glaeser 2010; Powell 2008; Stern 2011). For instance, a 2016 report by the National Low-Income Housing Coalition

(NLIHC) found that in no U.S. state, metropolitan area, or county could a full-time worker earning the prevailing minimum wage afford a modest two-bedroom apartment. In order to afford said apartment, a worker must earn \$20.30 per hour; \$5 more than the average hourly wage of U.S. renters. Thus, to afford rent, tenants are often faced with substandard housing conditions, including older homes and those with structural or mechanical deficiencies.

Responses to the affordable housing crisis have been numerous and diverse. In New York City, for example, anti-displacement organizing has created multilingual and multi-ethnic coalitions that unite together residents in multiple buildings in order to support tenant leadership, rights workshops, and legal actions against management companies when necessary (Agnani 2019). Such grassroots work proves vital in combating the increased vulnerability tenants face when navigating language and cultural barriers with wealthy and predominantly white landlords. In California, a state-wide ballot campaign resulted in overwhelming support for \$6 million worth of funding to support affordable and supportive housing for low-income people and those struggling with mental illness and chronic homelessness (Kausar 2019). Outside California, voters in eight states weighed in on various housing measures, demonstrating its importance as the U.S. enters its presidential election season. Embracing more anti-capitalist perspectives, Amanda Huron (2018) examines how cooperative organizations in Washington D.C create and maintain space and build communities that pragmatically challenge profit logics. Such perspectives become increasingly more important with the threat of COVID-19 drastically reshaping daily lives across the globe. Attempting to prevent the displacement of tenants and low-income residents facing increased precarity in this uncertain time, cities across the country

have implemented eviction moratoriums. While an exceptional example, these efforts build upon more longstanding tenant organizing, rent strikes and anti-eviction activism taking place across the country. These actions represent the continual and ongoing efforts to disrupt racial capitalism and secure affordable housing for all.

1.2 Affordability in Lexington, KY

Although these narratives of gentrification, affordable housing and its associated resistances proliferate, this study centers the experiences of community members, non-profit and real estate actors, and political leaders in Lexington, KY. In doing so, I engage with broad concerns surrounding affordable housing, while also countering the often-limited ways in which the American South is featured within these narratives. Often undertheorized as a space to critique, challenge and study questions of racialized development, I situate this study within and alongside the scholarship on black geographies to challenge the normalized regionalism, geographic containment and temporal stasis attributed to the American South as it is embedded within the North-South, white-black, progressive-racist binary (Eaves 2017; McKittrick and Woods 2007; Woods 1998).

With a population of approximately 320,000 individuals, and a combined statistical area of nearly 900,000 people, Lexington is perhaps most well-known for its thoroughbred horse racing industry. Contributing heavily to the local economy, the influence of horse farming is visible both in the fences that line the rolling hills of the city's surrounding countryside, and in the city's management strategies that actively steer development away from soils well-suited to equine operations (Phillips 2015). The city is able to do this through an urban service boundary that not only actively supports the horse industry, but also prevents urban sprawl to maintain a fiscally responsible budget. The first growth

boundary to be established nationally in 1958, Lexington's boundary essentially incentivizes infill and redevelopment projects that are compact and increase housing density. Although such strategies are often celebrated as environmentally conscious, the boundary remains a contentious local policy because some suggest that by incentivizing infill it also creates an artificially produced housing scarcity. This scarcity raises housing prices and contributes to gentrification and subsequent displacement and dispossession. Importantly, however, this does not mean that the city should abandon its boundary. Instead, it requires more proactive policies that mitigate rising costs and secure affordable housing for all.

Before moving to some of these policies, I first want to situate contemporary concerns over gentrification and affordability within the history of development in Lexington. Again, this need to do so recognizes the ways in which gentrification and urban blight are interlocked and relational processes underpinned by racial capitalism. Cultural and urban geographer, Richard Schein (2012) argues that the urban morphology of contemporary southern cities is deeply imbricated with and demonstrative of historic and social practices of racial formation. In other words, urban geographies not only inherit past residential patterns, but in doing so, also demonstrate how evolving urban morphologies have been crucial to constituting racialized identities. Schein (2012) argues, for example, that in Lexington the history of racial formation is visible in the ways in which street blocks have been periodically cut, re-divided and spaced. While the city's first plat was laid in the 1790s, the antebellum period saw larger city blocks, first built to accommodate semi-agricultural residences alongside slave quarters, cut through by alleys and populated by more modest shotgun homes that accommodated freed enslaved peoples. While Schein

suggests that these alleys demonstrated the first signs of black concentration in the landscape, following the Civil War black populations moved to the outskirts of the city to establish African American towns such as Adamstown, Pralltown, Kineadtown, and Smithtown.

These towns would later abut highly segregated white communities and, during the Jim Crow era, the demarcation between the two was highly enforced both through policies such as restrictive covenants and with stone gates that acted as physical barriers. Following white flight, African American towns expanded into these newly abandoned city spaces, until they were marked for demolition, redevelopment and clearing with the urban renewal projects of the mid 20th century. Now, the alleyways, the African American towns, and their valuable proximity to a growing downtown area, are the sites of gentrification, infill and redevelopment. Taken together, these transitions demonstrate not only how gentrification is situated within periodic legacies of urban transformations, but also how such patterns are informed by and continue to shape the formation and cementation of racialized identities as underpinned by racial capitalism.

Recognizing the weight of this legacy, and its importance to contemporary concerns of affordable housing, the Lexington Fayette Urban County Government (LFUCG) have begun to more seriously tackle questions of equitable development. For example, beginning in 2014, LFUCG commissioned the consultancy firm, czb, to comprehensively study Lexington's affordable housing challenge (according to this report, it was not yet a crisis). This report stated that, again in 2014, the city's affordable housing gap was 6,000 households, most of whom include at least one wage earner. Growing at an average rate of 400 units every year, the affordability gap was attributed to two root causes: 1) the cost of

prosperity as a strong local economy attracts businesses, residents, and contributes to rising prices, and 2) a legacy of stagnating wages for low-skilled workers. Proposing a variety of potential funding and programmatic solutions, the affordability report argued that no matter how the gap is closed, the unit cost was approximately \$6,000 per year, per household. In other words, to close the affordability gap would require a total investment of \$36 million per year, with an additional \$2.4 million every year to keep the gap closed. Again, this report attributes the affordable housing challenge to a strong and thriving local economy and as such the authors argued that “the issue is not whether Lexington can zero out its affordable housing gaps and keep them narrow, but whether it wants to badly enough” (23).

Complimenting the findings from this report, additional sources have further highlighted the challenges facing Lexington community residents in their search for safe and affordable housing. For example, a report commissioned by the Lexington Fair Housing Council sheds light on the scale of evictions across the city. The report states that:

“between 2005 and 2016, 43,725 residential evictions were carried out across Lexington, equivalent to a citywide average annual eviction rate of 6.33%. Taking into account estimates that just one in three evictions are captured in official court records, as many as 19% of Lexington renter households could be evicted in the average year. Unlike foreclosures [which grew exponentially with the foreclosure crisis, but have since decreased and stabilized], the number of evictions has remained largely stable over the last twelve” (Shelton 2017: ii).

The burgeoning national focus on evictions has highlighted a complex reality for low income households as they struggle to not only find safe and affordable housing, but also as they strive to remain stable and rooted in place, particularly as the rental market is increasingly subjected to predatory financialization strategies (Fields 2017; Fields and Uffer 2016; Sugrue 2018). Adding to this narrative, is an additional concern over who benefits from rental property investments and how does the flow of capital contribute not

only to the concentration of poverty, but also to essentialized and racialized narratives often attributed to these very spaces (Shelton 2018). While these challenges are increasingly subjected to public debates and scholarship, more research is needed to understand where evicted and displaced families are moving to, especially as they are priced out of previously affordable neighborhoods.

In response to these reports, and in conjunction with conversations emerging around equitable development, the LFUCG supported the establishment of an Affordable Housing Trust Fund (AHTF). Created in 2014, the mission of the AHTF is to leverage public investment to preserve, produce, and provide safe, quality, and affordable housing for households at or below 80 percent of area median income (\$59,600 for a family of four in 2019). The AHTF was created with an initial allocation of \$3 million from Lexington's general fund budget, with an adopted ordinance supporting annual allocations of at least \$2 million for four years. Importantly, while the trust fund has received funding allocated in the mayor's budget each year following its creation, the city has not yet dedicated a revenue source (which was recommended in all reports) and as such the trust fund holds a relatively precarious position as the government increasingly focuses on tightening their annual budget.¹

In terms of the impact of the AHTF, informal data, shared with Mapshop by the AHTF Director, suggests that 1,431 affordable units have been funded, averaging \$9,000 of public money per unit, since 2014. Of the total \$13 million budget, approximately 51% has been awarded to for-profit developers and the project solicitation process continues to

¹ In the wake of COVID-19, and substantial projected revenue shortfalls, the Mayor's proposed city budget places the Affordable Housing Trust Fund in greater precarity, cutting its annual allocation from \$2 million to \$200,000. With \$400,000 in reserves, it is assumed that this support is enough to fund a singular multifamily project (Musgrave 2020).

allocate money based on applications rather than set priorities or geographic areas. More detailed information on the trust fund monies and its impact is said to be forthcoming following a more official audit.

1.3 Neighborhoods in Transition (NT) task force

Although establishing the Affordable Housing Trust Fund (AHTF) is a significant step in closing the affordable housing gap, city leaders remained concerned that its creation left unresolved broader questions of equity. Thus, in May 2018, the Vice Mayor, Steve Kay used his executive powers to convene together a task force on Neighborhoods in Transition (NT). Comprised of approximately 30 members including political representatives, non-profit leaders, developers, and community residents, the NT task force is charged with “identify[ing] ways to protect vulnerable residents from the consequences of neighborhood redevelopment and transformation, especially displacement, with an emphasis on preserving the history and the culture of communities” (for more details on the task force members and intent see the NT scope of work 2019). The chair of the task force is Councilmember James Brown; the city representative of the 1st district, Lexington’s most diverse and historically black constituency. The credit for pushing the task force to consider questions of equity is often attributed to James Brown and his efforts to ensure that race is not left off the table in discussions of investment.

The name of the task force is significant, and it has been an ongoing topic of debate. While many continue to colloquially refer to the task force by the term gentrification, the task force leaders have been extremely consistent in pushing back against this framing as both too limited and too divisive. It is too limited, they suggest, because the term gentrification does not account for its positioning and embeddedness within larger cycles

of investment and disinvestment that extend beyond contemporary concerns for gentrification. It is too divisive, they further argued, because gentrification is associated with negative stereotypes that people preemptively bring to and associate with conversations of urban change. These stereotypes it was deemed might prevent the task force from having meaningful and engaged conversations on the changes underway in the Lexington community. Nevertheless, critics, both on task force and in the community at large, have argued that avoiding the term gentrification undermines the progressive lens of the task force, is ultimately only a political strategy, and that using the term transition distances the task force from a wealth of academic and public scholarship. While all of these claims have some merit to them, the task force continues under its banner of transition.

In alignment with using the term transition, there have also been considerable efforts to make sure that the task force represents a diverse cross segment of the community, including convening together private investors and community residents. Of course, while inclusive in scope, the task force ultimately remains mindful of the voices that need to be at the table to secure votes. However, as the task force approaches finalizing draft recommendations in the spring of 2020, it became increasingly clear that some residents' concerns will remain isolated from the task force despite the expansive umbrella of transition. This may have been further complicated because while insisting that the task force was addressing transition and not gentrification, the task force members could not easily agree on a definition of transition, beyond identifying that the displacement of vulnerable populations, and preservation of community history and culture were the main factors that they wanted their work to address.

Although preventing displacement and prioritizing preservation were the NT task force's broad goals, their scope of work more clearly identified their intentions. It highlights six main goals:

1. Identify existing resources.
2. Provide information/education to residents about homeownership/renting and the comp plan, new process (rural/urban/suburban).
3. Foster relations with residents and developers.
4. Identify ways to protect and empower residents to learn about the history of a community.
5. Identify characteristics of vulnerable neighborhoods.
6. Develop policies/programs that support and empower residents and neighborhoods.

To meet these goals, the NT task force balanced two approaches. The first was the need for public forums that prioritized the experiences and concerns of community residents. The second was a data-driven approach that highlighted the need to compare community concerns with evidence-based understandings of gentrification, transition, and its best practices with urban policy. This work pulled on the data collected by various city departments and the expertise of university affiliated academics.

1.4 Mapshop

It is here where I entered the space of the NT task force through the lens and work of Mapshop. Established in 2014 as an initiative at the University of Kentucky, Mapshop attempts to leverage the technical resources and the expertise of students and faculty in the Department of Geography to support community partners with mapping and visualization

needs. Underpinned by experiments to integrate participatory action research with GIS pedagogy (Elwood 2009), Mapshop brings together students, faculty, and community partners through a connected university course, GIS Workshop (GEO509), and student research assistantships. These two intertwined modes of engagement allow Mapshop to provide more reciprocal training opportunities for campus and community members that expand beyond the confines of the classroom and the academic semester. In the winter of 2019, Mapshop, consisting of a team of one faculty member, one graduate research assistant, and several undergraduate students, was invited to partner with the NT task force to offer data and mapping assistance as the task force collectively sought to identify characteristics of areas at risk of transition (point number 5 listed above).

These forms of university-community partnerships are foundational to the work of Mapshop. Aligning with academic contributions emerging from participatory GIS (Dunn 2007), critical cartography (Kitchin and Dodge 2007) and community geography (Robinson, Block, and Rees 2017), in Mapshop we recognize the importance of co-producing academic knowledge that is socially relevant, purposefully embedded within our local communities and attentive to the ongoing role that the university has as one of the largest landholders in the city. Thus, Mapshop approaches engaged mapmaking as an opportunity to reflect on, intervene in, and disrupt both hegemonic narratives about Lexington, and long-standing town-gown tensions. As such, our work begins and ends with a recognition of the unique histories and ongoing struggles in our communities (Barrett and Wilson 2019).

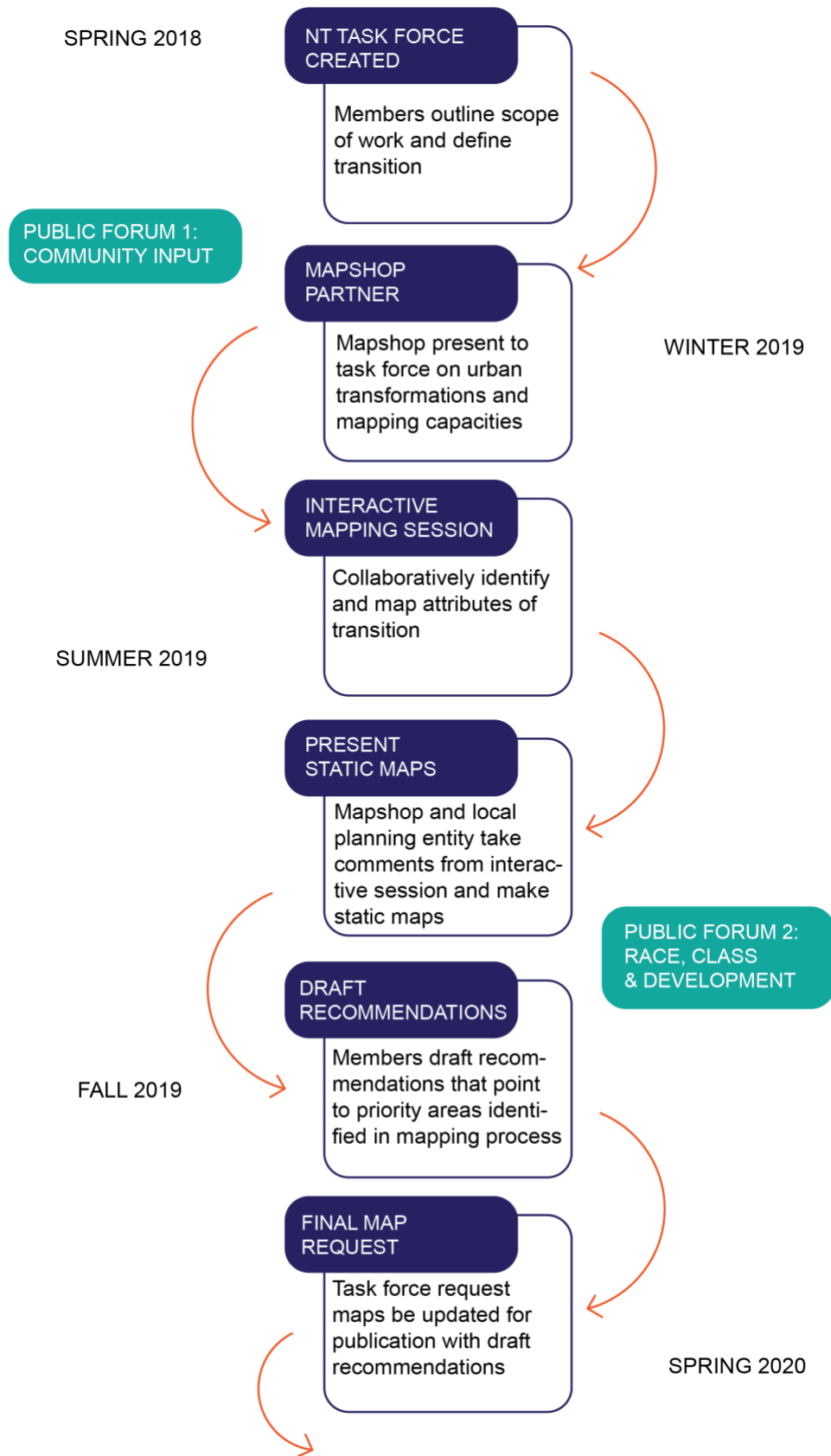


Figure 1: Timeline of Mapshop's engagement with the NT task force. Created by author.

Despite the engaged and critical intentionality of our work, Mapshop also encounters a series of conflicting ambiguities. Some of these tensions include being viewed as a consultancy service for community partners, contributing to problematic framings of the university as the sole and legitimate producer of knowledge, reconstituting the city as a lab for students and researchers, and contributing to the increasingly more pervasive demands placed upon community organizations and individuals to engage with often unrelated and resource intensive projects in a time of highly popularized models of service learning. Attentive to these conflicts, Mapshop embraces some of the lessons emerging from models of community geography that challenge the ways in which community-engaged scholarship is structured and rewarded in the academy (Robinson and Hawthorne 2018). As such, we value reciprocity, flexibility, and by engaging with community partners as experts and theoreticians we often reset our own constraints of timing, funding, academic rhythms and the boundaries of our classrooms.

1.5 Methods

I situate this study of affordable housing, critical mapmaking and data-driven urban governance in this context of a university-community partnership between the NT task force and Mapshop. Importantly, while the work produced through this partnership centered on supporting heavily quantified data and map analyses, I position my practices of mapmaking not as my method per se, but as my mode of engagement. In other words, I do not explore the best way to map areas of gentrification or identify gentrification's most appropriate mappable attributes. Although there is indeed a need to further examine how gentrification is mapped, particularly given its local particularities (Preis et al. 2020), the intent of my research is to unpack how the NT task force members constructed and applied

critical mapmaking and data-driven approaches to gentrification as it related to their needs and their framings of data within urban governance.

Thus, I draw heavily on qualitative methods, including participant observation and semi-structured interviews, to center the NT task force members' understanding of mapmaking, its capacities and applicability to data-driven urban governance. I juxtapose these framings with my own reflections to understand how these two viewpoints intersect with framings of academic scholarship and the contributions of Mapshop. Together these materials reflect over nine months of direct engagement with members of the task force, including my participation in public meetings, more logistical meetings with the task force leadership, Mapshop team meetings, 11 one-on-one interviews², 6 finalized maps, and countless drafts. As Sarah Elwood (2006b, 2006a) highlights, embedding qualitative methods in university-community partnerships is important for illuminating how everyday practices are integral to both understanding the ways in which spatial knowledge is produced, negotiated and mediated, and how community partners actively navigate, reuse, and adapt spatial narratives to achieve diverse political goals. By using both participant observation and semi-structured interviews, I was able to move between observing the NT task force meetings, immersing myself in the data work as a form of participation on the task force, and more formally exploring and documenting how some of the task force members, particularly those members that were actively engaged with the mapping activities, framed their own understandings of the mapping process and the work of the

² Because of this limited sample size, I rarely present a detailed description of the interview participants. While at times this means that my narration appears flat, this is a deliberate choice to protect anonymity, and the ongoing relationships that are central to community-engaged research.

task force outside the confines of the public meetings (Cook 2005; DeLyser et al. 2010; Longhurst 2016; Schoenberger 1991).

Importantly, although Mapshop was partnered with the NT task force, our work was voluntary, and we did not assume an official position. We remained, as I will explore further in chapter 2, both formally outside and intimately tied within the workings of the task force. Navigating the boundaries of such relationships, especially as a precariously positioned junior academic, whose continued progress is reliant upon the success of the partnership, is a challenge particular to community-engaged scholarship where the intimacy and proximity established through collaboration comes with additional layers of dependency and vulnerability (Barrett and Bosse under review). Therefore, while this section is brief on methodological concerns, I examine and explore the tensions of engaging in a university-community partnerships in chapter 2 as a means to further explore how participatory research and its pairing of collaboration and co-production are central to the work and understandings of the NT task force. Ultimately, such tensions are indicative of scholarship that is both an engaged practice of doing and studying.

1.6 Theoretical Framework

I further situate the questions that emerge from Mapshop's partnership with the NT task force at the intersection of three bodies of literature: smart urbanism, critical digital geographies, and critical race scholarship. Whereas smart urbanism draws our attention to the ways in which contemporary urban planning processes ideally mobilize data-driven decision-making, the focus on power in critical digital geographies, especially when heightened through the lens of critical race theories and its sustained call to interrogate processes of racialization and the securitization of whiteness, tease out some of the

complexities and misgivings of enacting these data-driven idealisms. Ultimately, by drawing on the insights of these different bodies of work, I explore the urgent question: how do university-community partnerships provide a lens to examine not only how data-driven discourses materialize, but also how they are being actively negotiated and re-imagined in spaces of local government?

Data is increasingly seen as the gold standard of contemporary urban planning processes. Facilitated by advances in big data, mobile technologies and predictive algorithms, data-driven urban planning is often spotlighted as bringing rationality, predictability, and accountability to a highly turbulent process. Smart city discourses, for example, envision a techno-utopian city that mobilizes seemingly massive amounts of data to rationalize the management of cities, often in real time (Kitchin 2014; Shelton, Zook, and Wiig 2015; Townsend 2013). As such, urban issues are approached as technical problems with technological solutions. Perhaps more importantly, these framings often advance an understanding that data helps to depoliticize urban planning processes (Green 2019; Safransky 2019). In other words, the ability to, in the words of one task force member, “fall back on the statistics” is seen as justifying political decisions as though they were apolitical. This implies not only that better data leads to better decisions, but that these decisions are easier to make through a deep dive into data.

However, critical scholars have drawn attention to the ways in which the smart city, and its imbrication in discourses of data and digital technologies, perpetuates and reinscribes existing relationships of privilege and power (Benjamin 2019; Elwood 2020; Leszczynski 2016; Safransky 2019). Sarah Elwood, for example, argues that in a smart city “the lives of those materially advantaged through white supremacy, settler coloniality, and

cis/heteronormativity are mediated for ever-greater mobilities, speed, and consumption that amplify existing race, class and gender privilege; while those already rendered structurally precarious are exposed to capture, control, and removability” (2020:7). On the one hand, this (re)structuring of power and inequality remains overt, and on the other hand, it is also more subtly pernicious. The physical infrastructures of surveillance technologies, for example, remain visible on city streets and in public places, but this visibility is also coupled with an invisibility of the underlying practices, policies, and performances that produce and maintain norms (Benjamin 2019; Browne 2015; Green 2019). This tension leads to what Mimi Onuoha (2018) highlights as the potential for algorithmic violence: an assemblage of people, institutions, and technologies that repetitively, automatically, and mundanely inflict violence by preventing people from meeting their basic needs. Taking up algorithmic violence, Sara Safransky (2019), calls attention to its geographies, highlighting the need to explore how the widespread popularity of data and algorithms in urban planning presents a “political and ethical imperative to investigate how and to what effect they are transforming spatial relations in cities, and, in particular, their stakes for poor and marginalized residents” (3). This exploration becomes increasingly more important for thinking about the potential to enact a progressive politics that challenges the certainty of reproducing inequality in a gentrifying city.

Therefore, while such scholarship has drawn attention to the highly problematic discourse underlying big data and smart urbanism, it has also presented ways to rework these very logics more towards equity and justice. This work builds on longstanding traditions of feminist scholarship and its application within critical GIS. For example, a contemporary focus on embodiment within digital geographies scholarship extends the

foundational work of Donna Haraway (1988 and 1991), as well as Liz Bondi and Mona Domosh (1992), and their critiques of the ability of science to perform the ‘god trick’ of seeing seemingly everything from nowhere (Elwood and Leszczynski 2018). Sandra Harding’s (1986) work deconstructing scientific neutrality has similarly been used to explore the ethical responsibilities that scientists and scholars have for the effects of their work, particularly given the historical and ongoing relationships between science, imperial imaginations and acts of war (Schuurman 2000). Work on embodiment in critical digital geographies therefore calls attention to the embodied positionalities of those conducting, producing, critiquing, and affected by data. Jack Giesecking (2018), for example, explores how lesbian and queer data work is conducted at interdependent and imbricated scales to refute the big-small data binary; thus, demonstrating how perspectives and celebrations of scale change from differently lived positionalities. Importantly, Giesecking continues, this work highlights already existing opportunities to recognize the marginalized and less studied lives, experiences, spaces, and histories of the oppressed in the moment of big data.

Critical race scholarship, and black feminist thought in particular, has also been foundational to critiques of science, digital technologies and has made considerable contributions to a critical use of embodiment. For example, the work of Patricia Hill Collins (2002) and Chela Sandoval (2000), and black feminist standpoint epistemologies more broadly, have challenged academic researchers to leave their ivory towers to produce scholarship that is more attuned to the lived experiences and epistemologies of those both most marginalized by structures of power, but also those most capable of creating more liberatory knowledge. Simone Browne (2015), has highlighted the urgent relevancy of such work to contemporary technologies of surveillance by locating blackness as a key site

through which surveillance is not only practiced, narrated and enacted, but also a frame for exploring how contemporary surveillance can be contended with. In doing so, Browne draws in a critical concern for how surveillance technologies endow black bodies with color and meaning, and how the body becomes a site of racialization and resistance. Taken together, such work has challenged the often-limited scope of white feminist thought to explore how knowledge and its associated practices and technologies are imbricated with and deployed within broader concerns for power.

This critique of knowledge has further impacted conceptualizations of expertise, academic scholarship, and its associated methodologies. For instance, more participatory and action-orientated research increasingly draws on black feminist standpoint epistemologies to challenge the fictive divides of the academy, demanding that academics more fully live their scholarship (Mohanty and Carty 2018). This work has decentered academic expertise to instead highlighting the epistemologies and theories of community experts. Perhaps most famously, Clyde Woods' (1998) blues epistemology poignantly demonstrates how working-class African Americans in the Delta region have constructed a system of explanation and knowledge that informs their daily life, organizational activity, culture, religion, and their social movements. By drawing in blues music, and oration more broadly, Woods demonstrates a key articulation of critical race scholarship that challenges academics to be critical of the standards used to define what counts as data and theory.

Although the impact of this scholarship remains evident in the ongoing proliferation of both participatory and more qualitative or at least mixed-method projects, scholars have also applied similar critiques to quantitative data and their associated digital technologies. For instance, Katherine McKittrick (2011) has drawn attention to the ways in which work

that seeks to demonstrate the materiality of racism by counting, mapping and categorizing state violence against racialized bodies often furthers harmful stereotypes by obscuring black life, its varied forms of resistance and by essentializing relational experiences, such as race and poverty. Ruha Benjamin (2019) further demonstrates these tensions by highlighting the ways in which American culture is seemingly both more attuned to overt racial biases, but that the demands for technological solutions are reproducing existing inequalities under the guise of progress and objectivity. Wendy Chun (2009) similarly interrogates the intersections between race and technology to examine how race can be mobilized as a technology that creates possibilities for new relations and new beings. Taken together, such work demonstrates both the need to account for how knowledge, data, and its associated practices are imbricated with processes of normalization and racialization, but also how these processes are already being undermined, reworked and practiced differently for more just and equitable means. Taking seriously these multifaceted challenges is necessary for any work that seeks to mobilize data or technology for social justice.

I situate Mapshop's partnership with the NT task force and our collective work to leverage data-driven narratives to more proactively address the displacement caused by gentrification at the intersection of these literatures. I pull on the critiques of smart urbanism to position Mapshop's relationship to the NT task force members, both in terms of the idealization of our partnership and the potential of re-imagining data-driven participatory urban planning. I further pull on critical race theories to highlight the importance of continuing to center race within critical engagements with data; this is important not only because data and digital technologies are increasingly more pervasive

and ubiquitous in urban planning, but also because the pressure to create data-driven narratives and simultaneously engage in participatory urban planning disproportionately protects white people.

In doing so, I contribute to these debates in three ways. Firstly, I highlight the specific power-geometry (Massey 2012) of university-community partnerships as an important site for thinking through how smart urban discourses materialize, particularly in small to moderately sized cities in the American South. Secondly, by examining how politics were centered, rather than obfuscated in the work of the NT task force, I explore how data-driven urban planning might enact a more progressive praxis (chapter 3). This praxis uses equity as a lens for data interpretation, rather than its resulting outcome. Finally, I disrupt the boundaries of data-driven narratives, whether they be quantitative or qualitative, to explore how these various forms of storytelling intersect within participatory urban planning processes to secure whiteness (chapter 4). Together these contributions reveal my broader argument: embracing data as inextricably saturated with power and politics creates possibilities to enliven a more progressive praxis that resists the certainty of a stratified, unequal and gentrified city. Importantly, this requires data practices that move beyond simply acknowledging the presence of power and politics, to actively, and indeed critically, embracing their very imbrication with data. Again, this argument requires us to move away from viewing data as shiny, but with hiding spaces to instead examine how the hiding places, once uncovered, actually make data shiny.

CHAPTER 2. UNIVERSITY-COMMUNITY PARTNERSHIPS

Mapshop's engagement with the Neighborhoods in Transition (NT) task force focused on the process of map making, and yet it was also so much more than that. In this chapter, I examine how the boundaries of collaboration and co-production, while often paired in participatory literatures, were navigated and often reconstituted throughout Mapshop's engagement with the NT task force. Exploring these boundaries, I ask, how do community partners sometimes leverage collaboration and co-production as shared responsibility and at other times embrace collaboration while distancing themselves from co-production to remove culpability through a reliance on the perceived authority, objectivity and expertise of academic researchers? Ultimately, I argue that current literatures on participatory mapping and university-community partnerships overstate the power and expertise of academic researchers and urban planners, and in doing so miss opportunities to examine the complex political strategies of community partners. It is these strategies that often blur and redefine the boundaries of collaboration and co-production, challenging what it means to engage in spaces of local government as academic researchers.

2.1 Participatory mapping

Emerging from the GIS & Society debates of the 1990s, participatory mapping efforts seek to invert power dynamics by leveraging the tools and technologies of mapping to collaboratively address pressing community concerns. For example, recognizing the growing ubiquity and pervasiveness of state-produced spatial data in local decision-making processes, initial approaches to participatory mapping, considered Public Participation GIS (PPGIS), emphasized the need to make mapping tools both available and accessible to all

community members with a stake in policy decisions (Dunn 2007; Obermeyer 1998; Schroeder 1996; Sieber 2006). While these efforts began by infiltrating the spaces of local government and often with a focus on urban planning, they have since diversified and multiplied to cover a broad range of topics from food insecurity, to transportation, to natural resource management, to safe and affordable housing (see for example Boll-Bosse and Hankins 2018). As such they have highlighted the potential for collaborative and community-driven efforts to both represent and correctively address a series of structural inequities and social injustices. Nevertheless, critiques of these participatory approaches have also challenged such efforts to move beyond a narrow focus on local government and to more critically reflect upon the diversity and needs of communities engaging in such initiatives (Kar et al. 2016). In doing so, these developments have pushed collaborative mapping efforts to more fully center participatory activities and community advocacy in their approaches to technology (Laituri 2003).

Important to some of these participatory mapping practices is a recognition that maps represent and make possible a particular view of the world. Although common to, but not exclusive or inherent to participatory mapping, this theoretical underpinning aligns with a processual and post-representational view of cartography that attends to the map as an unfolding mode of representation that does not authoritatively narrate a pre-existing world, but instead renders visible the production of worlds in the making (Kitchin and Dodge 2007). Complemented by traditions of counter-mapping (Peluso 1995), this potential underscores the ability of collaboratively produced maps to create change that fosters more just and equitable communities. Importantly, it also highlights the ability of collaborative maps to actively produce, or at least render visible knowledge that alters and changes the

space(s) that they depict, often for the better. Radjawali, Pye, and Flitner (2017) poignantly demonstrate this point in their work using drones with indigenous communities in Indonesia. Contesting state planning processes that obscured indigenous land through a reliance on poor quality aerial imagery, the indigenous community used drone imagery to render mappable their land claims, bolstering both their political and legal claims to the land. Such work highlights the powerful ability of collaborative maps in political and legal processes.

These theoretical commitments and the centering of collaboration in participatory mapping have significant implications for considerations of the production of knowledge, expertise, and the role of research and teaching institutions. Drawing upon feminist critiques of science and building upon black feminist theories of situated and partial knowledges (Collins 2002; Harding 1986; Sandoval 2000) participatory mapping efforts reimagine the relationships between academic researchers and community partners by considering community residents as experts in their own right. Approaching community partners in this way transforms conceptualizations of the production of knowledge away from viewing it as the sole activity of the academic scholar, tolling away in their ivory towers, and instead focuses on collaboration and co-production as central to the creation of knowledge. By decentering expertise, and locating it within and beyond academic institutions, participatory mapping efforts, in conjunction with traditions in critical, feminist and activist scholarship, challenge a series of fictive divides between the community and the academy, highlighting how academics are intimately embedded within the communities in which they live and learn (C. Katz 2013; Mohanty and Carty 2018; Robinson and Hawthorne 2018).

Of course, the collapsing of these divisions, however fictive, also raises a series of challenges and ambiguities for those engaging in participatory work. Most prominently, critiques of participatory research have highlighted the persistent ability of institutional structures to undermine meaningful community engagement that truly decenters the casting of research and teaching institutions as producers of knowledge (J. S. Katz and Martin 1997; Robinson, Block, and Rees 2017; Robinson and Hawthorne 2018). The reliance on a semester calendar, tenure requirements, and the constraints of academic publishing are all examples of these structures. Furthermore, although participatory mapping advances an understanding of community residents as experts, some modes of collaboration can appear performative, relegating community partners to mere data collectors, while continuing to legitimize the contributions and analytical capabilities of the researcher (Breen et al. 2015; Elwood 2006a). For historically marginalized and disenfranchised populations, often with entrenched legacies of exploitative and violent research practices, these performative modes of participation, can reinforce the “unbearable whiteness” of the academy by upholding problematic narratives of the white savior (Derickson 2017: 236)

These challenges and ambiguities highlight how although often collapsed into one another, collaboration and co-production are not mutually exclusive. In other words, while participatory mapping efforts often pair both collaboration and co-production as central to the creation of more just and equitable knowledge, the challenges of navigating these boundaries become more complex when confronted by the structures of academia, and more importantly, as I will discuss below, by the strategies of community partners.

2.2 Participatory urban planning

Considerations of participatory mapping are often collapsed into participatory urban planning perhaps because of their converging lineage in PPGIS. However, in this section, I first want to disentangle the two traditions to examine how participatory urban planning centers the skills and expertise of the urban planner in participatory processes, despite claiming to center community residents' control over these processes. I do this to highlight how considerations of participatory mapping fall into a similar trap, and in doing so fail to account for the agency, strategies and politics of community partners. It is this centering of the expert mapper to participatory processes that further highlights how collaboration and co-production cannot be collapsed into each other because the ability to do so is not always in the control of the academic researcher.

Debates within urban planning often examine the role of consensus in contrast to conflict and its impacts on the participatory process. For instance, directly discrediting conflict, the most popular model of contemporary participatory urban planning advances consensus building and reconciliation as the most ideal mode of participation to create decisive and actionable deliberations. Underpinned by planning's communicative turn and the view that consensus is attainable when actors engage in open and undistorted dialogue, the consensual model of participatory urban planning promotes an interactive approach whereby stakeholders search for 'all-gain', rather than 'win-lose' solutions (as characterized by Susskind in Saporito 2016). However, critiques of this model have highlighted that the resulting planning system "is not so much an empowering arena for debating wide-ranging societal options for future development, as a system focused on carefully stage-managed processes with subtly but clearly defined parameters of what is open for debate" (Allmendinger and Haughton 2012: 90). As such, it may be seen as

rewarding those who are capable of working within existing structures while relegating ‘troublesome’ actors to the margins. In other words, some critics argue that consensus-based models of participation may mask and even displace rather than resolve difficult political and social issues, often in favor of legitimizing neoliberal solutions (Allmendinger and Haughton 2012).

Subsequently, an alternative model of participatory urban planning advances conflict as the most ideal mode of participation to achieve a just and equitable city. Drawing on the work of political theorists Chantal Mouffe (1999, 2000) and Susan Fainstein (2010), a conflictual model of participation argues that conflict is necessary to produce new knowledge that challenges rather multiplies existing relations of power (Saporito 2016). However, conflict does not necessarily equate to antagonism, but rather is premised on the notion that in democratic systems individuals with conflicting viewpoints interact as legitimate and equal opponents with shared rights to express their ideas; they exist not in an antagonistic, but an agnostic relation. This approach centers on the idea that planners and more generally everyone involved in public decision-making processes approach each problem and solution with a pre-existing bias informed by political beliefs and personal values. Unveiling and acknowledging these positions is vital to achieve the transformative changes that are perceived to undermine consensus-based models of participation. However, this approach also creates a series of pragmatic challenges such as the practicality of implementing systematic and structural changes when framed by ambiguity and uncertainty.

While these debates and divisions persist, and I do not intend to advance one mode over the other, both models center concerns for the role of the urban planner in the

participatory process. For example, although consensus-building effectively de-centers the knowledge of the planner to instead promote the ability of residents to create decisions, considerations for this model still focus on the planners' skills necessary to be a facilitator capable of equalizing access to expertise, knowledge and resources between differently positioned participants (Allmendinger and Haughton 2012). By facilitating, planners also become mediators of contentious and often serious debates requiring their expertise to orientate participants in negotiations towards consensus (Forester 2008; Saporito 2016).

Conversely, supporters of the conflictual model argue that the planners should not be mediators, but instead should be encouraged to be the "uninterested outsider", the "uncalled participator"; someone who is unaware of prerequisites and existing protocols, bringing nothing but creative intellect and the will to provoke change to these processes (Mouffe 2007; Miessen 2010). For example, Samuel Stein argues that "[r]adicals engaged in community-based planning must not bureaucratically manage class conflict [a characterization of consensus], but rather accentuate it. A rowdy community planning process can help those excluded from the formal system develop a counter-vision and organize around it" (2019: 189). Certainly not all planners are radicals, nor are they all deeply committed to an ethics of social justice, but in these characterizations we can nevertheless see how the skills of the planner are depicted as central to the success of the participatory process. Whether mediating negotiations, or brewing conflict, the planner is presented as central to the knowledge produced in the participatory process; they are portrayed as the linchpin holding the process together.

Importantly, I draw on these debates to highlight that both models, of conflict or consensus, obscure the agency and political strategies of community partners by focusing

on the skills and expertise of the planner. Why is the planner uniquely positioned to control these moments? Why is the planner uniquely capable of creating consensus and/or conflict? What happens when the community residents disregard the planner and their attempts to foster these conversations, and instead control and navigate movements of consensus and conflict for themselves? Ultimately, what happens when the power of the planner is not central to the participatory process, but instead is embedded within the larger dynamics of the partnership? What does this mean particularly when community partnerships are not conceptualized solely as a collaboration between powerful researchers and vulnerable community members, but instead consists of powerful community partners, such as officials from the local governments that wish to collaborate with community residents and academic researchers?

These questions, I argue, offer an important intervention into considerations of collaboration and co-production that underpin participatory mapping efforts. By focusing on the challenges of engagement for the academic researcher, literature on participatory mapping faces the same limitations of participatory urban planning, and in doing so misses opportunities to examine the agency and political strategies of community partners. Challenging the dichotomous framing of community mapping narratives, Sarah Elwood (2006) argues that community organizations shift their technological, institutional and spatial approaches to urban planning in creative and multifaceted ways. In doing so, Elwood continues, community organizations apply their own interpretative frames to maps and images that they use to produce local spatial narratives that may be adapted to the diverse roles and relationships they negotiate in urban spatial politics. While this work importantly highlights the complex strategies of community organizations in relation to

both the production and interpretation of spatial narratives, and their positioning towards diverse actors and institutions, it does not directly place the university partners within this mix of diverse actors. This allows for a perceived alignment between the university and the community organization.

This alignment between university partners and community organizations is often overlooked by participatory mapping literature. However, it has important consequences for the ways in which we theorize and approach university-community partnerships, particularly when such collaborations seek to create more just and equitable knowledge and communities. For instance, in a paper co-written with Amber Bosse (under review), we explore the challenges that precariously positioned researchers face when a dependency on collaboration requires them to protect and privilege university-community partnerships over their commitments to social justice. In doing so, we highlight the need to re-examine the strategies of community partners, taking seriously their ability to navigate power imbalances and leverage the prestige of research and teaching institutions, sometimes against the desires and wishes of academic partners. In this chapter, I extend and add to that argument by more fully examining some of these strategies, pairing my personal reflections and observations with interview responses from the task force members. By taking this approach and incorporating multiple viewpoints of the same partnership, I precisely demonstrate my broader argument: there is a need to account for the ways in which community partners approach, challenge, and navigate the boundaries of collaboration and co-production as articulated by academic scholars.

In the following section, I engage with challenges of navigating the boundaries of collaboration and co-production, and the complex strategies of community partners

through the lens of Mapshop's work with the NT task force. I first examine moments where the task force embraced collaboration, noting its ability to justify and validate the data-driven process while also creating tensions for approaches to expertise and the embedded nature of collaboration and co-production. Then, I examine how the NT task force members and Mapshop navigated the boundaries of collaboration, highlighting how the task force members distanced co-production from the participatory mapping process.

2.3 Embracing collaboration

"This data is telling us what we already know".

"Everybody knows where gentrification is happening. Everybody knows. We knew on the first meeting. Everybody knows. It is no secret. Everybody knows."

As I asked task force members to reflect upon the desire to partner with a university institution, some suggested that collaboration established a sense of ownership over the work. For example, several task force members suggested that because Mapshop had the capacity to be flexible and leverage digital platforms to dynamically and interactively respond to the comments, questions and feedback of the task force members, the participatory process established 'buy in'. The ability to explore the data and break apart the final visualization thereby allowing the task force members to interrogate how each component builds, informs and constraints each other, was seen as establishing a common and shared knowledge base. In other words, the collaborative process ensured that the task force members "were on the same page", especially as the maps were going to be used to inform their strategies and recommendations.

Other task force members suggested that the partnership with Mapshop validated, justified and gave credence to the work of the NT task force. Comparing the data to wearing

glasses and being able to see the world with a greater clarity, one task force member suggested that the data brings objectivity, “we see it [gentrification], but it is not clear. We know what is going on, but our data allows us to put our pen on it”. When compared to the quotes written above this section that suggest the task force members already knew exactly where gentrification was happening, the ability of Mapshop to clarify and substantiate the intuitions of some of the task force members may be seen as the reason to collaborate. The fact that the data is telling us what we already know is perhaps the very, or at least one, point of collaboration.

However, this framing of collaboration as necessary to validate the understandings of the task force also raised a series of complexities surrounding the nature of expertise, authority and the role of university institutions to the production of knowledge. For instance, while there were other well-respected agencies that the task force could have used to help produce their maps, such as the city’s planning and GIS departments, Mapshop was often characterized differently to these resources, seen both as more authoritative and scientific. While noting their gratitude at Mapshop’s involvement, one local planner even stated, “now we brought in the *real* experts”.

Although conscious to resist the framing of our work in this way, there were understandably moments that highlighted the authority of Mapshop. For example, as academics, the Mapshop team members often embody these positionalities, showing up in spaces of local government as we would to teaching classrooms. Commenting on this, some task force members suggested that our use of technical terms such as attributes, “a big word”, required additional translation for the task force members and public audiences. When I asked task force members to further articulate their understanding of Mapshop’s

credibility and expertise, I received the following comment: “Well, you are at an accredited university [laughs]. You have more acronyms behind your names than I do”; a fact that was consistently highlighted in the public meetings where southern etiquette prompted task force members to refer to the Mapshop team by their academic titles.

Nevertheless, Mapshop’s authority was consistently juxtaposed against the experience, knowledge and expertise of the task force members and community residents. While stating their appreciation for the expertise of Mapshop, one task force member also highlighted their unique perspective, witnessing first-hand how gentrification was affecting residents’ abilities to meet tax payments and other “kitchen table pocketbook issues”, as well as noting their location within an organization that had access to a rich database with a series of data points that are extremely pertinent to data-driven concerns of gentrification. As realtors, non-profit leaders, developers, councilmembers, housing advocates, and also residents of Lexington, the task force members had a wealth of knowledge established through their professions and through their direct connections to community residents. Their boots were more firmly on the ground than any member of Mapshop. Community residents similarly highlighted the wealth of their knowledge established through driving down their streets and witnessing how their neighborhoods were changing by white folks moving in.

Because of this knowledge, the task force members were positioned to critically question and examine the contributions of Mapshop, and collectively we navigated the limits of our skill sets, and the boundaries of academic scholarship. For instance, some members expressed desires for an empirically grounded, perhaps traditional economic analysis, that focused more on what we might consider a predictive model for future areas

of gentrification. While such an approach highlighted the importance of investment cycles to gentrification demonstrating how periodic disinvestment is tied to reinvestment, the ability to perform such a model was beyond the capacity of Mapshop, and even the city's capacity to sustain the collection, management and utilization of such data. There were also desires for more comprehensive recommendations of best practices for public and private investment as assessed in bodies of academic literature. Thus, while Mapshop was confronted by the limits of our own expertise, we were also limited by what academic scholarship as a whole continues to value. Or in the words of one of my interview participants: "the literature can reel off what has been tried and how it had unintended negative consequences, but it is not full of what to do. It does not say 'we did this and boy what a difference it made'".

2.4 Distancing co-production:

Some of these complexities of expertise and authority became even more prominent as our work moved away from data exploration. In these moments, the task force seemed to distance collaboration from co-production, challenging the participatory intent of Mapshop's work. In other words, although the task force members embraced collaboration to explore data and establish a shared knowledge base, they also continued to rely on the objectivity and expertise of Mapshop to formalize the final data recommendations and identify areas as vulnerable to transition. It is this demarcation, and split between collaboration and co-production, that I find particularly jarring because we return to a system that recenters the expertise of academics, and in doing so distances the task force from the culpability of choosing areas of vulnerability. In other words, although Mapshop

helped the task force to place the pen on areas of gentrification, Mapshop was solely responsible for making that pen mark the boundaries of transition.

How did the task force members distance themselves from co-production? There was a moment when our work with the task force had to transition from data exploration to establishing the recommendations and decisions required to make static maps that demarcated areas of vulnerability (see figure 2). That is, there was a moment where the list of attributes, threshold boundaries, and geographic scale had to be finalized. However, rather than fully embracing a participatory model that emphasized collaborative negotiation, there was instead a sense of frustration that resulted in calls for stronger leadership and a reliance on the mappers to take control and finalize these choices. In the words of one member, we either needed someone to “lay the hammer down” or it was “time for the mappers to go and paint some scenarios”.

Frustrated by the organic organization of the task force, and feeling both a “sense of urgency in the room”, and a sense that task force members were having the same conversations week to week, the task force asked both Mapshop and a local planning entity, with a representative on the task force who had previously presented a series of maps identifying areas of vulnerability during a task force meeting (see figure 2), to work independently from the task force meetings, make some maps and present them to the taskforce. While some task force members resisted this push, suggesting that “it is okay if a bunch of people who have a relative amount of power feel uncomfortable that they do not know where it is going... I think a lot of times it is like holding the space for whatever

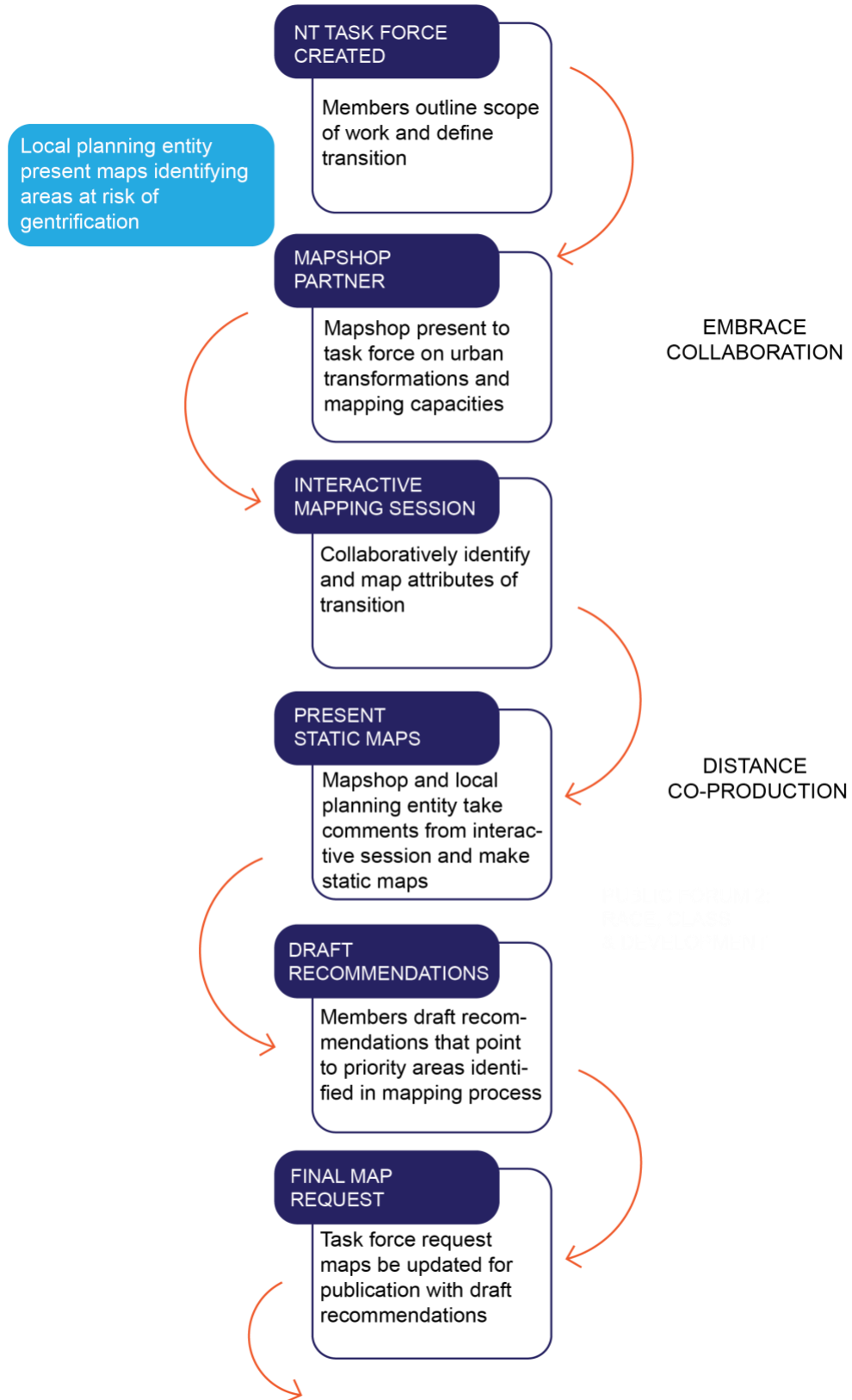


Figure 2: Timeline of Mapshop's changing engagement with the NT task force.

needs to evolve, instead of buttoning up and saying alright this is the decision, this is the marching orders”, others recognized and understood this strategy as common to government boards where sub-committees often take charge when conversations get particularly stagnant, controversial or divisive.

Although, as outlined above, there is much to say on the challenges of consensus building and the role of conflict within participatory urban planning and urban governance (see for instance Saporito 2016), I draw on these tensions to demonstrate how the mapping and data process return to a system that relies on the expertise of the mappers to resolve the conflict by independently finalizing the areas of the map that demarcated vulnerability to transition.

Feeling both hesitant to fully extract our work from the task force and pressured not to stall conversations focused on action and policy making, Mapshop made some initial maps that attempted to incorporate the comments and feedback from the task force. Additionally, although now working alongside the planning entity, our work remained relatively independent and our respective maps never fully aligned, each using slightly different datasets and vulnerability thresholds, and bearing institutional logos that visually identified our unique contributions. On first appearances the maps that we made seem like standard maps made by any relatively experienced mapper familiar with using census data; they seemed to be the products of an uncollaborative process. There were, nevertheless, some more nuanced changes. Perhaps the most important of those being a conceptual move away from creating one final map with a composite vulnerability score for each neighborhood, to instead creating a series of draft maps that highlighted each separate indicator of transition. For critical cartographers these nuances are not trivial, however,

separated from the context of the participatory process, I wonder whether for all intent and purposes, do the maps reflect the work of Mapshop, and Mapshop alone? And in doing so, do they distance the task force from the culpability of formally demarcating areas of vulnerability?

The boundaries between collaboration and co-production were further blurred by Mapshop's ambiguous position in relation to the task force. While the planning entity described above had a representative serve as a task force member, Mapshop's position remained relatively undefined; although we were regularly listed as an agenda item, we never really integrated onto the task force as members, and yet we also never really reclaimed our positions as concerned community members in the audience of the public meetings. We were located somewhere in between, often even contributing to the task force meetings from our seats in the public audience; a fact that frustrated community members required to contain their feedback to the allocated comments section at the end of the meeting.

This undefined position seemed to maintain Mapshop's distance from the politics of local government and the task force, reinforcing the objective and scientific perception of our work. Talking about the leadership structure of the task force, one member suggested that in order to have a community conversation on gentrification, uneven development, and its imbrication with racism, the task force leader should ideally be non-political: "because naturally this person is thinking about votes, and who is going to vote for them, and whose support they can get, and whether or not they can keep their job. That can persuade them to be soft when they need to be hard. Part of me, would feel like the person that should be

in charge would be a non-political person, and someone not connected to city government, more of a neutral individual on the outside of things”.

This returns us to the question of why the task force wanted to collaborate with a university institution, particularly when the task force had access to its own experienced planning department, and a representative from a well-respected planning entity with the capacity and skills to meet the task force’s needs. In the words of one task force member, the planning entity was “really good at this”. However, legally required to assess property values, and collect data on residential and commercial infrastructure, for some, particularly community residents facing the increasing pressures of rising property values and taxes, this planning organization may be seen as responsible for causing gentrification, and if not responsible, at least culpable. Conversely, Mapshop may have offered a sense of this neutrality, presumed objectivity and disconnect from the influence of votes. However, in the words of a task force member, Mapshop’s ambiguous role, and the resulting piecemeal approach did “not breed a lot of interdependence”.

2.5 Discussion

Research on participatory mapping demonstrates the important role that maps have in the world. Enacting knowledge and making worlds, maps—the spaces that they portray and the spaces that they produce—have significance and importance in urban decision-making processes. The fact that the NT task force did not definitively identify the areas of Lexington that are vulnerable to transition, but instead relied upon Mapshop, the perceived experts, to substantiate these claims makes this exact point clear. Yet, by relying on the authority and credibility of Mapshop, our partnership with the task force also demonstrates the various ways in which community partners strategically frame academic contributions

that reconstitute the pairing of collaboration and co-production. In this section, I explore two ways in which the task force framed the work of Mapshop and its implications for understandings of university-community partnerships.

2.5.1 Shared responsibility and protection

As mentioned above, Mapshop was often portrayed by the task force members as adding objectivity, credibility and contributing a scientific rigor to the task force's decisions. This specific framing was most often articulated in relation to any potential criticism that the task force might receive from the public. For instance, one task force member expressed that:

“I think that lots of people have lots of theories, but when you actually have the researchers that bring data and additional information to the conversation you make a more informed decision and that justifies the information that you used to make those decisions”.

This ability to “fall back on the statistics” was seen to counter potential criticisms that the task force could receive. Given the task force's heightened feeling of vulnerability around even addressing a controversial issue such as gentrification, and labeling it as such, our partnership and the depth of our collaboration seemed to offer the task force an additional layer of security and protection from this scrutiny.

In this way, collaborating with a university initiative and academic scholars can be seen as achieving two goals for the task force. Firstly, by linking collaboration with co-production, the participatory process established a shared responsibility for the work among the task force members themselves. Required to be the advocates of the task force's work and ultimately go out and get votes to support their proposed recommendations, the collaborative process not only established a shared knowledge base, but by co-producing this knowledge and establishing buy in to the process, it also ensured that all task force

members were, if not equally, at least partially responsible for the knowledge and recommendations produced. Secondly, however, by distancing collaboration from co-production as the work moved away from data exploration to finalization, the task force was afforded an additional layer of protection through the framing of Mapshop as validating and justifying ultimately the political decisions of the task force. By collaborating with Mapshop, and identifying our work as objective and authoritative, the task force was able to identify areas of vulnerability, without actually having to be responsible for choosing these areas; it was the statistics, the data, Mapshop that made these decisions, not politics.

Mapshop's engagement with the NT task force demonstrates the ways in which the broader framing of participatory mapping processes is not always within the control or under the power of academic partners or urban planners, but is instead embedded within the broader dynamics of the collaborative partnership. Thus, participatory mapping efforts are subject to the strategies and tactics of community partners, in ways that may not align with academic understandings of collaboration that often pair such processes with co-production. As such, it highlights a need to account for the complexities of university-community partnerships that troubles the framing of community partners as always vulnerable and as consistently aligned with the politics, strategies, and intent of academic partners.

2.5.2 Action and inaction

By the time Mapshop had finished presenting, editing, and finalizing our maps, I could feel the exhaustion, frustration, and confusion radiating from task force members in the room. We were in a data hole. We were lost. And we had explored so many questions,

so many tangents, so many combinations of attributes, indicators, vulnerabilities and predictors that maybe some of us did not even remember our original question. For some of the task force members, particularly those embracing a skepticism towards the ability of local government to intervene in the relentless advancement of racial capitalism, our collaborative deep dive into data-driven narratives also felt like a delay tactic: “it is all part of the game. You stall as much as possible on any action. Oh, well we have to wait and see what Professor X is going to show us next week”. In comparison to the urgency of addressing the displacement of vulnerable populations, our explorative and collaborative approach sometimes felt entirely unproductive and seemed to reinforce caricatures of academia as perpetually over-complicating pressing questions and local government as slow to respond and affect change.

By drawing on these statements, I am not implying that Mapshop or the leaders of the task force intentionally set out to stall action, and in no way I am implying that they are benefiting from such action. Indeed, I align with the fact that all members of the partnership are very passionate and dedicated to preventing displacement. However, I pull on these frustrations to highlight how at times embracing moments of collaboration can appear to distribute responsibility in ways that both limit action and re-center the expertise of academic scholars. Most prominently, by getting lost in the data hole, needing direction and clarification on how to synthesize the knowledge as presented, the work of Mapshop seemingly reinforced a reliance on expertise as embodied in particular places and people. By distancing co-production from collaboration, our work undermined the professional expertise of the task force members and the experiential expertise of community residents that provided powerful and in many ways more evocative depictions of transition. It also

challenged oversimplified discourses surrounding the ability of data-driven narratives to inform collaborative decision-making processes. We produced many seemingly tangible outputs from our work; outputs that might suggest we were acting to address gentrification. As such, collaboration may be seen as distributing responsibility while distracting from the complexities and challenges of effective policy making.

Again, these challenges demonstrate the need to account for the complexities of university-community partnerships in ways that extend beyond a concern for the institutional constraints of academic researchers and the expertise of urban planners. The pace of conversation, the call for leadership, the framing of our work as objective and scientific, all of these components were beyond the control of Mapshop. They arise not simply through the process of mapping, but through engagement itself. They are challenges that emerge when academics go out into spaces of local government and are subject to the dynamic strategies of community partners that reconstitute and challenge their ability to independently frame their contributions.

2.6 Conclusion

In this chapter, I explored Mapshop's engagement with the NT task force to examine the complexities of co-producing collaborative maps that inform policy making. My argument in this chapter is more than a statement on the ability of participatory practices to reconstitute inequality, whilst purporting to advance a social justice politics. Instead, this chapter advances a concern for the complexities of community engagement. In particular, I trouble the assumed pairing of collaboration with co-production, given the nuanced strategies and politics of community partners as they frame the contributions of academic scholars.

Wishing to establish a shared knowledge base and distribute responsibility, the NT task force members embraced collaboration and co-production to distribute culpability and ownership over the task force's work and recommendations. However, also wishing to protect themselves against the criticisms of addressing a controversial topic like gentrification, the task force members framed the authority, credibility and expertise of Mapshop in ways that distanced co-production from collaboration. By being able to clearly point to the contributions of Mapshop, the task force members again distributed responsibility, but this time in a way that potentially removed their culpability in the decision-making process. By navigating the boundaries of collaboration and co-production in this way, Mapshop's partnership with the task force demonstrates the ability of community partners to strategically frame the contributions of academic partners in ways that resist and complicate the academic's own understanding and ability to control these processes. As such, it reveals a need to better situate the contributions, expertise and power of academic researchers as embedded within the broader dynamics of university-community partnerships.

In the next chapter, I further explore some of the complexities of community engagement as demonstrated by Mapshop's attempts to accentuate and make clear the subjectivity and political nature of data-driven urban governance.

CHAPTER 3. THE DEVIL IS IN THE DETAILS

“We need to decide who we want to live in our community”. Although the activities of the Neighborhoods in Transition (NT) task force were rooted in tangibly creating policy and programmatic solutions to address gentrification, this question, imagining the future of Lexington and its community residents, was central to those decisions. Curious to see how the task force members would answer such a question, I asked those that participated in my interviews to describe their ideal neighborhood. Overwhelmingly, the most common answer was diverse. Racially, economically, culturally, and architecturally diverse with an accompanying diversity of businesses, schools, transportation options, resources and lifestyles. As one task force member stated, “diverse in every sense of the word”.

In this chapter, I examine how the NT task force members navigated their visions of the future of Lexington through urban planning methods that mobilized data-driven decision-making processes. In doing so, I interrogate the ability of data-driven narratives to rearticulate the tendency of smart urbanism to replicate social and spatial inequalities through discourses of data that depoliticize urban planning. Ultimately, I argue that the task force members’ visions for a more diverse and just Lexington offer a lens to approach data interpretation and analysis that centralizes rather than obfuscates the politics at the heart of the task force’s work. Recognizing the centrality of politics in data-driven urban governance creates opportunities to resist and recalibrate the certainty of a gentrified and stratified city.

3.1 Data urbanism: smart cities, inequality, and data-driven urban planning

For decades urban planners have taken advantage of developments in computing technologies, mathematics and systems analysis to inform data-driven urban policies. In the early 1960s, for example, American cities such as Pittsburgh, New York City, and Los Angeles each took a data-driven and problem-orientated approach to formulate their urban renewal programs (Luque-Ayala 2019). Since this time, debates around the role of computing and the city have diverged from first imagining how the immateriality of computer technologies risks the very existence of the city, to interrogating their interdependencies and the ways in which computer technologies have actually facilitated global urbanization and the spatialization of structural inequalities in urban landscapes (Graham, Sabbata, and Zook 2015; Luque-Ayala 2019). For urban planning, while these legacies remain prevalent, they are coupled with an increased concern for the scale and scope of digital processes as facilitated by advances in big data, sensor and mobile technologies, surveillance strategies and predictive algorithms (Green 2019; Safransky 2019). This deepening ubiquity and pervasiveness of digital technologies requires a greater consideration for the ways in which such capacities are seen as driving good urban planning and governance, particularly in relation to its implications on the politics of progressive urban planning.

Underpinning this data-driven framing of good urban planning is the discourse of smart urbanism. Rooted in seductive techno-utopian visions for the future, smart urbanism, although often a nebulous term, seeks to mobilize the data collected by infrastructures of digital technologies as a means to rationalize the planning and management of cities (Kitchin 2014, 201; Shelton, Zook, and Wiig 2015; Townsend 2013). Promoted by major corporate entities, such as IBM, and often working in partnership with municipal

governments, smart urbanism, and its accompanying smart cities, advances a technocratic form of governance that views urban issues as technical problems with technological solutions (Green 2019). In Rio de Janeiro, for example, following an extreme rain event in 2010, the city's mayor commissioned IBM to design and implement a digitally enabled control center to monitor and manage the city's emergency response. Operating 24 hours a day, 7 days a week, and with over 80 customizable computer monitors that resembled a NASA control room, the command center interconnected several municipal systems to ideally allow for dynamic data analyses that informed real time response to the city's emergencies (Luque-Ayala 2019). Such an example demonstrates the scale and scope of smart urban projects that have an almost totalizing impetus to control, manage, and economize urban issues through the power of digital technologies.

However, despite the utopian and often grand claims of smart urbanism, critical scholarship has challenged the ability of technological solutions to equitably address urban problems. Most prominently, critical researchers have demonstrated how smart urbanism infrastructures “do not question established orders but rather ensure their maintenance” (Luque-Ayala 2019: 26). Agnieszka Leszczynski (2016), for example, argues that because smart urbanism is a material-discursive project of future-ing, or anticipating and securitizing the future(s) to come, smart urbanism projects the certainty of what is into the future. In other words, by using the contemporary city as a pattern for the future, smart urbanism ensures a future city that is uneven and stratified along axes of race, class, and gender privileges. Further drawing in critical race theories, and intersectional feminist critiques, Sarah Elwood similarly highlights this claim by suggesting that in smart cities “the lives of those materially advantaged through white supremacy, settler coloniality, and

cis/heteronormativity are mediated for ever-greater mobilities, speed, and consumption that amplify existing race, class and gender privilege; while those already rendered structurally precarious are exposed to capture, control, and removability” (2020:7).

One way in which critical scholarship has demonstrated this tendency of smart urbanism to replicate inequality is through an examination of the data logics currently entangled within data-driven planning. Coupled with the rise of open data platforms, smart urbanism advances an understanding of urban governance that often equates greater access to data with more transparent and accountable decision-making processes (Green 2019; Kitchin 2014; Safransky 2019). This ability to “fall back on the statistics” as a justification for political decisions, builds from white and masculinist ideas within big data that promotes data analyses as objectively capable of speaking for themselves, or in other words capable of creating reasonable interpretations independently from their context (D’Ignazio and Klein 2020; Loukissas 2019). In this way, as Sara Safransky highlights, “the case for data-driven urban planning is not merely that better data leads to better decisions; it also encourages the argument that accessible and verifiable data helps to depoliticize planning decisions.” (2019: 4). In other words, because data is often seen as separated from the specificity of context, it can speak with a neutrality that is deemed desirable to urban planning processes.

However, as highlighted above, this framing of data and its capacities privileges certain bodies, viewpoints and experiences of the world, particularly those protected through white heteronormativity. For instance, the corporate partnerships valued by smart urbanism place greater value on a kind of technical expertise that tends to be embodied in far off places and in organizations which must be brought in as consultants (Shelton, Zook,

and Wiig 2015). Similarly, prioritizing entrepreneurial logics and competition, citizen participation in municipal government is channeled through events such as civic hackathons that although open to residents, remain exclusionary based on the technical expertise required to participate (Barns 2016). By requiring such technical expertise to engage with this form of participation and governance, smart urbanism discourses contribute to a devaluation of the experiential and situated knowledge of community residents who do not fit within these disciplinary models. In doing so, it relegates their role in urban governance to data collectors or data volunteers; although how voluntary such roles are requires serious consideration.

The importance of this often under examined privileging of white heteronormativity within big data logics cannot be understated. While indeed there are many theoretical frameworks to unpack these logics (see for example Elwood and Leszczynski 2018), critical race scholarship offers one way in which to examine the urgency of this very point. Ruha Benjamin (2019), for example, calls attention to the ways in which anti-black racism is not only a result or symptom of these systems but, is in fact a precondition of their very fabrication. As Khalil Muhammad (2010) similarly demonstrates, there is a need to account for the ways in which data and their associated digital technologies bear layers of racial ideology that requires data to be interpreted, and made meaningful within a broader political, social context in which race matters.

For practices that seek to address racism and advance social justice, this is especially important. Katherine McKittrick and Clyde Woods (2007) demonstrate, for instance, that while many geographic investigations empirically document discrimination and situate the materiality of race, they nevertheless naturalize racial difference and root it in place.

Without taking into account the inherited legacies of race within data and its applications, we risk what Simone Browne (2015) terms digital epidermalization: “the exercise of power cast by the disembodied gaze of certain surveillance technologies that do the work of alienating the subject by producing a truth about the racial body and one's identity despite the subject's claims” (109). In these ways, data has the potential to become part of an algorithmic violence: a repetitive and standardized form of violence that contributes to the racialization of space and the spatialization of poverty (Onuoha 2018; Safransky 2019).

For smart urbanism, this has implications for the depoliticization of data and the decision-making processes that they inform. In short, such work highlights that data is inherently political and informs decidedly political decisions. As Safransky (2019) states, “if facts are stubborn, they often are so not because they are right, but because of the material and affective infrastructures that accrete around such truths, which are embedded with racial norms, presumptions and ideologies” (11). However, while the smart city draws on big data logics, technocratic framings of urban governance and discourses of expertise and objectivity to make the deeply unequal social and spatial orders of contemporary cities appear necessary and acceptable (Elwood 2020), it is not data or digital technologies per se that are problematic. Rather, it is the “logics and intentions that inform how data are appropriated and operationalized, and to what social ends, that is important” (Leszczynski 2016: 1704).

Therefore, to rework smart city logics for equality there is a need to both examine and highlight the normative logics that underpin data-driven urban governance, and perhaps more importantly, there is a need to move beyond an examination of the perpetuation of inequality, to explore how existing digital practices are remaking and

undoing these logics (Elwood 2020). In this chapter, I engage with this tension to explore whether data-driven decision-making processes can enliven and enact the progressive politics that underlie the NT task force members' visions for a more diverse and equitable future. I ask, how did the task force members and Mapshop attempt to produce and mobilize data to capture and make legible their concerns of the present and vision of the future? In doing so, I take up these calls to explore the potential of data-driven planning to enact a future that counters and challenges the certainty of a gentrified and unjust city.

3.2 The actual existing smart city in the American South

Situated within this critical scholarship on smart urbanism, is also a call to examine the actually existing smart city (Shelton, Zook, and Wiig 2015). Calling attention to the ways in which the discursive rhetoric of smart urbanism materialize, this work also highlights how smart city paradigms become grounded in particular places, especially in economies of the global north, often characterized as more mature. Data scientist Ben Green (2019), for instance, highlights the fallacy of technological innovation as adding value to city governance by demonstrating how digital technologies must be thoughtfully embedded within municipal government structures if they are to achieve not only efficiency, but also equity. Such work reveals biases within smart urbanism literature, urban geography literature more broadly, and their privileging of specific geographies as capable of fulfilling the vision of 'smart' cities. Most prominently, work engaging with smart urbanism and data-driven governance tends to focus on major metropolitan areas within North America, such as New York, Seattle, or Toronto. Outside North America, a similar pattern emerges whereby major metropolitan areas such as Rio de Janeiro, Singapore, and Songdo in South Korea become the analytical focus. While perhaps

experiencing the brunt of smart urban discourses, particularly in terms of the drive for corporate organizations to capitalize on such markets, a focus only on these cities marginalizes the experiences and pressures faced by small to medium sized cities, and even the ways in which data-driven discourses translate across communities into rural spaces.

Sold the same utopian dream of greater efficiencies, transparency and accountability, small to medium sized cities may nevertheless strive to fulfil the demands of smart urbanism. This is evident for example, in cities such as Syracuse, NY, where increasingly limited fiscal budgets are legitimized through data-driven and metric-driven programming. However, with financial constraints and often facing stiff competition for the attention of corporate entities, such cities also rely on more creative avenues to build smart capacity such as Code for America, AmeriCorps VISTA and even more extensive partnerships with local universities as sites where expertise can be more easily accessed. Examining how smart urbanism, and its complexities for building just cities take shape in moderately sized cities is vital for further exploring the ways in which smart urban discourses materialize.

Focused on Lexington, KY, this chapter also engages with a concern for the ways in which the American South is theorized within academic literature, both in terms of its capability of being ‘smart’ and by extension progressive. While the American South should be approached as a complex region formed from multiple histories, identities and politics, the South is often constructed as “an easy repository for all that is backward and hurtful in the United States, past and present” (Law 2001: 3). Its opposite, the North, particularly when combined with smart urbanism, is all that is liberal, modern, and cosmopolitan. Drawing on the scholarship of black geographies, Latoya Eaves (2017) intervenes into these discourses to challenge the normalized regionalism, geographic containment and

temporal stasis attributed to the South. Throughout this chapter, I build upon this scholarship to explore how the NT task force in their attempts to openly address race, and use data to do so, challenge what it means to be smart, and progressive while remaining situated within the American South.

In the following section, I interrogate the ways in which the NT task force and Mapshop collaboratively worked to produce and mobilize data-driven narratives that enacted a future vision for Lexington that actively supported diversity. Ultimately, by drawing on examples of data-driven conversations of affordable housing and equitable development, I explore how political questions were centered in the task force, rather than obfuscated, challenging simplistic narrative of objectivity and neutrality in urban governance.

3.3 Mapping housing affordability

The role of public investment in promoting and sustaining gentrification was a contentious and reoccurring debate within the NT task force. Brought to the forefront of conversation by a passionate community resident, the NT task force members were charged with determining how public investments were exacerbating and institutionalizing displacement. Of course, the actions of government and their entanglement with investment is linked with very intentional patterns of racial segregation, displacement and discrimination that continues to shape urban landscapes and structure inequalities (Rothstein 2017; Schein 2012; Stein 2019). But, this community resident's comments also went a step further to prompt a more critical reflection on the ways in which progressive policies, designed to prevent or protect against displacement, actually end up supporting gentrification.

One of those policies was the subsidization of affordable housing. In 2014, the Lexington Fayette Urban County Government (LFUCG) established a modest housing trust fund to support the creation of affordable housing for households at or below 80% of the area median income, or AMI (\$59,600 for a family of four in 2019). Like other housing trust funds, the scope and geography of projects are influenced primarily by the applicants, and development budgets themselves. Because of this, housing advocates on the task force raised a series of questions around the use of income thresholds, established by the Department of Housing and Urban Development (HUD), and their applicability in communities experiencing the pressures of gentrification. A familiar struggle for housing agencies across the country, these concerns question the concentration of subsidized housing in areas of relative precarity, and in doing so further examine who benefits from creating affordable housing at 80% AMI.

Recognizing the ambiguity around these conversations, Mapshop sourced data on projects funded by the affordable housing trust fund and mapped it alongside census data on income demographics. Tracked in spreadsheets, and without uniform address, or unit information, the effort that went into producing an affordable housing dataset that was both mappable and informative to the task force's conversations was significant. The politics of obtaining this data was also fraught with tensions. For instance, although within the purview of local government, the data on the affordable housing trust fund was not openly accessible. This fact, and ultimately Mapshop's unique access, was raised as a concern by community residents who had similarly requested access to this same dataset. As discussed more in chapter 2, Mapshop's ability to gain access to this data, our access to the task force, and other agencies within the local government, served to further position Mapshop in an

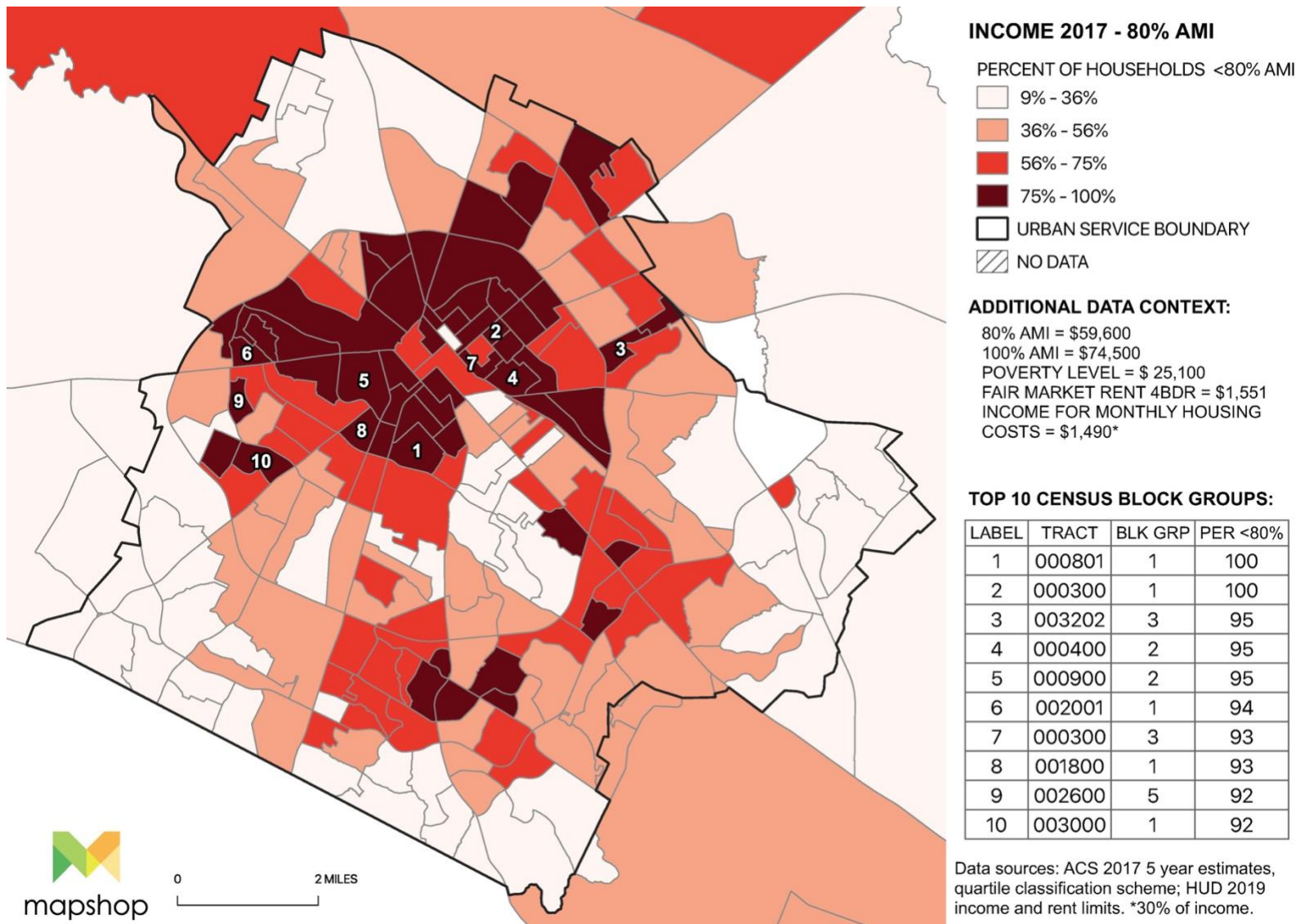
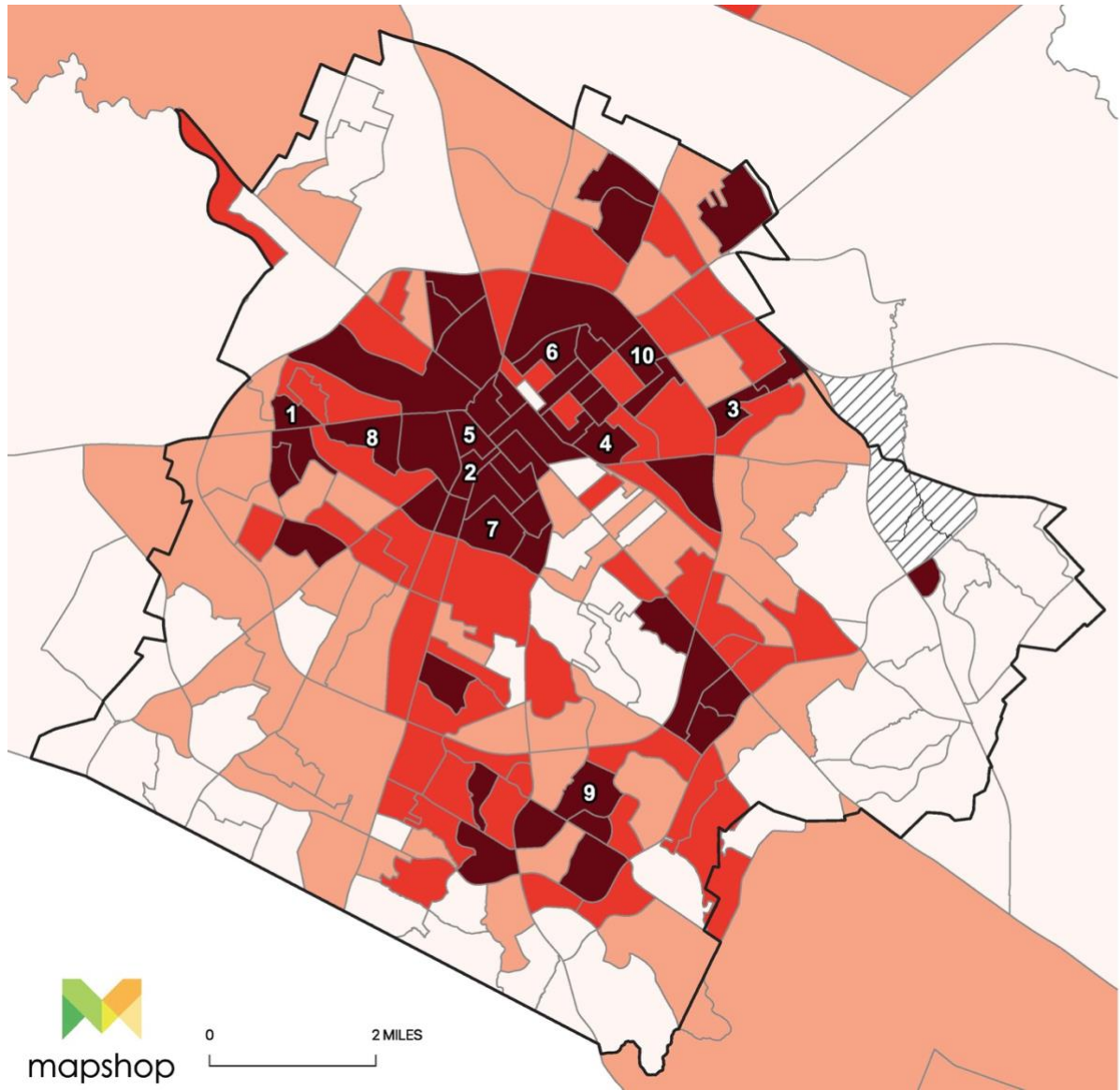


Figure 3: Mapping affordability at 80% AMI. Map created by author.

ambiguous relationship to the task force and community residents, highlighting our positions as authoritative academics working with objective and scientific data.

Despite these tensions, when mapped, the data on affordable housing suggested that using the 80% AMI threshold as the marker of affordability in neighborhoods experiencing the main pressures of gentrification would support rather than protect against displacement (see figure 3 and 4). For example, because extreme disparities in income become subsumed in an average statistic like area median income, new affordable housing units would remain unaffordable for residents currently living within census tracts where the median income was more aligned with 30% AMI and below (\$25,700, for a family of four in 2019). In other words, building affordable housing units aimed at families with incomes at 80% AMI still contributes to rising housing costs in gentrifying neighborhoods because it does not account for the current characteristics and disparities within these neighborhoods; instead, an 80% AMI threshold assumes that income distributions conform to county averages. For geographers, and GIS scientists, these challenges are familiar concerns of scale and categorization (Wong 2008).

Certainly, 80% AMI is the upper threshold of affordability and this does not mean that these units cannot house someone at 30% AMI. But, the rent allowed for these units remains unaffordable to households with an income at the 30% AMI threshold. For instance, a 2-bedroom unit, with rent at \$838, would account for 39% of the annual income for a family of four (\$25,700 a year). Without even including utilities, insurance, or other housing expenses, this rent is unaffordable by HUD's own standards whereby all housing expenses should account for no more than 30% of a household's annual income. Additionally, while \$838 might be the county level standard for a fair market rent, in



INCOME 2017 - 30% AMI

PERCENT OF HOUSEHOLDS <30% AMI

- 0% - 10%
- 11% - 21%
- 22% - 39%
- 40% - 78%
- URBAN SERVICE BOUNDARY
- NO DATA

ADDITIONAL DATA CONTEXT:

30% AMI = \$25,750
 80% AMI = \$59,600
 POVERTY LEVEL = \$ 25,100
 FAIR MARKET RENT 2BDR = \$883
 INCOME FOR MONTHLY HOUSING COSTS = \$643*

TOP 10 CENSUS BLOCK GROUPS:

LABEL	TRACT	BLK GRP	PER <30%
1	002001	1	78.19
2	000900	3	76.63
3	003202	3	67.95
4	000400	2	67.82
5	000900	1	67.41
6	000200	1	66.41
7	000801	1	64
8	001900	1	63.96
9	003404	1	63.67
10	001400	1	63.26

Data sources: ACS 2017 5 year estimates, quartile classification scheme; HUD 2019 income and rent limits. *30% of income.

Figure 4: Mapping affordability at 30% AMI. Map created by author.

neighborhoods experiencing the pressures of gentrification this rent would still be considered higher than average. Similarly, when you look at the units funded by Lexington's Affordable Housing Trust Fund, only 16% of funded units meet the needs of individuals and families with incomes at 30% AMI. This figure is also somewhat overstated, because the 30% AMI threshold is often collapsed into proposals that cater for special populations, such as the elderly, victims of domestic violence, and people with disabilities. In other words, it often means that those most in need of affordable housing often have the most constrained options on the private housing market and remain underserved in programs that support affordable housing. It also supports the community resident's concerns that progressive policies aimed to support populations facing displacement may actually further support gentrification.

This reality has left residents wondering, where do those that are displaced end up going? Where can they move to? Where in Lexington is there rent that remains not even necessarily affordable, but livable to residents surviving on such incomes? Pushed to the margins, perhaps even displaced beyond the boundaries of the county, the intentionality of such displacement, and its ties to legacies of racialized development are brought once again to the forefront of conversation. One concerned task force member for instance, stated:

“People have been comparing it to the great migration, like I am going to keep it real with you guys. The kind of things that people say, it is like ok they are getting all the black folks up out of here. The black folks are being pushed out... they are being pushed to the margins, out of the downtown areas. Especially, we want this downtown area you guys have to go. We want this now and we have plans for it and you are in the way. When I look out my window, I am not trying to see you guys. It is that kind of feeling that people have. People feel it”.

This sentiment clashes with the visions of diversity discussed by the task force members at the opening of this chapter. As people of color are increasingly displaced, this illustration paints a grim future for Lexington's flourishing diversity.

The NT task force's conversations around median income and the affordable housing trust fund therefore become significant for two reasons: 1) while the impact of scale and categorization, or the ways in which we slice and dice data is familiar to academics and even housing practitioners, mapping the differences between HUD's area median income, and the census tract median income remained an extremely critical reflection point for the task force members, particularly in their understandings of the ability to leverage objective and apolitical data for decision-making processes; 2) by allowing the task force members to explore the implications of changing the narrative told by data, our collaborative data-driven process brought the conversation back to the political question underlying the task force's work. In other words, by visually demonstrating how the data can be manipulated by changing the income thresholds, our collaborative dive into the data brought us back to the political question that began this chapter: who do we want to live in our community? Do we want our community to support low-income families? And if indeed, we want our community to be diverse, how do affordable housing policies prevent or sustain this diversity? The data alone cannot answer these questions. It can only support the argument made in response to this political decision.

3.4 Complexities of mapping race

Although our work on affordable housing data highlighted the centrality of politics to data-driven conversations, the focus that these conversations placed on income also raised a series of further ambiguities for our discussions of race. The NT task force was

intended to be a space to fully examine the racialized dimensions of urban development and investment. Beginning first as part of a committee of infill and redevelopment, the impetus for the NT task force came from a dissatisfaction with how race was excluded and “despairingly addressed” in questions of equitable development. In other words, while the infill and redevelopment committee previously examined equitable development through the lens of income, it did so by excluding race. The NT task force hoped to correct this, by taking “some of the hard, hurtful history out, recognizing it, acknowledging it, and moving forward”. In many important ways, the NT task force did dedicate time to questions of race, racialized development, and the ways in which gentrification capitalized on structured inequality and marginalization. I will discuss some of these, including a public forum on race, in more detail in the following chapter. However, here I focus on how race was approached through the lens of our data-driven conversations.

Mapshop did prepare data on racial demographics (see figure 5). Talking about these maps was a line item on meeting agendas. But, we never quite got there. We never fully had an in-depth data-driven conversation on the racialized dimensions of gentrification, especially not to the same extent that we talked about income. One of the task force members commented that, “I feel like we are dancing around the issue and we shouldn't be because for me it's just life. Maybe because I am a person of color and I am not afraid to talk about it. I deal with it every day, so it is always going to be on the table for me”. For some members of the task force, these sentiments highlight the ways in which data was often positioned as making conversations on race less challenging, particularly for white positionalities. For instance, the task force member quoted above, continued to state, “I would love to see more data broken down by race. I think that would help the discussion a

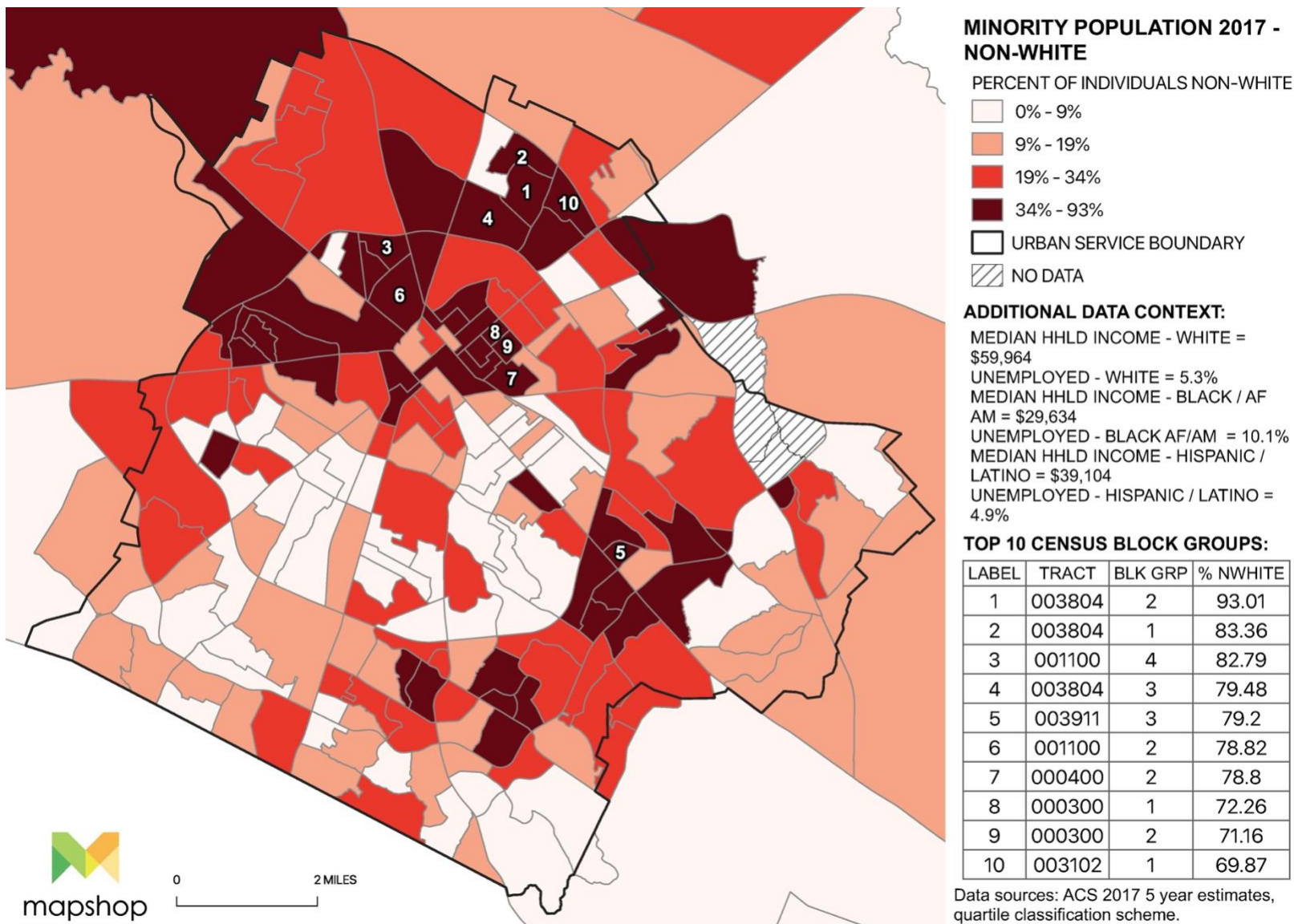


Figure 5: Mapping racial demographics. Map created by author.

little bit because I know people get really touchy when we talk about race. They don't know how to talk about it, so they just don't talk about it. If we had the numbers then, there it is, you cannot ignore that". In these moments, we not only confronted the fragility of whiteness (DiAngelo 2018), but also the limitations of census data and its categorization of race (Ellis 2009; Pavlovskaya and Bier 2012).

Nevertheless, race was at the forefront of our conversations on composite mapping. Requiring the task force members to determine how to rate and weight each identified attribute of gentrification, a composite map would have layered all of the individual attributes into one single map, identifying areas at risk of gentrification with a score from one to four (see figure 6) . In the task force meetings, debates around a composite map centered on whether income and race should be weighted equally, whether they should be weighted more than the other indicators of transition identified by the NT task force members, or whether we should use weights at all. Some of the task force members argued that weighting attributes removed the objectivity from the data and that the attributes should be approached equally. But, for others this questioning of objectivity and the relative importance of race and income was frustrating. One member stated,

“Part of me wanted to scream. How can we even think that we are not going to give that special emphasis, what are you talking about? I tried to be diplomatic when I said well if we are honestly saying that we are doing gentrification, we have to put special focus on race and income because the history tells us [laughs] that those are prominent factors for gentrification. We cannot ignore the history.... I kind of referenced you guys [Mapshop] and said that the data shows us that they are significant, if not top factors. How can we even be thinking that we are not going to give that a top priority in our conversation? It is not to offend anyone; it is to be honest”.

Importantly, this frustration with the conversation again demonstrates the underlying politics at play in the task force's conversations of data. As Mapshop was firmly

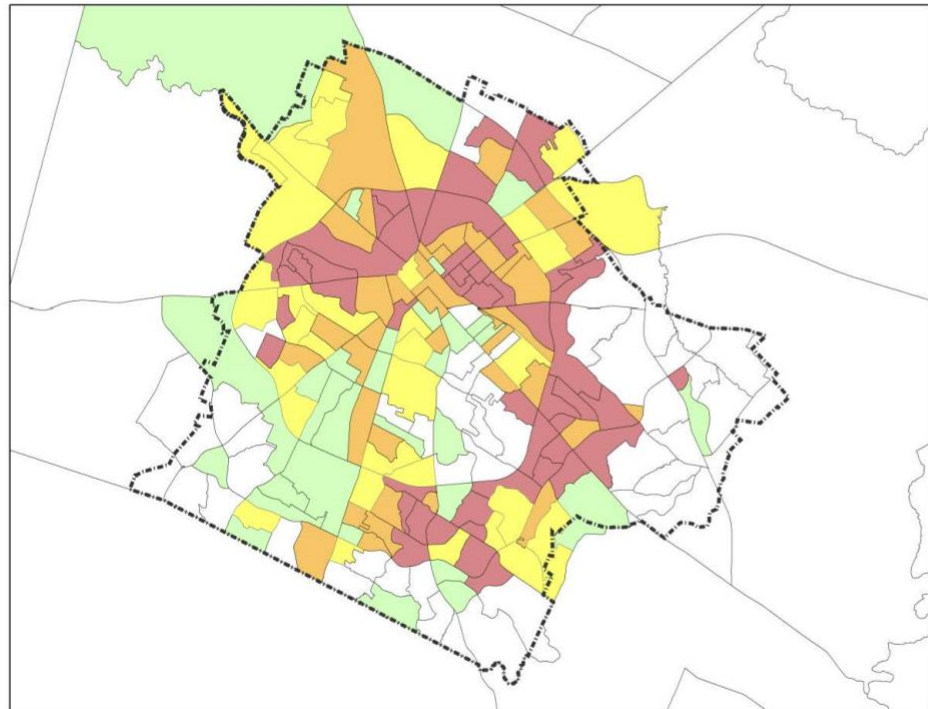
Composite Map of Four Risk Factors

Risk Factors – all equally weighted
at 1 point each, indexed against
County as a whole

1. Median Sale Price
2. Owner Occupancy
3. Percent Non-White
4. Household Income

Scale

Red = 4 points
Orange = 3 points
Yellow = 2 points
Green = 1 point
White = 0



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Figure 6: Example of composite map.

Map prepared by local planning entity and distributed publicly at NT task force meeting (08/06/2020).

resistant to independently making these composite maps, a responsibility we felt rested solely with the task force members, and the task force was unable to agree on the rate and weighting process, we moved away from using composite maps. In doing so, we again demonstrated that there is no correct, objective or obvious answer to the mapping of gentrification. Yes, we perhaps failed to actually address the political question at the heart of gentrification. We failed to address race meaningfully, and problematically allowed income to serve as its proxy. But, we also did not allow this tension to remain obscured in the data. The data-driven process led the task force members back to a conversation on race and income that was not easily resolved, navigated or mappable.

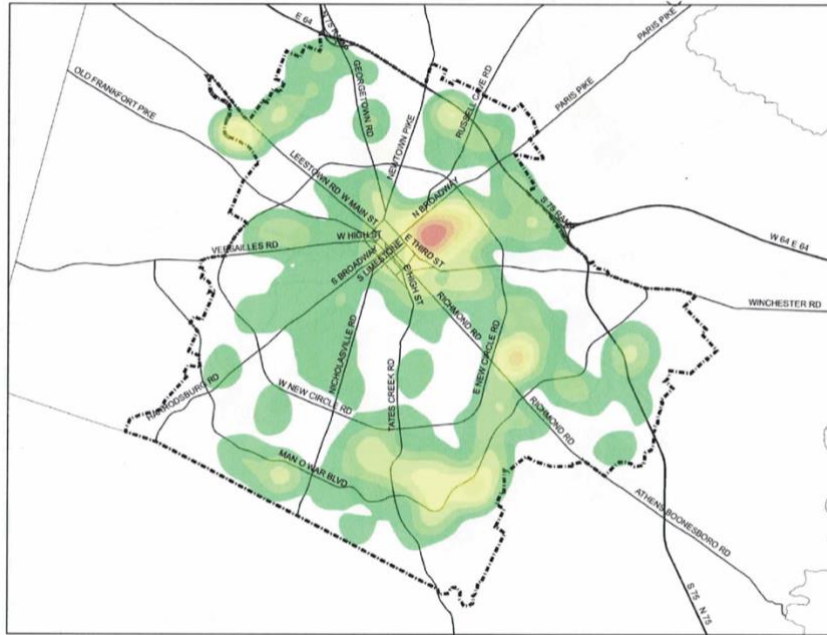
3.5 Mapping clarity and the centrality of politics

The examples above all have a layer of complexity; the data interpretation might at first appear simple, but then becomes more complicated as we tease out the political questions that underlie interpretation. Here, I ask the opposite question, how is politics centered even when the picture presented by the data and maps seems entirely clear?

One of the data packets prepared by the planning entity, discussed in more detail in chapter 2, depicted a heat map of foreclosures on one side of a sheet of paper, and on the reverse, a map of investor owned properties (see figure 7). When discussion turned to these maps, there was a perceivable discomfort around the room. One task force member described the event as follows:

“It was funny last night when they started talking about the foreclosures. You know, this is over a 10-year period, blah blah blah. And I am like if you look at the back side of the map, the spot where all the foreclosures are is the same spot where all the investors bought property. That is telling you something right there. It is just right there on the flip side of the paper and everyone is acting like it is such a mystery. It is right there... All these foreclosures concentrated in this area, and then all these investors have come through and bought the same area. That is not a

Where “Investors” Own



Foreclosures 2008-2018



Figure 7: Relationship between private investment and foreclosures. Maps prepared by local planning entity and distributed publicly at NT task force meeting (08/06/2020).

coincidence. They try to make it seem like it is so unsure of what is going on there [laughs]. It is comical. There are comical moments at these meetings. The denial is so deep”.

In this moment, the spatial relationship between foreclosures and the increase of investor-owned properties was apparently crystal clear; increased concentrations of foreclosures correlated with increased concentrations of investor bought properties. But, as the task force member quoted here explains, despite the perceived clarity of this relationship, the data was dismissed as incapable of accurately informing the policy making process. At least, the data was dismissed as too simple and in need of greater complexity to better inform public policies. Thus, we see again, how politics comes back into the conversation through the data. The political question being whether or not the local government wants to prevent private investors benefiting from racialized capitalism. In other words, does the local government value profit over people?

3.6 Discussion

The utopian discourses of smart urbanism present an image of data that advances transparency, accountability, efficiency and a model of urban governance that is rational and depoliticized. Critical scholars have demonstrated the fallacy of these discourses, drawing attention to the problems of data logics underpinned by white heteronormativity and racial capitalism, while also drawing attention to the need to explore already existing practices that are undoing the certainty of these inscribed inequalities (Elwood 2020; Leszczynski 2016; Safransky 2019). In this section, I further contextualize the data practices of the NT task force members and Mapshop to interrogate both the role of university-community partnerships in smart urban discourses, and the opportunity to

centralize politics as the interpretative lens for data analysis that enacts a more progressive politics in the space of urban governance.

3.6.1 University-community partnerships and the smart city

Mapshop's collaboration with the NT task force raises a series of questions around the role of university-community partnerships in smart urbanism discourses, particularly for moderately sized U.S. cities. Although situated in the South, and often stereotyped as lacking both in terms of progressive approaches to racism and modern technology, most members of the NT task force eagerly embraced the use of digital mapping to more actively address the continuing legacy of racialized development in Lexington, KY. Enacting the same optimism towards data-driven discourses that permeate major metropolitan smart cities, the NT task force members sought to use data in their decision-making processes to add both logic and reasoning to a process that was often seen as highly charged with conflict, emotions, and politics. Yet, with a more modest fiscal budget, and with limited access to leading corporations in smart city initiatives, the task force members turned to Mapshop, an entity seen as similarly embodying the capacities of data-driven smart urbanism.

However, given the roles that universities have historically played in shaping urban landscapes and structuring inequalities (Dorsey 2019), this turn to the university requires further scrutiny. For instance, while Mapshop does not have to be flown in to provide data-driven consultancy services, its presence and work with the task force can be seen as undermining the expertise of local community residents. It also undermines the perceived transparency and accountability of data-driven urban planning when unique access and skillsets are required to both produce datasets that are mappable, and then interpret their

significance once mapped for local decision-making processes. As discussed further in chapter 2, given the capacities within LFUCG and locally to access data and produce maps, the unique framing of Mapshop only heightens our distance rather than embeddedness within the community, particularly as Mapshop are less accountable to public opinion and scrutiny than government entities. Finally, although Mapshop embraces a framework that is reflexive and critical of discourses of scientific objectivity, the Mapshop mappers also embody specific positionalities that challenge our ability to do this. We are all white and have varying class, gender and sexuality privileges that stand alongside our academic positioning. Indicative of broader shortcomings in digital technology industries (D'Ignazio and Klein 2020; Benjamin 2019) and geography as a discipline (Derickson 2017; Pulido 2002), these positionalities further complicate our ability to challenge the often-problematic framings of authority imbued to data-driven narratives and digital technologies. All of these complexities highlight the need to further interrogate how cities that lie beyond normative framings of smart urbanism nevertheless strive to enact its futuristic promises while also examining the avenues through which they attempt to do so.

3.6.2 The devil is in the details: Equity as a lens for data analysis

When Mapshop was working on data with the NT task force members, Dr. Matthew Wilson, Mapshop's Director, would repeatedly state: "the devil's in the details". This phrase drew attention to the series of implicit and explicit decisions informing the maps of income, race, education and other attributes of transition selected by the task force members. By the time I began my interviews, the task force members were also relatively fond of using this phrase as demonstrative of the complexities of using data to inform their policy making. The popularity of this phrase by the task force demonstrates that Mapshop

was successful at demonstrating the complexities of using data to inform political decisions. In other words, by disrupting the ability of the politics to remain masked, obscured and hidden in the details of data, our collaborative mapping process critically undermined the ability of objective and rational data analyses to make decidedly political decisions. Importantly, this does not mean that data cannot *inform* political decisions, for the maps on affordable housing did inform the task force's decision-making process. But the data alone cannot answer: who do we want to live in our community, how is gentrification written into government policies; should the government protect people over profit? These are political questions.

Thus, I argue that for the NT task force the data did not obfuscate, but in fact, heightened the politics at play in conversations of gentrification and neighborhood transition. Clearly, by actively choosing to name the task force around the concept of transition, the task force members were keenly aware of the politics and controversy surrounding gentrification and government interventions into gentrification. Indeed, as noted above, the impetus behind engaging with Mapshop may have even been to mitigate this controversy with data, adding reason and logic to conversations charged with conflict and emotions. Sometimes this was true. Sometimes, as demonstrated by the foreclosure and investment mapping conversations, it was untrue. However, most importantly, I suggest that the critical and collaborative approach of Mapshop prevented the politics underlying the work of the task force from slipping out of sight. Our data analyses rejected the neutrality of data and in doing so brought the conversations of the task force back to the political question(s) underlying their work. In the words of one task force member, by demonstrating the differences in thresholds of affordability, the median income maps

“forced people to show their biases”. Or in the words of another member, “nobody is going to say that they don't want people who live below 40% AMI. But, I think by people's unwillingness to say that, we make them say the other. So, let's decide. What percentage of our population fits that category, what percentage of our housing fits that category, what does not? Let's set some priorities”.

I am not advancing the removal of data-driven processes, or evidence-based practices from participatory urban planning. To do so, especially given the dominance of smart urban discourses would be misguided. In fact, I even think that beginning with the data was foundational to the NT task force's ability to recognize the challenges of using data and move beyond its limited scope. The circular process (see figure 8) that began with the dive into the data and returned conversations back to the politics that started the task force's work allowed us both to critically discredit the ease with which objective data is portrayed, and also allowed us to rhetorically point to our data-driven process as complete. The task force was capable of being credited for being both diligent in using data, but also critical with its applications. Furthermore, I argue that Mapshop's collaborative practices demonstrate how data remains useful to decision making processes, if the task force's vision for diversity and equity becomes the interpretative lens or framework for analysis. As exemplified in the mapping of income thresholds, this requires us to transition from asking how to build affordable housing, to question who benefits? Or as articulated by a task force member, this means transitioning from using the data as a calculator, whereby this attribute plus this attribute equals transition, to instead using data to guide conversations towards policies that create and sustain equitable development.

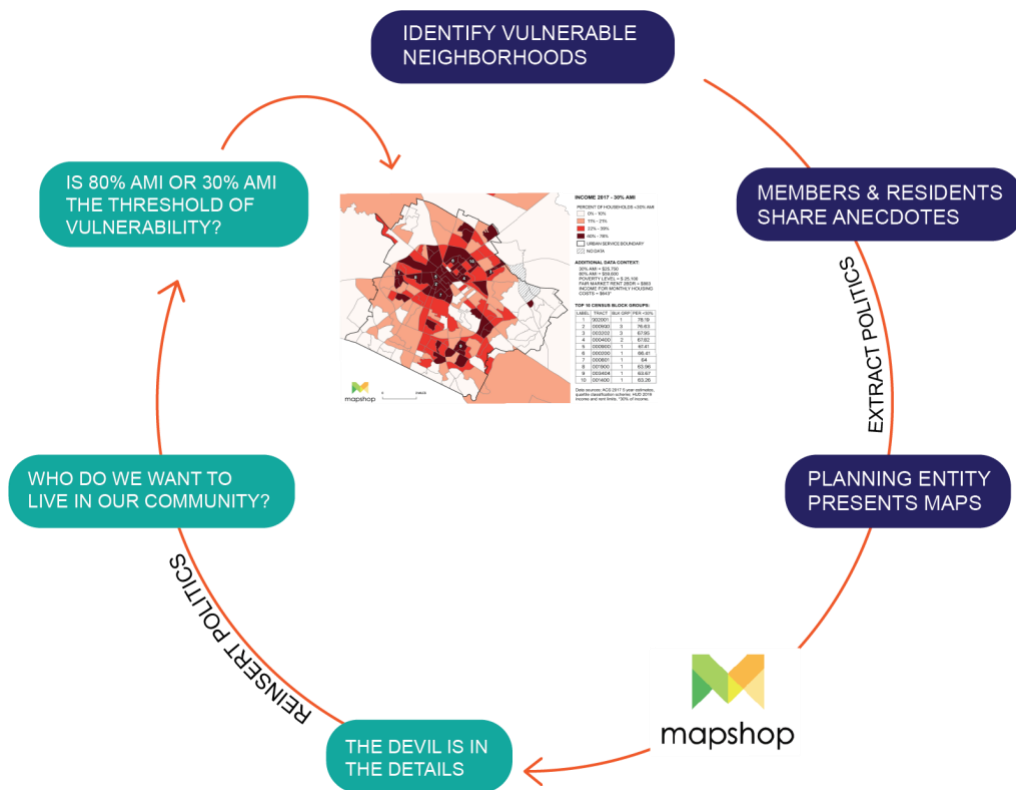


Figure 8: The circular data-driven process and the role of politics

Certainly, as discussed in chapter 2, our collective attempts to navigate these contradictions were imperfect. It was a constant negotiation as the NT task force members strategically positioned Mapshop, our objectivity, data outputs and expertise, in ways that did seem to mitigate some of the political questions at the heart of the task force’s work. In addition to the task force members’ hesitancy in identifying a list of areas as vulnerable to gentrification, our inability to truly have data-driven conversations on race, and falling back on income as its proxy, was highly problematic. While I have no intent to dismiss these complexities, and indeed it is pertinent again to highlight that conversations on race are often perceived as difficult only for those privileged by racism, these challenges also

further highlight how data-driven processes are entangled within broader social and political dynamics. Ultimately, these complexities highlight my broader argument: there is a need to further interrogate how university-community partnerships interface with smart urbanism discourses and how this site creates opportunities to remake and resist these very discourses.

Additionally, because our data-driven process did not obfuscate the politics from urban decision-making processes, does not mean that we were successful in truly enacting a progressive politics. At the time of writing, the recommendations and outcomes of the NT task force remain in progress. Based on the city's budget and past commitment to affordable housing, these recommendations are likely to be modest. Similarly, Mapshop's collaboration was only with one city task force; there was no integration into the economic development and urban planning department or an exploration of how they operationalize data in their more everyday decision-making processes. There is more to be said about how more critical data-driven processes fit within urban governments more broadly and how they create solutions that are backed by votes and money. That being said, given the continuing dominance of data and its coupling with the growing prevalence of algorithms in urban planning (Safransky 2019), Mapshops's collaborative data practices highlight a starting point: a reference of already existing and ongoing work with data and digital technologies that crystallize rather than remove the politics from the urban decision-making process.

3.7 Conclusion

I began this chapter reflecting on the visions that the NT task force members had for the future of Lexington. Recognizing how racial capitalism has periodically displaced

structurally marginalized community residents, these visions centered on a community that actively supported diversity. While it may be naive to equate diversity with justice, and indeed there is an ongoing imperative to examine how discourses of diversity intersect with neoliberalism to promote superficial forms of equity (Summers 2019), this framing of the future nevertheless required the NT task force members to interrogate how local policies contribute to displacement and support gentrification. It required task force members to actively decide who we want to live in our community and put policies and procedures in place that do just that. Throughout this chapter, I demonstrated the ways in which this decidedly political question was not mitigated through conversations of data that are often seen as depoliticizing urban planning processes. Instead, I highlighted how the critical conversations around the use of data, and its interpretation brought politics to the forefront of the decision-making process. Ultimately, I suggest that it is this ability to use the task force's vision of diversity and justice as the interpretation lens for the analysis and construction of data-driven narratives that highlights a potential for data-driven urban planning to enact a more progressive politics that resists the certainty of gentrification.

As I make this argument, and particularly as I highlight the complexities of critically using data and digital technologies for social justice, I am often confronted with a common question: why engage with data or maps in the first place? In other words, given the ways in which data and digital technologies continue and historically have been steeped in colonial, white, and heteronormative traditions that enact violence, can data ever really benefit marginalized and oppressed people? Although I have implicitly attempted to answer that question throughout this chapter, I now turn to explore its implications in more depth.

CHAPTER 4. WHY IS YOUR COMFORT IMPORTANT?

Mapshop's work with the Neighborhoods in Transition (NT) task force began with a presentation on the history of racialized development and its relationship to residential segregation patterns in Lexington, KY. Drawing on the work of Richard Schein (2012), this presentation depicted the clear ways in which our current landscape and struggle with gentrification is a direct legacy of slavery, segregation, urban renewal and structuralized inequality as legitimized and financially backed by government policies. Tackling this racialized history, and situating gentrification as embedded within it, was one of, if not the main, concern of the NT task force.

In this chapter, I more directly explore how the task force approached the racialized dimensions of gentrification in a space of local government. More specifically, I explore the tensions that emerged between a need for objective data to justify and validate the political decisions of the task force on the one hand, with a contrasting desire to incorporate personal narratives that spoke directly to the experiences of those being displaced by gentrification on the other. In doing so, I query how differently racialized bodies engage with participatory data-driven narratives, drawing particular attention to the ways in which these qualitative and quantitative approaches intersect to secure whiteness.

4.1 Equity, data and digital technologies

I ended chapter 3 with the following question: can data ever really benefit marginalized and oppressed people? This question, of course, has a long history and legacy within geographic thought, and academic scholarship more broadly. In this section, I summarize some of these debates by drawing on the work of feminist, queer and critical

race theorists, placing them within concerns over Geographic Information Systems (GIS) and data science.

4.1.1 Critiques of objectivity and the disembodied gaze

While the oppositional polemics of the GIS & Society debates often fails to attend to the importance of feminist contributions, feminist critiques of science, objectivity and their relationship to vision are central to contemporary approaches to quantitative data and their associated practices with digital technologies (Elwood and Leszczynski 2018; Kwan 2002b; Pavlovskaya and Martin 2007). The work of Donna Haraway (1988 and 1991), as well as Liz Bondi and Mona Domosh (1992), for instance, was used to critique the ability of science to perform the ‘god trick’ of seeing seemingly everything from nowhere. Outlining the power and the location of the observer, which in Western science privileges the position of the well-off heterosexual white man, these critiques challenged the objectifying and disembodied subjectivity of the scientist and their ability to universally and truthfully represent a known and knowable world (Kwan 2002b; Pavlovskaya and Martin 2007). By further drawing on feminist standpoint epistemologies and the inseparability of the object and subject, Sandra Harding’s (1986) work deconstructing scientific neutrality demanded that scientists take responsibility for the effects of their work by highlighting the relationship between science, colonial practices, imperial imaginations and acts of war (Schuurman 2000).

Additionally, although feminist critiques of science underpinned much of the GIS & Society debates, some feminist contributions were not taken up. For example, although Donna Haraway was cited prolifically in the arguments made against GIS, as Nadine Schuurman (2002) suggests, rather ironically Haraway’s formulations on the ability of

women to participate in writing the cyborg, or the ability to reconfigure technological tools towards life rather than death, was largely absent. By ignoring the potential for political action, this narration of the GIS & Society debates prevents an investment in change and divisively distances feminist contributions from critical applications in GIS, and digital technologies more broadly. For instance, depicting the debates as a history of “men, their innovations and their advancing of science”, displaces the contributions of feminist GIS researchers and users, like Carol Hall (1996a and 1996b) who, during the height of the GIS & Society debates, examined the link between the masculinist culture of computer work and the GIS lab noting its effects on women’s identities and their attitudes towards GIS technology (Kwan 2002a). Not only perpetuating the preconception that women cannot and therefore should not participate in technological fields, this divisive distancing of feminist contributions both in theory and to critical applications prevents an investment in change. Given the increasing ubiquity of geospatial technologies, and the continued underrepresentation of women in varied positions of power within technological fields and the academy more broadly, the relevancy of this critique should not be taken lightly.

The feminist potential for writing the cyborg is nevertheless evident in a series of developments in contemporary digital geographies scholarship. Elwood and Leszczynski (2018) highlight four keys pathways that emerged as a result of the feminist literatures of the 1990s. Firstly, research has proliferated that embraces alternative epistemological and methodological approaches to re-articulate mapping technologies towards non-positivist and non-authoritarian aims. Secondly, gender has solidified as an analytical category that cannot be separated from technological research. Work in this pathway highlights the potential for examining how digital spaces and technology may transform gendered power

relations in economic, political and social life. Additionally, feminist commitments to relationality and the inseparability of subject/object and observer/observed have begun to challenge the Cartesian epistemology of the grid, creating greater opportunities for representing theories and experiences of space that embrace processes, networks, flows and movements. Finally, a greater focus on bodies and embodiment has recast digital spaces as ontological objects, analyzing their potential as sites for normalization, discipline and resistance.

Here, exciting and necessary work is being conducted by queer, critical race and post-colonial theorists that seeks to answer calls within geography for intersectional analyses that incorporate a more critical attention to sexuality, race, and its imbrication with additional axes of privilege. Such work moves beyond the often-limited scope of white feminist thought to explore how digital technologies are imbricated with and deployed within broader concerns for power. For example, examining the intersections of cartography, colonialism, and violence against Indigenous women, Annita Lucchesi (2019) challenges the application of binaries that categorize violence to demonstrate how different patterns and sites of violence emerge. Jack Giesecking (2018) similarly refutes the big-small data binary to show how lesbian and queer data work is conducted at interdependent and imbricated scales, offering ways to recognize the already marginalized and less studied lives, experiences, spaces, and histories of the oppressed in the moment of big data. Challenging the racialized logics underlying network clustering analyses, Wendy Chun (2017; 2009) examines how contemporary algorithms are problematically derived from models of racialized housing segregation patterns. Leading us away from questions of ontology, or asking what race is, to ethics, asking what relations does race set up, Chun

creates possibilities for making race do different things. Taken together, such work demonstrates a longstanding and ongoing trajectory of challenging the normative discourses and logics of digital technologies and its associated data, reworking often already existing practices for more just, equitable, and liberatory means.

4.1.2 Power, equity and data science

Within data science, more specifically, this ongoing attention to embodiment and power has resulted in broadening the definition of data-driven narratives. Most prominently, in *Data Feminism* (2020), Catherine D’Ignazio and Laruen Klein advocate for integrating intersectional feminist thought, and its critical attention to power, with data science as a way to create more equitable and liberatory data-driven projects. In doing so, D’Ignazio and Klein advance a more expansive definition of data that moves beyond numbers alone, to include words, stories, colors, sounds, or any information that is systematically collected, organized and analyzed (2020: 14). This broadening definition highlights two of the key principles of data feminism: embrace pluralism, and elevate emotion and embodiment. In other words, data feminism insists that “the most complete knowledge comes from synthesizing multiple perspectives, with priority given to local, Indigenous, and experiential ways of knowing”; which in turn requires that knowledge be situated as radiating “from people as living, feeling bodies in the world” (18).

Importantly, these principles require different practices, both in terms of how the data work is conducted, and how its subsequent narratives are communicated. D’Ignazio and Klein suggest, for example, that embracing pluralism requires a design process that integrates collaboration and participation across various levels of expertise and diverging positions of power. This shift, they continue, moves the overarching goal of projects away

from “doing good with data” to something more aligned with “co-liberation” (140). As such, it requires a recognition, particularly by members of dominant power groups, that a fight for equity is best understood as a shared struggle for liberation; a recognition that is most likely to be fostered if differing perspectives and positionalities are collectively working together. However, to be effective, these processes must grapple with the recognition that “differential power has a silencing effect” or a persistent ability to leave people and perspectives out (142). Thus, D’Ignazio and Klein advocate for methods that “deliberately pair quantitative analyses with an inclusive civic process, resulting in locally informed, ground-truthed insights that derive from many perspectives” (142).

In terms of communicating the data narratives, D’Ignazio and Klein highlight the importance of emotion whereby data visualizations, and the story that they depict, have a visceral impact on bodies. Again, embracing a pluralistic framing of knowledge production, particularly one that challenges the perceived rationality, minimalism and objectivity of data-driven narratives, this more affective framing of data asks data scientists to consider whether a visualization should evoke emotion. Continuing, D’Ignazio and Klein ask whether activated emotions help us to learn, remember, communicate and act on data? While importantly these questions demonstrate the pressing need to create multisensory and more accessible visualizations, they also highlight the ways in which attention is captured and directed by evocative data-driven narratives. Through foregrounding the emotions and lived experiences that often lie behind each data point, such approaches are often colloquially framed as demonstrating the reason why people should care about facts and figures. In philanthropic and advocacy spaces, for example, this is evident in data dashboards that frequently embed quantitative data and maps

alongside personal narratives of poverty, eviction, hunger and so forth. Adding context to the perceived coldness of data, these narratives use emotion to capture attention and spur action; a task that is increasingly more challenging as the potential spaces for meaningful engagement become fractured and crowded (Wilson 2015).

While the insights from *Data Feminism* (2020), particularly its critical attention to questions of intersectionality and power, are indeed significant and require ongoing engagement within data science, in the following section I draw on the work of critical race theorists and black geographies to reflect upon the challenges of enacting more liberatory data practices. In particular, I am cautious that even critical approaches to data-driven narratives that integrate some of the principles and practices advanced by data feminism have the potential to reinscribe axes of difference, especially when larger questions of structural racism and whiteness remain unexamined. In what follows, I explore two ways in which these concerns materialize through the invisibility and fragility of white people.

4.2 (In)visibility

Racialized, sexualized, and commodified, the bodies of enslaved African people were often rendered hypervisible to the white supremacist gaze. At the auction block, for example, the enslaved body was subjected to a gaze that categorized, dominated and monetized the body at scales from character and intellect through to a valuation of bone, muscles, and blood. Katherine McKittrick (2006) argues that, in its crudest sense, such examples demonstrate how the enslaved body was territorialized: marked as decipherable, knowable, “subordinate, inhuman, rape-able, deviant, procreative, placeless” (45). In other words, the white gaze not only categorized and commodified the black body, but in doing

so marked it as other, out of place, particularly in public spaces coded as inherently white. Today, this ongoing legacy is replicated through the imbrication of code and digital spaces as is evident in police profiling technologies whereby black bodies, and associated racialized spaces are overrepresented as poor, criminal and deviant and consequently subjected to both physical brutality and social death (Alexander 2012; Benjamin 2019; Browne 2015; Cacho 2012). Such examples highlight how the white supremacist gaze continues to territorialize, surveil and categorize black bodies.

However, hypervisibility is also intricately entangled with invisibility and resistance. Notably, in countering the territorialization of black, and particularly female, bodies, Katherine McKittrick's (2006) discussion of Harriet Jacobs' [Linda Brent's] escape and imprisonment in a small attic space is a prominent example of the ways in which invisibility, or the ability to remain out of sight of the white gaze yet in sight of the plantation logic, was a complex, yet powerful form of freedom for enslaved peoples. Simone Browne (2015) further draws on this positioning of (in)visibility to advance an understanding of dark sousveillance: an embodied view that not only mobilizes a critique against racializing surveillance practices, but is also a site to "situate the tactics employed to render one's self out of sight, and strategies used in the flight to freedom from slavery as necessarily ones of under sight" (21). Thus, while subjected to the white gaze, such examples demonstrate the strategies of resistance, freedom and survival that counter the seeming totality of whiteness. In doing so, they demonstrate a key articulation of black geographies: although often camouflaged, black geographies disclose how space is produced and how life is lived otherwise in spaces demarcated as invisible/ forgettable/ damned (McKittrick 2011; McKittrick and Woods 2007).

Given the legacies of the white gaze and its relationship to science discussed above, this tension between hypervisibility and invisibility raises particular possibilities and challenges, especially for social justice work. Rendering visible state violence can be an extremely powerful strategy for justice claims, as is highlighted by the Anti-Eviction Mapping Project and their work documenting dispossession in gentrifying landscapes (Maharawal and McElroy 2018). However, while projects that call attention to state violence and structuralized racism are often well-intended, they can essentialize relational experiences and naturalize harmful stereotypes (McKittrick 2011). For example, while data dashboards, like those discussed above, often integrate personal narratives to add context, meaning and an emotive significance to data, they can also essentialize experiences of poverty by upholding controlling images of racism and in the process silence whiteness. The spotlighting of poverty with a black woman's face to contextualize the empirics of poverty is illustrative of this tension; while perhaps empirically truthful to claim that black women experience higher rates of poverty, reproducing a black woman as the face of poverty fails to account for the pervasive ways in which the kinship structures of black families have been denigrated and undermined by white heteronormative framings of the nuclear family (Bailey 2013; Cohen 1997). In other words, by silencing whiteness, such work often naturalizes the very structures that create and sustain inequality.

I draw on this literature of (in)visibility as demonstrative of a paradox outlined by Ruha Benjamin (2019): while American culture is increasingly more attuned to racial biases, an awareness that we might take as a sign of social progress, these very processes are also creating opportunities for more insidious forms of racism to remain unrecognized and even more secure. Brandi Summers (2019), for instance, calls attention to the ways in

which popular forms of gentrification continue to call upon black bodies and the aesthetics of blackness as structuring discourses of progress and diversity, while also ensuring that black people, and the conditions of structural inequality that shape the lives of black people, remain unseen. Summers specifically uses this lens of unseen to argue that “where invisibility speaks to a vanished presence, being unseen is akin to being ignored, an overlooking that is structurally embedded... It is in the best interest of people who unsee Black people not to see them, especially those who are poor. To *see* them, to envision their lives and conditions, disrupts the narratives of urban progress” (2019: 163, emphasis original). Returning to Benjamin’s paradox, examining (in)visibility and its associated practices within digital technologies and data science, therefore creates an opportunity to interrogate “how the value of Whiteness is underwritten through multiple forms of exposure by which racialized others are forcibly and fictitiously observed but not seen” (Benjamin 2019: 102).

4.3 Problematizing empathy

This also leads us to the question of how the use of emotion as a form of understanding and recognition is both gendered and racialized. Used to establish a shared humanity, empathy has a long and problematic history of deployment that is linked to white heteronormativity. The stereotype of the welfare queen, for example, has been used to demonize poor women of color as unable to control their both sexual desires and their financial responsibilities (Cohen 1997). Tied to discourses of morality, this deliberately unsympathetic image was used to effectively rationalize the shrinking state assistance provided under Ronald Reagan and its ongoing diminishment within the non-profit industrial complex (INCITE! 2017). Examining similar discourses embedded within

statistics, sociologist Khalil Muhammad (2010) demonstrates how white progressives strategically used statistics to achieve two very different political ends: one to naturalize black criminality and racial exclusion, and the other to promote white integration. Muhammad attributes this disparity to the ability of the white progressives to both accept the data as representative of black experiences of crime, while simultaneously rejecting the “data as 'too statistical' because it submerged the humanity of the [white] people and masked the 'aggravating causes of crime'” (2010: 273). Importantly, it was this demonstration of suffering and promotion of empathy that spurred extensive social programming for European immigrants. Taken together, these examples demonstrate the problematic ways in which emotions, and particularly empathy, are drawn upon to translate facts and figures into action, particularly when the intended audience is white.

This privileging of white empathy is further complicated by the framing of black anger. In *Notes from an Angry Black Hunter*, Jonathan Hall (2019) discusses that while angry about how white violence has shaped the lives of people of color, and indigenous populations in America, his anger is often disregarded and minimized by white people. He comments, for instance, that while he must confront his anger and its root cause in racism, white folks avoid the work of similarly addressing racism as a matter of happiness. This fragility of whiteness (DiAngelo 2018), its inability to meaningfully account for the “festering wounds of trauma” that white ancestors inflicted, and that white people today perpetuate through willful ignorance, prevents the hard work of dismantling racism (Hall 2019). These emotions are also wrought with power dynamics associated with gender. For instance, the tears of well-meaning white women are a controlling image that recenters white experiences of racism, their anger and hurt, while distancing the violence that the

role of white women purport in racism (DiAngelo 2018). As highlighted by Anne Bonds (2019), there is a need to examine how white supremacy co-articulates with gender, examining how both are embedded within processes, structures and institutions that produce and secure white dominance. For the feminist call to make data-driven narratives and visualizations more emotive, more affective, there is a need to ask how these emotions are a further dimension of power and social control that is not only gendered, but also racialized.

In the following sections, I take up the tension of (in)visibility and the problematization of empathy to examine how whiteness is disguised, yet also secured, in the data-driven narratives of the NT task force. Exploring how differently racialized bodies are mobilized at the intersections of the mapping process and a public input forum, I argue that there is a need to more fully examine how data, whether it be qualitative or quantitative, secures whiteness when used in participatory urban decision-making processes.

4.4 Positioning race within the mapping process

To begin, let's revisit the ways in which conversations of race were framed within the NT task force. As discussed in chapter 3, while the NT task force members identified race as one of the most important attributes for identifying areas at risk of gentrification, we never fully broached a data-driven conversation around race, especially not to the same extent that we talked about income. For example, in my field notes from a meeting where we walked through an extensive list of potential attributes, we spent considerable time talking about code enforcement, school performance, transportation, the age of the housing stock, and access to social services. But, as we reached the end of the meeting and discussed the last attribute of race, I rather unusually only wrote down one comment. Referencing

the co-chair of the task force, Councilmember James Brown, the note reads: “underlying the work of the taskforce is race. Although being played out, race is hard to talk about. There will be a publicly facilitated meeting”.

The need for this public meeting may have stemmed from the fact that although the data-driven mapping process validated and justified the work of the NT task force, for some it was also a dehumanizing process. It removed the experiences, real-life stories, and voices of community residents currently experiencing the pressures and violence of gentrification. Such narratives surfaced at nearly every meeting by task force members and the public alike. For instance, in one meeting I eagerly listened as the Commissioner of Social Services, Chris Ford openly discussed his shock and anger after receiving a cold call from a developer asking to purchase his home; a home that was not on the market and the offer was far below a fair market price. As we turned to public comments, I also keenly listened as longtime resident Reverend Mike Wilson expressed his personal frustration with the investment in his neighborhood, the ongoing displacement of his neighbors, and his demands that more resident voices should be heard. This demand is indicative of the ongoing tension that the task force leadership actively negotiated: on the one hand, they wanted to use data to validate their decision-making processes, and on the other they recognized the importance of ensuring that the data was brought “back to a people level”. This is reflected in the choice to pursue both the mapping process, and the public input forum.

Additionally, although Mapshop produced maps on race, we did not actively center these conversations within our public and interactive presentations, and although requested, we did not produce a final map that depicts the changes in racial demographics

through time. The reasons behind this were multi-faceted, ranging from allowing the task force members to retain ownership over the process, to the limits of using census data, to the dynamics of Mapshop and our own positionalities as white academics. But, despite our critical intent, perhaps the impact was the same? Indeed, while I argue that Mapshop's approaches to the data prevented the political questions underpinning our data work from slipping out of sight (chapter 3), I am also cautious that our collective reticence to have data-driven conversations on race, and even Mapshop's openness to discuss the limitations of racial census data, may have further contributed to the task force members' desires to discuss race through a public forum. In other words, despite our critical intent, the resulting impact was that race was uniquely positioned as a conversation that could only be discussed through a public forum.

4.5 Positioning race within a public forum on development

The NT task force held at least two public forums, with an additional meeting planned at the time of writing this chapter. While there is more to be said on the extent to which public forums are meaningful forms of public participation (see for example Güiza and Stuart 2018), the forums were intended to both update residents of the work of the task force and gather community input as a way to direct action. In what follows, I focus specifically on the second of these forums organized around the topic of Race, Class and Development. More colloquially, this meeting was referred to as a forum on race, and the racialized dimensions of gentrification.

Framed as a tough, but necessary conversation, the public forum on race was attended by approximately 150 individuals ranging from members of the task force, to other public officials, leaders of non-profits, police and school representatives and community

residents, including those living within and beyond areas facing gentrification. The event was facilitated by two male academics of color, both located at an institution disconnected physically from Lexington, but nevertheless experts in diversity and inclusion. In collaboration with task force leadership, the facilitators organized the evening around three themes: 1) Change, redevelopment, race, displacement: Gentrification, 2) Safe and affordable housing and, 3) Code enforcement and policing neighborhoods. Forum participants were encouraged for each theme to first identify concerns or issues, and then move onto crafting solutions. These conversations happened twice, as we talked first in small groups and then as we shared collectively with the entire room.

Interestingly, the meeting began with an attempt to establish a shared language. This is interesting because the task force members themselves had often bypassed defining gentrification, and relied instead on the more ambiguous term transition. Firstly, the facilitators defined revitalization as the promise of investment, with an ideal of creating mixed-income, mixed-race, mixed-use neighborhoods. In contrast, gentrification was defined as the failed promise of revitalization whereby investment results in a transition to exclusive upper income and white neighborhoods that displace current residents. However, while these definitions signaled to race, no shared language, or expectations for talking explicitly about race were established. For instance, we did not discuss unconscious biases, or the ways in which race is structured into institutions and everyday practices. Given the sheer number of people participating in the event, establishing clearer expectations for discussing racism may have added structure to the largely under-facilitated conversations happening around the small group tables.

4.5.1 I am no authority on this; I am here to listen

I felt this lack of framing immediately at the small group table I joined for the evening. My small table was racially and economically diverse, and it contained a mix of community residents and local officials. But, when we turned to start addressing the first theme, identifying concerns and solutions, our conversation faltered as a pair of white women sat down to join us. Actively stating that they were at the forum to listen, they turned to the people of color around the table with an expectant look, waiting for them to begin the conversation. Taking on the role of the table note keepers, the white women actively documented the words of the people of color, but they did not speak back or ask questions, or share their own experiences of life in their neighborhoods. As we moved deeper into the evening, this silence on behalf of the white women, became increasingly more tense. For instance, as we moved to the second theme, a person of color actively expressed their frustration at being the sole voice of gentrification and turned to the white women and other white people around the table, returning their expectant look and waiting this time for them to begin the conversation. As no white person spoke up, the resident chose to remain silent. They stopped speaking and in turn we all sat there awkwardly and uncomfortably, unsure how to move forward when no one chooses to speak.

As we moved to share our small group conversations with the larger room, white voices began to speak. But, while present, few white voices shared intimately personal experiences of suffering, policing, systemic and recurring patterns of dispossession and state violence. White voices advocated for more funding to the affordable housing trust fund, they expressed a need for tenant services and education programs, they advocated for more progressive minimum wage legislation. But, they did not share how they willingly

gave home grown tomatoes to a hungry neighbor's child, their experiences being pulled over by police at the end of their driveway, or their frustration experiencing white people in positions of power pass judgments over their living conditions and family life.

It is the contrast between these statements and their associated differences in engagement that leaves me questioning: who do we ask to be visible and vulnerable as we integrate lived experiences with data-driven narratives? Who do we ask to speak, be the face and story behind the data point, and share the “psychological torture” of racism? Indeed, while there is a need for white people to listen, to both give up and make space for other and often marginalized voices, my discomfort with the lack of white engagement and the depths of this engagement reflects a need to account for the differences between actively participating in meaningful dialogue, and simply listening as a witness and observer of racism unfolding.

4.5.2 Thick skins, closed ears

In raising these questions, I am vigilant of my own fragility as a white, middle-class woman who remained silent in the conversations of race described above. In the following section, I therefore draw upon an interview with a community resident and local activist to more critically contextualize my experiences and observations of the public forum. I use this interview as a point of reflection to examine how whiteness is secured in public forums.

As a self-identified multiracial woman, Angela Johnson³ expressed to me a familiarity with navigating contentious conversations on racism. She discussed both a keen awareness of the unfair expectations placed on black people and the varying ways in which

³ This name is a pseudonym. I chose to privilege the anonymity of this community resident, as agreed upon in the interview process.

white people negate their responsibilities to address the violence of racism. As I asked Ms. Johnson to reflect upon her expectations for the public meeting, she stated:

“I hope that individuals that do show up from the community, can keep their calm and just present what they have encountered and what they are experiencing in as calm and rational way as possible. Because what ends up happening, especially for black folks, if they express frustration then they are angry, they are angry black folks, even though what they are saying is very logical and real. What they are saying is ignored. The fact that they are excited about it gets ignored.

When I talk to my friends honestly I will say to them, try not to get too excited, white folks can't handle when we get excited, being real, that is too much for them [laughs]... I am excited to see what will evolve at this meeting. I hope that it is very honest, and open, and that the people at the table who are, who matter so to speak as far as directly affecting the situation in the community, that they are not easily offended, that they have thick skins, and don't shut their ears off. That these people are always complaining about something. I hope that they do not come with that mentality. We will see”.

This quote is a poignant articulation of the expectations placed on differently racialized people within participatory spaces. People of the community, black folks, are expected to control their emotions and their bodies in order for their experiences of racism and gentrification to be legible to white people. Although this is a participatory space that is advanced as welcoming different epistemologies, embracing pluralism and a need to account for the lived experiences of community residents, people of color still have to comport themselves in ways that fit within white standards of rationality, objectivity and logic. The pressure to continue to embody participatory spaces in these oppressive ways brings us back to Ruha Benjamin's articulation of the need to interrogate how “racialized others are forcibly and fictitiously observed but not seen” (2019: 102). Alternatively, in the words of Angela Johnson, there is a need for white people to further examine “why is your comfort so important”?

4.6 Intersection of data and participation

Extending beyond the public forum on race, other moments within the task force were demonstrative of some of these same tensions. In my interviews for example, when I asked a white task force member to reflect upon how conversations around race were informing the task force's approaches to gentrification, I received the following and rather incredulous response: "Don't you think now that race is injected into every conversation that we have at every level?". When I asked Angela Johnson the same question, she stated: "Every institution that a black person has to interact with in America is steeped in bias and racism. Every single one and it is so disheartening".

Finally, although I framed the public forum as distancing race from the mapping process, for some, there was a concern for the ways in which comments made during the public forums would be taken and inappropriately turned into data points. The focus on code enforcement, for example, was a clear example of how community residents' comments were used as a way to direct and focus the analysis of Mapshop, and the actions of the task force members. More importantly, however, these concerns questioned not only how the participants' testimonials would be counted, classified or mapped, but also how hosting the meeting and giving space to public input was satisfying the ongoing need to humanize the data-driven process. In other words, the public forum was seen as validating the work of the task force; the mapped data alone was not enough. It was the intersection of the mapped data, with the participatory forum and its more qualitative approach that is significant for examining the securitization of whiteness within these processes.

4.7 Discussion

Critiquing frameworks of gentrification, Ananya Roy (2019) advances an understanding of racial banishment whereby urban transformations are viewed as processes of state-instituted violence against racialized bodies and communities. As such, racial banishment shifts the analytical focus of gentrification away from questions of displacement to dispossession, particularly as understood through the lens of racial capitalism that systematically and continuously dispossesses racialized bodies of both property and personhood. This shift, Roy argues, challenges critical geography to center the role of the state in urban transformations and to take up the analytical and political centrality of race.

Here, I pull from Roy's work because I think that it highlights the gravity of neighborhood transition as faced by racialized people and communities. While Lexington is not Seattle, New York or Los Angeles, the reality faced by people of color as they strive to find affordable housing and remain rooted in their communities are the same. And it is reaching a point where residents and even political leaders are concerned that such displacement and dispossession will push people of color out of the city, even beyond the county entirely. In the words of one resident:

“People have kind of been comparing it to the great migration, like I am going to keep it real with you guys. The kind of things that people say, it is like ok they are getting all the black folks up out of here. The black folks are being pushed out to the Tates Creek, the Russell Creek and areas where there are already a high concentration of black people, they are being pushed to the margins, out the downtown areas. Especially, we want this downtown area you guys have to go. We want this now and we have plans for it and you are in the way. When I look out my window, I am not trying to see you guys. It is that kind of feeling that people have. People feel it. They can tell it”.

Such quotes demonstrate the gravity and urgency of centralizing race within conversations of urban development and gentrification. It calls attention to the legacies of racism that

continue to permeate the lives, feelings, and experiences of people of color in Lexington, KY.

For attempting to meaningfully engage with race, the NT task force leadership, particularly Councilmember James Brown, should be recognized. The public forum was historic for the Lexington community and it allowed residents of color to express how they experienced racism as a matter of public record. Sitting in that room, as residents demanded policing and code enforcement accountability, called out white settler colonialism, and advocated for more resources, I was reminded of why I find optimism, however skeptical, in spaces of participatory urban planning and local governance. The same can be said, for the ways in which the leadership created a task force space whereby urban policies of segregation, red lining, and urban renewal were discussed as foundational to understanding not only contemporary urban change, but also government complicity in routine racialized displacement. These are important steps in the right direction. As such, the work of the NT task force members demonstrates the potential of engaging with the American South as a site to critique, challenge and theorize questions of racialized development, particularly as they rework and undermine the north-south, progressive-racist binaries (Eaves 2017).

That being said, this chapter also raises a series of questions about the ways in which the public forum on race intersected with the data-driven mapping process to secure whiteness. Perhaps seen as unable, or at least insufficient at addressing race, the data-driven conversations were limited to a concern of income and other attributes of social demographics. However, by sidelining conversations of race to the public forum, and placing an emphasis on qualitative data, or the personal narratives of those experiencing the pressures and harmful impacts of gentrification and displacement, I am concerned that

white people are again protected from the depths of vulnerability and visibility expected of people of color. The public forum disproportionately necessitated that people of color show up, be vulnerable with their experiences, and once again submit their bodies, emotions and experiences to be gazed upon by white people simply there to listen.

For feminist calls to embrace pluralism and activate emotions within data science, the vulnerability and visibility demanded of black people in spaces like the public race forum raises a series of cautions. Firstly, deliberately pairing quantitative analyses with more inclusive civic processes has the potential to create more complex and perhaps complete data-driven narratives, but these do not guarantee more just or liberatory outcomes. This is particularly true if the underlying systems of power and oppression, such as whiteness, remain secured by these very processes. Whiteness remained secured because the expectations to talk about and address race were largely placed on black people, demanding they be vulnerable and divulge personal narratives of suffering, trauma, and displacement. In other words, throughout this chapter, I have demonstrated the ways in which whiteness remained secured even within a participatory process that recognized the value of knowledge formed through lived experiences.

Secondly, there is a need to account for whose emotions are activated and legitimized in data-driven narratives that seek to create empathy or establish a shared humanity. For instance, in the public forum, while black bodies were anticipated to be vulnerable and visible, white bodies seemingly showed up in superficial ways that required listening, but little more. As Angela Johnson and critical race scholars highlight, this can lead to a double vulnerability whereby black people share their trauma and then must listen as they are delegitimized as angry black people. Given the problematic legacies of how

empathy as a humanizing strategy has been deployed (Cohen 1997; Muhammad 2010), the vulnerability and visibility demanded of differently racialized bodies in these spaces needs further interrogating, particularly as it relates to processes that are intended to support social justice.

Importantly, this chapter draws attention to these challenges as they cut across quantitative and qualitative data. Why was the mapping process not seen as capable of addressing the attribute of race? Why was the public forum, which opened up the conversation from the task force members themselves to the community, seen as more capable of addressing racism? Ultimately, both were used to justify the actions of the NT task force: the first by validating the ways in which areas at risk of gentrification were demarcated, the second by ensuring that race was not left off the table as it was in previous conversations of investment. Because of this similarity, there is a need to examine why both of these processes were required in the work of the task force. Thus, I argue that there is a need to more fully examine how data, whether that be qualitative or quantitative, secures whiteness when used in participatory urban decision-making processes.

My argument does not advance a silencing of black voices in urban planning, participatory, or data-driven processes. As advanced by black feminist theorists, often the most marginalized positionalities are the most equipped to critique and rebuild more equitable structures of power (Collins 2002; Lorde 2003; Sandoval 2000). When the people of color at my small group table stopped speaking it was uncomfortable. It was a powerful articulation of black agency and a demonstration of resistance to the processes that I trouble in this chapter. These black voices did not submit and instead by making white people uncomfortable challenged their ability to remain distant and, as Angela Johnson suggested,

called attention to their fragility and discomfort. Thus, rather than contributing to a misplaced paternalism over black participation, what my argument calls for is a questioning of how whiteness is secured through a distancing of race in data-driven conversations that re-articulates the requirement for black people to be the sole voices and experts of racism and its associated trauma.

4.8 Conclusion

When I asked Councilmember James Brown on the importance of the public forum on race, he stated:

“all this is powerful stuff. But, I don't want to pull a scab off and just let it bleed out. I want to be able to pull the scab out, let some fresh air at it, hit it with some peroxide, and let's put, let's not put a band aid on it, let's leave it exposed and let's let it heal for real, and not just cover it up. I think that is what we are going to attempt to do with the public forum [on race], and I am optimistic about it. I think it's the task force's responsibility to have this conversation if we are serious and going to be honest about moving our community forward and addressing some of these issues with change and transition.”

Evoking such visceral imagery, Councilmember James Brown draws our attention to the embodied process of healing. In this chapter, I have argued that in order to further unpack the legacies of racialized development, to begin this process of healing, a focus on the centrality of race cannot be marginalized to participatory or public processes, but it must be situated across various forms of data as they are mobilized within processes of urban governance. Returning to the question that began this chapter that asks whether data can ever really benefit marginalized and oppressed bodies, my argument suggests that the answer is yes. But, in doing so, I also demand an engagement with data that is not only intersectional in its attention to questions of power, but also critical of the ways in which quantitative data intersects with qualitative data as both secure whiteness.

CHAPTER 5. CONCLUSION

“We should be wanting better neighborhoods everywhere, with the people that are there. Not this will be a great neighborhood once we get all these black folks out of here”.

5.1 Shiny objects, hiding places

While race and particularly addressing the ongoing legacies of racialized development was central to the work underway in the NT task force, navigating these emotionally and politically charged conversations was uncomfortable, confrontational and a potentially risky process for the task force leadership. This is evident not only in the decision to deliberately remove gentrification from the name of the task force, but in the decision to take a data-driven approach to identify neighborhoods in transition. Seemingly capable of justifying and validating the potentially highly contentious work of the NT task force, data, and its shiny qualities, was perceived as able to depoliticize these decision-making processes, adding accountability, transparency and logic to the management of Lexington and its urban inequalities. However, although popular, these connotations undergird a highly problematic and unrealistic framing of data (Elwood 2020; Safransky 2019). Embedded in oppressive structures of power, the production, analysis and interpretation of data remains inherently political; as demonstrated by our collaborative dive into the income thresholds of affordability. In other words, deciding where and how to secure affordable housing hinges on political decisions such as who we want to live in our community, who we want to benefit from public investment, and whether we want a government that protects people or profit. Data alone cannot answer these questions.

Perhaps more importantly, by trying to make data answer these political questions new challenges emerged that undermined the equitable intentions of the NT task force

members. Chapter 3 calls attention to the ways in which the data-driven process enabled Mapshop and the NT task force members to bypass conversations of race; although of course the intentionality of this avoidance remains unclear. Nevertheless, its impact was that conversations on the attribute of race were pushed to the end of agendas and not fully mapped, and instead race became a conversation that was uniquely broached through a public forum. While I commend the NT task force leadership for having a public forum that allowed community residents to express their frustrations and experiences of structural racism as a matter of public record, the public forum also distanced the task force and Mapshop members from a more personal responsibility for talking about and addressing race. It also served to legitimize the data-driven approach taken in the rest of their work. In other words, although perhaps oversimplified, by engaging in both a data-driven approach and a public forum, the NT task force leadership were able to claim due diligence in terms of using a seemingly more objective and scientific approach, legitimized by collaborating with academic researchers, and providing necessary opportunities to gain public input and feedback into their work on gentrification.

Thus, it is the intersection of the data-driven process with the public forum that highlights the importance of the argument that I advance in this thesis: both forms of data provide hiding places for whiteness to remain unanswered, unexplored, and secure. As I explored in chapter 4, this intersection raises a series of questions on how differently racialized bodies are required to engage in public forums that seek to capture conversations of race qualitatively through the personal narratives of racialized trauma of displacement and dispossession.

The expectation placed on black people to be both visible and vulnerable, while white people listen, should caution critical approaches to data and digital technologies that advance feminist calls to embrace pluralism and activate emotions. While this work builds upon much needed and ongoing scholarship that challenges hegemonic knowledge production, expertise, and authority, and calls attention to power and its embodied practices and positionalities (D'Ignazio and Klein 2020; Elwood and Leszczynski 2018), critical race scholarship draws our attention to the ways in which differently racialized bodies are called upon and positioned within these debates (Browne 2015; Cohen 1997; DiAngelo 2018). In doing so, critical race scholarship challenges researchers to examine how data-driven processes, even if they are attentive to alternative epistemologies and embrace participatory processes, fail to navigate systems of power and oppression. As such, there remains an ongoing need to examine how whiteness is obscured and secured through data-driven narratives, whether it be qualitative, quantitative or participatory, in urban decision-making processes.

5.2 Hiding places, shiny objects

Ultimately, these challenges require us to think differently about data-driven urban planning and its participatory practices. I argue that while Mapshop's collaborative and data-driven approach did not help the task force members to meaningfully broach data-driven conversations on race, our practices also did not obfuscate the importance of politics to these data-driven narratives. Our practices consequently highlight a potential avenue for a more equitable and progressive data-driven urban planning.

As I outlined in chapter 3, Mapshop's critical, interactive and participatory mapping process prevented the politics underlying the work of the task force from slipping out of

sight. This does not mean that we were successful at talking about race. However, by consistently drawing attention to the devil in the details, we disrupted attempts to position the data as legitimizing the choices and decisions of the task force as apolitical. For example, the income and affordability maps were a critical point of reflection for the NT task force members to explore how seemingly progressive policies continue to protect the logics of racial capitalism. Demonstrating how the 80% AMI affordability threshold (\$59,600 for a family of four in 2019) supports rather than prevents the displacement of current residents with incomes more aligned with 30% AMI (\$25,700, for a family of four in 2019), was a tangible moment to examine how the devilish question of who benefits from public investment was masked in the details of data. With a clear impact on political action, this process forced people to show their biases by pushing them to answer who they want to live and therefore support living in their community.

Through this example, I argue, that the collaborative work of Mapshop and the NT task force members demonstrates how data-driven urban planning might enact a more progressive praxis. This praxis rests on using equity as a lens for data interpretation, rather than its resulting outcome. In other words, rather than distancing equity and justice from the data analysis, assuming for example, that a review of the data will reveal how to achieve equality, without changing the methodology or viewpoint of the process, I suggest using equity as the interpretative framework driving the entire data-driven process from start to finish. This means beginning with a vision of equity and producing, interpreting, and applying data through that lens.

While significant, this idea does not hinge on revolutionizing policy making practices. As Khalil Muhammad (2010) demonstrates, the potential for these practices

already exists, particularly if whiteness is excavated and interrogated. For instance, Muhammad points to Ida B. Wells and her work pulling lynching data from white articles to spotlight white violence against black bodies as demonstrative of the already existing practices that challenge the securitization of whiteness. In critiquing the smart city, Ben Green (2019) similarly highlights how technology can never escape the normative and political questions of deciding how it is best used. In fact, Green demonstrates that technological solutions are most impactful when integrated with bureaucratic and operational innovation and support within local governments. Importantly, although not an argument against technology, this does require critical scholars, urban planners, and government officials to ask: how do technologies facilitate progress that benefits all city residents, and create a city that fosters justice and equity? Calling attention to these already existing practices, such work exemplifies the potential of taking data, algorithms, and digital technologies, and making them do different and more life enabling work.

Thus, I argue that not simply acknowledging but actively, and indeed critically, embracing data's saturation in the politics and power dynamics from which they are embedded, opens possibilities to enliven a more progressive politics that resists the certainty of a stratified, unequal and gentrified city. Again, this argument requires us to move away from viewing data as shiny, but with hiding spaces to instead examine how the hiding places, once uncovered, and more appropriately accounted for beyond an acknowledgement of their existence, actually make data shiny. In accordance with Sandra Harding's (1992) strong objectivity, abandoning neutrality to embrace subjectivity, or what I'm calling politics, as an inextricable component of the knowledge production process

makes science *stronger*, and more capable of accomplishing the projects called for by feminism, anti-racism, anti-colonialism and other social movements.

For some, the arguments that I outline here might resonate with the principles of counter-mapping (Peluso 1995). Indeed, there are many overlaps, including a critical attention to power, a goal of social justice, and a concern with an embodied viewpoint. However, my argument also extends beyond counter-mapping. Firstly, it does so because digital technologies are constantly proliferating, transforming, and adapting in our contemporary digital turn (Ash, Kitchin, and Leszczynski 2019). While perhaps the underlying structures of power remain relatively unchanged (Elwood 2020), these adaptations nevertheless require counter-mappers to extend critical practices beyond an engagement with maps and GIS technologies to considerations of data and digital technologies more broadly. The need is mirrored, however superficially, in the academic shift away from critical GIS to critical digital geographies. As chapter 4 highlights, this requires an examination of how different types of data and technologies intersect and are mobilized to inform urban policy making processes.

Secondly, many of the vantage points that I gained from this research were made possible because of a university-community partnership. This specific power-geometry (Massey 2012) brought together political and non-profit leaders, community residents, developers, and academic scholars, and it required us all to navigate complex political and personal relationships. Importantly, as chapter 2 highlights, these relationships affected our collective ability to leverage data for more equitable and just practices, challenging the often-romantic view of working with a homogenous, but relatively powerless community (Joseph 2002). Additionally, our collaborative data practices challenged those within

government spaces to critically engage with and claim ownership over non-hegemonic mapping and data practices. While imperfect, Mapshop's work was not a matter of collaborating with community residents, traditionally conceptualized as less powerful, to counter totalizing state produced narratives. Instead, our work, positioned directly within the space of local government, pushed community residents and state actors alike to critically reflect upon hegemonic narratives of space, race, and gentrification. Therefore, although sharing critical practices and traditions emerging from feminism, this work refracts back on counter-mapping practices to challenge often overly simplified narratives of how maps and data can inform more progressive practices of knowledge production and policy making within and across spaces of the academy, community and local government.

Given the scale of the affordable housing crisis, and weight of gentrification, a process that Ananya Roy (2019) has likened to racial banishment, I recognize the relative minor contribution of these claims. While critical cartography, and radical geography have long traditions of offering alternative practices for social justice, I openly acknowledge that for many these postulations are not nearly radical enough (Derickson 2017; Oswin 2019; Pulido 2002; Roy 2017). The whiteness of the discipline, its heteronormativity, the neoliberal structures of the university, and the power and privilege associated with academia are indeed relentless and need constant vigilance to combat. These challenges cut across society and are reflective not just of the academy, but also local government, and various industries including the non-profit world (Arena 2012; Beam 2018; INCITE! 2017).

That being said, I remain hesitantly optimistic that urban planning offers unique opportunities to resist and recalibrate processes of gentrification and racial capitalism. As

a fundamentally visioning process, urban planning offers a chance to imagine a different, and ultimately more just, future. Currently, as Agnieszka Leszczynski (2016) draws our attention to, urban planning secures a future city that is stratified and unequal because it draws upon the contemporary city as a pattern to follow. Throughout this thesis, I have asked what if urban planning followed a different vision of the city? This vision, in alignment with the imaginings of the NT task force members, centers diversity, equity and justice. Perhaps, for example, urban planning practice can draw upon Lexington community residents' visions for a city resists displacement by allowing residents to have access to the same number and quality of services, to have protection from environmental injustice in the face of climate change, to benefit from public investment, and to retain a cultural and historical identity that is rooted and legible in space. These are visions that can serve as the blueprint for a future city. Whether or not these visions materialize depends upon, as Clyde Woods (1998) highlights, challenging the persistent reproduction of racial capitalism and oppression. In the face of this challenge, the importance of calls to study the already existing practices that are undermining and re-working these very logics for life sustaining goals resonates most (Browne 2015; Elwood 2020; McKittrick 2011). It is these practices that offer hope and visions for spatial and social justice.

5.3 The analytical potential of the American South

At the time of writing, the work of the NT task force remains ongoing. As of March 2020, the task force has transitioned away from the data collection, analysis and knowledge building, to drafting policy and programmatic recommendations. With approximately 30 draft recommendations, the scope of the task force has been condensed into four main categories: Neighborhood Change, Infill and Redevelopment; Neighborhood and

Community Engagement; Housing and Government Regulations; and Housing Affordability. These categories encapsulate a wide segment of local departments and city ordinances from code enforcement, to the planning and zoning review process, to affordable housing regulations, to tenant services and advocacy. Although the majority of these recommendations remain modest and without new funding dedications, debate within the drafting process highlight the ongoing push from some of the task force members to do more and achieve more. For instance, while one of the recommendations encourages that the city ordinance for funding the Affordable Housing Trust Fund (AHTF) be increased from \$2 to \$3 million, some of task force members, particularly housing advocates such as Art Crosby, Rachel Childress and David O’Neil, argued that this was funding was simply not enough and that it would undermine the ability to advocate for more appropriate funding in the future. Again, the recommended amount for the trust fund to close the affordability gap is at least \$36 million.

Similar discussions emerged around the language of the recommendations that was often cautionary: suggesting, recommending, encouraging rather than requiring developers to have community meetings, for instance. While city planners state that such language was illegal, and indeed the city was negotiating the use of similar language in its comprehensive plan, some members again argued that the task force should be visionary, tough if needed, and the city could even advocate against local, state and federal regulations that prohibit necessary actions. Ultimately, these members suggested that being visionary was the responsibility of the NT task force.⁴

⁴ Although, as noted in the introduction, the city’s projected budget shortfalls and subsequent cuts as a result of COVID-19 will have a yet unknown, but certainly drastic effect on the potential impact of these recommendations.

Community residents are also pushing back on the limited scope of some of the recommendations. A particularly contentious point was the editing of a recommendation that would have created and funded a staff position dedicated to community advocacy, education and engagement. The drafted proposal instead recommended the creation of a resource guide. One resident, actively live streaming the public meeting on their social media account, responded by stating that: “We need resources, not a resource guide!”.

In general, these negotiations and conflicts are attempting to hold the task force leadership accountable to its vision of equity and diversity. In the words of one task force member:

“I hope that there are enough of us who are constantly pushing the true agenda, what the true agenda should be. It should not just be to say oh we have a task force, oh well we had a group that dealt with that. We dealt with that, but you never saw anything happen and it all just continued on. And five years from now and everyone is looking up like well, what happened here? In the end, it might be a dynamic neighborhood with a lot going on, but why can't it be a dynamic neighborhood now, with the people living there now?”.

As these leaders continue to push and advocate for more progressive policy making, they call attention to the analytical potential of cities like Lexington, KY to debates on gentrification, affordable housing, and smart urbanism. Empirically, as a more moderately sized city, Lexington offers unique opportunities to further explore how smart urban discourses and resistance to gentrification materialize (Shelton, Zook, and Wiig 2015). Without the same levels of capacity, access to corporate partners, and financial capital, more moderate cities potentially enact the ideals of smart urbanism and the hope of data-driven urban planning in creative ways, drawing in, for example, university partners as a site of accessible expertise. Exploring these differing relations is imperative for interrogating how the underlying whiteness of these discourses is navigated and

transformed. Additionally, because Lexington is situated within imaginations of the American South, it offers theoretical opportunities to examine how progressive urban policies take place differently: it sheds light on alternative ways to be smart, and progressive. Taking seriously the empirical and theoretical potential of engaging with the challenges emerging in moderately sized cities and those in the American South is imperative for advancing our knowledge on gentrification, smart urbanism and affordable housing.

5.4 Conclusion

Ultimately, the questions I raise throughout this thesis rest upon a continuing need for community-engaged data practices and participatory research more broadly. The persistent challenges of using data and its ability to both perpetuate and legitimize structural inequality can promote a hesitancy or a total abandonment of engagement with data-driven urban planning and its use of quantification. However, because of the tensions that emerge at the intersection of the NT task force's data-driven conversations and the more qualitative public forum, I argue that we cannot abandon critical and applied engagements with data-driven processes. Embracing qualitative approaches or mixed methods as the solution for the troubles of data is not enough; new problems emerge at their intersections. In other words, my argument is important not only because data and digital technologies are increasingly more pervasive and ubiquitous in urban planning, but also because the pressure to create data-driven narratives and simultaneously engage in participatory urban planning is disproportionately protecting white people. These protections require our attention and ongoing engagement with data.

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2019 Student Government Organizational Grant, co-grantee with E. Clancy, E. Sperandio, I. Spangler & O. Meyer, University of Kentucky (\$750)
2018 Research Fellowship, Department of Geography, University of Kentucky (\$16,650)
2014 Clinton Small Harris Scholarship, Syracuse University (\$3,000)

AWARDS & HONORS

2020 AAG Applied Geography Specialty Group travel/research award (\$150)
2020 AAG Urban Geography Specialty Group (UGSG) travel award (\$100)
2018 Wimberly C. Royster Graduate Excellence Award (\$6,000)
2016 National Council for Geographic Education / Association for American Geographers Excellence of Scholarship Award
2016 Honorable Mention for Honor's Thesis in the Social Sciences Category (\$250)
2016 Syracuse Scholar, College of Arts and Sciences Finalist
2015 Undergraduate Anthropology Gordon Bowles Essay Writing Prize (\$100)

PUBLICATIONS

Barrett, Emily and Matthew W. Wilson. 2019. "Mapshop: Learning to map, Mapping to Learn." *Living Maps Review*. No. 6.
<http://livingmaps.review/journal/index.php/LMR/article/view/166>

Barrett, Emily and Amber J. Bosse. Under review. Questioning collaboration: Examining community geography's commitment to social justice. Accepted for submission to special issue Engagement and Action in Community Geography (edited by Jerry Shannon, Timothy Hawthorne, Kate Mariner, and Hannah Torres) for *GeoJournal*

Barrett, Emily. 2019. "Gay, Inc.: The non-profitization of queer politics by Myrl Beam". *Antipode*. Part of Queer Geographies book review symposium (organized by Jack Giesecking and Erin Clancy). <https://antipodeonline.org/2019/05/30/queer-geographies-symposium/>

Barrett, Emily. 2016. "The Poppy: Contextualizing a Seemingly Timeless Symbol in History, Materials, and Practice". Syracuse University Honors Program Capstone Projects. 970. https://surface.syr.edu/honors_capstone/970/

PROFESSIONAL EXPERIENCE

2017-18 Neighborhood Planner, Home HeadQuarters, Syracuse, NY

2016-17 AmeriCorps VISTA, Community Prosperity Initiative, Syracuse, NY

2015-16 Information Graphics Designer, Routledge Publishing, New York, NY