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A Case Study of Micromobility Regulation in Atlanta Through the Lens of Black's Behavior of Law

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ABSTRACT

A CASE STUDY OF MICROMOBILITY REGULATION IN ATLANTA THROUGH THE LENS OF BLACK'S BEHAVIOR OF LAW

BY

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In 2018, dockless, shareable micromobility devices arrived on Atlanta's streets and sidewalks. The carrier companies that brought them did not coordinate their rollout with city officials. Much like the case in other cities where micromobility devices were introduced, Atlanta did not have the opportunity to prepare for them, meaning that the city had no oversight of the industry. The consequences were rampant clutter, increased danger to riders, pedestrians, and drivers of automobiles, and device-related crimes. News media outlets closely covered the challenges brought on by "e-scooters," as they came to be known. Eventually, Atlanta passed regulations that expanded the city's control over the industry but hindered it in the process. This led to vocal backlash, with some Atlantan's asserting that the scooters and their riders should not shoulder all of the blame, and that automobiles and a lack of suitable infrastructure for innovative transportation technologies were more culpable. This raises questions about why the regulations targeted micromobility in Atlanta instead of other forms of transportation, and what the extent of the impacts of those regulations were.

The current study obtains theoretical guidance from the Blackian framework, which proposes in part that socially disadvantaged entities will be vulnerable to legal intervention when

they violate or threaten relatively more advantaged entities. To answer the questions at hand, the central investigation consists of a thematic analysis of news media sources (N = 243) to assess the presence of themes that align with the Blackian domains of social space and social time. Themes emerged from the data that suggest that micromobility devices, their riders, and the industry itself were portrayed in a manner that made them vulnerable to legislative intervention. The impact of the regulations is explored through a collection of rider citation reports (N = 100) and internal City of Atlanta communications. Findings suggest that the regulations heavily altered the micromobility market in Atlanta. Conclusions, policy implications, and recommendations for future research are offered.

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MATHESON TANNER SANCHEZ

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ACCEPTANCE

This dissertation was prepared under the direction of the candidate's Dissertation Committee. It has been approved and accepted by all members of that committee, and it has been accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Criminal Justice and Criminology in the Andrew Young School of Policy Studies of Georgia State University.

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Dedication

This dissertation is the product of many efforts beyond my own, for which I would like to express my gratitude. Foremost, I thank my wife, Corinne. Your unwavering belief that I was capable of this sustained me through long nights, lonely weekends, and so many uncertain moments. This accomplishment is as much yours as it is mine. We did it. I am especially grateful for our daughter, Juniper, whose commitment to discovery is a constant inspiration. This is for you, June. Never stop testing the limits. I must also mention our dogs Wendy and Penny. They seemed to always know when I needed to go for a walk or to take a break for ear scratches. I thank my parents, Lauryl and Nelson, for being unquestioningly and unconditionally in my corner when it felt like the project had me on the ropes. Mom, our talks fortified me to keep going. Thank you to the rest of my family, many of whom may not have always understood the process, but whose enthusiastic encouragement was never tempered by that fact. I am grateful also to my colleagues at Georgia College and State University. Thank you, Sara, for never asking how the dissertation was going. Thank you, Scott, for being my advocate while I worked to complete it. Thank you, Carrie, Alesa, Max, Stephanie, and Ben, for your advice and willingness to listen. It helped more than you know.

A special mention is warranted for the individuals who have experienced and will experience tragedy related to micromobility's expansion. Often—perhaps too often—progress is tainted by the suffering of those who are caught at the frontier of innovation.

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Introduction

There are times when technological advancements arrive so abruptly and impact our lives so obviously that they become impossible to ignore, forcing us to decide how, if at all, the new technology should fit within established social spaces. In these instances of accelerated adjustment, questions often arise regarding the potential disruptive qualities of the novel technology, leading to natural discussions of evaluating possible routes for regulation of those qualities. Recent examples of this action-reaction phenomenon are found in the conversation regarding artificial intelligence (A.I.). For instance, the proliferation of facial recognition software has prompted debate about the limits to which that technology can be used by law enforcement and other governmental agencies (Eneman et al. 2022). Likewise, the advent of writing aids powered by A.I. has raised concerns about the extent to which students should (if at all) be allowed to use them to complete coursework (Barnett 2023). While these examples may not have an overtly visible presence in the lives of many, the same cannot be said of revolutionary advances in transportation technology.

Unlike A.I., which impacts our lives in a less visible manner, many novel transportation technologies bring unavoidable physical manifestations to the center of our daily lives. This became apparent at the beginning of the 20th century when automobiles began utilizing city streets alongside horses and pedestrians who were unaccustomed to coexisting with objects that moved like the autos did. It became relevant again when rideshare services—primarily at the direction of companies like Uber and Lyft—became the de facto way to hail a private ride in many locales in the United States where the conventional taxi service had been the longstanding business model. These advancements in transportation technology represent large leaps forward in the realm of personal mobility. Such large leaps, in fact, were not unanimously accepted as net

benefits to civilized life (Edleman 2017; Norton 2008). Their utility and convenience were undeniable, but the collateral harm caused by each made them vulnerable to critical appraisals of their place in society. Such was also the case in an even more recent example of a novel form of transportation: micromobility devices.

The term "micromobility" captures a multitude of different forms of small-scale personal mobility that have been in use long before now, such as bicycles, skateboards, push scooters, etc. In recent years, "micromobility" has come to have a much more specific meaning. While it still also refers to those human-powered devices, the term is now much more synonymous with shareable, dockless electronic devices that users rent through a smartphone app and pay by the minute or mile before parking them at their destination for the next rider to hail and use. This reconceptualization of micromobility has also come to include only those devices that weigh less than 500 pounds and have a maximum speed of less than 30 miles per hour (Price et al. 2021). Though this definition encompasses a variety of these types of devices, such as segways, sit-down scooters, and electric bicycles, the most ubiquitous of them by far is the stand-up electronic scooter (hereafter referred to simply as "scooters"). In the wake of their rollout, these devices seemed to garner the most attention—from both sides of the issue—and have maintained their widespread relevance and integrated status within their service areas, compared with their relatively more cumbersome counterparts. This eventual position atop the micromobility food chain was not always certain, however, as scooters were the subject of heated debate within the cities in which they were deployed during the early stages of their introduction.

The critics were not the only voices heard during the early days. Many championed the scooters for their ability to transport residents quickly and efficiently throughout cities in lieu of relying on automobiles, and at costs that were less prohibitive for travelers of limited means

(Louchez 2018). This new form of transportation was also praised for being a more environmentally sustainable transportation solution that would simultaneously help ease traffic congestion and offer a viable first mile/last mile option for commuters who relied on public transit already or who might consider using it if access to it was made easier (Grosshuesch 2020). For many, then, the scooters had potential for filling a necessary gap in transportation infrastructure in urban areas and promised a way of bringing car-swollen cities into a greener future. Given the promise of such advantages afforded by the scooters, it is also important to understand where the critical arguments were rooted.

Despite these prospective benefits associated with their arrival, the scooters stirred up a cloud of confusion and resentment. Initially, no locales had existing laws, ordinances, or regulations specifically designed to address the huge and abrupt changes that the scooters brought to city streets, sidewalks, parking areas, and public spaces. Riders were accused of operating the scooters in any manner they saw fit, often creating dangerous situations for themselves, drivers of automobiles, and pedestrians (Vox 2018). When not in service, scooters could often be found strewn about busy sections of sidewalk or similarly inconvenient spots, creating mobility challenges for some. The City of Atlanta was especially impacted by the scooters' arrival to its streets in May of 2018, as the city experienced all of the above-mentioned ailments, at one point even leading the nation in the number of scooter-related deaths (Keenan 2019). Micromobility defenders insisted that the scooters were not the principal antagonist within a city that continued to struggle with automobile congestion and inadequate alternative transportation infrastructure. Alongside fervent calls for regulation or banning of micromobility in Atlanta, some residents instead demanded that the municipality train their legislative sights on measures that would create safer conditions for users of the devices. Particularly, scooter

proponents and advocates for bicycle and pedestrian safety alike called for the lowering of speed limits within the city and the installation of dedicated multi-use lanes from which bicycles, scooters, and other forms of micromobility would be protected from automobile traffic and kept off the sidewalks where they posed a risk to pedestrians (Torpy 2019b).

In response to these scooter- and rider-induced ailments, and amid assertions from some that scooters and their riders were not completely to blame, Atlanta worked quickly to regulate micromobility devices and the industry in which the carrier corporations operated. The city council and surrounding municipalities passed a host of different regulations in multiple phases, severely restricting the operation of scooters and, subsequently, the earning potential for the carrier corporations to a point that the scooters were seen as less useful for commuting and casual riding, and less profitable for the carriers that served Atlanta (Habersham 2020a). In short, Atlanta's regulatory actions conveyed a message that scooters and their carrier corporations were ultimately culpable and the devices would have to be relegated back to the recreational luxury or occasional transit option that they had been prior to their arrival in Atlanta.

In considering why the City of Atlanta opted to establish regulations that targeted scooters when arguments were being made regarding the culpability of automobiles and inferior infrastructure, existing theoretical frameworks are not without feasible explanations. Specifically, Blackian theory asserts that law will always be more likely to be mobilized against individuals or entities that inhabit a more socially tenuous position than against those who have a firmly established place in society (Black 1976). Recent developments of the theory have also pointed to the importance of the speed and magnitude at which society is disrupted as a result of some act or occurrence (Phillips & Cooney 2022). Essentially, occurrences that create larger social shifts are more susceptible to formal intervention than other less upsetting events. Given both the

scooters' status as a "newcomer" and the disruptive nature of their arrival in Atlanta, it might logically be considered if this imbalance of social clout played a role in the targeting of micromobility over other established facets of Atlanta transportation culture. Importantly, the current study is not a test of Blackian theory, but rather takes influence from it as a logical lens through which to interpret findings.

Questions remain about the regulatory decisions that were made surrounding micromobility devices in Atlanta. Specifically, what were the motivations for city officials to pass legislation that targeted scooters and their carrier corporations? Could those factors have been influenced by popular opinion of micromobility devices, users, and carrier companies? And finally, what were the impacts of the regulations on scooter use and the micromobility industry more broadly in Atlanta? These events provide an opportunity to conduct a case study to identify and assess the factors that contribute to regulatory decisions of novel technologies, and to consider the impacts of those regulations on burgeoning markets.

The current study relies on an accounting of what transpired in Atlanta, as presented within various forms of data, and interpretations through a relevant theoretical framework to address these questions. To that end, the current study is presented in six chapters. The first chapter will contain pertinent background information, including a more in-depth detailing of the adoption of scooters in Atlanta and an elaboration on Blackian theory. These novel micromobility devices will be discussed within their historical context in the second chapter, with comparisons drawn between them and other forms of disruptive modes of transportation that have reshaped social spaces through the years. The third chapter will consist of an accounting of the regulatory narrative to shine light on what legislative events occurred and when, allowing for a more comprehensive understanding of how certain incidents may be

temporally related to the formulation and implementation of relevant regulations. In chapter four, potential explanations are offered as the motivation for those regulatory decisions. These explanations will be based on data collected via media sources and qualitative interviews conducted with key actors in the legislative process. Relying on official records, chapter five will outline the impacts of those regulations, focusing on enforcement practices and the possible hampering of the micromobility market within Atlanta. The sixth and final chapter will offer conclusions and lessons learned regarding what can be gleaned from the current study's focus on how a major municipality responded to the arrival of a novel transportation technology in the absence of any preceding legislative guidelines for its governance, and explore why these points are important.

Chapter I — Background

The Scooters

Adoption of Micromobility Devices

It may seem odd to conceive of a scenario in which businesses would drop thousands of devices directly on city streets and sidewalks without inquiring about necessary permitting or even the conventional processes of doing so. Strange as it may be, this was the reality for many cities, Atlanta included. The scooters just seemed to show up. City officials, residents, and commuters alike began to find the street corners and sidewalks rapidly becoming different than they had come to know them. Stretches of open sidewalk that had been previously absent of anything but pedestrians were now home to fleets of scooters, arranged proudly in rows, ready to transport their first Atlantans. Immediately, they became a topic of discussion, with many wondering where they came from, how they worked, and what they were like to ride. As bewilderment subsided and people began utilizing them, scooters could be found throughout large swaths of Atlanta. Before long, scooters firmly established themselves as part of the landscape, much to the displeasure of vocal segments of the population.

Nationally. For the United States, the scooter rollout began in California. In 2017, Santa Monica became the first frontier. A headline in the *Santa Monica Daily Press* on September 26th read "Bird scooters flying around town" (Hall 2017). The article - the headline of which played on the avian nature of the first scooter company's name (Bird Scooters) - was largely positive. It included encouraging rhetoric from the company's founder regarding the device's ability to lessen the burden of traffic, parking, and limited accessibility to public transit systems. In the months that followed, scooter rollout quietly progressed in a handful of metropolises across the U.S., despite certain apprehensive mentions in news media (such as Abcarian 2018). It would not

be until May of 2018 that the City of Atlanta would experience scooters flocking to its streets and green spaces.

In Atlanta. News coverage of the arrival of the devices to Atlanta began in *Curbed*, when a May 3rd article ran with the opening line, "All across Atlanta, Bird droppings are upon us" (Green 2018, para. 1). Despite the article's attempt to offer a balanced introduction to this new mode of transportation, some readers may have detected a critical tone from the tongue-in-cheek appraisal of the company and its product. While not especially hostile toward scooters, the article showed an apprehension or uncertainty about what they would do to the city-scape. This sentiment was held by many Atlantans at the beginning of the adoption process.

The Problem with Scooters

Before long, scooters drew heat within public arenas and media outlets alike. The nature of the gripes were varied, but a common theme was emerging: scooters were not unanimously accepted as the new, cutting edge mobility resource that they were touted as during their rollout. They were criticized for their contribution to urban clutter, their exposure of Atlantans to seemingly increased levels of danger, their facilitation of new and worrying forms of crime, and for their unannounced introduction to the city which prevented legislators from preparing Atlanta with the appropriate regulatory policies.

The Clutter. Each day started the same way. Fresh from their overnight stay with one of the many freelance scooter-charging individuals, the scooters would meet the morning light neatly arranged along high-traffic sidewalks within the city. This never seemed to last long; following the morning commute and with each passing hour, the scooters were redistributed across Atlanta. Riders would hire the scooters, reach their destination, and "park" the devices wherever convenient–often awkwardly and randomly. In addition, scooters aligned along busy

sections of sidewalk might be pushed over, sometimes creating a "domino effect" with strings of scooters lying on top of each other. Naturally, people shuffling by would be in no rush to pick up fallen scooters or re-park abandoned devices that blocked doorways or created bottlenecked areas on sidewalks. The result was scooters strewn across the city, clogging up busy corridors. It was inconvenient at best and dangerous at worst.

Though unpleasant for the able-bodied pedestrians of Atlanta sidewalks, the issue of scooter clutter was especially problematic for Atlantans with impaired personal mobility. It did not take long for the struggle of pedestrians in wheelchairs to be documented in major news outlets. In an *Atlanta Journal Constitution* (*AJC*) article outlining the difficulties of regulating the devices, a man who uses a wheelchair is quoted as saying, "Every time I go somewhere, there's scooters blocking the sidewalks" (Deere 2019d, para. 43). The article goes on to outline the man's rebellious attempts to fight back, by quoting his claims of running over scooters whenever they are blocking the sidewalks–often knocking over entire lines of them. A strongly-worded opinion piece in the *AJC* sporting the inflammatory title "Rising cluelessness makes our streets stupid zones" offered an appraisal of the mentality that perpetuated the scooter clutter. Alongside a picture of a scooter perfectly situated across a narrow portion of sidewalk, Bill Torpy, a recurring *AJC* columnist wrote, "I'd describe it as ignorance mixed with selfishness, smothered by a blinding lack of awareness" (2019a, para. 7). In the same piece, the city planning commissioner, Tim Keane, is quoted expressing his exasperation with the issues as well. A trend was emerging that pointed to a divide between the riders and nonriders. The former, stereotypically characterized by the latter as acting with complete disregard for their fellow Atlantans.

The Crime. Whatever was left of the tongue-in-cheek spirit of the avian analogies waned and ultimately dissipated toward the end of the scooters' first summer in Atlanta. The situation became much more dire as scooters went from being simply a nuisance to something that some feared, including riders, employees of the carrier corporations, and those that might come in contact with riders. As the public was finding out, scooters opened doors for would-be offenders who relied on the scooters' speed and maneuverability to carry out their unlawful acts. In August of the first summer, reports ran in the *AJC* of four perpetrators using scooters and a bicycle to ambush a 21-year-old man outside of a restaurant before shooting him multiple times (Prince 2018). The suspects then ditched the devices and fled the area on foot.

The scooters themselves also became the object of nefarious enterprise. In April of the following year, two teenagers were arrested after holding a representative of Lime Micromobility at gunpoint as he was setting the scooters out for public use, according to an *AJC* article (Prince 2019a). The suspects approached the representative and asked that he activate the scooters for them–something that they could not typically do themselves given the company's policy that riders must be 18 or older to operate them. After declining to accommodate the request, the suspects brandished a handgun and forced the representative to activate the scooters. The teens rode away and were later arrested.

August of 2019 brought with it two news stories that further demonstrated the potential for scooters to be used in criminal acts. The first involved a violent carjacking (Hansen 2019a). Two suspects rode up to a man at a gas station, reportedly attacked him causing cuts and scratches, and drove away in the victim's rental car. The second involved the robbery of a university student (Prince 2019c). According to the *AJC*, two suspects rode up to a Georgia Tech

student, told him they had a gun, and made him withdraw cash from an ATM in Midtown. The perpetrators then rode away on the scooters.

The above examples of scooter-related crimes that transpired shortly after the adoption of the devices in Atlanta served as fodder for those Atlantans who viewed the scooters as an undesirable addition to life in the city. Still, folks may have been getting accustomed to the added clutter of scooters on the sidewalks. Furthermore, the scooter crimes were relatively sporadic, and it was difficult for scooter abolitionists to make any real argument that these crimes only took place because of the existence of scooters in Atlanta. There was, however, another more concrete way in which scooters impacted the lives of more Atlantans. The devices exposed riders and pedestrians to heightened levels of danger in their daily lives.

The Danger. Evidence of scooters' potential to cause harm came in the form of a slew of new stories covering scooter-involved accidents, some with fatal outcomes. Atlantans that were previously unbothered and/or unaware of the challenges facing the city pertaining to the clutter and crime aspects of scooters were forced to take note as scootering proved to bring with it some inherent dangers. The foundation for this perception was laid months before scooters came to Atlanta when a *Los Angeles Times* column article ran with the telling headline, "The Bird electric scooter conundrum: So fun, so exhilarating, so dangerous" (Abcarian 2018). The article chronicled various dangers of scooter riding that reinforced this theme, including the relative inexperience of the average rider, the lack of protective gear such as a helmet, the (unsanctioned) use of scooters by underage riders, the use of single scooters by two or three people at once, and the arguably too fast cruising speed of the devices – about 15 miles per hour. It was not long after the adoption of scooters in Atlanta that a similar local article raised many of the same concerns (Lucie 2018).

Within the first few months of 2019, what was mostly speculative or anecdotal conjecture became very difficult to dismiss for Atlantans. In February, a story ran in the *AJC* about a woman who had a particularly traumatic accident during her afternoon commute on a scooter (Stevens 2019). Complete with pictures of the 15 stitches across her face and the warning to other riders, "Don't do it," the story went on to describe how when she needed them, the scooter she had been riding had a brake failure. She was thrown off into a wrought iron railing. To drive the point home, the article closes with mentions of the numerous impending medical appointments and her final statement about how she does not want this to happen to anyone else. A similar claim was made about an unrelated incident the following month. According to an *AJC* article, a man was suing Bird because of faulty brakes on a scooter that, instead of properly halting the device, pulled the scooter sharply to the left, throwing the man off (Habersham 2019a). Though the article did not mention any specifics of his injuries, it did report that the incident had at that point brought on $156,000 for medical and other expenses. The nature of these incidents were noteworthy, in that Atlantans now not only had reason to question their safety around scooters even when the equipment was operating as intended. It also gave folks reason to be skeptical about the companies' ability to ensure that they would not become dangerous objects irrespective of how they were being used by the riders. If these accounts of injuries were not enough to make Atlantans take note of the possible inherent dangers of scooter riding, the stakes would soon be raised.

On March 19th, the day after the second story about the faulty brakes ran, another story was released by the *AJC*. Scooters had been involved in their first fatal incident that touched Atlanta. A resident of Woodstock – a northern suburb of metro Atlanta – had been killed while riding a scooter in San Diego (Prince 2019e). Though the incident had happened on the other

side of the country, the death of the local business owner situated this issue of danger directly at the doorstep of many Atlantans. It prompted them to ask, “could this happen here?” Two months later, they would have their answer.

Around midnight on May 16th, a 20-year-old man was riding a scooter on his way home, when he was struck by an automobile, according to an *AJC* article (Prince 2019e). He died as a result of the impact, becoming the first person to be killed while riding an electric scooter within Atlanta. Wishing not for their son to have died in vain, the family publicly called for scooters to be banned from roadways and for additional safety measures to be taken, such as rider training and mandatory helmets (Hansen 2019b). The calls for increased safety measures were heard and answered in July of 2019. The city passed legislation to that end, including zones with electronically enforced speed limits and designated parking areas for scooters to make it safer for riders to enter and exit high traffic areas. The article covering these changes quoted city officials speaking of plans for additional safety measures as they continued investigating the best way to address the specific issues at hand. They would not get the chance to implement these potential changes before tragedy struck the city again.

A story ran in the *AJC* on July 18th, only a little over two weeks after the announcement of legislation that was meant to make scootering safer in Atlanta (Prince & Hansen 2019). The city had been the setting for a second death the previous night. This time, the story included details from eyewitness accounts. As before, the incident involved a person riding a scooter and an automobile, only this time the automobile was a public transit bus. According to the article, while navigating a turn, the bus had contacted a 37-year-old man on a scooter. After he was hit, the man was run over by the bus and trapped underneath. Passengers exited the bus, but were unable to help the man, who died before emergency personnel could free him. This second

scooter-related death within city limits occurred shortly after new ordinances were rolled out requiring scooters to be ridden on the street instead of sidewalks.

Before Atlantans had much time to think about the best way to ensure the safety of all users of transportation, a third death occurred. A few days after the last, a story ran in the *AJC* of an Alabama couple who had been visiting Atlanta when the wife and mother was struck by a vehicle while riding a scooter (Habersham & Deere 2019). The husband's eyewitness account of the incident describes the immediate aftermath of the event in some detail. The woman was placed on life support after sustaining severe brain injuries before passing away days later. Once again, this death came shortly after the newest wave of regulatory policy that prohibited any new issuances of scooter permits, meaning that companies would not be able to add any additional units to their fleets without removing others. As something of a promise toward the end of the article, Mayor Bottoms was quoted as stating that further action would be taken to help ensure safety of Atlanta residents.

This assertion could not stop a similar incident from happening, when less than a week after the third, a fourth death involving scooters occurred. On August 8th, the *AJC* reported that a homeless man was struck while atop a scooter by a commercial gas truck, killing him (Brasch & Deere 2019). The story, while scant on details, spoke to a growing consensus among elected officials within Atlanta and bordering municipalities to either ban or heavily regulate the devices. Though there would be no more deaths in Atlanta involving electric scooters, Atlanta had earned the title of being the national leader in scooter-related deaths.

Despite the lack of additional deaths, news coverage of the dangers of scootering did not cease. If anything, coverage became more damaging to scooters, as more and newer data pertaining to scooter injuries amassed. A handful of anecdotal stories ran in the *AJC* throughout

the final months of 2019 (Hansen 2019c; Hansen 2019d; Abusaid 2019; Habersham 2019b), many of them mirroring earlier articles in incident details and causes (faulty brakes, etc.). However, a host of stories reporting on larger studies of scooter injuries that validated safety concerns even further. The first, a local *AJC* story, covered findings from the Center for Disease Control (CDC) (Wickert 2019b). Relying on data from Austin, Texas, the CDC had found, on average, that 20 out of 100,000 scooter trips resulted in injury, and that half of those were serious injuries (Austin Public Health 2018). A few months later, a *Reuters* article ran summarizing findings from a study of the National Electronic Injury Surveillance System (NEISS). The story described how injuries stemming from scooter usage were on the rise and that one-third of injuries involved the head (Carroll 2020). Later in 2020, *CBS* offered an appraisal, stating that 41 Americans had lost their lives while using scooters, e-bikes, and hoverboards in the three years since they were introduced (Gibson 2020).

The Lack of Preceding Regulation. The potential for detrimental outcomes from scooters in Atlanta was undeniable. And yet, during the eager rollout of devices in the city, the municipality was always playing catch up. This is due to the fact that there existed no legislative precedent for how scooters should be regulated, and as such, no regulation was in place when the devices arrived. This primarily pertained to the usage by consumers, who were riding the scooters wherever, whenever, and however they saw fit without official recourse. It also pertained to the permitting and operating aspect for which the scooter providers were responsible. The city worked to bring forth legislation that would make scooter usage more organized and thus safer, and also to establish operational guidelines that would govern how the corporations would be expected to conduct business. Best efforts were made by the city council to quickly target essential areas for regulation and enforcement. Despite this, it took months for

regulation to reel in the chaotic adoption of the scooters, during which time vocal citizens and advocacy groups made their frustrations known through a variety of channels, some of which made headlines.

Reactions to Regulatory Efforts. Atlantans were inventive in their demonstrations. Following the second death involving a scooter within the city, a protest was organized in which attendees stood arm-in-arm on a stretch of city street, forming a barrier between automotive traffic and the more vulnerable traffic of the sidewalk. An *AJC* article covering the protest reported that about 55 attendees participated, forming a 240-foot stretch of protected sidewalk (Habersham 2019c). The message was clear: more protected sidewalks and bike lanes were needed to keep automobiles from being a danger to scooter riders, bicyclists, and pedestrians. Following Mayor Lance Bottoms's nighttime ban on scooter usage in August of 2019, protestors once again formulated a unique demonstration. Attendees "put a car to sleep" in front of Atlanta City Hall, according to a *Curbed* article on the event (Keenan 2019). Protestors tucked the car in, read it a bedtime story, and sang it a lullaby. The demonstration was meant to be symbolic of placing the blame of scooter-related deaths on the automobiles involved and not on the scooter riders, which the ban seemed to do. Hundreds attended a pivotal town hall meeting just two weeks later (Deere 2019d). The meeting was set to allow discussion about micromobility-specific areas and items to be regulated and to establish a dialogue surrounding planning efforts to allow for safer streets for all modes of transportation. Ultimately, the city passed regulations that addressed many of these concerns.

The Benefits of Scooters

Despite the many challenges that the devices posed, there was no shortage of proponents fervently pointing to the net benefits that scooters brought with them. Primarily, these claims

surrounded the notion that scooters offered a convenient, reliable, and economical option for commuters that otherwise would need to walk or use automobiles to travel from their homes to mass transit, and then from mass transit to their place of employment. This concept, known to urban planners as the "first-mile/last-mile" conundrum, is a critical consideration for those wishing to revamp cities to alleviate inner-city traffic on roadways and reduce the carbon footprint of commuters. Scooters, it seemed, were the perfect solution that could not only fill this need for existing users of Atlanta's mass transit system, but also had the potential to convince commuters who previously found accessing mass transit to be too inconvenient that it was now a feasible option for moving throughout the city.

Some championed the idea of transportation equity. Because of their relatively low cost to operate compared with rideshare or traditional taxi services, scooters were believed to be a way for lower income residents to commute further to higher-earning jobs in other parts of the city. City officials recognized this potential advantage as well, as evidenced by their requirements of scooter companies to disperse scooters throughout all parts of the city and to configure a method through which those without smartphones could still rent the devices (Keenan 2019). These inclusions in the regulatory framework point to the understood utility of micromobility devices to all segments of the population.

Certain segments of the mobility and transportation realm picked up the torch for raising awareness of scooter benefits. Specifically, bicycle- and pedestrian-centric advocacy groups claimed scooters as pragmatic partners in their push for better infrastructure and greater restrictions on motorists. Bicycle advocates, always pushing for better and safer infrastructure and recognizing a need for something similar for scooters, pointed to their turbulent arrival as the catalyst needed to justify large-scale protected bicycle and multi-use lane development

throughout the city (Green 2019). Along with these groups, others whose focus was on creating a more "walkable" Atlanta saw scooters as an unignorable reason to finally reduce speed limits and restrict automobile access to some densely trafficked parts of the city altogether (Torpy 2019c).

COVID-19 and Beyond

After the beginning of 2020, the micromobility issue garnered substantially less attention in the public sphere. If the heated discourse surrounding micromobility and the resulting regulation had already begun to cool off by the end of 2019, it would go virtually silent early in 2020. With the spread of the COVID-19 virus, carrier corporations were instructed to remove the devices from the streets of Atlanta, as reported by the *AJC* in April of 2020 (Habersham 2020c). As a result of the mayor's shelter-in-place order, micromobility was placed in the non-essential services camp, meaning the industry could not lawfully operate while the order stood. The order was lifted and the scooters were cleared to be redeployed early in June of 2020 (Habersham 2020c). Though the return of the devices was not met with the same intense controversy as seen previously, the devices brought back many of the same challenges that they introduced to the city in 2018. This diminished reaction from the media during the reintroduction despite the scooters still posing something of a challenge to the city is a peculiarity that warrants a closer inspection.

Current State of Regulation

As of the time of writing this proposal, the City of Atlanta has enacted comprehensive regulatory legislation that impacts the way that scooters can and cannot be ridden, requirements for the devices themselves, and protocols for operation by carrier corporations. A more thorough outline of these regulations may provide the reader with a better appreciation for the scale of legislation that was passed against scooters in the relatively short period of time since their arrival.

Regulation of Rider Behavior. Despite the backlash on micromobility customers in the media, only a fraction of the ordinances targeted rider behavior in comparison to those levied against the carrier corporations. Even so, there are a handful worth mentioning. In what is perhaps the most controversial and most impactful regulation of rider behavior, scooters are prohibited from being ridden on "sidewalks or any space exclusively for pedestrian use." (Article X, p. 5). This is impactful because, prior to the passing of this regulation, the majority of riders rode on the sidewalk. It is controversial because, without the option to ride on the sidewalk, riders are faced with having to share roadways with automobiles, making riders potentially more vulnerable to collisions with cars. Mercifully, scooters are permitted to operate in bicycle lanes and shared use paths as well. Legislation now explicitly states that riders must adhere to all state and local laws, including being required to yield to pedestrians on all shared use paths, and not being allowed to use cell phones or similarly distracting devices while operating the scooters (Article X). Regulations also make it unlawful for scooters to be operated by multiple people at once. This ordinance is meant to curb the carrying of passengers in addition to the primary operator of the scooter.

In recognizing that scooters are not only potentially problematic while being ridden, there are also multiple ordinances governing how the devices can and cannot be parked (Article X). For instance, riders must park scooters upright on a sidewalk, specifically in a bike rack, against a building, or by the curb, giving pedestrian traffic a minimum of five feet through which to walk. Parking prohibitions include not parking on vegetation, on a grate or manhole cover, in loading zones, blocking driveways or other shared use paths, in such a manner that obstructs wheelchair traffic, in bus stop zones, within five feet of a bikeshare hub, in a manner that blocks signage, or near fire hydrants or other emergency access points. With these and the regulations

pertaining to riding behavior, the regulations sought to alleviate many of the initial concerns surrounding scooters, especially regarding pedestrian safety and convenience.

Regulation of Carrier Corporation Behavior. The few regulations aimed at rider behavior bolstered efforts to make operation of the devices safer, but they do not paint the whole picture for why these regulations may have stifled the burgeoning micromobility market in Atlanta. For that, we must consider the ordinances that were aimed at regulating carrier corporation behavior.

Permitting. Central to the argument that regulations targeted the micromobility industry wholesale is the stringent permitting regulations that the city implemented. Carrier corporations must apply for and maintain valid permits to conduct business within Atlanta (Article X). Throughout the process, carriers must demonstrate that they have business licenses, liability insurance, and descriptions and images of the devices they will utilize. The regulations also outline the financial commitments to maintain the permit, which are scaled to the size of operation; $12,000 is required for the first 500 devices, with $50 coming due for each additional device. The regulations are also clear that the department of transportation has the right to determine how many permits will be issued in a given year, allowing the city the ability to regulate the size of the micromobility market within. Crucially, the regulations also provide the city the ability to revoke permits if they do not operate as authorized, or "for any reason at the discretion of the commissioner" (Article X, p. 2). The fine regarding enforcement of ordinances also outlines the processes for notifying carriers of violations and for fining carriers that violate.

Operations. Ordinances also address carrier corporations' standards for operation. Regarding the devices, carriers are required to limit speeds to 15 miles per hour, fit each device with an always-on white headlight and red rear light, and display signage about the law against

riding on the sidewalk on the device. In addition, through each carrier's app, the companies are required to educate riders about applicable laws surrounding riding and parking and encourage riders to wear helmets. Carriers are also on the hook for improperly parked devices, which the companies must remove. The city may also "cite, impound, store, and dispose of improperly parked devices" (Article X, p. 5). Excessive violations of parking regulations by a carrier's riders can result in a reduction of the number of permitted devices allowed to be operated by that company. Carriers must also employ sufficient personnel to maintain the devices and operate within the service area, combatting the perception that companies simply dumped the devices on the streets of Atlanta and then collected profits with little regard for the worsening condition of their devices and ability to address operational concerns as they arose. Lastly, carriers are also required to provide a bond to the city that is held to be utilized in instances of damage to property, the need to remove and/or store devices, and the levying of fines against the corporations. It is these operational regulations that most severely inhibited carriers from finding profitable conditions in Atlanta.

Equity and Data. Above and beyond the immediate safety and clutter concerns of the micromobility phenomenon, Atlanta also passed legislation to implement an equity component into the regulations. These ordinances are intended to make the devices more accessible by all groups of people within the city, an initiative that mirrors other cities' responses to micromobility, though operationalization of the efforts differ in form and effectiveness (Johnston et al. 2020). Specifically, carrier corporations must allow for payment options that do not require the use of a credit card to better serve those members of the public that do not have access to one. Carriers must also distribute their devices in a manner that adheres to equitability requirements, as established by the department of transportation, and must submit a plan to

address equitability concerns that outlines items such as discounted price plans and cash-based payment (Article X). The need to monitor distribution and operation of each device brought a need to require data sharing of companies. They must provide anonymized data for their fleet of devices and must submit a monthly report to the department of transportation. These equity and data sharing regulations establish the essence of a partnership as Atlanta determines how the carriers–and their devices by extension–may best serve residents and commuters.

Micromobility in Atlanta at Present

Despite the challenges and obstacles that the micromobility industry faced in Atlanta in the over four years since it was originally introduced, it has not vanished completely from the city. On the contrary, micromobility has become an established and (mostly) accepted form of transportation. Additionally, it remains culturally relevant and at the forefront of cutting-edge transportation technology, with some areas in Metro Atlanta serving as the setting for pilot programs that are testing self-driving scooters (Wilkins 2021). These recent developments provide an interesting contrast to the outcry that exploded during the scooters' rocky first months. Preliminarily, micromobility seems to have found eventual success in Atlanta. However, a deeper understanding of the narrative will help illuminate the collateral damage done–if any–in the form of companies that were forced to pull out of the Atlanta market or in the stifling of transportation innovation that ultimately may not have reached its full potential across the city.

The Behavior of Law

Despite a consensus that something had to be done to curb the tribulations brought on by the scooters and rider behavior, there was less agreement surrounding appropriate next steps. The benefit of hindsight provides us with a clear view of the outcome of the eventual legislation: micromobility devices were largely regulated out of relevance. The question of particular interest

is how or why did the legislation fall in favor of those who considered the scooters, their riders, and the carrier corporations at fault, rather than in favor of those who viewed scooters and their riders as victims of a system and infrastructure that were unprepared and inadequate to support them? Black's (1976) *Behavior of Law* provides guidance for addressing such a question.

Overview

The core assertion made by Black is that law does not materialize or intervene equally across people and situations. Rather, it is a fluid construct that shifts and adjusts depending on the attributes of those involved and the circumstances surrounding the incident(s) in question. In other words, it is malleable—but only to those who possess the status and influence to form it, and only within social spaces that allow it. Black posits that law is directly related to the social domains of stratification, morphology, culture, organization, and social control. More specifically, the magnitude and direction of law are dependent on these, in some very distinct ways.

Stratification and Law

Perhaps the most conventional and enduring set of Black's propositions pertain to how law operates in a stratified society. He considers stratification to be "any uneven distribution of the material conditions of existence…" (p. 11). Certainly, there is a socioeconomic aspect to this concept, in which some have more of this material wealth than others—something Black refers to as the "vertical distance" between them. Recognizing that wealth distribution is not continuous, he goes on to insist that people are placed in hierarchical tiers depending on their level of wealth accrual—called "vertical segmentation." Black offers some concrete measures of "rank" in this tiered system, but not all are monetary in nature. He also mentions occupation, age,

sex, and race as metrics upon which people may be categorized into their presumed level of social stature.

Regarding how law is related to stratification, Black presents five separate claims. The first, is that "Law varies directly with stratification" (p. 13). This is the most general of the five, simply stating that law will be greater in societies that are highly stratified than in those that are not as much. The second claim is that "Law varies directly with rank" (p. 17), meaning that the lower tiers of the social hierarchy will have less law than the higher tiers. Black offers anecdotal examples of disputes among poorer citizens and then between wealthier citizens, asserting that the latter would be much more likely to result in official legal intervention, while the former would be more likely to be resolved informally.

The third, fourth, and fifth claims pertaining to stratification begin to get at the notion that law will be applied more heavily in situations in which greater inter-class violations are done. Black claims that "Downward law is greater than upward law" (p. 21), that "Downward law varies directly with vertical distance" (p. 24), and that "Upward law varies inversely with vertical distance" (p. 25). These claims all deal with situations involving violations across social tiers. Downward law—that is, law that is applied because of a violation of a member of a higher tier by a member of the lower tier—is expected to be more common and more severe than the converse ("upward law"). Furthermore, this quantity of downward law is said to increase as the distance between the social rank of the involved parties increases. Plainly put, members of the lower class would be subject to more downward law if they violated a member of the upper class than a member of the middle class would, all else being held constant. Finally, Black claims that this relationship between rank and law is inverted for upward law. Members of the upper class may violate members of the lower class with relative impunity, but may be subject to more

severe legal repercussions if they violate members of the middle class. In other words, as this vertical distance increases, upward law decreases in kind.

Morphology and Law

Where stratification refers to the ranking and vertical structure of society, morphology pivots to address the "horizontal aspect of social life" (Black 1976, p. 37). Black describes this concept by discussing how societies can be more or less complex or differentiated, and their members more or less familiar with one another. Again, he asserts that law will vary in amount depending on the degree of horizontal proximity within societies and among members of those societies. To that end, he offers six propositions that detail exactly how and when we should expect law to react in the context of these attributes.

The first of these propositions deals with the differentiation—or specialization—in a given society. Explicitly, he posits, "The relationship between law and differentiation is curvilinear" (p. 39). Societies with a complete or relative lack of differentiation are characterized by members who are functionally and economically similar. On this end of the spectrum, Black insists that law would be less formal and less severe, with members instead relying on informal means of conflict resolution. In the middle of this spectrum, members of a society will be specialized in their functions and motivations, but will retain a certain amount of independence. These societies, according to Black, are those in which law is the most common and natural response to violations between parties. It is not until a society has differentiated to the extreme side of the spectrum that members become so specialized that they are wholly dependent on each other—and subsequently the continuity and success of each other's functions. At this end, Black again says that law will be less common and less severe. He offers the example of highly specialized businesses that rely on each other's services to maintain the success of their own. In

those cases, when one company slights another, we see those situations being handled through nonlegal channels to preserve the relationship.

Second, Black tackles the concept of relational distance, or familiarity between involved parties. He claims that "The relationship between law and relational distance is curvilinear" (p. 41). Of course, this follows conventional wisdom that people who are most intimately connected will be less likely to invoke formal law—or, at least, a great magnitude of it—if one violates the other. As relational distance increases, this likelihood increases in kind. Black insists that these relationships can be rank-ordered, beginning with family as the closest relation, then friend, acquaintance, neighbor, and so on until the unfamiliarity becomes absolute. However, Black states that at a certain point, this relational distance will become so great as to be the reason why no formal law is likely to enter the equation. In these instances, conflict that occurs between two people who "share no social system" (p. 43), such as language, culture, and morals, will not elicit any formal legal action. This may be due to the lack of a common understanding of the violation in question, or simply the absence of any legal system that can address the expectations of both parties.

Radial location within a society refers to a member's involvement with or participation in their social surroundings. Some are at or near the center and constantly interacting with various facets of the community. Others can be characterized as "outsiders," having little interaction with others in their community. The former are considerably more "integrated" within their social settings than the latter. With his third proposition regarding morphology, Black posits that "Law varies directly with integration" (p. 48). Simply put, disputes between those whose radial location places them closer to the center of their social circle will resort to law (and more of it)

more commonly than those at the outer fringe. Of course, disputes do not always involve parties with similar levels of societal integration.

Black addresses the instances in which violations cross radial boundaries and involve parties with different levels of integration with his fourth, fifth, and sixth propositions. He begins this discussion by claiming "Centrifugal law is greater than centripetal law" (p. 50). Similar to his assertions regarding disputes between members of different social "rank," cases in which a party with lower integration violates a party with relatively higher integration—centrifugal—will result in greater law being applied than cases involving a case where a more integrated party violates a less integrated party—centripetal. Also similar to the stratification assertions, Black claims in addition that "Centrifugal law varies directly with radial distance," while "Centripetal law varies inversely with radial distance" (p. 50). In essence, law will be more heavily applied with offenses that are directed "outward" in this radial understanding of societal integration when that radial distance is greater. Alternatively, offenses directed "inward" will yield fewer and lesser legal outcomes when the radial distance increases.

Culture and Law

According to Black (1976), law is also related to culture. This concept can be difficult to pin down, but he explains that it represents "the symbolic aspect of social life, including expressions of what is true, good, and beautiful" (p. 61). He offers examples of culture, including science, technology, religion, magic, and folklore. He also expands his abstract definition by describing how culture includes ideologies, moralities, and the arts (both fine and "popular"). Societies differ in the amount and types of culture that are present within, and members of those societies can be characterized as being more or less "cultured" than others. Black makes nine claims about how law reacts to culture.

Law is claimed to change based on the quantity of culture present. Specifically, Black first says that "Law varies directly with culture" (p. 63). Broadly speaking, this means that law will be more ubiquitous within societies possessing higher amounts of culture than those with less culture. Notably, Black mentions tribal societies such as that of "Bushmen of South Africa, the Pygmies of Zaire, and the Negritos of the Philippines" (p. 63) as having less culture and thus being less likely to resolve disputes with formal law than the more developed parts of the world. While the aging language may seem dismissive of the rich and unique cultural aspects found within these societies, it remains true that the sheer amount of culture found in them is measurably less than that in other societies across the globe.

In the second, third, and fourth propositions, Black follows a familiar pattern regarding the direction of law, this time in relation to culture. He posits "Law is greater in a direction toward less culture than toward more culture" (p. 65). In other words, within societies and among persons with less perceived culture than others, formal law will not be applied as readily as it would be in more cultured circumstances. Then, Black states "In a direction toward less culture, law varies directly with cultural distance" (p. 65), however "In a direction toward more culture, law varies inversely with cultural distance" (p. 66). These propositions mirror others in concept. They describe how the legal gap widens between entities of relatively more and less culture when a culturally lesser entity violates a culturally greater one. Likewise logically, when the converse occurs, law will decrease as this gap grows.

Black also outlines how proximity to mainstream culture affects crime in the fifth proposition, "law varies directly with conventionality" (p. 68). Essentially, this refers to the likelihood of formal law to intervene in incidents within mainstream culture, and less so to come into play if an incident occurs among subcultural or countercultural entities. Predictably, the

sixth, seventh, and eighth propositions pertain to how law behaves according to distance from mainstream culture. He posits that "law is greater in a direction toward less conventionality than toward more conventionality" (p. 69), that "in a direction toward less conventionality, law varies directly with cultural distance" (p. 70), and that "in a direction toward more conventionality, law varies inversely with cultural distance" (p. 70). With these statements, Black is saying that conventionality operates on law much the same way the other domains do. Between parties of differing distance to mainstream culture, when a more culturally obscure party violates a more culturally conventional party, that law will be greater than the converse, and the amount of law will increase as the cultural distance between the two grows. Alternatively, if the opposite situation occurs, law will decrease as the distance increases.

In his ninth and final proposition pertaining to culture, Black says that "the relationship between law and cultural distance is curvilinear" (p. 74). This references the way law is greatest when the variation in the amount of culture between involved parties is neither too small nor too great. Too small and the incident is likely to be handled more formally. Yet, too great and the incident is likely not to likely to trigger any mutually applicable law that would intervene.

Organization and Law

If the prior domains are more closely related to the casual social nature of a society, then organization is a departure. In the context of Black's work, organization—or how "organized" a society is—refers to the "capacity for collective action" (p. 85). Indications of organization lie in the bureaucratic structure of society, such as the number of administrative personnel, a centralized decision-making structure, and the existence of a lasting, focused agenda. Naturally, the tendency while considering this domain is to think of formal businesses, corporations, and organizations, but it is also true that segments of society can organize themselves—albeit usually

at a lower level. It is within these variations in the quantifiable amounts of organization that Black's four related propositions are found.

These begin with a general claim: "law varies directly with organization" (p. 86). With this, Black points to the notion that societies become more or less organized over time, and with these shifts, the propensity for formal law follows. For instance, for entities that demonstrate higher levels of organization—be they formal sovereign states or smaller segments of society, such as social groups, clubs, churches, etc.—law will be applied more readily and in greater magnitude than in comparatively less organized entities. Black also insists that organization can increase temporarily, such as during times of war, when increases in organization are made to ensure security and to further the war effort. He is sure to point out that law follows these natural fluctuations. In the example of heightened organization during wartime, a country may be less tolerant of anti-nationalist propaganda, and may be more likely to direct formal law at the transgressor.

In a similar logical vein as previous domains, Black's second, third, and fourth propositions speak to the way law will react differently when directed across parties with varying degrees of organization. The second proposition suggests that "law is greater in a direction toward less organization than toward more organization" (p. 92). Plainly put, when less organized parties (especially individuals) violate more organized parties (such as businesses), law will react more harshly than if the roles were reversed. He then states, "in a direction toward less organization, law varies directly with organizational distance" and "in a direction toward more organization, law varies inversely with organizational distance" (p. 93). The former addresses the likelihood of law to be greater as the difference in organizational levels increase if the violation of a relatively more organized entity is carried out by a less organized entity. The

latter describes the tendency of law to not be as likely or severe in the opposite situation—a trend that becomes more accentuated as the organization of the involved parties reaches the extremes.

Social Control and Law

Black's final domain of consideration for which he provides guiding propositions[1] is social control. Though he is quick to recognize law as a form of formal social control, he discusses how it is interrelated with other forms of social control, formal or otherwise. These other forms dictate what is right, proper, and acceptable for individuals and groups within and across society to do. The specifically mentioned forms of social control in his work are "etiquette, custom, ethics, bureaucracy, and the treatment of mental illnesses" (p. 105), which all have the potential to impact the behavior of law. To that point, Black provides five propositions that explain how the behavior of law is dependent on the amounts of other social control.

Unlike the proposed direction of the relationships between law and other domains, the existence of other forms of social control will in turn *decrease* the necessity for formal law. Because of this, Black first posits, "law varies inversely with other social control" (p. 107). It stands to reason that in societies or among segments of society that have alternative and possibly more powerful forms of social control, formal law becomes redundant or even contrary to normative expectations to such a degree that it becomes irrelevant.

The remaining four propositions pertaining to social control deal with the normative status, or "respectability," of the involved parties. In other words, those people and entities who operate outside of what is deemed acceptable or proper may be perceived as less normatively respectable, and the law will behave in kind. The second proposition claims, "law varies directly with respectability" (p. 112). This suggests the tendency for more "respectable" entities to

[1] Black also highlights how anarchy can influence law, but his observations surrounding this domain are more abstract and are therefore less useful as guidance for research studies that are grounded in his work.

involve law more readily to settle disputes, while less "respectable" are less likely to do so. An illustrative example is to describe how members of "street culture," a subculture that is often associated with less conventionally respectable qualities (Anderson 1999), prefer to handle disputes informally among themselves. Indeed, involving formal law enforcement is seen as a normative breach subject to further (informal) punishment. Black's third proposition reads, "law is greater in a direction toward less respectability than toward more respectability" (p. 114). Perhaps predictably, this outlines the decreased likelihood of formal law to intervene when more "respectable" parties violate the less so, and vice versa. Consider a scenario in which the investigation of an altercation between two individuals reveals that one has previously been convicted of a violent crime. It is easy to imagine how the investigating authorities would interpret this as a mark against that individual's respectability, and may therefore be more likely to name him the aggravating party.

The fourth and fifth propositions address how the normative distance between parties influences the magnitude of law in regard to respectability. Explicitly, Black suggests, "in a direction toward less respectability, law varies directly with normative distance," but "in a direction toward more respectability, law varies inversely with normative distance" (p. 117). Simply put, the greater the disparity of respectability between the violator and the violated, law will increase if the violator is less respectable than the violated, and decrease if the opposite is true.

Definitions of Law

An important consideration of Black's work is the fact that he insists that law is a measurable, quantifiable concept. He defines law loosely, initially describing it simply as "governmental social control" (p. 2). Expounding on this basic definition of law, he details the

things that are and *are not* considered law. Legislation, litigation, and resulting adjudication are mentioned outright as examples of law, whereas governmental services such as the post office or fire department are said not to be included in this definition of law. Law is also defined as varying in quantity, often evidenced by the punishments handed down as a result of violations. It varies both in frequency (e.g. the number of fines ordered by a judge) and magnitude (e.g. the amount attached by a judge to a given fine). Crucially, while Black does not explicitly designate regulation as a form of law, he does treat it as such in the examples relied on to illustrate the behavior of law (such as the "plague regulations" on p. 90) and mentions it as a form of governmental social control more casually in other areas of the text. In the context of the behavior of law, it is apparent that Black operationally considers regulation to be a type of legislation, and therefore included in his conceptualization of law.

In his work, Black often speaks of law as a monolithic concept. Though it may be convenient to do so for theoretical parsimony, he does also explain the four types of law recognized by other legal scholars (Gibbs 1963; Nader 1969; Goffman 1971). According to Black, law can be penal, compensatory, therapeutic, and conciliatory, and applies to cases involving both criminal and civil matters. Penal law prohibits certain behaviors and punishes those that do not abide. This is perhaps the most visible and familiar type of law. Compensatory law comes into play when a victim brings some violation forth and seeks compensation from the violator. Therapeutic law is said to be triggered when a deviant harms himself and requires help to rectify the situation. Lastly, conciliatory law deals with "social harmony" (Black 1976, p. 5). It involves parties in dispute, where some intervention by the state is required to settle the issue. Black is careful to admit that many situations have elements from more than just one category of

law. The scooter situation in Atlanta is likely to be no different, but conciliatory law may logically be the most applicable.

Social Space and Social Time

Despite its many propositions, Black's theory displays relative parsimony given the enormity of what it attempts to explain. This has not stopped scholars from developing the theory further, however. Seeing an opportunity for further simplification and simultaneous expansion, Phillips and Cooney (2022) use extraordinarily rich data of death penalty cases to test the efficacy of Black's theory—termed the "geometrical theory of law"—distilled down to three generalized propositions. They are "downward law is greater than upward law" (p. 17), "law increases with social status" (p. 17), and "law increases with social distance" (p. 18). The authors reckon that these three propositions capture the spirit of *The Behavior of Law* in a way that is more useful and consumable. According to Phillips and Cooney, these propositions outline what Black theorized regarding something called "social space," but the authors also pull from one of Black's other theses, *Moral Time* (2011), and posit that another element is also responsible for what we observe to be the behavior of law: social time.

Social time is not meant to refer to time in the literal sense. Rather, "social time" in this application refers instead to the "dynamic aspect of social geometry" (Phillips and Cooney 2022, p. 72). Phillips and Cooney see this concept as the missing component in many Blackian interpretations of law that wish to evaluate the concept without accounting for the social *shift* that is felt when a dispute or violation occurs. While social space refers to the absolute and relative attributes of the parties involved, social time refers to the magnitude of social change that is created during conflict between those parties. The authors use a selection of murder cases

to highlight this point, wherein many of the facts of some are measurably more egregious than others, the former representing cases that create greater changes in social time than the latter.

This focus on the seriousness of offenses is not new, as it has surfaced in tests of Black's theory almost from the outset (e.g. Gottfredson & Hindelang 1979). What Phillips and Cooney do in their work is attempt to remove the subjectivity that is inherent within all previous discussions around the gravity of offenses and how that might influence outcomes regarding law. After all, as they point out, what is serious to some, is not necessarily serious to others. To address this, the authors establish three measurable dimensions of social time that influence legal outcomes when they experience "movement." The first is termed "vertical time" (Phillips and Cooney 2022, p. 73), which refers to disruptions in inequality of any kind, such as that pertaining to "wealth, health, organizational standing, reputation, or position of authority" (p. 73). The second is known as "relational time" (p. 73), which accounts for changes in levels of relational intimacy among parties. The third is "cultural time" (p. 73), which refers to any shift in "cultural space or diversity" (p. 73). Furthermore, Phillips and Cooney state that the larger and faster these movements of social time are, the more susceptible the cause of them is to legal intervention.

Chapter II – Scooters in the Context of Other Novel Transportation Technologies

Not a New Phenomenon

Despite the peculiar atmosphere surrounding the scooters, their arrival is not the first time that a novel technology has challenged the transportation status quo. It can be easy to forget that bicycles, automobiles, rideshare business models, and bikeshare programs each brought with them some number of growing pains as they pulled the concept of personal transportation—sometimes reluctantly—into the future. At each respective point in history, the adoption of these disruptive technologies raised questions about what constituted progress and about how much change social spaces can endure all at once. While these examples exhibit some consistencies across them in how they arrived and how they impacted social processes, the introduction of each technology also brought certain unique implications that complicated its adoption in different ways than had been addressed previously while implementing earlier technologies. Likewise, scooters mirrored these previously disruptive technologies in some ways and, in others, established themselves as a new and unique challenge for legislators, residents, and travelers in the City of Atlanta. A deeper understanding of how each of these technologies impacted the transportation and social facets of life during their respective periods of adoption will help situate scooters in the broader realm of novel transportation technologies and will help highlight the attributes of the scooters' arrival that makes this situation unique.

Bicycles

Bicycles were a 19th-century invention. At that time, alternative transportation methods were extremely limited. These modes realistically existed only in the form of horseback riding, driving a horse-drawn carriage, walking, and—in some very limited locales—riding a streetcar.

Against this sparse transportational backdrop, given the only just-established urban landscape in America, bicycles made quite a stir.

An Exclusive Invention. Though simple by today's standards, the materials and production processes were cutting-edge at the time, yielding a hefty price tag for the radical invention (Gurgoff 2017). This fact, along with the contemporary social standards meant that right from the start, bicycles were not seen as something that was accessible by all people from all walks of life.

Playthings for the Wealthy. One way in which bicycles demonstrated an air of exclusivity was through the sheer expense associated with their procurement. This restricted the type of person that could buy their own bicycle. So much so that, when they begin to be used in New York City in the 1800s, "…they were expensive playthings only attainable by a certain type of adventurous, wealthy man" (Budds 2019, para. 6). This highlights the seemingly flippant public image of bicycles at the time of their introduction to major U.S. cities. By being dismissed merely as a "plaything," the bicycle risked falling to the same fate as similar other eccentric transportation toys that never fully integrated into social spaces. This characterization of bicycles was exacerbated by the economic conditions of the time. The industrial revolution had yet to gain full momentum, and, as such, production costs of the parts that made up bicycles were high and many Americans did not enjoy the regular, dependable wages that they would eventually earn while working factory jobs and similar, making disposable income difficult to come by. All of this meant that, when first introduced in America, bicycles were not taken seriously as a viable and accessible option for personal transportation. Despite this, they would eventually gain in popularity with certain unlikely segments of the population, and the impacts would prove to be instrumental in affecting social change.

No Women Allowed. Aside from initially being prohibitively expensive to purchase, bicycles were also first thought of as only appropriate for men to ride. When women inevitably began openly riding them toward the end of the 19th century, it caused something of a moral panic (see: Cohen 1972). The medical profession weighed in on the issue, with doctors insisting that certain conditions would befall women if they rode bicycles (Jarry 2020). Riding was said by doctors to corrupt a woman's natural gate, turning her walk into something unsightly. Women were also said to be at risk for developing skeletal anomalies known as "bicycle hand" and "bicycle foot." Not even their faces were safe. According to medical doctors, the prolonged strain and exposure to winds and other environmental hazards were said to result in something called "bicycle face" (Stromberg 2015). The condition was described as being associated with a litany of symptoms, including flushed or pale skin, drawn lips, dark shadows around the eyes, a tired expression, clenched jaw, and bulging eyes. Clearly then, doctors were warning women that participating in this strenuous form of transportation would dilute their culturally expected lady-like appearance and affect.

Along with the medical claims of the bicycle's ability to corrupt women came the more direct assertions that cycling could change women in perhaps more realistic ways. It was understood that riding a bicycle regularly would change and potentially "harden" a woman's body so that it became more masculine. Not all people viewed this as a benefit (Jarry 2020). In addition to the differences that bicycling made in a woman's physique, women also began wearing more sporting-minded attire. Particularly, women began to forego cumbersome dresses in favor of pants, which were less likely to interfere with mounting, dismounting, and pedaling a bicycle. In keeping with other concerns, this change was perceived as another piece of evidence that bicycles were making women more masculine.

In addition to overt objections regarding how bicycling may change a woman's appearance, the machine also came to be associated with women's liberation (Jarry 2020). For the first time for many American women, they were able to be independently mobile. They could leave the home and access destinations that were previously outside of their reach, where they could meet, socialize, or even organize in ways that might not have been possible under the watchful eyes of husbands, fathers, brothers, or other men who might object. This social impact reached something of a critical point in the 1890s when bicycle usage and ownership became so popular as to be termed a "bicycling craze" (Taylor 2010). This social movement was the target of religious organizations, who blamed the bicycle and the newfound privacy, anonymity, and mobility it afforded women and, more generally, all young people. The concern was that bicycles allowed these demographics to engage in behaviors that the churches condemned. Such behaviors included arranging private "dates" in secluded areas, drinking alcohol, and the spreading of female frivolity. Public condemnation of the so-called "cycling craze" earned cycling the reputation of being "…a sport with distinctly sexual overtones" (Taylor 2010, p. 341). In hindsight, it can be concluded that many of these claims were driven by a level of fear that may not have been proportional to the actual threat posed, leading to a universal dismissal of many of the worries surrounding bicycles in the United States. Still, the physical danger that bicycles expose riders and others to when ridden on public streets in larger numbers is something that continues to be a central topic to bicycling in America today.

A Dangerous Invention. Absent any infrastructure prepared to accommodate this newfound form of individual transportation, bicycles were quick to become the subject of ire from city residents who felt that they posed a certain level of danger. Safety was such a concern with early bicycles—first "velocipedes" and then penny-farthings—that toward the end of the

19th century, a new "safety bicycle" was invented which promised to rectify many of the dangerous design components of the earlier design (Friss 2020). This did not alleviate the collective animosity all at once, though. According to Friss (2020), a leading bicycle history scholar, residents continued to question whether bicycles should become a more common and permanent fixture in urbanizing areas. Much of this came from the fact that cyclists were operating the machines in public spaces—such as Central Park—where they were said to be encroaching on the right of way of pedestrians and horse-powered transportation (Friss 2015). In the case of the former, it was stated that they created a risk to personal injury for pedestrians. Regarding the latter, bicycles were said to frighten horses, creating the potential for runaway horses and for erratic movements of the animals. In either case, it was clear that bicycles were not universally welcomed into the social fabric of early U.S. cities. Despite recent scholarship calling into question whether bicycles have ever become a welcome part of urban life, they were undoubtedly beginning to enjoy more widespread acceptance by the end of the 1800s (Friss 2020). Just as bicycles were making a place for themselves in a more modern America, another invention would completely turn the transportation infrastructure upside down in a way that had never before been experienced.

Automobiles

No technology or machine has altered the transportation landscape in the United States quite like the automobile has. A scholar of the time wrote of the new invention that "…its great power, speed and weight have made it a veritable king of the highway, before whom we are all invited to prostrate ourselves" (Brown 1908, p. 223). Until its arrival, the streets had only scarcely before been the subject of conversations regarding their organization and the concept of right-of-way. Streets in populated areas had always been the setting for travel, certainly, but they

were also spaces for gathering, for children to play, and for conducting business. In other words, they were a "free" space, being used by all segments of the population for a variety of purposes in addition to travel. This was challenged with the advent of the automobile, which essentially forced the issue of commodifying street space in the United States (Norton 2008). Users of all types began vying to stake their claim in the developing American cityscape. This paradigm shift came about because of various predictable and unforeseen consequences of introducing heavy, fast-moving objects to roadways. The most obvious of these include the notions of automobiles as dangerous machines, the newfound traffic congestion in city centers, and the need for automobiles to be parked on streets when not in use.

A New Threat. According to Norton (2008), a leading scholar of the adoption of automobiles in America, almost immediately following their introduction early in the 20th century, automobiles drew heat for being involved in collisions that resulted in serious injury and death. Brown, a contemporary of early motoring, writes of automobile operators:

> The speed of which they are capable intoxicates and bewilders the senses, and deadens them to the dangers which surround the machine, and by a sudden mishap may turn it in the twinkling of an eye into a terrible engine of destruction. (1908, p. 225)

The sentiment expressed above illustrates a major concern that early street users had regarding drivers: that they were unaware or unappreciative of the inherent capacity to inflict harm that accompanied their new mode of transportation. Brown also implies that blame lies not explicitly with automobile operators per se, but instead it is the machine which is vilified for its propensity to corrupt those that drive it. In addition to the overt

danger, Brown writes further of the indirect dangers through the dust kicked up and smoke emitted by the vehicles, as well as the potential to startle horses.

In his book which chronicles the "dawn of the motor age," Norton (2008) provides tragic anecdotes of injury and death inflicted by early motoring. One such example—that of Wartrell family, who lost two sons after they were each struck by automobiles and killed in separate incidents four years apart—Norton describes as "…the most typical variety of motor calamity" (2008, p. 21). So typical, he claims, that more than 200,000 were killed during the 1920s in vehicle accidents in the United States. Many of these fatalities involved the striking of pedestrians in the roadway, which were often children. Due to the feeling of the time that pedestrians had every right to freely utilize the street, automobiles were held responsible for the deaths of these "innocent victims" (Norton 2008, p. 25). Public anger mounted toward motorists and their choice of transportation. Anger turned to grief, which became a powerful symbol for change. Memorials were erected and initiatives to minimize automotive tragedy gained much publicity and support. Despite these efforts to counter the automobile's growing stake on the public street, the vehicles continued to gain in popularity, and before long cities were inundated with the machines.

Congestion. As more people relied on automobiles for personal transportation and for business purposes, streets in densely populated areas began to fill up with the new vehicles. In addition, street users were unaccustomed to operating in a predictable fashion; the concept of lanes and right-of-way were not yet part of the transportation culture. This naturally led to a need to organize street use in a way that would prioritize efficiency of flow without sacrificing safe operation. In the mid-1910s, city planning

officials for the first time considered concepts of "traffic congestion," and called on police to regulate the chaos (Norton 2008). Despite police agencies' best efforts to control traffic, their capacity for doing so was limited. They often prioritized safety over efficiency, slowing traffic to a problematic pace. City officials recognized a need to establish order, resulting in an expansion of road use rules and the use of signage at intersections, first in the form of the "silent policeman," and eventually developing into early traffic lights (Norton 2008). In the early stages of adoption, these developments set the in motion what would be a shift in street-use customs in the United States.

Parking. With more city-dwellers and visitors arriving at locations in their automobiles came the need for places to park them. In the absence of established norms or areas for doing so, motorists largely defaulted to curb parking. The curb existed in a murky area between the street and the sidewalk, where citizens struggled to agree if parking should be permitted (Norton 2008). Traffic engineers lobbied for total eradication of the practice, claiming that the curb was a public space and it was therefore inappropriate for private vehicles to occupy it. Additionally, many argued that curb parking only benefitted the few who owned and drove automobiles—and could chance upon an empty space large enough to park—yet it negatively impacted the lives of countless others by monopolizing what used to be a flexible venue for all manner of activities (Norton 2008). Finally, critics also complained that curb parking utilized a substantial portion of valuable street space, the clearing of which would also further alleviate the new form of congestion that plagued dense areas. From these realizations came the establishment of parking time limits, paid parking, and "no parking" zones, all of which are commonplace in the rules and regulations governing parking behaviors in modern cities.

Regulation. The above ailments that accompanied the early adoption of automobiles were experienced amid the backdrop of no precedent for controlling or regulating this type of device. Many called for wholesale banning of the new machines, some advocated for regulations, and others countered by claiming that regulation infringed upon their right to freely use the roadway as street users had always done (Norton 2008). Policymakers were faced with decisions about how to proceed in this legislative void given the lack of public consensus about how best to proceed. They were left considering how best to balance the safety and efficiency of public streets, all while ensuring that the rights and freedoms of Americans to choose and operate their preferred mode of transportation remained as intact as feasibly possible. For this reason, regulations did not happen overnight; they were instead developed over years and decades following the arrival of the first automobiles to American cities.

Rideshare Businesses

While the bicycle and automobile were introduced to America cities before the most recent wave of modernization, novel transportation technologies have continued to shape and reshape societal conventions since. A prime example of this ability of novel technology to challenge established conventions is the advent of the rideshare business model. Pioneered by the company Uber and later Lyft in the United States, these businesses capitalized on the increasing interconnectedness of people through smartphones and cellular networks to introduce a transportation option that relied on the burgeoning gig-economy.

Industry Disruption. This business model consists of a would-be rider "hailing" a ride through a smartphone application, where a driver looking for a fare would accept the job and proceed to drive to the customer in a personally owned automobile for pickup (Posen 2015). It offered convenience in that no longer did travelers need to either call a dispatch center for a taxi

or physically hail one that happened to be driving by. In addition, customers benefitted from knowing who would be picking them up—and what previous customers said about the driver in reviews—and what the route should and would be from the pickup location to the destination (Posen 2015). This alleviated many customers' fears regarding safety and being taking advantage of by taxi drivers that might "drive up the fare" by taking longer routes when driving customers unfamiliar with the area. In fact, customers were able to see the cost of the fare before booking the ride. These benefits made the rideshare business model an instant success as residents and visitors from out of town alike bought into the new way of moving throughout cities.

This success also proved to be extremely disruptive to the car service industry, as taxi drivers and shuttle services suddenly experienced a level of competition that they had always been without (Posen 2015). So fierce was the competition, that some brought legal action against Uber on the grounds that it did not go through proper channels that a formal business should have to navigate during the early years of its operation (Larkin 2021). The ambiguity in what constituted "proper channels" was a result of the lack of specific regulations that governed this type of business in the gig-economy. Uber argued that the individuals that drove for the app while displaying "Uber" emblems on their cars were not actually employees but were instead each self-employed contractors, thus absolving Uber of the permitting and benefits obligations to which standard cab companies were subject. Still, many believed that because Uber was a formal business, they should have to follow all of the procedures that a more conventional business would when attempting to enter a market. This was the case brought by taxi business collectives, who sued Uber for negatively impacting their industry with their questionable business practices. Ultimately, many of the lawsuits brought against Uber were unsuccessful, as courts sided with the transportation giant (Larkin 2021). Despite winning these lawsuits, the proceedings did

impact Uber, as the company had developed something of a reputation that made them the target of increased scrutiny.

Contentious Corporate Tactics. With critical eyes on the rideshare industry, Uber and Lyft received quite a bit of unfavorable press, much of which has focused on the way that the business is operated. In California, regulations were passed making it unlawful for rideshare drivers to operate at airports (Kirchner & Paredes 2014). This was a reaction to the companies operating in zones where established taxi services transported a significant portion of their customers and to the disorganization introduced by greater numbers of cars for hire in the pick-up and drop-off zones at busy airports—many of whom were relatively new to the drive-for-profit occupation. In response to these regulations, both Uber and Lyft instructed their drivers to ignore the new regulations, offering to pay fines for citations that their drivers incurred while operating at airports (Kirchner & Paredes 2014). This disregard for the decisions of policymakers demonstrated early in the adoption of rideshare services that the companies were intent on challenging officials' authority and positioned themselves outside of what might be deemed "cooperative" in facilitating the new business model's integration into the status quo. This was later solidified when Uber stated that it would not classify drivers as employees, per California law (Ongweso & Koebler 2019).

This trend evolved in the years to follow, as Uber was found to be engaging in something called "greyballing" (della Cava 2017). This was the name given to the tactic of singling out certain users of the company's app and programming them to receive confirmation from "ghost drivers" when attempting to hail a car, meaning that the drivers did not actually exist and that a car was not on the way. It came to light that Uber targeted policymaking regulators in some jurisdictions in an effort to prevent them from using the app. In this, the company's resistance

went from being passive (ignoring regulations) to active (singling out regulators to be penalized). This active refusal to cooperate came to a head when Uber was found to be employing deceptive tactics amid more intense surveillance by governmental agencies. Specifically, the business implemented a company-wide software program—code named "Ripley"—that was used by "a remote team to lock, shut off, and change passwords on devices the company feared would be targeted by investigators in foreign countries," preventing them from building cases against the company (Matousek 2018, para. 3). In an attempt to make sense of how Uber was allowed to continue to profit in areas where it seemed to shirk the rules that governed other businesses, *The Irish Times* documented the coordination and lobbying that took place involving Uber executives and high-ranking political officials across the globe (Alecci et al. 2022).

Uber did not always put its efforts into blocking officials' attempts to regulate, either. When Lyft proved that it would become a large obstacle in maintaining market share, Uber carried out a plan to flood the competitor's drivers with fake ride requests (Fink 2014a). Only after the drivers drove to the location presuming to pick up their fare did the Uber employees who made the request cancel the ride. The result was Lyft drivers wasting time and fuel, which both impacted the drivers' abilities to earn their living. In response to a growing number of drivers earning fares through both Uber and Lyft, Uber also sent communications to Lyft drivers falsely informing them that they were legally prohibited from driving for both companies (Fink 2014b). The motivation for the operation was to create dissatisfaction within the ranks of Lyft and to convince drivers that they were better served driving for Uber instead.

All of these contentious actions carried out by Uber and other rideshare companies sullied their reputations and fostered a negative public image for the rideshare industry. Uber especially suffered as a result, and the company rolled out expensive marketing campaigns to

regain the loyalty of its customer base, to little effect (Siddiqui 2019). Bad press continued to spotlight Uber's dubious tactics, going so far as to run the headline "Uber Goes Back to Basics: Violating the Law" (Sammon 2019). Another press headline said of Uber that it "Can't be Fixed—It's Time for Regulators to Shut It Down" (Edleman 2017). These representations of Uber in media highlighted a sentiment held that, as useful and convenient as the business model might be, the companies behind the service were not to be trusted and that they were not a universal ally for good.

Bikeshare Programs

The most recent and directly comparable novel transportation technology to grace U.S. cities is that of bikeshare programs. Originally a European concept, Americans began seeing these rentable bicycles in their cities only shortly before the arrival of scooters (Salgado 2013). The programs were often implemented by carrier corporations in a dockless format—like scooters—and riders could locate a bike, use a smart phone app to rent it, and be on their way. Though quite similar, early bikeshare programs were slightly different from the recent micromobility wave in some subtle but notable ways that will be discussed in the following section. As early adopters of bikeshare programs, the cities of Dallas, San Francisco, Washington D.C. and New York City were the setting for various growing pains associated with this new mode of offering accessible individual transportation to residents.

In New York City, opponents spoke out against the new program that was provided by Citi Bike. Critics cited the dangers posed by the bicycles that were said to present fire hazards when parked outside subway stations and by the riders who "veer in and out of the sidewalk, empowered by the city administration with the idea that they are privileged because they are helping—they are part of good, forward-looking things" (Salgado 2013, para. 3). This view of

bikeshare users as haughty, elitist, and entitled was also held by some in San Francisco, where the bikeshare devices became a poignant symbol of gentrification (Levin 2017). The social and economic transformation in San Francisco was not welcomed by all and especially not by some within communities of color who saw the bicycles as evidence that the neighborhoods that they long called home were changing in undesirable ways. As a result, some bicycles met malicious ends, including being mutilated and hung in trees, dumped in lakes, and having their tires slashed (Levin 2017). In Dallas, where the number of dockless bikes was the highest of any American city, people complained about the swaths of bicycles on city streets and sidewalks, creating unsightly clutter and inconvenience (McFarland 2018). One resident was quoted as saying, "From my front porch you can see about 200 bikes. Not a single one is parked in a way I'd call respectful or helpful" (McFarland 2018, para. 7). Residents of Washington D.C. felt similarly about the dockless bikeshare devices in their city, calling the entire bikeshare model a "nuisance" (Capps 2018). These criticisms point to the controversial atmosphere that surrounded bikeshare programs when they were first introduced to American cities.

Comparison with Scooters

Though bikeshare programs are the most immediately comparable transportation development of those discussed above in relation to the micromobility wave, there exist certain similarities between all of them that allow parallels to be drawn across time and place. Conversely, there are also unique attributes of the adoption phase of each of the above developments that provide further insight for peculiarities in the social and legislative reactions to each. Highlighting these is the clearest way forward for being able to understand what sets the scooter phenomenon apart from these earlier advancements in transportation technology.

Similarities.

Legislative Void. Almost by default, some inventions enter the public eye without any pre-existing rules, policies, or laws governing their use. Such was the case to some degree for bicycles, automobiles, and rideshare businesses. These developments arrived in a legislative void that made their regulation and governance far from automatic. In some instances, the need for such legislation was not immediately apparent. In the case of the bicycle, the initial scope of its use was so sparse that city planners and policymakers had no reason to question how it might fit or not fit within the existing infrastructure. It was only when the device began affecting more lives that the need to regulate became evident, at which point the lack of preceding legislation proved to be problematic (Friss 2019). Automobiles experienced a similar rollout in which the early days contained anecdotal tragedies, but the widespread accidents and large-scale congestion issues were yet to become realized until the 1920s (Norton 2008). Though regulation was slow to arrive, there was still time to consider legislative recourse before the automobile ailments reached their true height.

Rideshare business models also surfaced amid some regulatory ambiguity. The operation of the vehicles used for the businesses' purposes were captured under laws governing automobile operation. However, the regulation of the business practices inherent within those types of business models were less established. This is evidenced by Uber's legal challenges which called into question whether drivers are employees or independent contractors, and whether the business is bound by the same permitting and related requirements that comparable business (taxi services, etc.) are. Even certain consequences of bikeshare programs highlighted issues that required a legislative response. This is especially true of the clutter caused by introducing large

numbers of bicycles—sometimes as many as 18,000 in a single city (Reigstad 2018)—into densely populated areas without plans for managing the parking and storage of the devices.

The adoption of novel transportation technologies within a legislative void directly parallels with the early days of the arrival of scooters to U.S. cities. In all cases, the very existence of novel devices or the unanticipated consequences of a novel implementation of a familiar device or machine created circumstances around which municipal and state-level policymakers were making regulatory decisions from the back foot. Governments were caught off guard, meaning that there was a time period after the initial adoption in each case during which members of the public were at the mercy of the completely or largely unregulated behavior of their compatriots. These conditions set the stage for a controversial public perception of the novel technologies.

Where Do They Belong? One of the most consistent conundrums surrounding the cases described above is the notion that it is unclear where, if at all, the new devices or machines belong physically within the established infrastructure and symbolically within the transportation culture. Bicycles and automobiles elicited the former question almost immediately, with bicycles being denounced for their use in public parks and in other areas near horses, and automobiles being condemned for their use in city streets where horses and pedestrians had long existed. In both cases, critics questioned if the use of the machines was appropriate in places where the operators chose to use them, and in both cases again, they were caught "in between." Bicycles experienced this purgatory of belonging when they were criticized for being used in places with pedestrian traffic and also in places with horse and eventually automobile traffic. In both areas, bicycles were said to be a nuisance and/or a danger—something that scholars say still impacts bicycle use in the modern day (Friss 2020). Automobiles found themselves in their own state of

"between" when using the curb for parking (Norton 2008). This area between the street and the sidewalk had previously been something of a flexible public space, and automobiles were not universally welcomed by all to use it.

If bicycles and automobiles were the physical manifestation of unbelonging, then bikeshare and rideshare models were the symbolic manifestation. Both did not introduce anything visibly new to the transportation landscape; bicycles and automobiles had long since been part of it. However, the way that they were being used had many questioning if there was a place for them in the transportation culture of U.S. cities. Bikeshare programs, for instance, have been successful in some locales, but have been met with both passive and active resistance in others, including some cities that have an otherwise accepting relationship with bicycles (Guay 2018). Rideshare businesses, too, raised questions about whether they could be integrated into transportation culture. These questions were asked and answered largely in the legal realm, with courts fielding various lawsuits against Uber and Lyft. In a sense, rideshare businesses were characterized as existing somewhere *in between* an example of private entrepreneurship and a full-blown corporate service. Though these cases represent similar instances of transportation disruption, there are notable differences that make them unique from one another.

Differences.

Not Always About Danger. Though much of the discussion surrounding the issue of scooters in Atlanta included some mention of danger or how they were the antithesis of safety, not all of the cases of novel transportation described above shared this property. Certainly, bicycles and automobiles brought heated and lengthy debates about the dangers they posed. However, bikeshare and rideshare models did not. In fact, rideshare businesses relied on their customers' increased perception of safety by using a phone application that would tell them who

would be picking them up and, ultimately, how other customers rated that driver following their own experiences. This, and the fact that customers were able to hail a car to nearly any location reachable by vehicle, meant that the public quickly adopted the feeling that in many ways rideshare was a safer alternative to the traditional taxi service. Bikeshare programs, on the other hand, did not necessarily signal an increase in safety for customers, but they were also not associated with an increased level of danger through the use of their bicycles. Instead, both bikeshare and rideshare models met their greatest source of controversy in the political implications embedded within each. The distinction that not all of these cases involved the tangible and immediate threat of increased danger is important in that it illuminates the ability for novel transportation technologies to be disruptive and controversial even if the point of controversy is as symbolic as it is physical.

Cooperation with Government. In nearly all of these cases, the new devices, machines, and business models were introduced initially without consultation or cooperation with the affected governing entities (Friss 2015; Norton 2008; Ongweso & Koebler 2019). During the periods of simpler social organization within which the bicycle and automobile were introduced, this was a natural and not entirely intentional element of their early use. Bicycles and automobiles were manufactured, at first, in small numbers. They were simply sold to private citizens as curiosities and amusements and were eventually seen in use sporadically around the United States. Given the gradual nature of their adoption, the decision not to involve government processes in the manufacture and sale of the machines was made implicitly as a product of omission. While the automobile industry may have grown into one that resists regulation, the advent of cars was not immediately accompanied by overt measures taken to subvert regulatory efforts.

The same cannot be said of rideshare businesses, which explicitly and intentionally resisted attempts by policymakers to regulate the industry. Initially, this reluctance to cooperate with governing bodies is evidenced by the way the businesses began operations in U.S. cities without counseling municipalities about registration, permitting, or any of the other of the usual requirements placed on conventional businesses. Later, as governments began to regulate the behavior of rideshare businesses, the companies instructed their drivers to ignore certain policies and challenged policy decisions in court. These behaviors earned the companies a reputation for operating outside of the rule of law, which resulted in the loss of support among many in the public (Siddiqui 2019).

The differences in cooperation with governments extends further when considering bikeshare programs. Bikeshare businesses often organized these programs in tandem with municipal governments who sought to provide their citizens with a greener, less congestive form of personal transportation within their cities (Guay 2018; McFarland 2018; Reigstad 2018). Rather than attempting to undermine governmental authority, bikeshare companies partnered with municipalities in what could be considered a symbiotic relationship. This is noteworthy given the behavior of the scooter companies, which were criticized for opting to ask for forgiveness after they deployed their devices, rather than asking for permission beforehand. The bikeshare approach is in stark contrast to this, so it may be somewhat ironic that this cooperative approach led to its own set of tribulations. Rather than focusing their discontent with the introduction of bikeshare devices, residents in some cities aimed their sights at the governmental representatives, which were perceived to be operating within a conflict of interest (Guay 2018). In short, due to the cooperation with the bikeshare companies, the public did not fault the businesses, instead targeting their ire at their local representatives who were thought to be

personally gaining something by awarding bikeshare contracts to private businesses.

Individual Versus Corporate Culpability. While the bikeshare situation raised questions about the public's perception of private versus public wrongdoing, there also exist differences among these cases in whether individual users of certain modes of transportation were thought to be at fault, or whether the culpability lied with the corporations responsible. For instance, in the case of automobiles especially, the drivers often elicited the most ire, being characterized as reckless (Norton 2008). Cyclists, on the other hand, were thought to exhibit an air of entitlement and disregard for others. These opinions of motorists and cyclists differed from the cases of bikeshare and rideshare programs. In both of these scenarios, it was not the individual user of each form of transportation that was vilified. It was instead a collective entity that had a hand in its administration that drew fire. For bikeshare programs, this meant that governments and the carriers shouldered much of the blame while riders were mostly spared. For rideshare businesses, the companies were easy targets for those that took issue with the new business model. The customers who used the rideshare services were not perceived to be as blameworthy as the controversial companies.

The Uniqueness of Scooters. Though the cases described above exhibit some definite similarities, it is clear that each of these transportation disruptors spurred a social reaction that is unique in certain ways. Bicycles raised questions regarding the potential restriction of access for certain forms of transportation. Automobiles were unmatched in the injury and death they inflicted on those around them. Rideshare businesses demonstrated how pure technology could challenge the established status quo, and how "big tech" companies could stand against official decree and continue to profit. Bikeshare programs shone a light on how the public might react to

conflicts of interest in their endorsement by governmental officials. Like these comparable cases before it, the issue of scooters is unique in its own set of ways.

Arrived All at Once. One aspect of the scooter adoption process that sets it apart from the others is the fact that the large quantities of the devices arrived in short order (Calvert 2018). This is in contrast to bicycles and automobiles, both of which began first as sparse curiosities before evolving into the ubiquitous forms of transportation that they would eventually become (Friss 2015; Norton 2008). This also differs from the adoption of rideshare services, which did not introduce anything physically new to American cities. After all, the personal cars being used by Uber and Lyft drivers did not represent a novel form of transportation, because they took the same form as any other not-for-hire car. Bikeshare programs are the only of these cases that share this attribute, in that many bicycles were introduced into participating cities rapidly, just as the scooters were (McFarland 2018). However, given some obvious similarities between the adoption of bikeshare programs and that of scooters, it is beneficial to consider the circumstances surrounding their respective rollouts to understand the peculiarity of the scooter issue.

Bikeshare programs are easily linked to the adoption of scooters, as they mirror each other in some noticeable ways. For instance, both involve a carrier corporation repurposing an existing personal transportation device and making it rentable via a smartphone application. In many respects, bikeshare programs laid the foundation for additional micromobility devices to be introduced that relied on the same or similar business model and technology to facilitate their operation. In some cases, the introduction of bikeshare programs and the rollout of scooters occurred nearly or actually simultaneously, further highlighting the need to answer how these two transportation technologies are appreciably different from one another.

The primary difference between the models is that bikeshare programs often worked in conjunction with municipalities, while scooter carriers did not. The bikeshare companies petitioned cities to operate within them (McFarland 2018). This distinction means that cities knew the devices were coming, could make infrastructure preparations for their arrival, and could ensure that city policy was equipped to regulate the bikeshare industry before the devices were introduced to city streets and sidewalks. On the contrary, scooter carriers deployed their devices without asking permission and often without giving prior notice. This meant that in the case of bikeshare programs, governments were perceived to be directly complicit in the ailments that coincided with the arrival of the bicycles. On the other hand, scooters were perceived to be a rogue addition to cities. Not having been condoned or directly welcomed by city officials, public discontent lacked a single, definitive subject on which to lay blame.

Multiple Offenders. Scooters are then also unique because of the existence of multiple entities that Atlantans believed to share culpability in the scooter-induced problems that they were experiencing. Critics blamed bicycles and their riders for cycling-relevant issues. Those who spoke out against automobiles blamed the machines and the motorists for the tragedies and increased congestion. Rideshare corporations took the brunt of the ire that surfaced following their novel business model and controversial tactics employed to sustain it. Bikeshare programs were mostly considered a failure credited to those in public office for their (sometimes controversial) role in *subjecting* the public to the problems they introduced. Scooter-related problems in Atlanta elicited criticism of the devices, the behavior of their riders, the carrier corporations that brought them, city officials that were believed to have dropped the ball in regulating them, those same city officials that were believed to have fallen short in building sufficient infrastructure, and even motorists that were blamed by some when tragedies found

drivers at fault for colliding with micromobility users. In essence, the problem in Atlanta felt both a function of the individual—such as the one scooter that blocked a sidewalk or the one rider that rode into a pedestrian—as well as a function of societal shortcoming—such as legislation that allowed for an unchecked deployment of devices throughout the city or the self-serving motivations of the carrier companies who would choose to subject Atlantans to such conditions. The situation made Atlantans feel that the matter was immediate and intimate while also underlying and collective in nature.

Physical and Symbolic Unbelonging. If the culprit was difficult for Atlantans to identify, then recognizing the reason for the negative reactions to scooters in Atlanta was similarly elusive. Though the immediately visible ailments (clutter, danger, lack of regulation) were obvious, the explanations for why Atlantans felt so strongly about them are less so. Much of the reasoning for why prior transportation innovations have been met with criticism and resistance to welcome their integration can be credited to the public being unsure about where the new innovations belong in established social settings. Bicycles and automobiles, for instance, were disparaged for their inability to physically integrate in existing transportation spaces. Bicycles were found to raise safety concerns when traveling near horses and pedestrians, while automobiles proved to be a dangerous presence in streets and quickly began occupying streetside curb areas that had historically been free spaces. Rideshare and bikeshare models were dissonant with established culture for the change that they represented to those affected.

Scooters demonstrated their unique quality yet again in the way that they faced an uncertain state of belonging in both respects. Physically, they were not welcome on sidewalks where pedestrians felt endangered by the devices. Similarly, motorists did not appreciate having to share the roadway with the devices, as they presented a different form factor that traveled at

slower speeds and moved unpredictably when compared with other vehicles on the streets. Scooters found their symbolic unbelonging in how they raised questions about Atlantans' willingness to allow companies to fill the city with their products without the opportunity or ability for residents to first refuse or moderate the manner in which it was done. To some, the scooters' arrival felt like an invasion.

Chapter III – The Regulatory Narrative

Introduction

Explaining the status of scooter regulation at the beginning of their rollout in Atlanta and describing the current state of those regulations are both simple endeavors. These are cross-sectional representations of the legislation that governed the industry and the use of the devices at those respective times. Chronicling the regulatory process is an altogether more involved task. Nevertheless, it is essential for gaining an appreciation for the official response to the scooter rollout. Canvassing popular media coverage for relevant stories will give some idea of the regulatory events that eventually led to the current legislative environment surrounding scooters. However, relying solely on these types of sources would provide an incomplete narrative. Doing so would omit the events that were not picked up by those media outlets, and it would provide only the journalistic perspective of the events that were covered. The current chapter aims to provide a more thorough accounting of the events that transpired regarding scooter regulation in Atlanta. To accomplish this, a variety of sources are referenced. These sources do include popular media, but, crucially, these media articles are used to contextualize the official record—as represented in Atlanta City Council meeting minutes and internal communications—and the individual accounting of key actors in Atlanta that played a role in regulating scooters. Charting this narrative will provide for a deeper understanding of the actions taken by city officials and will allow for a more accurate interpretation of the city's motivations for regulating scooters.

Sources for Construction of the Narrative

Before describing the events that constitute the scooter regulation narrative, it is prudent to outline the sources from which the included information was obtained.

Official Record

The City of Atlanta provides unrestricted access to city council meeting minutes and certain internal communications between city council members and other staff in the form of memos and presentations delivered. The meeting minutes serve as a record of the proceedings of both the full council and its specialty committees. Meeting minutes for full council regular and special call meetings as well as the transportation committee regular and special call meetings were compiled. These documents were reviewed for relevance to the scope of the current study. The information therein is used to fill gaps in the regulatory narrative that exists between the major events covered in popular media. Additionally, these official documents are compared against the information published in the media articles to confirm the accuracy of certain details. In other words, while the news media can provide a general overview of what happened in response to the scooters landing in Atlanta, official documentation recounts important information that was not published in newspapers and other media outlets in Atlanta.

Media

Media articles from popular Atlanta news outlets are referenced to establish a working timeline of events. Atlanta's paper of record, *The Atlanta Journal-Constitution* (*AJC*), serves as a baseline for key social incidents, such as scooter-related tragedies and demonstrations. It also provides preliminary information regarding regulatory proceedings in Atlanta, nearby municipalities, and county and state jurisdictions. These Atlanta-adjacent news stories are important, as Atlanta did not formulate and implement its scooter regulation in a vacuum. Rather, many cities faced similar challenges when the scooters arrived, and many municipalities looked to other jurisdictions for precedent and guidance. Therefore, certain news stories are directly and or indirectly related to the efforts by Atlanta city officials to regulate the devices and the broader

industry. Although these stories provide context for the narrative, more primary sources are referenced to garner a more factual accounting of events.

Interviews

It is reasonable to believe that some important details may not have been made readily available through the above channels. In recognition of this, the current study also incorporates information obtained through interviews conducted with three key actors that worked for the City of Atlanta in some capacity and were involved in the regulation of scooters during their tenure. Participants were identified through purposive and snowball sampling techniques. Initially, a GSU faculty member referred the researcher to one individual who was believed to possess the insight being sought. Though that individual declined to participate, references for two individuals were obtained through that interaction, which manifested in securing the first two interviews. Neither of those two interviewees were able to provide names or contact information for additional participants. Relying on coverage of regulatory events in news media and official documentation, a list of key actors was compiled that contained the names of seven individuals whose experiences might have been useful within the scope of the study. After using Google to locate professional contact information for these individuals, emails were then sent to each to gauge interest in participating. Despite follow-up attempts to make contact, five of these individuals never responded to the requests. One individual referred the researcher to an associate, who agreed to be interviewed but ultimately stopped communicating before one could be conducted. The final individual expressed interest in participating, which yielded the third and final interview. Including these interviews provides valuable insider perspective on the regulatory process and can aid in the interpretation of certain official decisions. After obtaining approval through GSU's Institutional Review Board, the semi-structured interviews were

conducted via telephone[2] and the participants were asked a series of questions that are relevant to the construction of the narrative.

Interview Items. To assess the temporal and experiential relevance of the participants' knowledge and perspective, they were asked about the exact time period they served as a City of Atlanta employee. Additionally, they were asked about the exact position(s) held during that time, and what that entailed. Participants were also prompted to explain if they were involved in the regulatory process surrounding micromobility in the city, and if so, to describe the nature of their involvement. The interviews also touched on motivations of city officials in formulating and implementing the regulations. Specifically, participants were asked about motivations generally and the perceived top priorities of doing so. To get a sense for which entities were involved in the process, participants were asked about key stakeholders and, ultimately, if the micromobility carrier corporations took part in any way and to what extent their input was considered. Participants also spoke on whether other forms of regulation were considered that were ultimately not enacted, both in the form of other scooter-focused regulations and in the form of regulations that might have further governed other forms of transportation. Interviewees were also asked what they believed the impact of the regulations to be and whether they accomplished what they were intended to accomplish. The interviewer also asked how the participants believed the experience of regulating micromobility would inform the regulation of future novel transportation technologies in Atlanta. Lastly, because of their unique insight, the interviewees were asked about the best sources of information for gaining the most factual accounting of official proceedings possible, regarding the regulatory process in question.

[2] Interview transcripts are on file with the author.

The Process of Regulation

The events surrounding the regulation of scooters and the micromobility industry in Atlanta can be categorized into distinct phases. These phases are identified by the official municipal response to each and are named to reference the nature of the incidents and attitudinal atmosphere during each stage of the process.

Phase One: Anarchy

The reader is aware by now of the absence of governing legislation that applied to the operation and parking of the dockless electronic scooters and to the behaviors of the carrier corporations responsible for them. The reader will also recall that this lack of preceding legislation set the stage for a host of problems that arose when the scooters appeared in the city. In a sense, this void led to a sentiment that the micromobility industry had brought upon Atlanta a state of anarchy. This is the attribute characteristic of what can be deemed the first phase of the scooter regulation process. According to one interviewed city employee:

> …the scooters kind of appeared overnight out of nowhere here…I got a call from one of the lobbyists in town mentioning to me that these new Bird scooters were going to be on the streets starting tomorrow, and then they just kind of appeared. And there were no rules or regulations in place. They didn't exist…it's not necessarily that they were violating rules because there weren't any, so to speak. (Interview #3, 1:46)

The words of this employee highlight two critical facts. The first is that even city officials who are typically apprised of the goings on within Atlanta had less than 24 hours to consider the scooters' arrival and to prepare for that event. The second is that, because of a lack of official

violation, there was nothing that the city or its authorities could immediately do to respond to the scooters.

Despite acknowledging the reality that scooter carriers may not have technically violated any existing law or ordinance, policymakers immediately recognized a breach of protocol in how the carrier companies entered the Atlanta market. Some of these feelings were grounded in the bureaucratic misstep of their actions. One city employee expressed this sentiment, saying, "…just the notion that a company will just start using city property in order to essentially display their wares and store their wares without seeking any permission from the city to do so…nobody has a right to do that" (Interview #2, 12:10). The interviewee hints at an oft-cited reason for condemning the behavior of the carrier companies: they should have asked for permission. Also suggested is the notion that perhaps it was not the explicit lack of regulations itself that was the problem, but perhaps a lack of scope within existing legislation to adequately extend to an event such as the arrival of the dockless micromobility industry. One interviewee cited city-sponsored bikeshare programs and newspaper kiosks as examples that shared many characteristics with the novel scooters, except for that the latter were evidently not governed by the same permitting and operating requirements that impacted the former. According to this interviewee, "…this was a system that was totally unregulated, operating in the public right of way…anything that's being bought and sold in the public right of way is regulated" (Interview #1, 10:04). Whether the industry operated outside of existing regulation, or if its orchestrators simply chose not to interpret their service as something to which existing legislation applied, when dockless micromobility arrived in Atlanta, policymakers were unsatisfied with its unchecked operation.

News media coverage of the issue touched on this lack of coordination between the scooter companies and the city. In an article that likened the companies to Uber, Jeffrey wrote,

"On a less pleasant note, like Uber, the scooter companies have been notorious for not communicating with local officials when introducing their vehicles" (2018, para. 10). In the months following their introduction to the Atlanta market, another article posited, "When health and safety is on the line, it is crucial that one company's legitimate right to come up with a handy new product…doesn't infringe on your right to move freely in public spaces without fear of serious injury" (Vox 2018, para. 5). These articles—both published within the first six months that scooters were operating in Atlanta—echoed the sentiments expressed by the city policymakers that the carrier companies were not only guilty of some breach of what are considered proper or expected business practices. The news coverage also insinuated that the companies were making victims of individual Atlantans. In other words, some were questioning if the companies were guilty of taking advantage of the city, its residents, or both.

The devices' novelty had barely begun to wear off when questions arose whether the industry warranted regulation or if the situation called for a much more final response in the form of all-out banning of the devices. There was precedent for banning, as that had been the result in other municipalities within the state. Amid the turmoil in Atlanta, the *AJC* ran an article that covered Athens, Georgia's own leanings toward banning the devices. The article mentioned that Athens city officials believed that doing so might be the best way forward, citing many of the same ailments that Atlanta was experiencing as a result of the scooters' spontaneous arrival (Capelouto 2018). Atlanta policymakers wrestled with whether to allow the devices to continue to operate in any capacity. One city employee alluded to this predicament, stating, "…we could have went one of two ways. We could have just banned the whole operation, right? But…the decision was made to regulate it." (Interview #2, 13:53). From this statement, it can be inferred that Atlanta policymakers were aware and even considered the option of banning the industry as

a whole. Ultimately, city officials decided on regulation as the course of action over banning. When asked why the city chose the regulatory route over the banning route, the same employee said, "There must have been some consideration of the fact that the public would like to use these devices. If it was seen as an entire nuisance that nobody liked…they might have might have made the decision to ban…" (Interview #2, 14:40). The next stage of the process would be characterized by the city's attempts to determine the exact nature of the scooter problem and how best to manage those issues through regulation.

Phase Two: Catching Up

Once the decision was made to regulate the devices, Atlanta worked to draft suitable legislation. However, given the lag between the scooters' arrival and the timeline of regulating through the usual channels, there was a feeling that the city was legislating from the back foot. This led many to characterize policymakers as having to catch up with the micromobility industry. In addition, pressure mounted from the increasing number and scale of the scooter-induced troubles, yielding an atmosphere of urgency as city officials raced to govern the industry and its devices.

Initial Regulations. Atlanta was in the position of having to create regulations that were distinct from other city ordinances. In other words, the scooter situation was unlike other more familiar transportation developments in that it required its own set of policies separate from those that governed bicycles and automobiles, for instance. This meant that city officials were faced with drafting new legislation, rather than adapting existing policy so that it would apply to scooters as well. A team of individuals within the City Planning Department were assigned this task. What followed was a multi-step process that consisted of drafting and revising the proposed

ordinances. According to one city employee, this was a process that included input from the public—something that made these regulations somewhat unique. The employee stated:

> …it was the citizens…and that's not how things have to happen all the time. It could have been done completely behind the scenes, and nobody even knows it's happening until it's all done…you know, all of this drafting of regulations and making a policy being done behind the scenes. And here's a fully formed piece of legislation that was ready to be voted upon by the city council. But that's not what happened here. (Interview #2, 8:00)

This passage highlights the inclusion of public feedback in the drafting of the regulations and suggests that not every attempt to create legislation is conducted in this manner.

The consideration of the public's input in drafting the regulations points to the notion that city officials believed that the micromobility situation was a deeply public issue. They were aware that the regulations would have major implications for the daily lives of Atlantans. As one city employee mentioned, "…definitely we got feedback from residents…especially on the Beltline being a topic of public interest" (Interview #3, 3:51). Atlanta's "Beltline" is a multi-use trail used to navigate the city, for recreation, and as a destination for those seeking to access the businesses that punctuate its borders (Gustin 2022). Despite this commitment to honoring the public's opinion on scooters, residents were not the only group that were allowed to weigh in on the direction of the regulations during the drafting process. According to another employee, the carrier companies were given an opportunity to comment and provide feedback throughout the development as well. When asked how much influence the companies' representatives had during this process, the employee responded, "Just as much as anyone else" (Interview #1, 7:12).

Drafting the regulations, then, was a collective effort among stakeholders. However, after this initial drafting process, the legislation was not yet ready for the city council's vote. The draft was then presented to the city's legal department, where, according to an interviewee, it was reviewed and revised. The employee describes this process as an assignment to work "…with the Department of City Planning, to get [the legislation] to a point where it was appropriate, as far as from a legal standpoint, and to ensure that whatever the policy desires of the city were…the legislation would accomplish those things" (Interview #2, 6:02). According to this employee, this was a critical process during which the wants and needs of the stakeholders were translated into legally feasible and actionable items that would eventually make up the scooter regulations. This document, as presented to the city council, would come to be known as "Article X," the tenth article of the section of ordinances within Atlanta's municipal code governing the transportation elements within the city. As previously outlined in Chapter 1, Article X was designed to address the various facets of the micromobility industry that were intended give the city a greater span of control over it. Specifically, Article X included language which would govern both rider behavior (e.g. not riding on sidewalks, appropriate parking practices, only one person per device at a time, etc.) and carrier operations (e.g. establishing a fee and permitting system, impounding stipulations for improperly parked devices, data sharing requirements, etc.).

On October 24th, 2018—roughly five months after the scooters appeared on the streets and sidewalks of Atlanta—Article X was proposed to the city council's Transportation Committee (Transportation Committee 2018). The legislation would establish this new article within the Atlanta municipal code and set forth regulations that would address many of the scooter problems. The motion was met with a unanimous vote by the committee. The regulations were dual referred by the committee on December 12th, 2018, signifying the committee's

decision to bring the legislation to the full committee (Transportation Committee 2018). At the city council's next regular meeting on January 7th, 2019, the members voted to adopt the amendment to the municipal code and the micromobility regulations therein by a 13-1 majority (Atlanta City Council 2019). At last, the city had enacted legislation that filled the gaps in the existing municipal code, providing the legal basis upon which city official and residents could demand a change in how the micromobility industry had been operating. An indication of the significance of this event, the *AJC* picked it up as a top story. One article ran with the headline, "Atlanta City Council Lays Down Law on Scooters" (Deere 2019a) while another took aim at rider behavior with the headline "New Scooter Rules Offer Wake-up Call for Some Inconsiderate Riders" (Turnbull 2019a). It was evident that, at least among some of the city's journalists, the feeling was that the regulations were poised to tackle the scooter issue head-on.

As part of the new legislation, the council saw a need to understand more about how the scooters were impacting Atlantans. The city made formal requests for data from all Atlanta-based emergency healthcare providers that included cases of scooter-related injuries (Atlanta City Council 2019). The reason for doing so, as a council resolution document read, was "to track [scooters'] effectiveness as well as its risk to the public…so as to ensure that the City is fostering innovation in a way that it is in the best interest of the health and welfare of the public" (Hillis 2019). This marked the city's intent to involve itself in the micromobility industry not only as a regulator of its operation, but as a guardian of the city's residents.

Ad Hoc Regulations. Despite optimism that these efforts would alleviate the day-to-day challenges that Atlantans experienced as a result of the previously unchecked micromobility scene, the large-scale regulations enacted by Article X did not prevent some of the most tragic events from occurring in Atlanta. During 2019, the city bore witness to three scooter-related

deaths resulting from collisions with motor vehicles. The city council recognized these incidences by observing moments of silence for the deceased in two council meetings. The first of these followed the city's first scooter-related fatality in May of 2019 (Prince 2019b). The second, in August of that year, would recognize three more individuals who were killed while operating scooters in Atlanta (Atlanta City Council 2019). These first eight months of 2019 were punctuated by news stories covering the numerous injuries and the handful of deaths that befell Atlantans, even after the regulations were passed on the first of the year.

In response to these ongoing tragedies, Mayor Bottoms would not wait for additional regulations to move through the usual channels. During late July 0f 2019, following the second fatal accident, Bottoms issued an executive order preventing the issuance of additional scooter permits (Deere 2019b). Importantly, the order did not impact any of the existing device permits across the city. Bottoms's actions can be interpreted twofold: on one hand, the mayor temporarily kept any additional devices from being introduced to the city, effectively containing Atlantans' exposure to risk. On the other hand, Bottoms did not mandate a removal of any devices, calling into question whether the executive order could be seen as more of a punitive message to carriers who might need to take a more proactive responsibility for their customers' safety.

Whatever the mayor's motivation, the industry would not have much time to consider it before an additional executive order further impacted operations. In the wake of metro-Atlanta's fourth fatal incident, Mayor Bottoms ordered a ban of scooter use between the hours of 9:00pm and 4:00am (Deere 2019c). Calling the order a stopgap while the city developed better long-term solutions, Bottoms removed the scooters as a transportation option for Atlantans during the hours of day when it was believed that were most likely to be involved in a serious traffic collision. Notably, three of these four fatalities occurred within the hours during which riding was now

prohibited. The nighttime ban was a major blow for the micromobility industry, which had become a widely utilized convenience of nightlife in the city. With these executive orders, Bottoms demonstrated the city's commitment to exercising its authority to the fullest extent necessary to gain control over the situation—a message that had not always been clear since the initial regulations were passed.

Phase Three: Getting Serious About Enforcement

The third phase of scooter regulation marks a transitional period during which the residents, carriers, and the city worked to establish exactly what the regulations meant and precisely where the boundaries were that defined them. As part of the legislation passed in Article X, city officials compiled data and delivered a presentation to the Transportation Committee outlining the status of the regulations following the first 90 days after their enactment (Department of City Planning 2019a). This presentation provides insight into how Atlanta was adjusting to these new regulations.

Partial Enforcement. By April, it was evident that at least some of the regulations were resulting in real actions undertaken by the city. According to the presentation, permitting of the devices began on February 1st of 2019, and were set on an annual renewal basis. This development allowed the city to monitor the types and numbers of devices. It also established a fee structure for the companies, effectively raising revenue and creating carrier buy-in in the Atlanta market. In February, 2,000 permits each were issued to the companies of Bird, Jump, and Lime, and an additional 1,000 were issued to Lyft. In March, Gotch obtained 500 permits, Spin was issued 2,000, and Lyft purchased another 1,000. As of the middle of April, the city had issued a total of 10,500 permits, 8,000 of which had been launched. As a result, Atlanta collected $455,600 in permitting fees across six companies (Department of City Planning 2019a).

The city also solicited carriers' feedback on the permitting process (Department of City Planning 2019a). When asked if the companies were satisfied with the permitting process, nearly all agreed, with only one responding "neutral." Seven companies agreed or strongly agreed with the statement that the first full month of permitted operations was successful, while two neither agreed nor disagreed. The majority again agreed or strongly agreed that the Department of City Planning had been responsive to inquiries about the program, with one company disagreeing. Carriers were less complimentary of the Department of Public Works—the department involved in the impounding of devices—with three disagreeing that this department had been responsive to inquiries about enforcement. Only a slight majority of the companies agreed with the sentiment that the City of Atlanta had been responsive to feedback from carrier representatives, with still three companies disagreeing. Lastly, six companies agreed or strongly agreed that they were happy with the relationships with Atlanta staff, and a substantial four companies responded "neutral" to this notion. Overall, these responses from carrier companies are illuminating. One key finding is that the companies were generally satisfied with the permitting process. However, in these early days, carriers felt a little kept in the dark regarding how enforcement issues would be handled.

To contextualize this finding, the presentation also sheds light on some enforcement that impacted the companies. For instance, during February and March, the top four companies had 2,186 devices impounded, and were the subject of another 393 complaints from members of the public (Department of City Planning 2019a). Nearly all of these complaints and impounds were the result of devices that were parked in violation of the new regulations. Though the presentation does not provide information about impound fees or the expected timeframes until the devices can be released back into service, but one might speculate based on the general

dissatisfaction with city officials involved in enforcement that carriers felt that either their devices were being unfairly impounded, or the Department of Public Works was not responsive enough to facilitate a timely release of property, or both.

Furthermore, an update delivered by the Department of Transportation (2020) outlined at the time that "The city *is* collecting more than $200,000 to cover costs related to enforcement" (emphasis added)—the result of impounding or relocating improperly parked devices. The word choice is intriguing in that it does not claim that the city *has* collected those fees, only that it "is" collecting them. According to media coverage of the topic, this would likely be due to the fact that Atlanta struggled to collect impound fees from the carrier companies, apparently without explanation (Habersham 2019d). In a statement on the matter in mid-December, Atlanta's Department of Transportation Commissioner claimed that Atlanta would collect on those outstanding balances by the end of the year (Habersham 2019e). When asked about the subject in an interview, one top-level Atlanta policymaker said he had "no idea" (Interview #3, 10:14) to what extent those balances were resolved. According to a later presentation delivered to the mayor by the same Department of Transportation Commissioner in September of 2020, all impounding fees had been collected, except for $65,000 unpaid by Lime, which eventually left the Atlanta market.

Rider Enforcement Begins. Though the presentation outlined these numerous facets of regulation that impacted carrier operations, it did not provide any insight into enforcement practices of rider behavior. This omission is noteworthy, given that many Atlantans were of the belief that regulating rider behavior was the key to providing some relief to the most immediate problems surrounding scooters. Instead, the presentation outlines a plan to roll out a campaign that would educate Atlantans prior to enforcing the parts of the new ordinance that would result

in law enforcement intervention. This campaign, named "#ScootSmart" would provide graphics to illustrate proper parking and riding practices. It would be another two months before full enforcement of these regulations began.

After what an *AJC* article called a 10-month "period of leniency" during which "electric scooters [had] been allowed to flout the city of Atlanta's code by riding on sidewalks" (Deere 2019e, para. 1), Atlanta police announced that they would be enforcing all ordinances impacting scooter riders beginning in June of 2019. This change in approach came nearly two months after the Department of City Planning launched their campaign to educate riders of what would constitute unlawful behavior. Later in 2019 a presentation delivered to the Transportation Committee in October provided some rider education and enforcement metrics that resulted from the enforcement shift. According to the Department of City Planning (2019b), the city placed over 200 sign decals directing riders not to ride on sidewalks and where parking of the devices would be permitted. Between the announcement in June by city police that officers would begin citing riders in violation of these ordinances and when the presentation was delivered in October, police had issued 235 warnings and had written 37 citations for riding a scooter on the sidewalk. In a later update the February of 2020, the number of warnings remained the same at 235, but the number of citations for sidewalk riding had increased to 62 (Department of Transportation 2020).

Characterizing the Narrative

The described development and eventual full enforcement of the scooter regulations during the years of 2018 and 2019 constitute the legislative narrative surrounding micromobility in Atlanta. The reader will recall that, in the beginning of 2020, Covid-19 caused the devices to be removed from the street for a period of time, after which the scooters returned but in smaller numbers. Article X still governs the use of micromobility devices and operation of micromobility

businesses in Atlanta, with some changes made to the permitting structure. The circumstances surrounding the scooters' removal and return to the streets before and after the Covid-19 program suspension will be explored in greater depth in Chapter 5, along with the continual tweaks that the city has made to the permitting structure. Overall, the narrative describes a process of a collective effort on the part of city officials, members of the public, and carrier corporations to quickly address the gaps in the existing municipal code. However, it also shows that, even when promptly addressed, the inherent lag that exists between recognizing a policy need and creating policy to serve that need creates ample time for troubles to continue and—in the case of the scooters in Atlanta—time for those troubles to increase in frequency and severity.

Chapter IV – Depictions of Micromobility in Media

Overview

As discussed in the previous chapter, the regulatory actions taken in Atlanta surrounding the micromobility industry singularly targeted the devices, rider behavior, and carrier corporation oversight of operation. In contrast, automobiles saw no additional restriction or regulation of their operation, something that vocal advocates felt unfairly sent the message that scooters were solely to blame for problems that existed within a system containing various modes of transportation (Keenan 2019). These events lead to natural questions about the possible motivations and explanations for scooters bearing the brunt of the legislative recourse following the introduction of the novel form of transportation to city streets. The current chapter relies on data collected from relevant news media sources to help identify any other potential explanations. Analysis and interpretation of these media data are influenced by Blackian theory, which raise questions about the social disadvantage that scooters possessed within Atlantan society.

Data

The data being analyzed is derived from news media sources. The newspaper articles, online news wire publications, blog posts, and trade journal articles gathered are fitting given the task at hand. They provide an opportunity for further qualitative investigation aimed at determining if the coverage of scooters and other less ubiquitous micromobility devices represented them in a ways that might demonstrate some parallels between this case and the propositions pertaining to social space and social time. Furthermore, news media has the two-fold utility as a barometer of public opinion and as an external influence to shape public opinion. Analyzing media sources will allow for a more informed assessment of the importance of

micromobility depictions in the decisions to regulate the industry rather than place a greater emphasis on regulating the operation of automobiles within the city, for instance.

Collection and Selection Criteria. Media data was collected through Georgia State University's online library collection of databases. The "U.S. Newsstream" database was selected for its exclusive access to recent articles from national, regional, and local newspapers, including *The Atlanta Journal-Constitution*–the paper of record for the City of Atlanta. Along with these newspapers, U.S. Newsstream provides access to newswire content, blogs, and other online news sources. The inclusion of these additional sources is crucial for any researcher wishing to capture a media narrative in the modern age of primary, secondary, and independent news. Considering news from all such sources is the most effective way to obtain a comprehensive and impartial narrative.

Searches attempted to gather all relevant data for the subject and time frame of interest. Keyword searches included the terms "scooter," "bikeshare," "micromobility," "e-bike," "electric bicycle," "electric bike," and "dockless" combined with location and time frame parameters. Notably, the term "scooter" was found to also capture all instances of the use of the terms "e-scooter" and "electric scooter," so separate searches for these terms were deemed unnecessary. For geographic accuracy, the location restriction function was used during these searches, which limited the results to only those data that corresponded with the location "Atlanta, Georgia," or some variation of it or the surrounding areas. Importantly, many results were found to *pertain* to Atlanta while not actually focusing on micromobility in Atlanta. These data points were not selected for inclusion. Finally, results were limited to only those data that were published between January 1, 2018 and the date of the search in question–between mid- to late-January of 2023. The reason for the first parameter is because micromobility devices first

arrived in Atlanta during May of 2018 (Green 2018), and were seen in other major cities around the country in the months prior. This study period allows for all preemptive, concurrent, and reactionary publications that addressed the scooter issue to be represented in the study.

The above searches grossed a total of 1,679 results. Each result was assessed for initial relevance to the proposed study. Most were found not to be relevant to the study at hand for a number of reasons. First, studies were deemed not relevant if the terms referred to other types of similarly named devices that were not micromobility devices. This included coverage of stories involving mopeds, mobility scooters, shopping scooters, and children's toys. Second, stories were omitted if the terms referred to a person's name, such as in the common coverage of Atlanta Braves player Scooter Gennett, for example. Third, and the most frequently encountered reason for exclusion of results, are those stories which addressed the micromobility phenomenon broadly, and either only mentioned Atlanta tangentially, or not at all, opting to tag Atlanta as a referenced location simply by default as its status as one of the burgeoning markets for the devices. Ultimately, results were only selected for inclusion in the study if they could logically be determined to be part of the Atlanta-centric narrative surrounding micromobility devices. Based on these criteria, the search terms netted 469 unique data points.

A master list of these was exported to Microsoft Excel, at which point the "remove duplicates" function was executed on the source title column. A further manual inspection of the data was conducted to identify duplicates that were not captured automatically. This was usually due to article titles changing slightly when the story was released verbatim–or nearly verbatim–in different publications (such as once in *The Atlanta Journal Constitution* and then again as part of a wire release). Often, publications would release stories in print, which would then be picked up by an online source and recirculated within a day or two. The goal of this phase of data

selection was to identify only the original occurrence of a given story or part of the narrative in the news cycle to avoid an overrepresentation of certain stories in the analysis. It should be noted that in some instances, stories were covered across multiple different data points, usually following the original coverage with updated information or additional details. These stories spanning multiple releases were included in their entirety with the assumption that readers would be exposed to the story each time a new update or detail was published. Likewise, if stories were covered more than once but at markedly different times–such as when an author references a prior news story in a later article about a novel story–each occurrence was included. Logically, it seemed that these instances represent distinct opportunities for readers to encounter the information and to have that information influence their perspective on micromobility in their city. Lastly, a final inspection of each remaining story was carried out to ultimately ascertain each story's relevance to the issue at hand.

Sample. The selected sample totaled 243 newspaper articles, web articles, trade journal articles, wire service releases, and a television broadcast. As can be seen in Table 1, the specific publications included in the sample are *The Atlanta Journal-Constitution* (96 articles), *TCA Regional News* (63 wire releases), *The Atlanta Journal-Constitution Online* (26 web articles), *University Wire* (20 wire releases), *Targeted News Service* (10 wire releases), *CNN Wire Service* (8 wire releases), *Georgia Trend* (5 articles), *Axios* (4 web articles), *Business Wire* (3 wire releases), *PR Newswire* (3 wire releases), *CNN Newsroom* (1 broadcast transcript), *Michigan Chronicle Online* (1 web article), *The Daily Beast* (1 web article), *The Washington Post* (1 article), *Wall Street Journal Online* (1 web article).

Table 1. Summary of Study Data (N = 243)

Source Title	Type	N
The Atlanta Journal-Constitution	Newspaper	96
TCA Regional News	Wire service	63
The Atlanta-Journal Constitution (Online)	Website	26
University Wire	Wire service	20
Targeted News Service	Wire service	10
CNN Wire Service	Wire service	8
Georgia Trend	Trade journal	5
Axios	Website	4
Business Wire	Wire service	3
PR Newswire	Wire service	3
CNN Newsroom	Broadcast	1
Michigan Chronicle (Online)	Website	1
The Daily Beast	Website	1
The Washington Post	Newspaper	1
Wall Street Journal (Online)	Website	1

Importantly, *University Wire* accounted for articles written by college students from Atlanta-based universities, such as Emory University, Georgia State University, and the Georgia Institute of Technology. The inclusion of data from such sources is elemental in providing a balanced appraisal of the phenomenon, given the tendency to presume that the paper of record–in this case, the majorly represented *AJC*–is reflective of the entire discourse surrounding an issue. Student-written sources, along with data from sources such as the Black-centric *Michigan*

Chronicle afford the opportunity to account for contrasting, complementary, and/or otherwise varying perspectives surrounding the micromobility phenomenon.

Analytical Plan. The current study utilizes a qualitative thematic analysis (Braun & Clarke 2006). This allows for an investigation of the data for themes that indicate evidence of the relevance of Blackian concepts to the case of scooters in Atlanta. By considering both the minutiae of the themes within the data and the narrative that framed them, conclusions are informed by that context. Data management and analysis was conducted using NVivo software. PDF files of each story were downloaded directly from the U.S. Newsstream database and uploaded into the data management software. Notably, the text within the files often contained extraneous words, such as headlines for other articles on the website from which they were gathered, information outlining copyright details, text from embedded advertisements, or other verbiage that is otherwise not relevant to the study at hand. For this reason, analysis of each file was only performed on the main body of the story and any captions for pictures. These elements are reasonably understood to be related to the story and would theoretically be consumed by the reader/viewer at the time of exposure to the story that comprises the data.

Using NVivo's built-in coding tool, the data was coded in accordance with the discovery of words or phrases that correspond with the proposed coding strategy (detailed below). Coding of the data was reflexive in nature, allowing for the revisitation of earlier data after the development of findings and ideas during later analyses has reshaped or otherwise honed certain lines of inquiry. The analysis was a blended deductive and inductive approach; though guided by the below coding strategy, which itself is based off of Blackian propositions and the subsequent applications of his theory in published research, the analysis allows for the addition or refinement of certain markers of each domain that may serve as indicators of domain

measurement. To aid in ensuring internal reliability of coding, about 10% (25) of the articles were recoded after the main coding process was completed to assess consistency of coding decisions. Minor inconsistencies were revisited and reconciled across the completed codes.

***Coding Strategy*.** The proposed coding strategy will take the lead of previous research that utilized Blackian propositions to guide inquiry, and it will adapt those methods of measurement to the case of micromobility regulation in Atlanta. Due to the fact that most published research on Black's work is quantitative, this adaptation requires a general conceptualization of those domains to the qualitative data being analyzed. The coding strategy will be structured around Philips and Cooney's distillation of Blackian theory, given that it represents a significant evolution of the theory and provides a framework for a simultaneously more efficient and more thorough investigation than one structured directly around Black's seminal work would.

Social Space.

Vertical. As a generalized conceptualization of Black's stratification (seen in Campbell, Griffiths, & Hinkle 2021), social status works to address those elements about scooter riders that may place them somewhere within the social and transportation hierarchies. By considering these indicators, themes may emerge that allow for some understanding of micromobility users as either relatively inferior or superior to users of other forms of transportation. To accomplish this, the data was coded for those factors which have been designated to indicate social rank, such as age and gender. Specifically, the data often refers to users of different forms of transportation as "man," "woman," "child," "teen," "boy," "girl," among other indicators of such constructs. At times, the data even provided the exact ages for those users. Notably, the data did

not regularly provide information pertaining to users' incomes or specific occupations, effectively prohibiting a financial- or wealth-centered approach to establishing social status.

Radial. As another generalized approach to measuring Black's propositions, the degree to which the devices and their users are integrated into conventional society in Atlanta were coded. In the scope of integration of the devices themselves, data was coded for instances in which media coverage included discussion of scooters as offering either net benefits or net detriment to the transportation arena in the city. Examples of such instances are those in which scooters were said to be a feasible solution to the first/last mile predicament or when they were touted as disrupting the ability for long standing forms of transportation to continue–such as in blocking pedestrian traffic on sidewalks or presenting hazards to motorists on the roadways. Knowing how the devices themselves were depicted in this scope is key to understanding the greater rhetoric and narrative surrounding the micromobility issue.

Aside from how the devices were depicted, the perceived integration of their users is also important. To that end, data was coded to indicate occurrences of media coverage that addressed riders' level of social engagement, employment status, marital status, and other indicators of ascription to conventional society. Riders and users of more traditional forms of transportation were often referred to in the data as being accompanied by friends or family, or as being a part of a social group, gathering, or institution (such as a university, business, or governmental organization). These details will uncover whether scooter riders were painted as "lone wolf" actors, or if they represented some collective component of Atlantan society. Additionally, these depictions were compared with how users of other forms of transportation were represented in this same vein, providing an opportunity for an assessment of relative integration.

Another key element of the micromobility narrative centered around the status and conduct of carrier corporations, who were often criticized for playing fast and loose with the rules and exploiting the lack of city ordinances explicitly preventing the deployment of the devices. The data was assessed for content relating to the integration of those carrier corporations. Of particular interest were instances in which the companies or associated representatives were discussed in regard to their relative standing in Atlantan society when viewed against other forms of transportation and their representatives. In the exploratory phase of data familiarization, it was found that carrier representatives were often quoted as wanting to work alongside policymakers to find mutually beneficial solutions. However, it remains to be seen whether these efforts were enough to change the overall image of the corporations in the eyes of the media and its consumers.

Normative. Perhaps one of the more obvious elements associated with the discourse surrounding micromobility is the perceived respectability of members from each "side" of the debate. There were numerous stories with quotations from common members of the public as well as more well-known members of the community casting blame on scooter riders and automobile drivers alike and denouncing them and their chosen mode of transportation. To get a better sense for the overall representation of this part of the discourse, the data was coded for instances of wrongdoing by members of each. Often this included examples such as inconveniencing pedestrians, disobeying city ordinances, and endangering others for micromobility users, and speeding and creating dangerous roadways for motorists. Relatedly, coding was done to establish how media coverage assigned blame for accidents or other unfortunate events that transpired during the study period. Additionally, criminal activity committed by and against users of all forms of transportation was coded as well. Lastly, and

more generally, the words used to describe these actors and their chosen forms of transportation were recorded. During familiarization, the data proved to include many instances of the use of inflammatory words such as, “dangerous,” “evil,” and “nuisance” to describe the scooters, the cars, or the streets themselves. These ingredients provided the ability to evaluate the perceived respectability of each group.

Social Time.

Vertical. Separate from indicators of vertical space, the data provided the ability to code indicators of vertical time. According to Phillips and Cooney (2022), larger movements of vertical time are denoted by the indicators of heinousness of certain acts. As such, the data was coded to identify factors that contribute to aggravating or mitigating qualities of wrongdoing. For instance, the data often referred to the ways that micromobility devices and riders inconvenienced pedestrians persons who use wheelchairs. Additionally, scooters were often reported to be present in accidents or wrongdoing by or against juveniles. Both of these examples represent instances in which micromobility was associated with hardship experienced by vulnerable populations–designating larger movements in vertical time. The data also included reports of especially gruesome details surrounding injuries and deaths resulting from scooter riding, which could be interpreted as magnifying shifts in vertical time. Coding of these items allowed for a determination of whether these themes existed in the data, or whether they were strictly anecdotal.

Relational. Media coverage of the micromobility situation in Atlanta also provided the ability to assess the nature of a potential shift in relational time. Phillips and Cooney state that this refers to an increase or decrease in intimacy, referring to the sociological understanding of the term, meaning the “involvement in in the life of another” (2022, p. 73). Given this

conceptualization of relational time, the data was coded for instances in which micromobility is described as increasing or decreasing the relational distance between people. While the nature of urban life routinely places strangers in each other's lives, the data could contain language or descriptions of occurrences that state or imply that scooters facilitated some overstepping of traditional social boundaries between strangers. Examples in the data included instances of scooter-related conflict between strangers, especially between scooters and motorists and scooters and pedestrians. The complex dynamic between scooters and those using other forms of transportation was a critical point of discussion while scooters struggled to find their physical place in Atlanta. Pedestrians wanted them banned from sidewalks and motorists groaned when they began riding in the streets. Both groups felt that scooters and their riders encroached on territory, the borders around which had long since been established.

Cultural. The cultural aspect of social time is perhaps the most logical area in which micromobility created obvious waves. The data was coded for any instances in which the language used painted the devices or business model as disruptive or game-changing addition to Atlanta. Not only would these instances demonstrate a departure from the status quo, but they would also constitute a greater level of diversity–which Phillips and Cooney posit is another component of cultural time–in the transportation realm. This is seen in the ways that micromobility devices were often described as offering "alternative" options for commuters and residents. At times, the data referenced the impacts that these devices and corporations had on the popularity of other forms of transportations, such as in the examples of scooters taking customers away from traditional Uber car services or providing the opportunity to increase customers of mass transit. It was strongly hypothesized that themes would emerge in the data that pointed to the disruptive nature of shareable, dockless micromobility technology, but coding

for these elements also provided an assessment of the magnitude of the shift in cultural time and a better understanding of the specific elements that contribute to that shift.

Findings

During coding, certain themes began to emerge that indicated that the concepts of social space and social time might apply to media coverage of micromobility in Atlanta.

Social Space

Radial Space. There was evidence of themes in the data that pertained to micromobility's involvement in the context of radial space. The themes at times seemed to suggest that media portrayal of the scooters might have been detrimental to their perceived status within Atlantan society. Other times, these themes painted scooters as a net benefit and spoke to their rapid integration into the city's operations.

Contention with Established Forms of Transportation. A key component of Philips and Cooney's interpretation of radial space is that the extent to which developments challenge established components of culture can be partially responsible for their rejection. In the media data, a consistent theme became evident which pointed to a tension that existed between scooters and established forms of transportation. Namely, scooters were placed in competition with cars, as they were said to be replacing the need for cars to some extent in Atlanta. One representative for Lime was quoted as saying, "I don't think it makes sense to drive 4,000-pound, fossil-fuel-burning vehicles less than a mile" (Brasch 2019a, para. 6). The language used by the representative is illustrative of this tension, as it not only implies that the scooters are a viable form of transportation, but in doing so, it seems to disparage the automobile as a means of completing short trips within the city. This serves to polarize the issue, creating an adversarial

environment within which users of automobiles may have felt a need to become defensive of their chosen form of transportation.

This feeling among drivers that the automobile was in danger of losing ground to scooters was not unfounded. Media coverage often described for readers the scale of the impact. Mayor bottoms wrote of the scooter trips taken during the first half of 2019, "Estimates also show 700,000 of those trips replaced travel that would have been made with automobiles—a potentially game-changing statistic" (Bottoms 2019, para. 6). The mayor's description of the scooter trend as having the potential to alter the transportation landscape in Atlanta may have had the confirmatory for drivers who feared that the scooters brought the city closer to a car-free future. One author spells this out by writing, "Atlanta simply cannot grow and cater only to cars" (Turnbull 2019c, para. 16), mentioning also the likelihood of having to narrow traffic lanes in the future, resulting in fewer car-friendly streets and reductions of speed limits on those that remain. To drive this point home, the city's then-planning commission, Tom Keane, was quoted in another article as saying at a town hall event, "A fast car in the city is a negative thing…It's a very bad thing." (Deere 2019, para. 10).

While the specific details of exactly how the scooter phenomenon would infringe on drivers' stake in the transportation infrastructure, the assertion that it inevitably would surfaces repeatedly in the data. The possibility that this adversarial tension would make scooters vulnerable to legislative intervention was not only implicitly represented in the media coverage. One article quotes a Georgia Tech faculty member explicitly mentioning that it could cause blowback for the micromobility industry. As she put it, "When anything new comes up that endangers that car culture, our automatic assumption is to target the other" (Brasch 2019d, para. 18). This "targeting" of the scooters, according to this individual, was a direct result of the threat

that they posed to lessening the established conventions that surround the use of automobiles in Atlanta—namely being the de facto mode of transportation, around which all infrastructure is designed and constructed.

Scooters as a Solution. Notably, not all coverage that compared scooters with established forms of transportation placed scooters in a contentious relationship with the transportation pillars of Atlantan culture. Much of the early coverage characterized scooters as a solution to societal problems that loom large in the minds of many: environmental impact and congestion in urban areas. An opinion piece in the *AJC* included scooters in the conversation surrounding a reimagining of the future of transportation, stating:

> The time has come to broaden the public dialogue around "mobility." Whether you're riding transit, cycling, walking, driving, ride-sharing or hopping on a scooter—our community ought to be forward-looking in order to seamlessly integrate traditional modes of commuting while also being strategically positioned to integrate and embrace the next wave of disruptive technologies on the horizon. (Parker 2018, para. 5)

This call-to-arms not only mentioned scooters as being equal to the other established forms of transportation, but also plainly included them as being part of the recipe for a convenient, connected Atlanta of the future.

This theme would continue in subsequent media coverage. One author called scooters "an inventive, convenient way to get around the city without much of a carbon footprint" (Capelouto 2018, para. 1), and further characterized them as "an antidote that could help alleviate the metro area's traffic problems" (para. 19). Even when not being recognized only for their potential to solve known issues in the Atlanta area, officials seemed consider the devices a net positive, with

one author writing, “Though miffed by the sudden arrival of e-scooters…without prior notification, commissioners believe the technology is…’consistent with the city’s strategic plan and community transportation plan’” (Banks 2018, para. 1). This theme of the scooters being considered a benefit despite their detractions is evident in other articles as well. One author for a university newspaper wrote:

> So, while not being a perfect solution to commuting deficiencies in Atlanta, electric scooters are providing some “last mile” relief to a city served by a measly 38 heavy rail stations. In a city with a metro population approaching 6 million, the only long-term answer is expanding MARTA’s heavy rail system. However, until that happens, Bird and Lime are providing some necessary outside-the-box thinking. (Louchez 2018, para. 11)

This notion of scooters offering an option for commuters during their “last mile” is present throughout the media coverage, as this is often a nagging obstacle for city planners who wish get more people out of cars and into public transit (Grosshuesch 2020). Outside of their utility as a complementary service to be used in conjunction with public transit, scooters were praised for offering a flexible option for scenarios that were previously without a solution. One scooter rider was quoted as saying, “For me, so many of the trips I need to make are too far to walk most of the time, but also a bit too short for me to want to deal with my car” (Alfonso 2019, para. 7). In this example, scooters are being characterized as a “just right” solution for instances that had previously forced commuters to choose between two less-than-convenient modes of transportation.

The theme of scooters being portrayed as a solution to existing problems or part of a natural evolution of the transportation system within cities is a robust finding in the data. While

this did place them at odds with proponents of automobiles, it may have been elemental in creating a place for them in Atlantan society, when the alternative could have been their total banning.

Normative Space. Much of the media coverage contained characterizations of people, devices, and modes of transportation as they related to the issue of micromobility. The themes that emerged from these articles highlight consistent implications for the role played by scooters and their riders in the realm of normative space. Generally, the data contained themes that outlined perceived normative breaches by each.

Rider and Device Respectability. While data was coded for the respectability of users of all modes of transportation in the media, the characterizations of users of only one mode were consistent. Only scooter riders were written about in a way that created a theme that allowed for conclusions to be drawn about their perceived respectability.

Even absent portrayals of rider behavior, a theme came from the data that suggested that the very image of scooter riders was a detriment to their respectability. Use of the scooters was ridiculed early in the data. One article in the *AJC* included coverage of comedian Lewis Black's bit on scooters, quoting Black as claiming, "You can get to your destination five minutes earlier and all you have to do is give up your dignity!" (Ho 2019, para. 12). Though the content of a comedian's set may not be the most objective representation of a concept, the inclusion of the quoted portion in a media article might make the content more credible to the reader. Other coverage calls into question the intelligence of scooter riders. One editorial reported, "Asked about overconfidence and rash decisions on [scooters], Keane told me, 'We can't pass a law to make people smarter" (Torpy 2018a, para. 21). Another article called attention to perceptions of riders' abilities to make smart decisions by quoting a resident as saying (of riding), "People have

got to use common sense. But that seems to be lacking here" (Torpy 2018b, para. 16) According to these quotations that journalists chose to include in their articles, it would seem that scooters—and their riders by association—did not enjoy a particularly respectable portrayal in the media.

Though their outward and presumed image appeared unfavorable even on the sole merit of what scooters and their riders looked like to certain individuals quoted in the data, by far the most robust theme that pertained to rider and device respectability centered around rider behavior. Specifically, riders were characterized as acting recklessly, flippantly, and inconsiderately. This was demonstrated in the regularity with which passages in the data called attention to riders' nonchalance toward behavior that is illegal or against carrier policy. One article addresses this notion of carrier policy as stating, "Bird requires riders to be 18 or older, to wear a helmet, have a driver's license, stay off the sidewalk, and refrain from double riding. Many ignore this, with predictable outcomes" (Vox 2018, para. 9). To further highlight this trend, the author later writes, "The problem is, riders don't always follow the traffic laws…all of us know that" (para. 14). This speaks to a general fact that, according to this author, all Atlantans should know to be true: that riders a more than occasional rule breakers.

This theme continues in the data with anecdotal examples of rider behavior being portrayed negatively. Regarding the notion of riders behaving in an inconsiderate manner, one articles offers on Atlantan's account of a run-in with a scooter rider:

> Thomas said she was leaving her pedicure appointment on North Highland Avenue earlier this summer when a person on a scooter zipped by, brushing her shoulder. "If he had been any closer he would've hurt me," Thomas said. "He never even looked back. That was very frustrating." (Capelouto 2018, para. 14)

The inclusion of such an anecdote is noteworthy, because the details within describe an instance in which a resident was going about a routine activity, unaware of an approaching scooter when it very nearly collided with the pedestrian. Anecdotes such as these have the potential to resonate with readers, signaling not only that this is how riders behave, but also, if that reader has had similar experiences, that the issue of rider behavior may not be based on isolated incidents. These personal anecdotes about rider behavior are consistently negative through the data as well. As one editorial read, "I drove around a bit on a drizzly, cold Monday and counted 13 riders on sidewalks and just two in the street…Helmets? Are you kidding?" (Torpy 2018a, para. 16). The author simultaneously points out that scooters are overwhelmingly operating in pedestrian spaces and also that they do not take the recommended precautions to protect themselves. This further calls into question rider respectability by prompting the reader to consider what type of person might forego protective equipment while operating the devices.

Danger. Another major theme in the data that suggested that scooters and their riders were made vulnerable for their representations in normative space is in how the media coverage remained hyper-focused on the dangers inherent in the devices' use—both to the rider on top of them as well as those in their path of travel. Often, these representations painted the scooters themselves as being dangerous by design as a result of them being ill-equipped for their intended task. One rider mentioned, "I did not feel unsafe until my wheels skidded under my feet because of wet leaves. I largely stayed on the sidewalks because I felt like a deer on I-75 when I ventured into Peachtree Street…the small wheels dictate there's little room for error" (Torpy 2018a, para. 21). Indications that design might impact safety also came in the form of unpredictable or unreliable performance. For instance, one person interviewed is quoted in the data as claiming, "I heard someone say, 'I don't know how to stop this [scooter]!" (Banks 2018, para. 5). Another

article covered a story in which a rider suffered injuries after being involved in a solo accident. The author wrote of the incident, "[the rider's] legal team says the 'dangerous' brakes made the device unstable, causing the client's crash" (Habersham 2019h, para. 2). These passages demonstrate that it was not always the riders to blame when scootering turned dangerous.

The theme that the scooters were dangerous was also exhibited in the abundance of coded passages that outlined undesirable consequences of riding. The data contained instances of articles outlining the aggregate scope of the injuries that riders were sustaining. One article described how these injuries have been noticed at a major emergency department in Atlanta, saying, "Dr. Hany Atallah, who heads up Grady Memorial Hospital's emergency room, figures that each month, his facility's ER sees at least 30 scooter riders after they've eaten pavement" (Torpy 2018b, para. 13). A later article indicated to readers that this number likely grew over time by reporting, "While no data exists for Atlanta, Grady Memorial Hospital…estimated it received between 80 and 100 scooter-related injuries per month" (Hansen 2019e, para. 16). Another article mentioned that between late 2017 and early 2019, a study found that "scooter crashes have resulted in an estimated 1,500 injuries" (Stevens 2019, para. 17).

Injuries were not the only type of tragedy that frequently presented in the data. Media coverage surrounding the handful of scooter-related deaths in Atlanta was thorough. One author wrote of one the city's first such incident, stating in the opening line, "No one wants to be involved in the first electric scooter death in Atlanta, but the family of a 20-year-old who was killed last week didn't get a choice in the matter" (Hansen 2019e, para. 1). The word choice suggests to readers that this type of tragedy could befall any unsuspecting family, and that this was only the "first," leaving the reader to question if it would also be the last. Other passages in the data contained details about the subsequent deaths that would eventually occur. Importantly,

in many occasions in which media stories were relevant to the issue of the dangers posed by scooters, authors frequently included details that contained information about previous scooter-related deaths in the city. For instance, in an article covering the second death of a scooter rider in Atlanta, the author included:

> The crash is believed to be the second deadly accident involving electric scooters in the city of Atlanta…The first death on May 17 also happened near a MARTA station. A man on a Lime scooter was hit and killed while leaving the parking lot of the West Lake station in west Atlanta." (Hansen & Prince 2019, para. 7)

Similarly, the details of this second death were included in an article covering an rider's injury shortly after. The author wrote, "The latest scooter incident comes a week after William Alexander, 37, of Atlanta, was hit and killed by a CobbLinc bus while riding a scooter…" (Habersham 2019g, para. 5). The deaths continued to be an oft-included detail in the data. In an editorial piece, readers were reminded that "Four scooter riders have died in accidents so far this year in metro Atlanta…it's believed to be more fatalities than any other city so far" (Jackson, 2019, para. 3). Though it is not intended that the current reader infer that the authors of these passages purposely meant to inflate media consumers' perceptions of the danger posed by scooters, it can reasonably be understood that this repetition of the most serious stories in the data may have had that impact, nonetheless. This, along with the other findings pertaining to rider and device respectability may worked to diminish micromobility's standing in normative space.

Vertical Space. Analysis of the coded passages also sought to discern if the data contained evidence that scooters, riders, or carrier corporations were placed in a hierarchically lower position than other forms of transportation and their users in relevant media coverage.

Though the observed themes in this domain were not as robust as some of the other themes pertaining to social space, there were still some that warranted reporting.

Aimed at Young Users. One such theme is that micromobility devices were being represented as a form of transportation catering more to younger users than other forms did. According to Black, youth is understood to place someone at a relative disadvantage to the less youthful. An example of scooters being a youthful venture is inherent within the repeated descriptions in the data of micromobility devices as relying on smartphone functionality to operate. For instance, one author informed readers, "two-wheeled devices can be rented through smartphone apps" (Habersham 2019f, para. 6) while another offered, "Simply unlock by scanning a QR code and your ride begins" (Louchez 2018, para. 10). Though these routine passages mentioning smartphones, apps, QR codes and similar do not necessarily mean that only young people will use the devices, the terminology and presumption that users will be capable of navigating the high-tech scooter rental process make have indicated to some readers that riders were a predominantly young group. This is not only an implicit assumption, either. One passage in the data reads, "Scooters have many supporters who tend to be younger and more fit or adventuresome" (Torpy 2018a, para. 13), calling attention to this very notion. Another mixes age and respectability, claiming that riders are "often…young people who risk injury by not wearing helmets" (*AJC* Staff 2019, para. 3). This is echoed in another passage that reads, "Scooter riders…are mostly random smartphone-toting folks who often jump on the contraptions and ride" (Torpy 2019c, para. 19). The comparison of riders to users of other forms of transportation is explicitly addressed in the data as well. One article, quoting an Atlanta employee, reported, "The average bus rider is a 54-year-old female…that's not normally who I see on a scooter every

day" (Brasch 2019, para. 9). Media coverage, then, conveyed to readers that the micromobility industry offered devices that served a mostly younger demographic.

Within this theme, a distinct subtheme emerged that highlights how this vertical ranking of modes of transportation may have contributed to scooters' exposed position during the formulation of regulatory policy. The scooters were not only portrayed as a device used primarily by young people. They were also routinely depicted as being very close in form and function to their toy counterparts. In some cases, this comparison was direct. One journalist opined:

> When I think scooters, I think back to my childhood and a blue electric Razor Scooter my brother and I used to ride around and around our cul-de-sac…when I first read about scooters as an actual form of transport, I found the concept amusing. (Jeffrey 2018, para. 5)

This is not the only mention of the popular "Razor" scooter in the data, demonstrating that the above author's association was not unique to his experience. This comparison is also evident in early coverage of policy changes, with one article reporting on Denver's need to alter legislation that "classifies escooters as 'toy vehicles'" (Calvert 2018, para. 25).

In other examples, the link between micromobility devices and childish behaviors is more indirect, but still apparent. When considering the problem of scooters strewn haphazardly about sidewalks in Atlanta, one passage reported, "Councilwoman Cleta Winslow noted that kids are told to pick up their toys to keep people from tripping over them. 'So why do we tell our children to do one thing, but allow adults to do something opposite?'" (Torpy 2018a, para. 8). Similarly, another article quoted an interviewee as calling the early stages of micromobility adoption, "the awkward toddler phase of micro-mobility" (Torpy 2018b, para. 3). As something of a potential

promotion in rank, another journalist referred to the micromobility industry in Atlanta as being in "The awkward adolescent stage" six months following the scooters' rollout (Capelouto 2019, para. 1). Perceived evolution aside, these passages highlight a popular propensity for Atlantans to liken micromobility devices to toys and childish after their arrival. This may have placed the industry in a relatively disadvantaged standing in relation to the perceivably more "grown up" modes of transportation for which Atlantans made no natural connection to childhood memories—or perhaps had long-since shed those associations.

Social Time

Vertical Time. The data was coded for indicators that would denote the magnitude of the violation felt by society with the arrival of scooters in Atlanta. Themes were observed that contain evidence to suggest that depictions of micromobility in the media may have characterized scooters as a serious concern, and therefore responsible for substantial shifts in vertical time. These themes revolve around the scooter's role in harm being done to certain vulnerable populations within Atlanta and in the aggravating details that media included in its coverage of scooter incidents.

Harming Vulnerable Populations. A common thread throughout much of the data is the scooter's proximity to harm. In some cases, this is actual harm; in some, it is only the potential to cause harm. Within this consistent trend is a theme that is especially relevant to the scooter-induced shift in vertical time: the depiction of devices as being proximal to incidents involving harm experienced by members of vulnerable populations.

One such vulnerable population represented in the data is children. The analysis uncovered a theme in which scooters were portrayed as being both potentially and actually involved in instances of harm to youths. As one example of scooters being potentially tied to this

phenomenon, one author editorializes, "Likely sensing their vulnerability on the roadways, some scooter riders are zipping along the sidewalks at 15 mph, where they risk knocking down pedestrians and baby carriages" (Vox 2018, para. 13). Though this passage only speaks to the *risk* posed by scooters, it signals to the reader that scooters are placing the most fragile Atlantans at risk. Relatedly, the potential for harming children is on display in one passage that includes the words of a woman who was injured while riding. She is quoted as saying, "I don't want anybody to have to deal with this ever…I would truly hate if this was one of my kids" (Stevens 2019, para. 17). This final line of the article leaves the reader with an ominous message about how, although the individual involved in the current accident is an adult, it could have happened to a child instead.

Though law and policy both dictate that children should not have been riding scooters and would therefore not be especially likely to be harmed by their operation, the data suggests that Atlantans did not always abide by this rule. As a result, stories of actual harm to children existed in the media coverage. Most often, these stories involved youths becoming injured from accidents while riding scooters. For instance, one article reported, "A child riding a scooter was hit by a car in Dekalb County and was taken to a local hospital in critical condition, police confirmed" (Hansen 2019e, para. 1). Another story went into more detail about a similar event:

> A 15-year-old on an electric scooter was hit by a vehicle in Buckhead on Monday night, police said…The teenager was bleeding from the head, but he was described as conscious and breathing before being taken to Grady Memorial Hospital. He is expected to be OK. (Hansen 2019f, Paras. 1-2)

Stories of children harmed in accidents were potentially impactful for readers, but they were not the only examples of children being exposed to harm in incidents involving scooters. Other

youths were described as engaging in scooter-related crime. One journalist reported, "A 13-year-old and 17-year-old are facing charges after police said a group of teens stole electric scooters at gunpoint near a busy Midtown intersection Tuesday afternoon" (Prince 2019a, para. 1). Relatedly, another article describes how a "male teenager is accused of using an electric scooter to ambush a man and steal his rental car just before 9:45am Monday, Atlanta police said in a news release" (Hansen 2019g, para. 2). Though these examples do not imply that scooters were the cause of these behaviors, they do present the reader with the opportunity to associate scooters with negative events involving children.

Children were not the only vulnerable population that were described as being harmed by scooters in the data. Atlantans who rely on wheelchairs for their personal mobility are mentioned regularly in early discussions that sought to expound on the scope of the scooter problem in the city. One article describes how campus deliberations at Georgia Tech included special consideration for persons with impaired mobility. The author writes:

> Much of the panel discussion surrounded accessibility concerns across campus and complaints that stemmed from issues with the Americans with Disabilities Act, whose legally mandated accommodations are often impeded by faulty door switches, elevators and walkways in need of repairs, or persons not being mindful of their actions. This last human element is one of the largest obstacles to accessibility, especially with the recent rise of the dockless electric scooters across campus. (Favro 2018, para. 4)

The impact that scooters had was not only depicted as inconvenient or in breach of legal statute, either. As one article stated, "[scooters'] mere presence in public rights of way is already affecting some citizens like James Curtis…who says the scooters block the sidewalk for his

wheelchair, making him 'feel like a second-class citizen'" (Vox 2018, para. 14). This passage highlights that scooters harmed the mental state of people with impaired mobility as well. Some of these individuals felt inferior to non-mobility-impaired persons as a result, with some choosing to lash out. As an example, one Atlantan was quoted as saying, "Every time I go somewhere, there's scooters blocking the sidewalks…Now I just run them over (in [my] wheelchair)" (Deere 2019, para. 34). Regardless of the reactions from these Atlantans, the theme in the data points to a common theme that mobility-impaired individuals experienced some form of harm as a result of the scooters.

Aggravating Details. Taking guidance from Phillips and Cooney (2022), the data was coded to account for instances in which journalists included certain pieces of information in their articles that might shock readers or otherwise prompt them to find scooters to be causing larger shifts in vertical time. These pieces of information highlighted a theme in the data that pointed to a tendency for authors to rely on aggravating details to describe events—whether for journalistic merit or dramatic effect. In describing how a scooter injury would impact one patient's life, a doctor was quoted as saying "I think my patient will ultimately be OK, but the injury will interrupt this patient's life for month, along with that of their entire family. It'll be a tough process getting back to independent living and work" (Vox 2018, para. 11). The in-depth appraisal of this patient's hardship is seemingly meant to demonstrate to readers the extent to which scooter-induced injuries can impact lives.

Though poignant, the above passage lacks the bodily details found in others. One such article read, "In Buckhead, Piedmont Atlanta Hospital sees about 40 scooter injuries a month, ranging from facial lacerations to broken wrists and shoulder separations" (Capelouto 2019, para. 16). Another journalist, reporting on an incident involving a scooter accident, wrote, "Turner, a

mother of five, suffered head injuries in the accident…Turner required 15 stitches to her head ad underwent reconstructive facial surgery" (Habersham 2019h, para. 2). Later coverage of the story took on a dramatic slant, as a subsequent article read, "Her face hit a wrought-iron railing along the bike path and her hand slammed on the ground as she tried to stop her fall. Scraped, bruised and bloody, Turner knew she needed help. But during rush hour in Atlanta, no one came to her side" (Stevens 2019, para. 6). Coverage of the first scooter-related death in Atlanta also contained elements of this theme. One of the victim's family members was quoted as saying, "He just died like a dog in the middle of the street and something needs to be done about it" (Prince 2019b, para. 7). These colorful descriptions of exactly how the injured and killed experienced their tragedy had the potential to create emotional responses within readers, further inflating the perceived harm done by scooters, increasing the shift in vertical time.

Relational Time. Trends in the coding results outlined certain a theme that demonstrated a way in which scooters contributed to the challenging or breaking down of conventional social boundaries. This evidence suggests that the devices may have been related to perceived shifts in relational time. The theme observed in the data are that scooters were depicted as being caught in between socially established and organized systems and spaces.

Caught In Between. The story of the early days of scooters in Atlanta was one of being unwelcome. Pedestrians took issue with scooters riding on sidewalks. When they were eventually made to ride in the street, scooters received blowback for that, too. This notion that the scooters had no natural space and were effectively caught in between pedestrian spaces and automobile spaces was a consistent theme in the data. At times, this presented simply as depictions of Atlantans reacting negatively to the presence of scooters within these spaces. For example, one author wrote, "There have been quite a few complaints about inconsiderate scooter

riders putting those on foot in danger by zooming close by or running into them" (Turnbull 2019d, para. 5). One passage describes an interaction between a police officer and a rider, which read, "A cop shouted at a kid on a scooter zipping around cars. 'My man, get off the street!'" (Figueras 2019, para. 6). Interestingly, this officer's directive ran opposite the newly implemented scooter regulations which barred riding on the sidewalk. Despite the legislation, the officer may have felt that the scooter was out of place in the street, further highlighting this atmosphere of unbelonging. Alternatively, the officer may have simply believed that the manner in which the rider's was operating the scooter was inadequate or inappropriate for use on the street.

Other passages in the data spoke more explicitly to this sentiment that scooters did not have a natural place within the city's existing infrastructure. An article covering the regulations stated, "The new legislation aims to make life safer for pedestrians by pushing scooters to the streets, per state law governing motorized vehicles, but riders could be courting trouble on Atlanta's busy roads" (Capelouto 2019, para. 24). Another passage, quoting a representative for the Atlanta Police Department, read, "We need them out of the way of the flow of traffic. We need them out of the way of the flow of pedestrian traffic. We need them placed neatly somewhere that's not blocking anything" (Schramm & Mason 2019, para. 9). One journalist referred to this precarious position as the "tricky middle ground the scooters have landed in" (Capelouto 2018, para. 11), while another adopted a more absolute perspective, claiming, "There just doesn't seem to be a great place for these scooters to operate" (Turnbull 2019d, para. 8). Clearly, the shared sentiment depicted in the data did not solely rely on the notion that the scooters did not belong on sidewalks or solely on the notion that they did not belong in streets. The theme is that many Atlantans did not feel that the scooters belonged anywhere. On the

sidewalks, they posed a danger to pedestrians, but in the streets, they risked endangering themselves. This challenge to social boundaries and the established organization of infrastructure demonstrates that the devices caused a felt shift in relational time.

Cultural Time. In many ways, a perceptible shift in cultural time is a de facto result of events like the advent of micromobility, during which new technologies unsettle the status quo within social settings. That said, in the current case study, what is of greater importance is understanding the degree to which this shift was felt by Atlantans impacted by the scooters. The data contained themes that give reason to believe that the shift in cultural time was substantial enough to potentially further expose scooters to targeted legislation. These themes pertain to the abruptness and the magnitude of the change—both of which are theorized by Phillips and Cooney to be elemental in identifying instances of greater shifts in cultural time.

Abruptness of Change. In the data, one of the most universally recognized peculiarities of the micromobility wave was the suddenness with which it arrived. This fact was frequently included in news coverage of scooter events. One city councilmember was quoted as saying, "These scooters appeared one day and took the city by storm" (Capelouto 2018, para. 3). The same article's author referred to the scooter trend as having "exploded across the country" (para. 5). Other examples of dramatic combat-tinged language abounds in the data. One article stated, "the electric bike and scooter-sharing craze has stormed into cities" (McFarland 2019, para. 2), another describing the carrier's rollout design as "shock-and-awe tactics" (Percy 2019, para. 23), and another still calling the event "an invasion of e-scooters" (Brasch 2019c, para. 26). These choices of language no doubt contributed to a portrayal of scooters as coming to Atlanta abruptly and unexpectedly. Readers may have consequently interpreted this depiction as a "surprise attack" on Atlantan culture, further heightening the urgency felt in the need to respond in a

manner that would protect the city and its residents from additional unsolicited changes to the established order of things.

This sense of urgency manifested in the data as well. Quotations from Atlantans interviewed in the media routinely demonstrated this. Some spoke broadly about the speedy development of transportation technology. For instance, one article quoted a Georgia Tech professor as saying, "The technology and travel behaviors are changing so rapidly and in so many directions that in some ways, all bets are off…It could be pretty exciting. It could be really scary" (Kempner 2018, para. 11). Another journalist quoted a state representative, who stated, "All this technology has come out over the last few months…This may be something we'll need to address on a regular basis" (Wickert 2019a, para. 5). Another Atlantan described the situation more directly, claiming, "Technology has outpaced law" (Brasch 2019b, para. 10). One journalist brought the issue back full circle by summing up how the scooters are emblematic of this greater technological movement:

> Anyone doubting that the future won't look much like the past need only look at the e-scooter craze. In less than three years, the electric scooter business has skyrocketed in metro Atlanta and many other places having a critical mass of potential users, especially young people. (Jackson 2019, para. 1)

These excerpts from the data draw a clear connection between the scooters and a feeling of change—specifically a change in the technological and transportation landscape—in Atlanta. This connection can be reasonably believed to have been elemental in creating at atmosphere in which Atlantans felt a drastic shift in cultural time.

Magnitude and Permanence of Change. This abruptness is not the only ingredient to this shift, though. If something happens quickly but does not make much of an impact or if

circumstances return to their previous state in short order, then this cultural shift may not be especially meaningful to those who experience it. It is therefore necessary to consider the size and longevity of this shift. In the data, a theme was present that suggested that scooters created a sizable shift and that the conditions brought on by scooters were slated to have significant lasting effects on Atlanta. This magnitude of the change was evident in much of the data that depicted the scooters and the dockless micromobility business model as disrupting conventional established systems. One author described this, positing, "I do believe that scooters are the most disruptive transportation technology to hit the streets of Atlanta since Uber" (Jeffrey 2018, para. 1). Another called scooters "part of a whirring wave challenging views about urban transportation in Atlanta" (Kempner 2018, para. 1). In an article that addressed whether scooters belonged on popular walking and biking trails, one journalist notes, "the introduction of electric scooters has been disrupting the peace and harmony of some people who enjoy the trails" (Archie & Deere 2019, para. 2). In a statement comparing scooters to similarly dockless, sharable bicycles, one passage reads, "Because bicycles are familiar sights, they are not likely to be the disrupting factor that e-scooters initially were" (Percy 2019, para. 39). These mentions of how scooters are disrupting or challenging the status quo likely played a role in readers' own appraisal of the cultural change that Atlanta was experiencing.

The depiction of scooters' permanence was ambiguous in early coverage of the phenomenon. According to a university police officer quoted in the data regarding the development of regulations, "there is not any possible way to tell when laws will be made because we do not know how long the scooters will last" (Rigby 2018, para. 10). This uncertainly about the future of the scooters was echoed in another article passage which read, "The next several years will be critical in determining whether e-scooters are only a temporary

fad or the beginning of a shift to a more sustainable means of urban transportation" (Kliewer 2019, para. 6). However, eventually media coverage began to signal to readers that the scooters would become a permanent fixture in Atlanta. For instance, an article quoted the city's planning commissioner as claiming, "E-scooters and micromobility devices are an important part of the transportation future for the city" (Percy 2019, para. 4). Another offered the following comparison of their products with early apprehension of automobiles:

> Nima Daivari, the community affairs manager for Lime scooters in Atlanta, said people are simply getting used to the feel of riding, just like the city's infrastructure is still trying to accommodate them. People, he said, are more often incorporating the contraptions into their commutes and daily interactions. "It's just like it was in the first decades of cars," he said. "There were no turn signals, no stop signs, no driver's licenses. The world is constantly developing." (Torpy 2019c, paras. 21-22)

By making the connection to cars, the Lime representative seemed to be explaining that early difficulties in the scooters' adoption were simply growing pains associated with a novel mode of transportation it its way to potentially becoming as ubiquitous as the automobile. This sense of longevity that was present in later representations of the scooter adoption, coupled with the undeniably disruptive nature of the micromobility industry worked to create a perception of a larger shift in cultural time.

Conclusion

Themes Informed by Blackian Theory

Though a thorough reflection on the extent to which media depictions contributed to the reception and ultimate regulation of micromobility in Atlanta will be offered in the final chapter

of the current dissertation, it may be helpful at this stage to summarize the above findings. First, there exists in the media data certain themes that may link the nature of the depictions of scooters, their riders, and the carrier corporations to the formulation of legislation that targeted the industry. Taken in the context of Blackian theory, it can be posited that these themes offer a mechanism through which micromobility could have been made vulnerable to formal intervention by the City of Atlanta.

The themes offer some connection with each of the six domains within Phillips and Cooney's distillation and expansion of Black's seminal works (1976; 2011). Specifically, radial space was represented by the themes that scooters were portrayed as competing with established forms of transportation and in how the devices were being cast as a potential solution or evolution of transportation. The themes of riders and their devices depicted as having low levels of respectability and being the source of danger in Atlantans' lives serve as evidence of micromobility's perceived disadvantage in normative space. Regarding vertical space, the portrayal of scooters a being aimed at young users—even at times being painted as juvenile—by nature show that the devices and their riders did not enjoy a position high in the social hierarchy of Atlanta. The media coverage also had implications for the concept of social time. Larger shifts in vertical time were characterized by the press's stories which outlined the perceived and actual harm done to vulnerable populations (in children and people with disabilities), and through the inclusion of colorful aggravating details which could have increased felt severity of scooter tragedies by readers. The theme that micromobility devices had no natural place within which to operate and were instead caught in between pedestrian and automotive spaces in Atlanta may have increased the changes in relational time. Finally, shifts in cultural time can also be believed

to have been made greater by media stories covering the abruptness, magnitude, and permanence of the micromobility movement.

The data contained multiple themes that offer some insight into how the theorized relationships between social domains and formal legal intervention may have manifested in the case of scooters in Atlanta. However, the data did not contain elements of certain notable themes which were expected. First, while the carrier corporations were anecdotally known to shoulder much of the blame for the troubles Atlantans experienced when the scooters arrived, media coverage did not consistently represent this sentiment. For instance, it may have been expected to find a theme that carrier respectability was portrayed unfavorably in the data. This was not the case. On the contrary, carrier companies were just as often depicted as cooperating with the city's efforts to control the micromobility situation.

Second, there were not sufficient examples within the data of characterizations of pedestrians and drivers of automobiles to identify trends regarding those groups' respectability or status within vertical space. This made impossible any relative assessment of how scooter riders' comparable characterizations or social position might have differed from those of pedestrians and drivers. This omission is partially expected, given that data was selected for inclusion based on its coverage of scooter-specific stories. Still, because the narrative of scooter adoption included adversarial discourse that pitted riders against drivers, for example, the inability for the data to support such a comparison is noteworthy.

Despite the lack of thematic elements in the data to facilitate these portions of the analysis, many components within the findings are in line with the Blackian framework. Before considering the greater meaning of the findings, it is necessary to explore the impacts of the

regulations. Doing so will provide the final layer through which the results of the thematic analysis can be interpreted.

Chapter V – Impacts of the Regulations

After the Regulations

The story of scooter regulations in Atlanta does not stop at the point that regulations were passed into law. This is due to the fact that the regulations did not instantly and completely rectify the scooter ills, partly because the regulations did not automatically change behavior of riders, and partly because the city did not immediately begin full enforcement of the regulations. Instead of a heavy-handed approach that sought sudden relief, the incorporation of enforcement was a more gradual process, through which the city gained incremental control over the micromobility industry and device operation. In light of this, one of the key points in the scooter narrative is the city's actions after that point and how those actions impacted the lives of Atlantans. It is therefore necessary to chart the events that transpired in the months and years that follow the legislative response to scooters. Considerations to that effect must incorporate how the regulations impacted individual Atlantans, the carrier corporations, and the micromobility industry more broadly. To accomplish this, the current chapter relies on Atlanta Municipal Court data and City of Atlanta internal communications to provide some insight into those pursuits. As always, relevant media coverage is included to contextualize those findings.

Data

Internal Communications

Similar to the internal communications data utilized in Chapter 3, the current inquiry incorporates presentations made by City of Atlanta employees. The records associated with these presentations serve as the best source of information for understanding how the city was responding to the scooter problem in general terms. These records were obtained directly from the City of Atlanta official website, through which official documentation of internal

communications is made readily available. The documents were reviewed and selected for their inclusion of any information that would help describe interactions between the city and the scooter carrier companies or the city and its residents in regard to enforcement of the scooter regulations.

Scooter Citation Data

Internal communications such as those described above can provide a general overview of events—namely by allowing for the description of aggregate enforcement metrics through which municipal response can be approximated. Those types of records do not allow for a more fine-tooth consideration of exactly how Atlanta used its law enforcement personnel to handle one of the most visible scooter problems: rider behavior. For this reason, additional data is needed to be able to fully appreciate how the city enforced scooter laws among individual riders. To facilitate obtaining these data, an open records request was made through the Atlanta Police Department inquiring about records relating to officer interaction with citizens on the basis of alleged violations of laws and ordinances that govern rider behavior while operating micromobility devices. The open records representative informed the researcher that the police department did not maintain a database containing any such information and instead referred the request to the Atlanta Municipal Court. After making contact with the Atlanta Municipal Court representative, a formal request was made for data pertaining to all cases involving violations of Atlanta Municipal Code sections 150-400, 150-401, 150-402, 150-403, 150-404, 150-405, 150-406, 150-407, and 150-408 during the study period of January 1, 2018 through January 31, 2023. These sections were established in direct response to the statutes outlined in Article X, the micromobility-specific amendment to the municipal code (Article X).

The open records representative informed the researcher that the court did not maintain any databases with the requested information, electing instead to send raw data in the form of files containing scanned images of police reports in which officers cited and/or arrested individuals, referencing a micromobility statute as the reason for their intervention. In total, there were 100 such reports, which the researcher combed through and compiled data for relevant variables within the reports in an Excel spreadsheet for analysis. The variables included a unique case identification number, the primary offense for which the citation was written, a secondary offense for cases in which one was mentioned in the report, the specific code section and subsection referenced, an indicator of whether an accident was reported, an indicator of whether multiple persons are mentioned on the report, and indicators of whether the officer reported that an injury had occurred, and indicator for whether the cited individual was also arrested, the date on which the report was written, the race and sex of the cited individual, the specific micromobility carrier for reports in which one was mentioned, and the reporting officer's identification number with the city. Notably, the data also allowed for the inclusion of variables that documented whether a fatality had occurred through the course of the incident at hand and whether the cited person was found to be driving under the influence. However, these items proved to be constants—with both showing that none of the reports recorded a fatality and that none of the cited individuals were suspected of driving under the influence—and are therefore excluded from the analysis.

The Impacts of the Regulations

Regulations' Impacts on Riders

With rider behavior being the focus of much critical discourse surrounding the scooter issue, many anxiously awaited the city's enforcement efforts in correcting those perceived

injustices. The amount of bad press that riders received in the early stages of the scooter rollout would imply that enforcement of riding-related ordinances would be an arduous, all-encompassing endeavor, requiring that Atlanta's law enforcement go to great lengths to establish order. Despite this, the Atlanta Municipal Court had a record of just 100 citations written that pertained to scooter-related incidents during the study period. This relatively small number of punitive responses to rider behavior makes it crucial to understand how law enforcement intervention was used within these cases. The current chapter employs a descriptive statistics approach to addressing this.

Univariate Analysis. A closer inspection of the citation reports is needed, beginning with a univariate analysis of the relevant variables. Descriptive statistics for the variables are found in *Table 2*.

Cited Individuals' Attributes. It is first beneficial to recognize who the cited individuals were. In order to do this, key demographic characteristics are offered. Of the 96 police reports in the provided the cited individuals' sex, 80 (83.3%) of them recorded that the sex was male, while just 16 (16.7%) reported that the individuals were female. Regarding race and ethnicity, the majority of the reports recorded that the cited individual was Black, with 77 (80.2%) of the 96 that included the individuals' race falling into this category. White individuals made up the next largest representation, with 13 (13.5%) reports accounting for individuals of this race. Reports indicating that the cited individuals were Asian and Hispanic were matched at three (3.1%) each.

Table 2. Citations for Scooter Violations (N = 100)

Variable	N	%	Minimum	Maximum
Offense (N = 100)				
Riding on sidewalk	86	86.0	-	-
Wrong side of road	2	2.0	-	-
Multiple riders	3	3.0	-	-
General violation	10	10.0	-	-
Second offense recorded	3	3.0	-	-
Code section cited (N = 100)				
150-207	1	1.0	-	-
150-403	2	2.0	-	-
150-405	93	93.0	-	-
(a)	1	1.0	-	-
(b)	61	61.0	-	-
(e)	1	1.0	-	-
(f)	5	5.0	-	-
150-71	1	1.0	-	-
18-0-1322	1	1.0	-	-
40-6-144	1	1.0	-	-
40-6-350	1	1.0	-	-
Sex of cited (N = 96)				
Male	80	83.3	-	-
Female	16	16.7	-	-
Race/Ethnicity of cited (N = 96)				
White	13	13.5	-	-
Black	77	80.2	-	-
Asian	3	3.1	-	-
Hispanic	3	3.1	-	-
Accident indicated	32	32.0	-	-
Multiple parties involved	10	10.0	-	-
Injury indicated	23	23.0	-	-
Resulting arrest	37	37.0	-	-
Warrant arrest (N = 37)	4	10.8		
Carrier (N = 36)				
Bird	18	50.0	-	-
Jump	1	2.8	-	-
Lime	8	22.2	-	-
Mi	1	2.8	-	-
Motor	1	2.8	-	-
Veo	1	2.8	-	-
Wheels	6	16.7	-	-
Number of distinct officers	66	-		
Citations per each	-	-	1	12
Date	-	-	04/30/2019	12/5/2022

Incident Characteristics. Next, characteristics of the offense are considered. The largest offense category was riding on the sidewalk, which accounted for being the reason given for citations in 86 (86%) of the cases. Having multiple riders on one device that is only legally allowed to be operated by one person was provided as the reason for citing in three (3%) of the reports. In just two (2%) of the reports, the officer recorded that the cited individual was riding on the wrong side of the road. Lastly, a general violations category—including offenses descriptions such as "operations of motor scooter," "dockless mobility device safety," "improper use of dockless mobility device," and "scooter violation rules of the road apply"—is comprised by ten (10%) of the reports in the data. In three (3%) cases, officers reported that more than one offense had been committed. Examples of additional offenses included possession of marijuana and "false rep to police."

The reports also included a specific code section that was said to apply to the offense details, offering reason for the behavior constituting a violation. Overwhelmingly, officers referenced code section 150-405, with 93 (93%) falling into this group. The reader will recall that this section refers to micromobility-specific municipal codes established as a result of the incorporation of Article X. Within this code section, subsections (a), (b), (c), and (e) consisted of 1 (1%), 61 (61%), 1 (1%), and 5 (5%) reports, respectively. Generally, subsection (a) pertains to the use of scooters inside city parks, (b) pertains to scooters being ridden on sidewalks, (c) pertains to the use of scooters in streets, bicycle lanes, and shared paths, and (e) requires that scooters be operated in a manner consistent with applicable state and local laws (Article X). In the next largest group, only two (2%) reports referenced municipal code section 150-403, which outlines states relating to safety while operating micromobility devices. One report each (1%) cited under municipal code sections 150-207—applying to "coasters, roller skates, or similar

devices"—and 150-71—operation of "all-terrain and off-road vehicles." In one (1%) case, the officer referenced statute 18-0-1322, which denotes the legislation passed that incorporated Article X. Two reports opted to cite Georgia state law instead of municipal code, with one (1%) referencing Georgia law section 40-6-144 and another referencing 40-6-350. The former requires the driver of a vehicle to yield the right of way to pedestrians, and the latter states that all laws apply to the operation of a moped that also apply to the operation of an automobile.

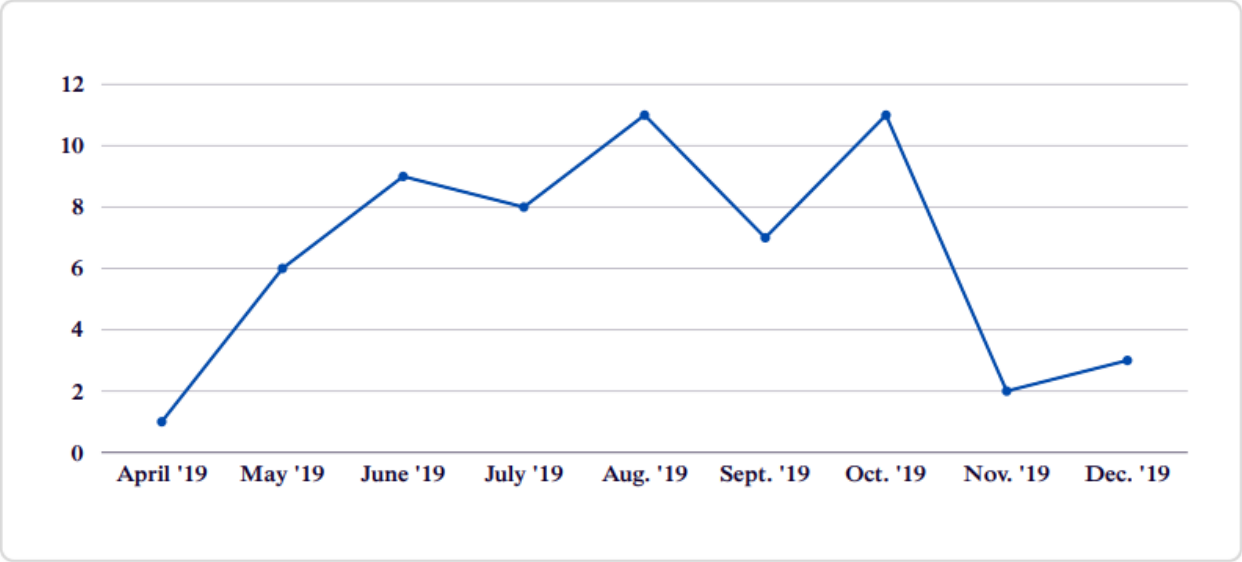
Certain additional incident details were included in the reports as well. In 32 (32%) of the cases, an accident was recorded to have occurred. Injuries were reported to be present on 23 (23%) of the reports. In the descriptions of the offenses, ten (10%) of the incidents were said to include multiple persons. Lastly, 37, or over one-third of the reports, stated that the cited individual was arrested as a result of the incident. Notably, four (10.8%) of those arrests were the result of outstanding warrants naming the cited individual for arrest, and thus not for the immediate scooter violation.

Other Variables. The reports contained information for other variables that were deemed relevant to the current study. First, officers somewhat regularly mentioned the specific carrier that offered the device involved in the incidents. The most frequently mentioned was Bird, which was present in 18 (50%) of the reports. Lime was also included in the description in eight (22.2%) of the officers' record of events. Wheels is the final carrier mentioned more than once, showing up in six (16.7%) of the reports. A few carriers were named in just one (2.8%) of the reports, including Jump, Mi, Motor, and Veo. Also of interest are the citation patterns of the officers. Across the 100 reports, 66 distinct officers were listed at the primary officer involved. Most were responsible for just one report, but some wrote more, with the most prevalent officer

being named as the primary for 12 (12%) of the reports. Lastly, the report dates ranged from April 30, 2019 through December 5, 2022.

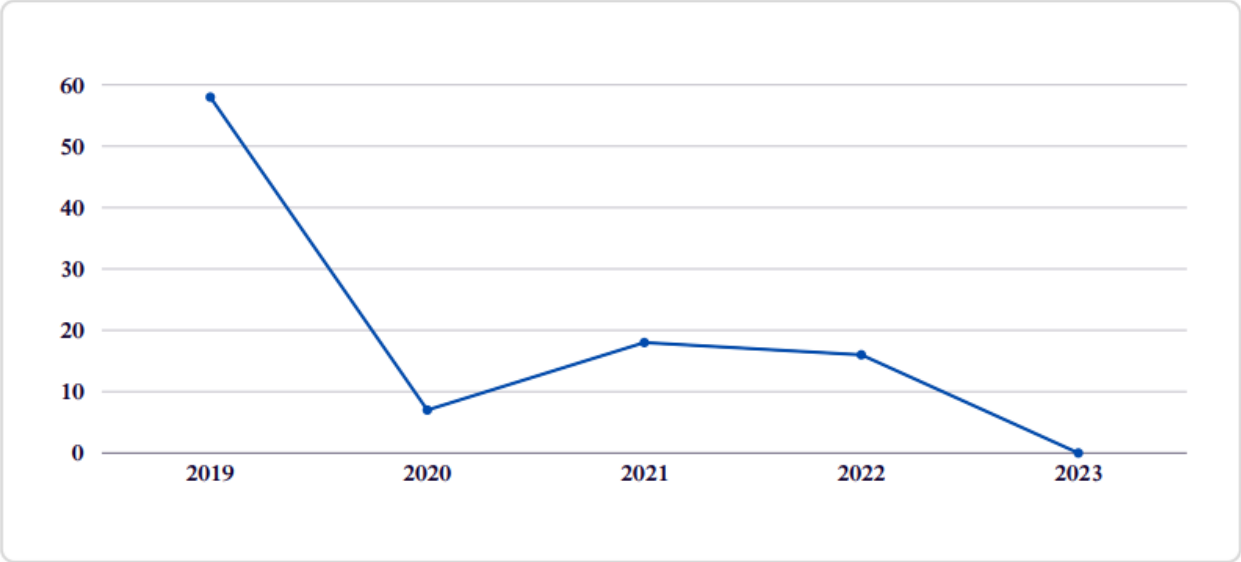
Citations Over the Study Period. Another notable component of the enforcement of laws pertaining to rider behavior is the trend of such activities by law enforcement over time. Within the data, the year of 2019 is both the first year represented and by far the year during which the greatest number of scooter-related citations were written. This is not surprising, given that regulations did not become official until January of 2019, even if formal enforcement did not start right away. A graph charting the number of reports written each month during 2019 is found in *Figure 1*. The record of reports begins at the end of April of 2019. Exactly one report was written during that month. From then on, police began handing out citations for rider behavior somewhat regularly. During May, June, and July, officers wrote six, nine, and eight reports for scooter citations, respectively. The months in the data during which the most reports were filed were August and October, with 11 each. Between those two, September saw a temporary decrease to just seven. Finally, citations dropped substantially to just two in November, increasingly only slightly to three in the final month of December. This downturn is potentially expected, given that November and December tend to make the arrival of cooler temperatures in Atlanta. This could logically result in fewer Atlantans utilizing scooters.

Figure 1. Citations per 2019 Month



Though the monthly trends during 2019 are interesting, the data also contains reports from 2020 through 2022 as well. The graph showing the number of reported citations for scooter-related incidents is found in *Figure 2*. The reader will notice the stark decline from 2019 to the 2020 year. During 2019, police cited 58 riders. This number dropped to just seven during 2020. It should be noted that 2020 contained the period of micromobility operations that were impacted by Covid-19 mandates that required scooters to be temporarily removed from city streets. Still, this decrease in observable evidence of enforcement remained in the years following. Throughout 2021, police filed just 18 reports. In 2022, that number fell slightly to 16. The data did not include any reports written during January 2023, which is noteworthy given that the open records request extended through the end of that month. As such, readers will note that *Figure 2* includes 2023, for which zero reports were obtained. However, it should be pointed out that this does not apply to the entirety of the 2023 year.

Figure 2. Citations per Year of Study Period



Bivariate Analysis. Univariate analysis provides a baseline understanding of how enforcement was utilized to address problematic rider behavior. To gain a more nuanced perspective, it is prudent to conduct some level of bivariate analysis to further investigate the nature with which law enforcement personnel impacted the lives of scooter-riding Atlantans.

Characteristics of Cases Involving Arrest. One such relationship of interest is the trends that exist in the data pertaining to the likelihood of police-citizen interactions to result in arrest. Arrest is a critical consideration given that it represents the most severe discretionary outcome that a law enforcement officer can employ, especially in cases that, for instance, might have alternatively been handled with verbal or written warnings, or simple citations with instructions to resolve the matter with the court. For this reason, natural questions arise regarding how other variables in the data might or might not be associated with the outcome of arrest.

The first set of variables to be investigated are the individual demographic variables of race/ethnicity and sex. This will highlight any trends that exist in the data pertaining to the

specific attributes of the arrested individuals. The figures for these relationships are outlined in *Table 3*.

Table 3. Number of Arrests by Rider Race/Ethnicity and Sex (N = 37)

Variable	N	Percent
Race		
White	0	0.0
Black	37	100.0
Asian	0	0.0
Hispanic	0	0.0
Sex		
Male	35	94.6
Female	2	5.4

Of the 37 individuals whose interactions with law enforcement resulted in their arrest, all of them (100%) were reported as Black in the reports. It follows, then, that no individuals who were arrested in the data were reported to be White, Asian, or Hispanic. The arrestees were also overwhelmingly male, with 35 (94.6%) falling into this category. The remaining 2 (5.4%) were reported to be female. Given that Black individuals made up just 77.0% of the cited individuals across all of the data, and that males represented only 80.0%, both of these demographic categories are overrepresented in the arrested portion of riders in the reports. Both categories are also overrepresented compared with the Atlanta population.

It follows reason that the type of offense might be associated with officers' decisions to arrest riders. After all, warrant arrests made up only four of the 37 total arrested individuals, and additional offenses were present in just three instances. This suggests that in most of the cases in which officers opted to arrest the cited individuals, that decision was made primarily based on

the primary riding offense and the resulting interaction between the officer and the citizen. The number of arrests by offense category is broken down in *Table 4*.

Table 4. Number of Arrests by Offense Category (N = 37)

Variable	N	Percent
Offense		
Riding on sidewalk	27	73.0
Wrong side of road	1	2.7
Multiple riders	1	2.7
General violations	8	21.6

Generally, out of 37 arrests, 27 (73.0%) were reported to be riding on the sidewalk, one each (2.7%) were riding on the wrong side of the road or riding with multiple people on the device, and eight (21.6%) were said to be cited for a general micromobility violation. Despite making up the largest proportion of cases that resulted in arrest, individuals cited for riding on the sidewalk were underrepresented when placed in the context of making up 86.0% of all cases in the data. The percentage of arrestees cited for riding on the wrong side of the road and for having multiple riders on the device was in line with total data representation for each. On the contrary, it is the category of general violations within which a disproportionately large number of cases resulting in arrest are found, drawing from the fact that these violations made up only 10.0% of the total dataset. This means that in more cases for which officers reported a general micromobility infraction, the individual of interest was more likely to be arrested proportional to the other three offense categories.

It may also be theorized that in instances in which certain aggravating circumstances were present, officers may be more likely to resort—or, potentially feel obligated—to arrest. For

that reason, a closer look at how reported accidents and injuries are represented among arrest cases is warranted. The figures for these relationships can be found in *Table 5*.

Table 5. Number of Arrests by Indication of Accident and Injury (N = 37)

Variable	N	Percent
Accident reported		
Yes	2	5.4
No	29	78.4
Not indicated	6	16.2
Injury Reported		
Yes	1	2.7
No	30	81.1
Not indicated	6	16.2

An accident was reported in just two (5.4%) of the 37 arrest cases and in only one (2.7%) arrest case was an injury reported. Most often, no accidents were reported in these cases, which accounted for 29 (78.4%) of cases resulting in arrest. Similarly, in 30 (81.1%) instances, the arresting officer reported no injuries. For both injuries and accidents, six (16.2) reports did not indicate either an affirmative or negative status of those conditions in arrest cases. In both accident- and injury-reported cases, officers were disproportionately less likely to arrest cited individuals compared with each condition's representation in the total dataset. It is possible that in these types of cases, officers served more of a support than a law enforcement role. One might logically consider how, if a civilian was involved in a scooter accident or had been injured while riding a scooter, police officers might be called to those scenes. In contrast, cases in which no accident or injury had occurred, officers would become involved in response to some observation of wrongdoing on the part of the rider. Additionally, the latter officers' decisions to engage with

the rider would be a discretionary one, allowing the officer greater control over the outcome of the interaction.

Not Ascertainable Through the Data. These analyses are useful for highlighting trends in the scooter citation data. However, the data is limited in some notable ways that prevent a full understanding of how the City of Atlanta enforced rider regulations. First, the data is only comprised of reports in which officers made formal documentation of an interactions with a civilian that resulted in—at minimum—a citation being given. This omits any potential for investigating instances involving either informal interactions or formal police-civilian interactions that resulted in verbal warnings in lieu of citations. One can imagine any number of scenarios in which an officer may offhandedly direct a rider to correct some behavior without feeling a need to write a formal report documenting the interaction. Additionally, it is feasible to suggest that some officers may have conducted formal traffic and/or pedestrian stops of micromobility riders, and documented those stops, but may have ultimately elected to issue a warning to the rider. Because documentation of instances such as these would have never been filed with the Atlanta Municipal Court, they are missing from the data.

Second, the reports within the data contain only superficial information about the interactions and therefore lack a detailed summary of events. Given that officers' discretionary decisions are contingent on a litany of circumstances that surround encounters with citizens—both subtle and obvious—this deficiency of the data is noteworthy. For instance, it is unclear from the reports the exact reasons for the initial contacts with the citizens. This leaves questions about whether these were straight-forward violations of laws governing rider behavior for which the officers wrote citations and made arrests, or if there were precipitating or aggravating circumstances that prompted the officers to stop the individuals and, absent anything else upon

which to justify making the stops, they then resort to scooter violations. In a very select few reports, for example, officers noted that certain individuals were told multiple times to stop the scooter before finally doing so, or that the stop was conducted for riding violations but that the individuals had active arrest warrants or were found to be in possession of marijuana. These reports are illuminating outliers that serve to demonstrate how some citation and arrest outcomes were not solely dictated by the individuals simply violating new laws barring the use of scooters on the sidewalk or by multiple persons at one time, for example.

Third, the data does not provide the details of the punitive outcomes of these cases. Despite being included in the open records request, no information was provided by the court regarding the dollar amounts associated with fines levied as a result of the citations for riding violations. This prevents any assessment of the actual or perceived severity of being cited for riding in a manner that is deemed unlawful. Furthermore, the court did not include any details regarding the sentencing outcomes for the arrested individuals. This would have been especially helpful in cases in which individuals were not said to have committed any additional infractions apart from their problematic riding, as knowing how the court responded to these individuals would provide some insight into the perceived severity of these types of offenses from the court's perspective.

Despite these limitations in the data, it is worth making some generalizations from what can be ascertained. First, at some level, police in Atlanta were enforcing scooter regulations that governed rider behavior. This is notable, given some reported opinions that Atlanta was not doing anything to correct unlawful riding (Deere 2019e). Second, and conversely, the number of citations for the entirety of the study period indicates that formal enforcement of individual riders through punitive channels was quite rare given the sheer number of rides that Atlantans took on

scooters during the same time period, and also given the amount of bad press that riders received for their behavior. According to one presentation delivered internally, scooters were utilized in Atlanta for over 4.3 million trips during 2019 (Department of Transportation 2020a). Third, officers' decisions to arrest disproportionately impacted certain demographic groups and offense designations. Fourth and finally, officers were much more likely to resort to arrest in cases in which they utilized their discretion to initiate interactions with riders, compared with those in which the citation was written while on the scene of an accident and/or injury.

Regulations' Impacts on Carriers

Individual riders' behaviors and the enforcement of the new regulations that impacted those types of issues were perhaps the most visible components of Atlanta's response to the micromobility phenomenon. Arguably, though, the city's enforcement of carrier operations may have had a much larger hand in changing how Atlantan's experienced micromobility on a day-to-day basis. These regulations were often handled out of sight of the general public, and therefore may have gone largely unnoticed by a portion of the public. However, these regulations were enforced more quickly following the passing of the legislation into law and likely altered carrier behaviors more so than regulations impacting operation of the devices by the consumer did. These regulations implemented permitting and fee systems that financially impacted carriers, and limited the number of carriers that could operate within the Atlanta market. A series of legislative updates delivered among City of Atlanta staff provide some insight into the scope of the regulations impacting carrier operations over time.

The reader will recall from chapter three that, as part of the then-newly established Article X, the micromobility market in Atlanta was organized on a strict permitting system. The system required that carrier companies purchase a set number of device permits in addition to a

base-level company permit to operate within the city. The Department of City Planning delivered a 90 days post regulations update internally to the city council during April of 2019. At the time of the presentation, Atlanta had issued permits for 10,500 devices across six companies, including Bird, Jump, Lyft, Lime, Gotcha, and Spin (Department of Transportation 2019a). By the end of July of that year, the number of devices permitted had grown to 12,700 (Department of Transportation 2019c). Again, six carriers were said to be operating within the city, except that Gotcha had pulled out in the interim and Spin and Boaz were not active in the city despite having purchased permits. Instead, Bolt and Wheels had joined Bird, Lime, Lyft, and Jump in the market. By September of 2020, the micromobility offerings in Atlanta had shrunk considerably. According to a Department of Transportation presentation, active device permits numbered just under 4,000 at that time, and were held by just four companies: Bird, Helbiz, Spin, and Veoride (Department of Transportation 2020b).

Despite this drastic decline in the number of permitted devices, the decline in the actual number of devices deployed at any point was not so extreme. For instance, though 10,500 devices were permitted to operate as of April 2019, the number of deployed devices only averaged 5,177 during that month (Department of Transportation 2020b). Likewise, as device permits reached a heightened level of 12,700 in July 2019, the average number of deployed devices in the city only increased by less than 200, to a total of 5,539. Within this context, it can be appreciated that, though device permits dropped by nearly 8,000 between mid-2019 and the late summer of 2020, the number of deployed devices did not reduce by the many. In fact, as of August 2020, 1,665 devices were known to be deployed (Department of Transportation 2020b). This still denotes a substantial decrease in the number of devices, but the scope of the reduction is less than if active permits were the sole metric used to assess the impact on carriers.

The potential reasons for this shrinking of the market are threefold. First, with the introduction of a paid permitting system, companies were forced to pay the city sums of money that cut into profits. For some companies, this proved to make continuing business in Atlanta untenable. As the most noteworthy example of this, Lime—early arriver and one of the largest purchasers of permits—exited the Atlanta market early in 2020. The company cited the Atlanta market's incongruence with the company's profitability goals as the primary reason for leaving, specifically mentioning the city's impound fees and ban on nighttime riding (Habersham 2020a). Lime's exit came just two months after the only-slight-less-prevalent Lyft made the same choice. The company left Atlanta among other cities as part of a national strategy that would allow resources to be diverted to markets where there were "bigger opportunities" (Alfonso 2019, para. 4). The financial limitations of operating within Atlanta's paid permitting structure, as well as the fees associated with the impounding of devices seemed to have an appreciable impact on carriers' decisions to leave the Atlanta market.

The second potential reason this decline is that it was plainly an overt effort by the city to simplify the micromobility industry within the city. As part of an initiative to make continued improvement to the scooter market, Atlanta administered a survey during 2019 asking residents about how they felt about certain changes to micromobility in the city. A presentation on preliminary results from the survey in December of 2019 stated that the city had received 2,640 responses by that time, and some trends were beginning to appear in the data (Department of Transportation 2019c). Over four fifths of respondents said that they wanted e-scooters to be an option for Atlantans, but many respondents wanted to see change in some key areas. Two of the most common suggestions for improvement were to decrease the number of scooters in the city and to decrease the number of carrier companies operating in the city. In a legislative update

presentation in February of 2020, Atlanta's Department of Transportation outlined plans to update the permit structure "to address oversaturation of the market with operators and devices" (Department of Transportation 2020). Details for accomplishing this included creating a "competitive" permitting system that awarded the opportunity to operate larger fleets for companies that adhered to more extensive expectations, such as device parking compliance, increased local staffing, advanced technologies, better responsiveness to complaints, and improved data management. In short, even if they were willing, companies could no longer view Atlanta's micromobility market as a passive revenue venture and expect to be allowed to operate at the same level as competitors who bought into Atlanta's rapidly developing micromobility infrastructure.

The third potential explanation is that the diminishing presence of micromobility devices in Atlanta can be attributed in part to the Covid-19 interruption in micromobility services. The city suspended device operation from April 2020 until July 2020, during which time no devices were permitted to operate. However, even before the official suspension of the program, numbers of active permits and actual devices deployed both fell sharply. From June 2019 through January 2020, the number of active permits stayed it highest at 12,800. During February 2020, this number plummeted to around 4,000 (Department of Transportation 2020). The number of deployed devices tapered off noticeably, too. From November 2019 until March 2020—the month before operations were suspended—the number of devices deployed fell from an average of 4,560 to just 1,037. In the months following the suspension, the number of devices and permits remained largely unchanged. This suggests that Covid-19 had a greater impact on the micromobility industry in Atlanta than the three-month suspension; the decrease in permits and deployed devices preceded the suspension and was sustained for some time after.

Conclusions

The impact of these regulations both on individual micromobility users and on the carrier corporations that provide the service is significant. While the punitive response to individuals' behaviors through traditional enforcement does not seem to have reached many Atlantans during the study period, the fact remains that the regulations changed the course of micromobility in Atlanta. For many Atlantan's this will be seen as a positive change, given that the decrease the number of devices and the organization that comes with permitting only a select few carriers that have been vetted for their efforts to cooperate with the city will make their lives less chaotic and, perhaps, safer as they move about the city. In addition, pedestrians may appreciate a change in rider behavior, finding fewer scooter riders utilizing pedestrian spaces for their travels. Some Atlantans, however, may be dismayed by the lack of device availability, which many credited to be a critical ingredient in the inherent convenience of dockless, shareable micromobility. Riders may also feel unsafe utilizing roadways for their travels and may opt not to ride scooters altogether. These impacts highlight the importance of the current study's efforts to consider all facets of the scooter issue in Atlanta to determine what can be learned from the events that transpired.

Conclusion

Summary of Findings

A case study such as the current one offers a unique opportunity to identify its key elements, characterize the relationships between those elements, and draw conclusions about how what is learned can inform an understanding of relevant future events. Furthermore, regulation studies such as the current one are critical for exploring the occasionally murky circumstances around which policies are formulated and the often-overlooked impacts that they have on affected parties. Having chronicled the regulatory process, explored theoretically influential aspects of the regulations' development, and considered how the regulations impacted both individual riders and the carrier companies, the current chapter pulls from what is learned and applies those lessons to a broader scope. There is a dual purpose for doing so. The first is to offer some appraisal of Blackian theory's efficacy in helping explain societal reactions to disruptive arrivals, such as the advent of novel technologies. The second—and subsequent to the first—is to provide policymakers with additional information about key considerations that should be made during the formulation of regulatory policies.

Before attempting to distill the focal case of micromobility in Atlanta down and extrapolate the key takeaways and insights that the current study offers, it will be helpful to first consolidate the results into a summary of findings. This summary will present the findings from the three analytical steps taken in the current study. First, an abridged breakdown of the regulatory narrative surrounding scooters in Atlanta will be provided. Second, the results from the thematic analysis that assessed the depictions of micromobility in media coverage will be outlined. Third, the observations of the descriptive analysis of the impacts of the micromobility regulations will be presented.

Narrative Components

The narrative surrounding the formulation of regulatory legislation relied heavily on City of Atlanta internal communications, city council meeting minutes, and—crucially—interviews with key actors that had a hand in the policy development process relating to scooters. The narrative was characterized by the city's attempts to strike a balance. Specifically, policymakers identified a need to find the overlap between needing urgently to act in a way that would provide officials some level of control over a chaotic situation and the notion that micromobility presented an opportunity as much as it brought on headaches. Specifically, scooters were seen as an opportunity to relieve a deeply established city-wide reliance on cars. Officials also acknowledged the feeling that, despite the loudly critical reaction to the devices' arrival, most Atlantans wanted them to remain available as a viable option for personal transportation. For these reasons, the city opted not to resort to the most extreme tool available to it by banning dockless micromobility devices outright, as numerous other municipalities throughout metro Atlanta did. Instead, the city went to work drafting legislation almost immediately following the devices' appearance, running contrary to a commonly held belief that the city simply allowed the carrier companies to act unchecked.

Despite Atlanta's rapid efforts to regain control of its streets and sidewalks from the micromobility carriers, drafting the regulations from scratch was a lengthy process. It consisted of reviewing regulations enacted by other locales before drafting initial legislation and having the city's legal teams review and revise the documents. By the time the legislation was ready for a final vote by the city council, over half a year had elapsed since the scooters first arrived. By that time, the devices had become deeply contentious, with many long-since forming their opinions about whether the industry had benefitted or harmed the city and its inhabitants.

Therefore, when regulations were finally enacted—and certainly by the time they were being fully enforced some 12 months post arrival—the atmosphere surrounding them was that of a city fighting an uphill battle akin to slowing a runaway train. This was evidenced in the persistent struggles that grew in severity throughout 2019 that the city experienced relating to scooters. Eventually, though, the regulations took hold. Through educational campaigns that sought to inform Atlantans' riding practices and through continued pressure on carriers to shoulder their share of responsibility, the city was able to gain control. The result, however, was a drastically diminished micromobility market in Atlanta, raising questions about whether the regulations did too much to hamper technological innovation of transportation.

Thematic Elements Within Media Coverage

Throughout the course of these events, micromobility carriers, devices, and riders received a substantial amount of coverage in the Atlanta news media. The depictions of each in many cases are widely consistent with the proposed relationships regarding the domains contained with Blackian theory's concepts of social space and social time. Blackian themes exist within the depictions of micromobility as a concept, the devices, and the riders. There are certain exceptions, however. Notably, news media depictions of carrier companies—which were a key target of restrictive regulation—did not consistently portray them in a way that would make them especially vulnerable to formal intervention via targeted legislation as Blackian theory would suggest.

Still, many of the themes that were observed in the data suggest that the framework's propositions may be relevant to the case at hand. Generally, micromobility was placed in a position of disadvantage in social space because of its clash with established transportation culture, because the devices and riders were depicted as not being particularly respectable,

because of the danger involved with the devices' use, and because micromobility was presented as something youthful, even crossing into juvenile at times. Micromobility was also portrayed as creating large shifts in social time, due to its depiction of harming vulnerable populations, its inability to be neatly placed into existing Atlanta infrastructure, resulting in it being unwanted in any spaces, for the aggravating details that accompanied many stories of scooter-borne tragedy, and for the abruptness, magnitude, and permanence with which the industry was depicted to be pulling Atlantan society from its status quo. Taken in isolation, the results of the current study's thematic analysis are a convincing compilation of the efficacy of Blackian theory as an explanation for the regulations that targeted scooters.

Extent of Regulatory Impact

The impacts of the scooter legislation were felt both by micromobility users and the carrier companies, as well as the greater Atlantan public. Beginning with the broader public, in time, Atlantans again enjoyed the more organized and predictable streets and sidewalks more akin to those that had existed in the city prior to the sooters' arrival. Much of this came from the regulatory impacts to the carrier companies and, as a result, the micromobility industry in Atlanta. Specifically, the regulations levied financial obligations on the companies and required more of them in the form of compliance with established laws and policies and also through contribution in the form of efforts made to help Atlanta realize goals toward further streamlining the industry. The result as of the end of the study period was that fewer companies remain to provide micromobility products and services to Atlantans. This was partly intentional, as the city aimed to pare down the number of carriers to simplify oversight and logistics. Some of this decrease was due to individual carriers making the decision to exit the Atlanta market in response to the additional obligations placed on them.

Individual riders also experienced the impacts of the regulations through the enforcement of laws that governed scooter riding behavior. During the study period, city law enforcement wrote 100 citations for riding violations, with 37 of these encounters resulting in an arrest. Though the data does not allow for an understanding of how some situations resulted in arrest while others did not, it might be speculated that, absent some aggravating circumstances, simple riding violations would not be arrestable offenses. This raises questions about whether riding violations were being used as an additional means through which officers could justify stops of persons. Whatever the nuanced reasons for making the arrests, it was also found that arrests of Black Atlantans, males, and riders in non-accident and non-injury present scenarios were overrepresented in the cases resulting in arrest. Additionally, in a disproportionately large number of cases, citation reports listed only general information regarding the specific scooter riding offense committed. Temporally, 2019 was by far the year of the study period during which the highest number of citations were written, with the summer and early-fall months accounting for the bulk of this number.

Discussion

Given the above summary of findings, some notable distinctions and subsequent interpretations are in order. One such distinction is that there is a lack of congruence between the theorized mechanisms in Blackian theory and the findings within the study. Specifically, according to the interviewed individuals who played direct roles in the formulation of policy, the largest concern when identifying the need for regulations was carrier behavior. The policymakers recognized that, absent regulations governing how they would operate, the carriers would not themselves work to alleviate the challenges that the city was facing regarding micromobility adoption. Importantly, these challenges were not resultant only of carrier behavior, but also of

rider behavior and, in some cases, pedestrian and driver behavior. However, the policymakers were plainly focused on the city's reaction to carrier-specific behaviors as the impetus for initiating the drafting of legislation. This distinction is not meant to imply that rider behavior was addressed in the regulations; it was. Nonetheless, it was the carriers who were most mentioned as the scooter-related topics of contention among Atlanta policymakers. This is also evident in the observed impacts of the regulations, which seem to indicate that the legislative effects were felt on a larger scale by carriers than by individual riders behavior.

This is a key takeaway, because the results of the thematic analysis found little evidence that carrier companies were depicted unfavorably in the news media. One would expect, based on the theoretical framework presented that carriers would be universally portrayed as the folk devil in this scenario, given the reasons offered by policymakers for the targeted legislation and the city's heavy-handed response to carrier operations. If, for instance, carriers received large amounts of bad press, it would be simple to argue that Blackian concepts were at play, effectively weakening micromobility's position in the legislative arena. This did not happen, which forces a reinterpretation of the events that transpired.

One potential conclusion is that the regulatory decisions were made independent of micromobility's relative position in social domains characterized within the Blackian framework. Or, at least, that policymakers were not especially influenced by these characterizations. There are possible explanations for this. Policymakers may simply not place any stock in how the issues they are regulating are depicted in news media. Indeed, the interviewers unanimously seemed to view their role in the regulatory process as a pragmatic one that served a practical need. Perhaps the emotionally charged stories that punctuated the news did not serve a utility purpose in this endeavor and were therefore disregarded. The assumption in this explanation is

that the policymakers were not interested in accommodating public opinion during the drafting process. From the interviews, this was not found to be true. On the contrary, the interviewees expressed a careful consideration of the public's wants and needs through town hall meetings, surveys, and similar poll-taking. The regulatory actors recognized that Atlantans generally did want the option to ride scooters. This, after all, was the oft-cited reason for not simply banning the devices altogether.

The more accurate route would be then to conclude that media depictions may not be an especially useful metric for determining stakeholders' positions within Blackian domains of social space. This may be due to some disconnect between actual public opinion and the "consensus" presented in news media, calling into question the efficacy of media to genuinely represent a society's wants, needs, and sentiments. Media data instead may be more useful for assessing shifts in social time. This is suggested by the clear and consistent themes in the data that speak to the manner with which micromobility changed facets of life in Atlanta. After all, social space deals in the characterization of people and other entities; social time deals in the characterization of events. The latter may be more suited for journalistic reporting, while the former may exist in news media as colorful commentary, and therefore less synonymous with a factual accounting of involved parties' relative positions in vertical, radial, or normative space.

In light of what was learned throughout the current study, it is also useful to consider the utility of the Blackian framework in the study of regulation. It makes theoretical sense to hypothesize that regulatory policy would be influenced by scooter actors' relative positions in social space, and how their actions presented a felt shift in social time. However, this hypothesis assumes that regulatory decisions are always made against an adversarial backdrop. The current study, for example, conceptualized the micromobility regulations as signifying a symbolic loss

on the part of the industry and, consequently, a win on the part of automobile drivers, pedestrians, and other affected Atlantans. This notion that the micromobility industry was pitted against Atlantan society and that policymakers were the referees deciding winners and losers may not be a strictly factual assessment of the events. The characterization of events presented outside of relevant media coverage suggests instead that regulation of micromobility in Atlanta was a natural response to any novel industry that initially operates within an unregulated space. This understanding of the regulatory decisions is devoid of an adversarial element, calling into question if Blackian theory applies to the case of micromobility regulation in Atlanta. Because Blackian theory relies heavily on the relative social position of the involved parties, it can be concluded that the lack of opportunity to make a comparative assessment of micromobility's position in social space to other parts of Atlantan society in the current case greatly reduces the theoretical framework's usefulness in explaining the case's events.

Another confounding factor in this equation is the presumption that news media impacts the legislative process. Prior to conducting this study, the researcher believed that news media not only accurately reflects the broader consensus of public opinion, but that policymakers are influenced by the media content and—in part—make decisions in response to how issues are characterized by media outlets. The findings of the current study suggest that this may not be true. The participants interviewed to help construct the narrative presented in Chapter III were unanimous in their assertions that micromobility was always going to be the de facto target of regulations given that it would have been incorrect or inappropriate to allow the industry to operate without official oversight in some form. Furthermore, while two of the three interviewees mentioned considering public opinion during the decision-making process, it was made clear that policymakers assessed public opinion in a manner that did not prioritize media portrayals of the

industry, the carriers, the devices, or the riders. At no point did any of the interviewees indicate that media depictions of micromobility served a role in swaying policy decisions at any stage in the process.

The minimized priority placed on news media coverage may be unique to the current case, as existing literature points to an established role of media in the lawmaking process. Specifically, media is often credited with impacting policy discourse through the mechanisms of agenda-setting, priming, and framing (Moy, Tewksbury, & Rinke 2016). These processes involve media's ability to influence the public's perceptions of what is important (agenda-setting), connecting the public's perceptions of issues to emotional reactions (priming), and presenting the public with a set of facts that emphasize certain characteristics of an issue over others (framing). Prior research has linked these mechanisms with impacting legislative, political, and policymaking processes (Nelson, Clawson, & Oxley 1997; Simon & Xenos 2000; Tan & Weaver 2009; Winburn, Winburn, & Niemeyer 2014). These findings are echoed by scholars of non-state actors' roles in policymaking, where media is recognized as a social institution with an especially fast-growing influence over legislative decisions in a South African study (Shoba & Zubane 2022). Other researchers have found that media is especially impactful for lawmaking behaviors of officials when media coverage is focused on the behavior of those policymakers (Melenhorst 2015). Importantly, much of the theory and research linking media coverage to legislative action is posited to be an indirect link, with public opinion being the vehicle through which this relationship exists. Therefore, the current study would have benefitted from some measure of public opinion, especially assessing how it may or may not have changed as a result of the waves of media coverage focusing on micromobility. Social media would again seem to be an appropriate source for such data.

Policy Implications

The current case is unique in that it is an example of regulatory policy having to be drafted from scratch and with very little precedent for legislators to reference. This process was made stranger still by the fact that policymakers were working to fill a regulatory void amid an urgent need. In this situation, city officials were presented with a situation in which they had to act quickly yet resist the urge to act rashly. In this respect, the actions taken by the City of Atlanta represent an appropriate reaction to being presented with a novel technology for which there were no pre-existing laws governing it. Despite the immediate harms that befell some Atlantans, the city's quick action prevented the case of scooters of turning into a multi-year, or even multi-decade struggle to gain sufficient control, such as in the cases of automobiles and bicycles.

Questions are still unanswered, however, regarding whether an actual balance was struck between gaining that control and regulating the industry to a point of irrelevance for the devices' intended purpose of offering a viable transportation alternative. Municipalities that are forced into a time-sensitive position such as Atlanta was in the current case would do well to continually assess the impacts of regulations enacted under urgent pressures from external sources. Doing so would allow for an appraisal of whether the legislation is found to be producing the intended effect, or if, perhaps, the legislation is too aggressive in its approach and has the unintended consequence of stifling innovation. This is especially relevant to Atlanta, which is known to face issues of congestion mostly in the form of automotive traffic and would therefore benefit from being a leader in incorporating new and progressive forms of transportation. Cities should consider how their needs might be met by the advent of new technologies when determining how to respond to their arrival.

Blackian theory may also point to a need for policymakers to be mindful always of the potential for decisions to be made in a way that responds to relative social disadvantage instead of pragmatic needs. The case of scooters in Atlanta is missing the unfavorable depiction of carrier corporations that might have drawn a clear connection between Blackian propositions and the formulation of scooter policy. Still, ample evidence exists to suggest, at least in part, that perceptions of scooters, riders, and micromobility more generally may have fostered a atmosphere in which they were seen as the obvious target for heavy-handed regulations. Policymakers should reflect and evaluate during the regulatory process whether decisions are being made out of practical utility, or due to some feeling of injustice done by a less established and therefore less influential entity.

The current case also highlights the ability for policymakers to use legislation not simply as a means to halt shifts in social time, but to slow or lessen them. By making the decision not to ban scooters and to regulate the industry instead, Atlanta policymakers demonstrate how social time can shift too drastically in some cases, and how regulations can be relied on to mitigate the felt circumstances that add to that feeling of change. Policymakers can follow suit, and instead of rejecting novel technologies that disrupt social processes to the point of intolerance, legislators can opt instead to implement just the minimum amount of official intervention to make decrease the felt shift in social time to acceptable levels. Naturally, a one-size-fits-all prescription cannot be offered, as each municipality and every situation will be faced with unique circumstances.

Limitations

Despite efforts made to conduct a comprehensive evaluation of the regulatory process in Atlanta, the current study contains certain limitations. An example of this pertains to the temporal association between news media and the regulatory events that transpired. Particularly,

the reader will have noticed that the majority of media coverage that was used to identify themes about depictions of micromobility in the news were published late in 2018 or during 2019. These depictions were therefore made either concurrently or *after* the drafting and/or passing of the scooter regulations. This temporal ordering prevents any conclusions from being drawn that might suggest that policymakers directly considered these depictions during the initial drafting of regulations. However, it has implications for the city's enforcement decisions that followed. Specifically, this may help to explain the lag between the establishment of the regulations in January of 2019 and the enforcement of rider behavior. While regulations impacted carrier operations almost immediately, rider behavior was given a pass or handled informally until the very end of April. It might be that the city opted to begin enforcement of rider behavior after sensing through media coverage that the regulations and campaigns to educate riders were not having the desired deterrent effect without associated consequences. Admittedly, this still does not explain the temporal ordering of enforcement beginning before the weightiest of the news stories began to surface chronicling the tragic deaths involving riders in the city. However, the ad hoc regulations that were enacted as a result of Mayor Bottoms's executive orders suggest that a proposed cause-and-effect may still hold true. Whether the media depictions of the stories had any impact, or if policymakers' knowledge of the events themselves independent of the news reporting on them were solely responsible for those ad hoc regulations, the current study cannot make a claim to of either.

Questions also remain regarding how the case of micromobility regulation in Atlanta exists in the context of the broader national or global conversations regarding the industry and resulting regulations elsewhere. Atlanta was characterized as one of the epicenters of the micromobility frontier and received national news coverage for its relatively lofty number of

scooter-related deaths, perhaps leading some to conclude Atlanta was a unique example. To that point, the data analyzed in the study leaves a multitude of questions unanswered. For instance, it is not known how micromobility was depicted in news media coverage in other locations that experienced similar rapid deployments of devices. Relatedly, the current study does not provide an assessment of how regulations differ from one city to the next, or what the impacts of those regulations are. An objective evaluation of the risk or harm done by scooters is not offered, either. The lack of these points in the study data prevent broader implications from being drawn. While Atlanta's circumstances surrounding and response to micromobility may seem extraordinary at first glance, it is possible that Atlanta's story may be a shared story with many of the municipalities that faced similar challenges. Additional research is needed to shed light on these inquiries.

Recommendations for Future Research

Future research may be informed by the current study. Theoretically, scholars of the Blackian framework benefit from a different application of its propositions. Since it is typically applied quantitatively, the nuance involved in the proposed relationships is not always clear. The current study offers the qualitative insight that news media may not be an exceptionally reliable way of assessing collective perception of people and concepts. Future research wishing to evaluate how perceptions of such subjects in qualitative data might help predict the mobilization of law may find that social media rather than mass media is better suited to filling that role. This is due to the potential for it to contain data that is more representative of public opinion. Additionally, if researchers are wishing to temporally test a causal relationship of how conceptual depictions in qualitative data might influence outcomes, social media might also be considered a better source of data for facilitating the argument that its content works to form

opinions and is not simply a representation of them. This is something that presented something of a quandary throughout the current study.

The current study also provides some insight for conducting future inquiries of regulation through case study design. It is critical for researchers hoping to find explanations for the formulation of certain policies—especially in how those events might relate to a potential alternative outcome, such as presented here—to recognize the necessity of a multi-faceted approach. Had the current study relied solely on any one source of data and any one approach to finding potential explanations for scooter policy, it would have fallen short of presenting a balanced collection of those explanations. Only by considering multiple sources of data and by seeking to understand the interconnectedness of potential explanations can one arrive at something resembling a satisfying conclusion. Critically, given the noteworthy conclusion that the Blackian framework is most usefully applied in cases involving directly competing or, at least, directly comparable entities, future attempts to study cases of regulation should only rely on Blackian theory for insight if those criteria can be met. One example of this might include cases in which the advent of novel technologies result in the regulation of other long-standing or more permanently established technologies, in which the former can be hypothesized to have possibly caused the latter.

Lastly, future endeavors to study the regulation of micromobility regulation should consider a multi-city approach to ascertain where this is overlap between the official response to micromobility across different municipalities, and how each of the cities' situations and responses were unique. Specifically, a comparative assessment of the regulations including the motivations for drafting them and the consequences of their implementation would be especially informative. Given that the current case study is only focused on the regulatory process in

Atlanta, further and different methods are required to fully understand the interactive formulation and implementation of micromobility regulations nationally and globally. Examples of potential useful examinations include a multi-location narrative analysis for a more comprehensive temporal appreciation of the events as they transpired, statistical investigations of the impacts of certain portions of the regulations—such as comparative analyses of injuries and deaths per miles ridden—and an appraisal of how cities' geography and infrastructure may have influenced regulatory decisions and/or contributed to certain subsequent outcomes.

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Vita

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