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Space Producers: An Analysis of Equitably Produced Bike Space

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Abstract

This paper sets out to understand the dynamics of bicycle space production in Philadelphia. To understand the implications of a bike infrastructure as produced space in a city, I analyze specific spaces in Philadelphia through Lefebvre's tripartite view of the production of space. These spaces – the Vine Street Expressway, Baltimore Avenue, and the 58th Street Greenway – reveal the dominance of perceived space, which often lacks representation from those who use the space day-to-day. Perceived space is found to be heavily influenced by environmental, health, and safety concerns, while leaving out a consideration to equity in the production of bike infrastructure. Greater consideration must be granted to the lived experience of spaces to equitable influence. Through an analysis of how these spaces are conceived, perceived, and lived, and how these separate productions of space align, I seek to understand the role Philadelphia's inhabitants have in the production of their space. And, consequently, what right they have to their city.

Keywords

Bicycling, Production of Space, Lefebvre, Equity, Infrastructure

Disciplines

Social and Behavioral Sciences | Urban Studies and Planning

Comments

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URBS 401 – Honors Thesis
April 25, 2018

Abstract

This paper sets out to understand the dynamics of bicycle space production in Philadelphia. To understand the implications of a bike infrastructure as produced space in a city, I analyze specific spaces in Philadelphia through Lefebvre's tripartite view of the production of space. These spaces – the Vine Street Expressway, Baltimore Avenue, and the 58th Street Greenway – reveal the dominance of perceived space, which often lacks representation from those who use the space day-to-day. Perceived space is found to be heavily influenced by environmental, health, and safety concerns, while leaving out a consideration to equity in the production of bike infrastructure. Greater consideration must be granted to the lived experience of spaces to equitable influence. Through an analysis of how these spaces are conceived, perceived, and lived, and how these separate productions of space align, I seek to understand the role Philadelphia's inhabitants have in the production of their space. And, consequently, what right they have to their city.

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“no space is completely knowable; there is always something that is hidden, beyond any analytical point of view, shrouded in impenetrable mystery...this encourages a sort of intellectual nomadism in urban studies, as one respects but is never fully satisfied by the knowledge one has accumulated, always ready to move on to new ground, to adapt to new and different circumstances” (Suja 2014, 177).

Introduction

“Do you want a bike lane?”

Moosey nodded.

“And a bus lane?”

Another nod.

I was helping Moosey, a second grader from Eastern Northern Philadelphia, create a streetscape online. The hope and irony in the act struck me as he picked out street light placement and building heights. Moosey, had grown up in the city, daily navigating the urban streetscapes with the help of his older brothers. It was entirely possible that Moosey had more experience on his neighborhood streets than the planners who had conceived them. However, there was little possibility that his vision for the streets would ever be realized beyond a computer screen.

Admittedly, it would be unreasonable to let eight-year olds plan our cityscapes. We need the architectural expertise of planners and the design theory of urbanists. Still, leaving the production of space entirely up to professionals, leaves little room for the lived experiences of

those who experience the city daily. Who conceives the space thus defines who that space is for and the limitations of the lived experience within it. These have clear implications for the equity of the space itself. While it would be irresponsible to give Moosey entire control of the streets, incorporating his expertise into the city would allow for a more equitable production of space.

While Lefebvre's right to the city has been applied in great depth to a number of subjects, none have used it to directly understand bicyclists and bicycle infrastructure. I base my analysis of space, on Lefebvre's three notions of the concept; perceived, conceived, and lived space. Using these as a lens of understanding, I analyze how well Philadelphia's current environment of bicycling allows citizens to create and inhabit the social space of bike infrastructure. Assumed in this is the belief that the ability to produce space (through economic, physical, or social means) is directly related to power. I find that in fact, the power to shape and inhabit the space of bicycles in Philadelphia, is not granted equally to all citizens. In the conclusion I elaborate on how these findings can be expanded beyond Philadelphia's bike world.

Literature Review

City streets have always served as a space for urban interaction. Marxist geographer, David Harvey (2012) writes that the street, "is a public space that has historically often been transformed by social action into the common of revolutionary movement, as well as into a site of bloody suppression" (p.73). Since the introduction of bicycles in the late 19th century, bicyclists have lived this statement, becoming both vehicles for revolution and victims of brutal suppression by deadly motor vehicles.

Part of the marginalization of urban bicyclists can certainly be attributed to the roots through which bicycle space is produced, or, more often, not. Since the 1956 passage of the Federal Highway Revenue Act, funding for transit projects has been largely buoyed to revenue

generated by a federal gas tax (Weiner 1999; McCann 2013). The tax money was historically cycled back into highway maintenance, allowing the perpetuation of space for cars and simultaneously maintaining the dominance of cars. Cars have reached an almost mythic like position in United States culture, with scholars identifying the daily commute as one of the most ritualistic part of most peoples' lives (Furness 2010, 7). Within this car-centric context, space for bicycling is both culturally and physically difficult to create.

To combat this history of street-making, bicycle advocates have begun to demand a right to city streets. Scholars have compared some cycling advocates to insurgent political movements; drawing connections between their far-reaching social networks, disciplined core membership, and an often more radical fringe group (Beehner 2013). In some cities, mass groups of bicyclists regularly come together to celebrate bicycles, question dominant car culture, and demand a right to the city streets (Furness 2010, 80). These more radical bicycle movements seek to problematize the spatial production of cities by flooding the streets, appropriating the space usually reserved for cars.

Other bicyclists take markedly less radical stances, by emphasizing the importance of bike infrastructure in creating safer, greener, and healthier urban spaces. The Complete Streets movement, is a notably successful form of policy that argues the incorporation of bike lanes in cities is a way to slow traffic and create safer streets (McCann 2013). It claims to be a democratizing movement that makes the street a safe place for all users regardless of who they are or how they get around (Zavetoski and Agyeman 2013). Other bicycle advocates use the promise of environmentalism to push for bike infrastructure claiming bicycles are both the symbol and vehicle to achieve the green cities of the 21st Century (Horton 2011). The health benefits of bike infrastructure have also been emphasized as a reason for their construction

(Cervero and Duncan 2011; Saelens et.al. 2003). Advocates have even outlined the economic benefits of bicycle infrastructure (Florida 2004; Flusche 2012).

Scholars have come forward to contest the claims made by mainstream bicycle advocates and challenge the production of bicycle space in cities. Despite, or perhaps because of its rapid rise, the Complete Streets Movement has received significant critical attention from scholars who problematize everything from its ahistorical foundation and tendency to overlook urban racial and economic inequities (Zavetoski and Agyeman 2013). The framework of sustainability has also been critiqued for its dependence on an image of environmentalism and sustainability that overlooks equity (Lubitow and Miller 2013). Bicycle advocates have also been critiqued for championing the economic interests of a creative class (Florida 2002) and perpetuating the displacement effects of gentrification (Hoffmann 2015).¹

Production of Space

Marxist philosopher Henri Lefebvre posits that those who produce and occupy space, hold the power in a capitalist society. Marxist scholars argue that the unique spatial forms of capitalist cities are built to reproduce the power structures of capitalism, founded in the main tenant of capitalism: private ownership (Lefebvre 1991; Smith 2008). To understand this production of space, Lefebvre (1991) suggests a three-part definition of the concept. The three – perceived, conceived, and lived space – have been interpreted as lenses to understand the production of urban space (Zhang 2006) and have been built on by scholars to conceptualize cities and identify methods of resistance within them (Soja 1996; Harvey 2012).

¹ Key to this critique has been the scholarly work done to identify the cyclists that mainstream bicycle advocates tend to miss and whose interests then go unrepresented in the production of bicycle infrastructure (Lugo 2012; Lugo 2013; Zewde 2011; Lubitow 2016; Koepfel 2005; Mohan 2011; Hoffmann 2016; Owens 2015).

Conceived space is often the dominant space in a society (Lefebvre 1991, 39). It is a space that remains almost entirely conceptualized, as it is created by planners, urbanist, and others who seek to shape the city in ways that straddle art and science. Perceived space is the space created by society and the mainstream systems, values, and morals it upholds. Within a capitalist society then, a perceived space is interwoven with order – a daily commute, a timed wake-up, meal breaks – that facilitate the labor required by and reflected in the capital-driven space (Lefebvre 1991, 38).

Lived space is the real experience of city inhabitants as they interact within conceived and perceived space. Lived space is simultaneously the hardest to identify through literature and the most relevant to a discussion of equitable production of space. Whereas conceived and perceived space are often controlled by those with power, lived space can be created universally. Through this lens it is possible for Philadelphians to claim their right to the city and it is the measure of this ability that the following analysis hopes to conduct.

Production of bike space (i.e. bike infrastructure) in Philadelphia lacks a critical reading. While bicycle advocates, planners, and the city itself, tout the safety, environmental, health, and economic benefits of bicycle infrastructure, the assumption that the construction of bike infrastructure anywhere in the city is a neutral “good” is naive. The city, and its citizens deserve a more nuanced understanding of the historical and social context that affect how and why spatial production has and continues to occur in Philadelphia. It is necessary to analyze whether the conceived and perceived bicycle space is done so with equitable consideration of the lived experiences of those who will one day inhabit them.

Methodology

I use three case studies to facilitate an understanding of Philadelphia bike space. These spaces were the Vine Street Expressway, Baltimore Avenue, and the 58th Street Greenway. I collected data on these spaces through semi-structured interviews conducted over a five-month period between 2017 and 2018.

I also incorporate bike-to-work data, taken from the American Community Survey (conducted yearly by the United States Census Bureau). The ACS includes a question that asks workers 16 years and over to indicate how they travel to work. Respondents can answer car, truck, or van; public transportation, motorcycle, bicycle, walk, other means, or that they work at home, which is fruitful for getting a sense of ridership geography in Philadelphia. I analyze news articles and city documents to inform my understanding of the structural aspects and mainstream understanding of bicycle infrastructure. Lastly, and perhaps more influential sub-consciously, I pull from four years of participant-observation bicycling in Philadelphia.

Data Analysis

The 58th Street Greenway

The first case study is on the 58th Street Greenway, a 1.4-mile bikeway in Southwest Philadelphia that connects Bartram's Garden to Cobbs Creek Trail (*58th Street Greenway, PA*). The

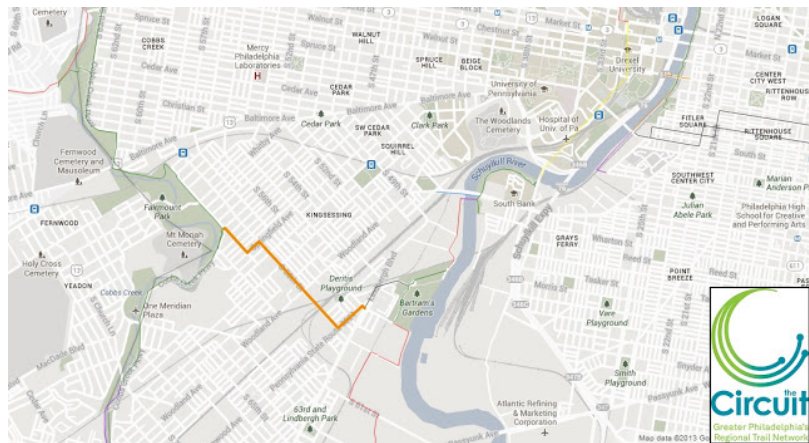


Image 2: The orange line indicates the path of the 58th Street Greenway.

Greenway was conceived by planners at the Pennsylvania Environmental Council (PEC) as a

connector for The Circuit and the East Coast Greenway.² Both organizations produce bicycle space in Philadelphia and emphasize that such infrastructure contribute to healthier, more sustainable, and prosperous communities. Ultimately, both The Circuit and the East Coast Greenway conceive bicycle space as a way to make communities, “more attractive places to live and work” (“About the Circuit Trails”). This rhetoric aligns with the ideals of the city of Philadelphia, specifically its Department of Complete Streets which emphasizes safe, comfortable, and convenient streets.

While the conceived space reportedly sought to incorporate community voices, it is unclear how successfully this was accomplished by planners. The trail pathway was chosen during a 2007 trail study to determine the most desirable route for linking the Schuylkill River Bike Trail and Cobbs Creek Bikeway. It was initially questioned by neighboring residents. However, according to a PEC report, the organization was eventually able to win over the neighborhood by involving community input in the planning process and creating “Get Active 58th”, a program meant to encourage physical activity within the neighborhood (Stanford, et.al. 2012).

In a newsletter released by PEC to enhance transparency within the project, Spencer Finch, Director of Sustainable Communities, notes the process involved, “nine community meetings, numerous one-on-one conversations and significant federal, state and local investments”. Neighborhood Steering Committees aimed to incorporate community block captains, local non-profit representatives, and the city planning commission into decisions about the greenways design, aesthetic, building materials, and construction issues (*58th Street*

² The network of the East Coast Greenway aims to stretch continuously from Maine to Florida. The mission of the greenway is, “to partner with local, state, and national agencies and organizations to promote the establishment, stewardship, and public enjoyment of a safe and accessible multi-user greenway” (“About the East Coast Greenway”).

Greenway Plan). However, it is difficult to know the success of such intentions. One advertisement for a community meeting notes the time as 1:00 PM on a Tuesday in January. Given that this is the middle of the workday, it is unclear how many community members were realistically able to be in attendance. Furthermore, this focus on aesthetic features belays the reality that community members did not have a hand in actually producing the perceived space. While they had limited access to produce conceived aspects of the space, they had no choice in if the space would be produced at all.

Ultimately, much of the perception surrounding the creation of the greenway frames it as a safe, green, and economically beneficial space to improve the quality of life in the neighborhood. This is revealed in a collection of news articles between 2009 and 2013, which reflect the statements of city and state politicians as well as bicycle advocacy groups. Community and project leaders perceive the greenway as a “vote of confidence” for the Kingsessing neighborhood and a sign that it’s, “a neighborhood on the rise” (Fisher 2012, Fisher 2013, Press Release 2009). This perception was only emphasized by the opening fanfare from state and city governments as well as local organizations. At its opening, State Senator Anthony Williams praised the greenway for the safety that it would bring to the neighborhood. In this way Williams connected the greenway to the Complete Streets movement propagated by the city.

The lived space of the greenway is quite difficult for even experienced cyclists to navigate. The two lanes that comprise this path run in both directions and at times transition from the sidewalk to share the road with cars. At several intersections, the greenway requires users to navigate over intercrossing trolley tracks, which can often be difficult and/or dangerous to cross. Despite the significant community outreach undertaken by the greenways planners, periodic visits to the greenway between November 2017 and March 2018 reveal that it is a fairly

underutilized space. A further indicator that the greenway was not truly conceived as a space for health, is the inactive link to the “Get Active 58th” Facebook page which has not been mentioned on Facebook at all since June 2013.

The trail seems generally unkempt, with debris clearly visible during every visit. The section of greenway that shares 58th Street with vehicles, is blocked by multiple parked cars stretching for around a half mile of the trail (shown in Image 4). On one visit, the bike path was blocked at the corner of Chester and 58th Street by a fairly busy farmer’s market stand. While the state of the physical environment might be acceptable if riders were present, on almost all

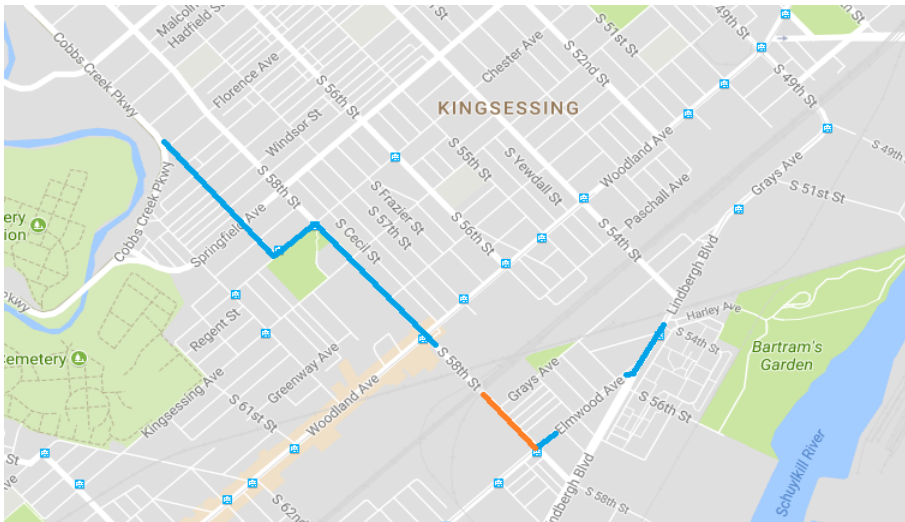


Image 4: A map of the 58th Street Greenway represented by the blue line. The orange line signifies the stretch of Greenway blocked by parked cars.

visits the researcher was the only one biking on the trail.

At points when bikers were observed along the length of the greenway, they were generally riding in the street, creating their own

space. In terms of economic shifts, most of the census tracts around the greenway saw no change in the value of their houses. In some tracts, the value slightly decreased between 2010 and 2015.

The greenway has also been perceived as an example of equitable bicycle infrastructure production. At the opening of the greenway, Rina Cutler, Deputy Mayor for Transportation and Utilities, remarked that the 58th Street Greenway showed that investments in Philadelphia’s

bikeways could not be reserved for Center City. The reasoning behind her point is simple, and mirrors that often used by bicycle advocates in Philadelphia; every part of the city should have equal access to bicycle space. Advocates often use survey data which reveals that city-wide, rates of bicycling (as measured by the bike-to-work question on the American Community Survey) are increasing (from 1.6% to 2.0% between 2000 and 2015).

However, this is a non-nuanced understanding of bicycling in the city. A neighborhood breakdown reveals that this uptick in bicycle commuters is reserved for only certain neighborhoods.³ In these neighborhoods, a rise in population of bike commuters has been mirrored by an increase in median gross rent, white residents and residents with at least a Bachelor's degree. While it is impossible to draw causation, there is a clear correlation between bike commuters and wealthy, white, and highly educated residents. Though they are certainly not the only bicyclists in Philadelphia, using their increasing rates as a way to justify city-wide bicycle infrastructure, ignores the existing residents who many not bike.

Data from the ACS better reveals the manner in which neighbors of the Greenway are impacted by its existence. Between 2010 and 2016 there appears to be no change in the number of people who bike to work as the average of the surrounding census tract remains at 0%. While it is true that funding cannot be done equitably if it is concentrated in Center City, by conceiving of the space as a necessary connector, rather than considering whether the project was really necessary, ignored the needs of existing residents.

Baltimore Avenue

Located less than a mile away from the greenway is another bicycle space in the city. Baltimore Avenue's bike lanes between 40th and 52nd Street were conceived in conjunction with

³ Namely census tracts 78 (Cedar Park), 13 (Graduate Hospital), 20 (Point Breeze), 30.01 (Newbold), where bike-to-work rates have increased from 0% to over 15% between 2000 and 2015.

Baltimore Avenue itself, a city street conceived for strolling and shopping. The space around the avenue is zoned as a combination of single and multi-family households, mixed-use commercial land, and green space; a mix that invites community members and neighborhood visitors to become consumers. Running along both sides of the Avenue, the bike lanes are a well-used amenity that emphasize the marketable identity of Baltimore Avenue as an environmentally-aware, anarchist, and “homey” street where a cup of coffee will cost five dollars.

The economically-driven values of Baltimore Avenue are reflected in its two most prominent community organizations: the University City District and the Baltimore Avenue Business Association (BABA). Others have already examined the financial drive of the University City District at length (which is has created “Penetration” or revitalization depending on ones’ viewpoint) (Puckett and Lloyd 2015). While not explicitly stated in its mission statement: “to promote and advance the interests of Baltimore Avenue business...to foster a positive relationship between member businesses and the community”, it can be assumed that the interests of a business association are at least partly financial.

In this capital driven space, it is not a surprise that even the decorative aspects have accrued cultural value. As Sharon Zukin said of art in the 1990s, so have bicycles come to be in the 21st century. It seems that the creation of bicycle infrastructure and the use of bicycle imagery goes, “along with



Image 5: The flags that line Baltimore Avenue

establishing a marketable identity for the city as a whole (Zukin 2005, 23).⁴ While certainly aesthetically appealing, the lamppost flags depicting a cruiser bicycle is part of the perceived space of Baltimore Avenue. The bicycle has become a symbolic manifestation of the space, based in capital, appearance, and the lifestyle of a Baltimore Avenue stroller (i.e. a consumer).

Unseen then by this symbolic economy is the history of displacement and gentrification experienced by those who once lived along Baltimore Avenue. Perhaps they too were bikers. But it was not those that once lived along Baltimore who had the economic and political power to shape the conceived and perceived space they inhabited. Between 2000 and 2016, the median gross rent of properties surrounding Baltimore Ave ballooned from \$400-500 to upwards of \$800-900. At the same time, black populations shrank, in some surrounding census tracts from over 65% to around 25%.

The bicycle lanes were conceived in conjunction with this neighborhood change. On an avenue embedded within the market economy, the bike lanes are perceived as an amenity, increasing the property value and quality of life in the neighborhood. The Baltimore Avenue bike lanes, are thus reflective of a common trend in Philadelphia; the production of bike space for its economic and symbolic benefit.

The Vine Street Expressway

At first understanding, The Vine Street Expressway, seems to be the last place one might use as a case study for the production of bicycle space in Philadelphia. However, a deeper look reveals that the expressway is a valuable example of how conceived and perceived space can be powerfully interrupted by the lived space produced by bicyclists.

⁴ It also has found its way into the advertisements of a realtor in Center City, where cruiser bicycles fill the sidewalk window display.

The Vine Street Expressway has been contentious since its introduction in the 1960s. What was initially meant to be a twelve-lane expressway running at ground level along Vine Street, is now a sunken highway that still manages to split Philadelphia in two (Yee 2012). Usually crowded with cars, the expressway was conceived as a space for motor vehicles to travel spectacularly fast through the city. Its sheer size belays its purpose, at six lanes across, it is clear when traveling along this expressway that only one type of transportation should be here. As a perceived space, Lefebvre would argue it is representative of society's desire for rapid transport that allows laborers to get to work, all free of pedestrians.

However, in spring of 2017, one group sought to disturb the perceived and conceived space. On an afternoon in April, One Way, an informal group of young Philadelphia bicyclists known for riding freely through the streets, disregarding traffic laws and, at times, their own safety, took over the expressway. Hundreds of young men flooded the expressway on bicycles, stopping traffic and shocking bystanders who watched from their cars and from the overpasses at street level (Schrattwieser 2016).

This interruption of space did not go unchallenged. While some pointed out the similarities between the actions of One Way and the Critical Mass Movement⁵, local Philadelphia media was particularly critical of the group. In a FOX29 segment, interviewer Mike Jerrick derided Corey Murray; the young man who took credit for organizing the Expressway shut down. His mockery of Corey reflects the sentiments of many Philadelphia residents. The challenge of conceived and perceived space did not go unheeded.

⁵ The Critical Mass Movement began in the streets of San Francisco in the early 1990s. The movement allows cyclists to come together in, "a direct action, anarchic event [where] rides are unsanctioned by city officials and riders are motivated by self-determination, self-rule, and non-hierarchical organization" (Furness 2010, p.80). These events have spread around the world, regularly drawing together cyclists to celebrate bicycles, question dominant car culture, and demand a right to the city streets. However, their proliferation has generated a hearty critique, one being that their demographic is mainly oriented around white, middle and upper class cyclists.

In a city with many rules, One Way riders see what they are doing as freedom. Their gravity-defying tricks often take place on city streets and are spread through social media sites like Instagram. The One Way kids subvert stereotypical assumptions about bicyclists: they are a group made up of racially diverse kids from all over Philadelphia who seem not to fear the danger of car-filled streets. While the city has attempted to satiate groups like One Way with pump tracks and skate parks, journalist Claire Sasko does not think the One Way kids are aware of these efforts or that they want them at all (Interview 11/8/2017).

Although Sasko recognizes the danger posed by bicycles weaving between cars or shutting down streets, she suggests that the city should try harder to incorporate One Way cyclists rather than ignoring or attempting to eliminate them (Interview 11/8/2017). Sarah Clark Stuart, Executive Director of the Bicycle Coalition, views the “wheelie kids” as generally uninterested in bike lanes, or other forms of bike infrastructure. While she recognizes the health benefits of cycling as often as One Way does, she does not tend to bring up the group when advocating for bicycles at civic organizations (Interview 11/10/2017). Consequently, while space has been conceived for One Way, it has not been done with them. Without the ability to shape conceived and perceived space, these young men produce their own space which often challenges perceived and conceived space of the city streets.

Discussion

Despite the emphasis on equity through increased programming and outreach to low-wealth Philadelphians of color, the city has not done enough to reassess how it is producing space of bicyclists in the city. While Philadelphia’s Complete Streets plan addresses safety, its focus on traffic safety obscures the personal safety that is felt disproportionately by low-wealth, POCs, from bicycling.

Ironically, as these Philadelphia attempts to increase diversity amongst bicyclists, existing populations of diverse riders like One Way go unrepresented by bicycle advocates and despised by the city. They were not conceived of in Philadelphia's production of space and do not fit the perceived values imbued on Philadelphia's streets. Therefore, though their lived experience is a powerful one, groups like One Way are barred from expressing their right to the city through cycling.

Conclusion

"Power over space is power over life" (Weinert, 2015)

With the completion of this study, comes the realization that there will always be more to consider. Greater research must be done to gain a comprehensive picture of who is bicycling in Philadelphia. While news outlets have identified large populations of immigrant riders, and small studies of the Indego bike share have begun to reveal what factors influence riders, Philadelphia deserves a longer and more intensive study.

It is clear that the power of bicycle space production is mainly allotted to the conceivers of space: the planners, architects, and designers supported by the city and vocal bicycle advocates. Often, however, this prioritization of bicycle infrastructure as conceived space, ignores the lived experiences of those who inhabit the spaces. While One Way provides a powerful example of bicyclists willing to demand attention towards their lived experience, for others this conflict is difficult, if not impossible.

As Philadelphia continues to grow its economy and population, it must consider *all* of its citizens. The city has the potential to incorporate its wide range of diversity, compassionate citizens, and long history, but it must be encouraged to do so democratically. Only then will the city be able to equitably reflect the diverse desires of its citizens and its bicyclists.

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