

SPECIAL ISSUE: Exploring Spatial Justice in times of disruptions

Invoking spatial justice in urban mobility in Nairobi: A commuter's perspective

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Abstract

Justice in relation to mobility is invoked and performed in various ways. This is based on the premise that space not only contains resources that can be distributed but also consists of individuals who are highly mobile within that space, and whose perceptions play a pivotal role in shaping the concept of justice in relation to mobility. Mobility is an enabler for access to resources and opportunities that are spatially dispersed. However, in Nairobi, the injustices prevalent in the mobility landscape enable access for some users while restricting it for others. This presents a notable way in which justice in relation to urban mobility unfolds. Through sixty-five in-depth interviews with commuters in Nairobi, this research reveals that individuals' everyday experiences not only present a multifaceted connection between justice and mobility but also shape which specific facet of justice takes precedence in one's consciousness. Notably, affordability of public transit, police misconduct, safety of non-motorized users, neglect of traffic regulations and ensuing impunity are some of the prominent ways in which injustices in mobility are made manifest. Furthermore, the unclear laws and regulations that govern road use sustain a system riddled with uncertainties and injustices. Promoting transparency, creating platforms for citizen engagement, integrating technology in traffic management system, fostering a culture of accountability, and enhancing public awareness of regulations and mobility rights through comprehensive civic education represent some of the interventions and strategies that can be invoked to redress the injustices prevalent in Nairobi's mobility landscape.

Keywords

spatial justice, urban mobility, user perspectives, Nairobi

Introduction

No mobility for us without us.

This phrase draws inspiration from the broader slogan, “Nothing About Us Without Us”, which has been an acclamation for disability advocacy and inclusion. “No mobility for us without us” is introduced in this research to specifically highlight the need for inclusivity and active participation of city inhabitants in shaping urban mobility systems that meet their needs.

The exclusion of users from planning and execution of mobility projects has far reaching implications on the livelihoods of the users as well as the accountability of relevant stakeholders, as illustrated in Edward Soja’s book “Seeking Spatial Justice” (2013). The book highlights a legal case involving the Los Angeles Metropolitan Transit Authority and the Bus riders Union of Los Angeles. Over several decades, the bus riders, who primarily consisted of poor and racial minorities, experienced discrimination and limited access to essential services and opportunities due to inadequate bus services. Part of the reason for this situation were the conflicting views on equity between the transit service providers and the bus riders. According to the transit authority, equity translated to equal distribution of public transit buses across all districts. This understanding of equity, however, failed to address the needs of the bus riders as it overlooked the heterogeneity of space and the reality that services and opportunities cluster in some areas more than others. Hence, vital destinations that were crucial for the livelihoods of the poor bus riders remained inaccessible by bus. This specific instance illustrates the adverse effects on the wellbeing of commuters, as relevant stakeholders, when their requirements are overlooked in the provision of services intended to cater directly to their needs. It also emphasizes that decisions regarding mobility should involve the people who directly benefit from or are affected by those decisions.

With the *Just City* concept, Susan Fainstein (2010) argues that citizen engagement and democracy are central to the development of equitable outcomes in the city. She advocates for participatory approaches that include and consider the voices and needs of the disadvantaged and affected groups in decision-making process for fairer outcomes. Placed in the context of urban mobility, the involvement of users/commuters as key actors in shaping processes and decisions for equitable mobility systems ideally advances the concept of justice in the city. Advancing spatial justice in urban mobility, therefore, is not solely dependent on the distribution of spatial or material resources, but also the efforts towards including the perspectives of those who are directly affected in the decision-making processes.

The concept of just mobility is often shaped by scholarly viewpoints, providing suggestions and interventions to develop and execute a just mobility landscape (Cook and Butz, 2018; Golub and Martens, 2014; Martens et.al., 2012, Martens, 2016; Nyamai and Schramm, 2022; Nyamai, 2022; Pereira et.al., 2017; Sheller, 2018). When seeking stakeholder

participation in mobility projects, the notion of justice is typically predefined. Stakeholder involvement, if it occurs, tends to involve users in contributing to the design of projects with a predetermined definition of justice or their participation becomes a formal/legal requirement prior to the project implementation (cf. Omenya, 2020). Rarely are the perspectives of users obtained at the onset, regarding their perception of justice or their vision of an ideal just mobility system.

This study therefore aims to discuss justice in mobility, not only from scholarly viewpoints but from the viewpoints of the users themselves, as important stakeholders in the advancement of justice in urban mobility. Understanding how individuals perceive justice on their own terms is essential for advancing a just mobility system for various reasons. First, these perspectives potentially unveil diverse interpretations of justice, which can serve to strengthen the linkage between justice and urban mobility. Second, the varied perspectives on justice held by urban commuters can offer a deeper comprehension of the mobility needs and experiences among different user groups. This knowledge can be instrumental in developing comprehensive and inclusive strategies to address injustices within urban mobility systems. Third, this approach has the potential to contribute to a broader understanding of epistemic justice, in both scholarly and societal discourses, particularly within the context of a southern city.

This research highlights key findings regarding the multifaceted dimensions of justice that are reflected through the lived experiences of individuals in Nairobi, Kenya. It also points out the different ways in which commuters associate justice with urban mobility in the city.

The subsequent sections present a theoretical review of justice and its application in mobility and an overview of the methodological approach used to explore the different perspectives on justice in Nairobi. The article concludes by discussing potential interventions that could foster justice within Nairobi's urban mobility landscape while integrating the views of the commuters.

Justice in an urban context

Justice as a concept, idea, theory, experience or as depicted in other iterations continues to be explored both in scholarly circles as well as in political discourses of urban development, governance, and various socio-cultural constellations. This has led to the emergence of various ontologies of justice. Different societies, cultures, histories, political contexts, academic disciplines and philosophical perspectives have developed their own understandings of justice that often overlap and intersect with each other.

One frequently made distinction in the theorization of social justice in scholarly circles is between distributive and procedural justice (Marcuse, 2009; Pereira et.al., 2017; Reisch, 2002; Soja, 2009). Distributive justice addresses fairness in the allocation of resources, rights or valued goods, encompassing both benefits and disadvantages, and taking into account the

different impacts these allocations have on individuals. It advocates for resource distribution in a manner that ensures the least advantaged members of society experience progressive improvements in their livelihoods (Harvey, 2002; Rawls, 1971; Soja, 2009). Procedural justice addresses the way structures in society shape possibilities, responsibilities and duties for various actors and those who benefit from these structures. It argues that the transparency of processes by which decisions are made, and rules are enforced within a system is important, regardless of the outcome (Marcuse, 2009). These ontologies are interrelated as the fairness of the procedures and decision-making processes are used to determine equity in how resources should be distributed. Several other ontologies have emerged, among them reparative justice (Williams and Steel, 2023), socio-ecological justice (Yaka, 2019), spatial justice (Soja, 2013), food justice (Cadieux and Slocum, 2015), intersectional justice (Rice et.al., 2019). The shared objective of these diverse categories is promoting the equitable distribution of resources and opportunities, focussing on addressing the needs of the most vulnerable groups.

Spatial justice is an ontology that is of particular interest for this research as it localizes social justice and gives it geographical relevance. Soja (2009) explains that spatial justice does not replace other forms of justice but is a concept that emphasizes the spatial perspective of justice, which is crucial as uneven geographical development leads to differences in social processes that inevitably produce inequalities. Within such differences, competing and co-existing visions and ideals emerge, with different actors holding power and negotiating for processes that might lead to equitable or inequitable outcomes (Marx et al., 2022). Continuous spatial appropriation and resistance of affected groups in the production of unjust urban spaces represents the manifestation of spatial justice in cities (Dikeç, 2009; Soja, 2013). Spatial justice is therefore an outcome of actions, interactions and mobilities within space and the space itself, a manifestation and permanence of the dynamics that produce and reproduce injustices (Dikeç, 2009). In this article, the concept of spatial justice is important to inform the dynamics in the mobility landscape that produce and sustain spatial injustices as expressed by the lived experiences of city dwellers.

Justice in relation to urban mobility advocates for the prioritization of the mobility needs of the most vulnerable, especially those with limited mobility options such as the poor and those with disabilities (Dong, 2018; Nyamai and Schramm, 2022; Pereira et.al, 2017; Sheller, 2018). This approach entails providing sufficient resources, including material, spatial, infrastructural and financial resources, to ensure equitable access to transportation (Martens, 2016). The concept of the just city, as proposed by Fainstein (2010), holds significant value and can be partially applied to African cities especially with regard to stakeholder participation in decision-making processes. However, it is important to understand how the citizens themselves perceive justice, how they directly link this understanding with their daily mobilities and their ideals for a just mobility system.

Urban mobility in Nairobi and the application of justice

Nearly half of Nairobi's commuter population relies on active mobility, primarily walking, as their main mode of travel (Odhiambo, 2021) for trips to school, work, shopping and journeys back home (County Nairobi, 2014). This prevalence of walking is largely influenced by unaffordability of public transit and paratransit options (Nyamai, 2022). Paratransit, commonly known as *matatu*¹, is the second most used mode of mobility in the city accounting for about one-third of daily trips (Kamau and Manga, 2020). The transit routes largely originate and terminate in the city centre and are limited to specific highways, which restrict circular mobility throughout the city (Nyamai and Schramm, 2022). Private car use accounts for about 13% of the commuter trips while cycling accounts for 1% (Odhiambo, 2021).

Similar to many other southern cities in Africa, Nairobi faces an imbalance that heavily favours the promotion of motorized mobility over non-motorized modes despite the ubiquity of active travel (Khayesi et al., 2010). This can be traced back to the historical growth of the city, which prioritized motorized mobility and restricted the use of non-motorized modes (Nyamai, 2022). The historical path dependency continues to influence contemporary urban mobility in the city. Presently, equity is not adequately integrated into the city's overall infrastructure planning and policy development (Mitullah & Opiyo, 2016). A small fraction of the annual transport budget is allocated to improving non-motorized modes of transport compared to motorized modes. This has significant implications for the majority who use non-motorized mode as they are exposed to higher risks of road crashes due to inadequate infrastructure (Nyamai and Schramm, 2022).

A study on the application of social justice in public transport highlights injustices that emanate from the historical development of public transport in the city (Kamau and Manga, 2020). They argue that availability, accessibility, safety and affordability are among some of the critical pillars for a socially just public transport in a Kenyan context. Their findings reveal that the current public transport provision falls short of meeting these pillars, hindering the realization of a socially just public transport system. Some of these issues, particularly affordability, emerge as significant contributors to injustices in urban mobility in Nairobi as discussed in the following sections.

Research Methodology

This study has applied a qualitative approach to explore perceptions of justice among Nairobi's urban commuters and how they relate justice with urban mobility. A total of 70 interviews were conducted between October and December 2021. Only 65 interviews were ultimately utilized in the analysis and reporting. The decision to exclude the remaining five interviews was primarily due to issues related to recording quality and the inadequacy of information

¹ Paratransit in Nairobi is provided by private entities operating minivans and buses that are commonly known as *matatu*. The words *matatu* and *paratransit* and at times *public transport* (with reference to the respondents' views) are used interchangeably in this research.

gathered during these interviews. Of the 65 interviewees, the majority were private car users and public transit users as shown in Table 1. The views expressed in this research are therefore largely the views of motorized users, however, the views of non-motorized users are also included in the study.

Participants were selected using convenience and snowball sampling methods. An initial selection of the respondents was based on the city's inhabitants who were willing to participate in the interviews. Afterwards, each participant was asked to recommend one or two other participants. Most of the respondents were aged below 35 years. This is not surprising as more than 75% of Nairobi's inhabitants are younger than 35, as documented in the 2019 National population Census. There was also a higher male than female participation.

Table 1: Respondents' primary mode of transport (n = 65)

Transport mode	Number	Percentage
Private car users	31	47%
Public transit users	20	30%
Pedestrians	5	7%
Cyclists	3	5%
Train riders	3	5%
Taxi riders	2	3%
Motorcyclists	2	3%

To be eligible to participate in the study, respondents had to be residents of Nairobi who commuted within the city, at least three to four days a week. Taking into consideration the regular use of multiple modes of transport, the respondents were asked to indicate their primary mode of mobility for at least 80% of their journeys. Notably, the interviews were conducted amidst the uncertainties of the COVID-19 pandemic, leading to some respondents experiencing changes in their mobility behaviour during the interview process. The interviews took into account the mode of mobility used at the time of the interview.

The interview was divided into three different sections. The first section asked general questions about age, occupation and social status to obtain a profile of the respondents. The second section addressed daily mobility patterns of the respondents while the third section focussed on justice and its association with urban mobility. The questions were asked in a way that allowed for the respondents to voice their own perspective on justice.

Table 2: Interview questions

Section	Question no.	Question
Section 1: General questions	1	How old are you?
	2	What is your current occupation?
	3	Do you have a family of your own?
Section 2: Mobility	4	Do you commute on a regular basis?
	5	What would you say is your main reason for commuting?
	6	What means of mobility do you mainly use when commuting for your full journey or 80% of the journey?
	7	Please give an account of a typical working day from when you leave home to when you return.
	8	In your own words, how would you define justice?
Section 3: Justice	9	Is there any particular experience that has led to this definition?
	10	How do you associate your definition of justice with mobility in Nairobi?
	11	What, if any, injustices have you experienced in your day-to-day movement within the city?
	12	Are there some commuters, who in your view, experience more injustices in their daily mobility than others?
	13	Who do you think should be responsible for ensuring a just mobility system in Nairobi?
	14	Do you think you have the capacity to contribute to a just mobility system? How so?
	15	Do you think there is hope for Nairobi to achieve a just mobility system?
	16	In your ideal world, what would just mobility look like?

This article focusses specifically on discussing the questions about justice and its relation to urban mobility (Section 3). The other sections are used to complement the respondents' perspectives, considering factors such as age and mode of mobility used. Questions 11 to 14 were designed to explore how each participant perceived justice and how they associated this understanding with their daily travels. The survey also delved into the respondents' perceptions of the essential elements required to attain an equitable mobility system. These insights were gathered through questions 15 and 16.

The research carried out qualitative document analysis using MAXQDA software. Each question was coded and analysed separately. The analysis started by looking for common patterns or differences in how the respondents' defined justice, and proceeded to examining how justice is connected to urban mobility. The responses were then juxtaposed with the

broader concepts of justice as discussed earlier in this article. This allowed for the assessment of the variation between individuals' personal justice perspectives and the broader epistemic justice. The research also evaluated the perspectives of justice concerning urban mobility and the suggested interventions by the commuters in addressing the inherent injustices in the mobility landscape.

The findings of this research do not reflect the views of all Nairobi's commuters. However, they provide a starting point to identifying and addressing injustices in Nairobi's urban mobility system. The perspectives collected in the study represent important points from which efforts towards achieving a more equitable mobility system can begin.

Research findings and discussion

Perceptions of justice among commuters

To be able to understand how the commuters relate justice with urban mobility, it was important to first understand their perceptions of justice generally. Two questions were of importance: How do respondents perceive justice in their own terms? How do their perceptions differ from the broader epistemic justice?

The respondents' perception of justice was primarily shaped by personal experiences of encountering what they perceived as unfair treatment or observing instances where justice was not upheld.

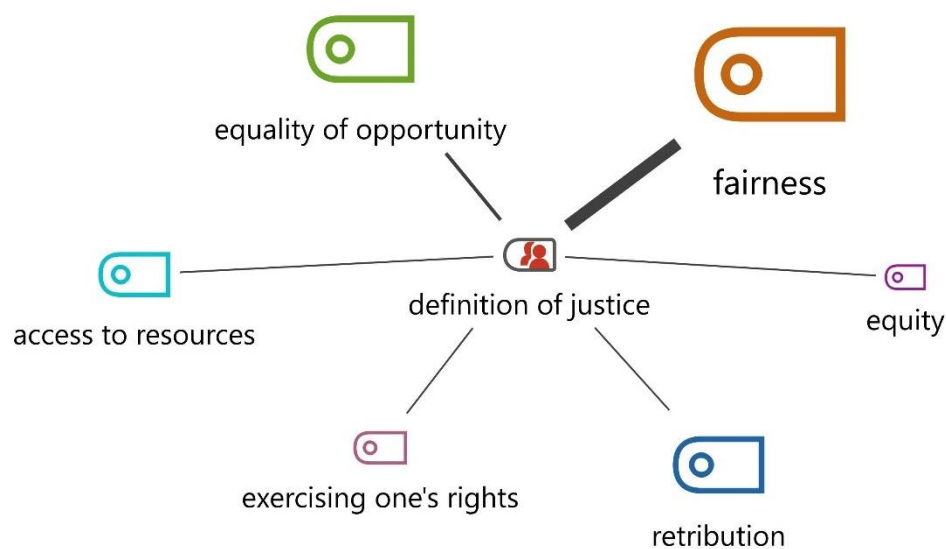


Figure 1: Justice as perceived by Nairobi's commuters.

Note: The thickness of the line and the size of the icon represents the frequency of the responses.

As shown in Figure 1, justice is perceived as a holistic concept that encompasses various dimensions. It is expressed as a complex amalgamation and interplay of fairness, retribution, equality of opportunity, access to resources, equity and the opportunity to exercise individual and collective rights. The majority of the respondents, approximately two-thirds, defined

justice as fairness. This conception of justice revolves around the notion of individuals receiving what they rightfully deserve. Abdul², a 45-year-old male respondent articulated this perspective by stating,

To me, justice is fairness. You fairly get what is yours and I fairly get what is mine.

Belinda, a 33-year-old female respondent echoed a similar sentiment remarking,

Justice should be fair for everyone. Everybody feels that they have gotten their fair share of whatever it is that is in question.

Kiptoo, a 21-year-old male respondent also characterized justice as fairness explaining,

Justice is an act of fairness given to people who deserve it without favouritism or biasness.

This perspective was also expressed by Sarah, a 31-year-old female respondent,

Justice to me is getting what you deserve. And when you deserve it without any prejudice.

Collectively, these viewpoints underscore the paramount importance of fairness and impartiality as core components of justice.

Some respondents expressed the view that justice related to equitable access to shared resources. Daudi, a 56-year-old male respondent articulated this perspective saying,

The society is structured in a manner that people are not likely to be equal in any way. But access to common services, say, access to public transport, access to health care, access to government services, should be fair.

This definition of justice was closely tied to the belief in the equality of opportunity and the capacity to exercise one's rights without encountering discrimination or bias. Fali, a 34-year-old male respondent emphasized,

Justice has to be accessible. That means if a disadvantaged person in society wants to seek justice and a rich person wants to seek justice, it is afforded to both of them at the same level, so, it doesn't favour one or the other.

² Pseudonyms have been used throughout the article when citing the interviewees' responses.

These perspectives were strongly influenced by personal experiences where respondents felt they had been treated unfairly. As Evira, a 51-year-old female respondent put it,

Justice is not infringing on my rights. Everyone should have access to health services, for example, the COVID vaccination services provided by the Ministry of Health should be accessible to everyone without any favouritism.

These responses emphasize the notion that justice is intricately connected to equitable access to essential resources, opportunities and services.

In a just society, individuals should ideally receive equitable and impartial treatment, regardless of their background, capabilities, wealth or social standing. This aligns with the scholarly perspective of justice as fairness initially introduced by John Rawls (1971) and further elaborated by Sen (2009). The viewpoint of justice as fairness was also shared by certain respondents in this study who stressed the importance of impartiality in the dispensation of justice. As expressed by Gloria, a 34-year-old female respondent,

Justice is something that is judged and fairly done for everyone despite your age, your race or social status.

For other respondents, justice was associated with holding individuals accountable for their actions.

Justice means one get what one deserves. And wrong is punished and right is rewarded. Yes, I think that's what justice means, to me.

These varying but interconnected viewpoints underline the significance of fairness and accountability as integral components of justice, resonating with both scholarly perspectives and the personal beliefs of the participants.

The multifaceted notion of justice as observed across various demographical differences such as age and gender is reflected through the lived experiences of individuals. The understanding of justice in its various forms, including fairness, retribution, equality of opportunity, access to resources or exercising one's own rights, suggests that the fundamental principles of justice as applied in practical terms, closely align with the universal scholarly perspective on justice.

The influence of everyday encounters, however, shape the specific aspects of justice that take precedence in an individual's perception. This implies that justice is not solely an abstract or theoretical concept but a practical lived experience that is profoundly influenced by social, cultural and economic contexts in which individuals find themselves. In this sense, the everyday encounters of individuals play a pivotal role in determining their personal

emphasis on various dimensions of justice, whether it pertains to fairness, retribution, equality of opportunity or other aspects. This understanding aligns with Amartya Sen's Idea of Justice (2009). In his view, what we can observe and understand is often limited by our perspective or position. Our observations and inferences are influenced by where we are standing in relation to the things we are observing. This can impact our beliefs, understanding, and decision-making. Our position or viewpoint, therefore, plays a significant role in shaping our knowledge and practical reasoning, and this concept is relevant to epistemology.

This study further explored the association of justice with urban mobility guided by the respondents' definition of justice. Two key questions were paramount in gaining a comprehensive understanding of the relationship between justice and mobility: How do commuters relate their understanding of justice to mobility in Nairobi? What is their vision of an ideal and just mobility system?

How do commuters associate their definition of justice with mobility in Nairobi?

Initially, establishing a direct link between justice and urban mobility posed a challenge for most of the respondents. However, many were able to establish this connection with justice when they contemplated on the injustices they encountered or observed during their daily commutes. The association of justice with urban mobility was articulated through several interconnected factors (Figure 2). This section explores the four primary ways in which respondents drew a connection between justice and mobility.

Unaffordability

A significant injustice, as perceived by most of the respondents revolves around the unaffordability of paratransit services. Paratransit, as discussed previously, constitutes a substantial portion, approximately one third of the total trips in Nairobi. It operates under the purview of private individuals who offer public transportation services. While the government partially regulates the paratransit sector through registration of vehicles and route designation, the pricing of transportation fares is predominantly influenced by market dynamics and the decisions made by paratransit operators. The substantial and unpredictable fluctuations in the fare costs are viewed as exploitative and are closely associated with perceptions of injustice among commuters.

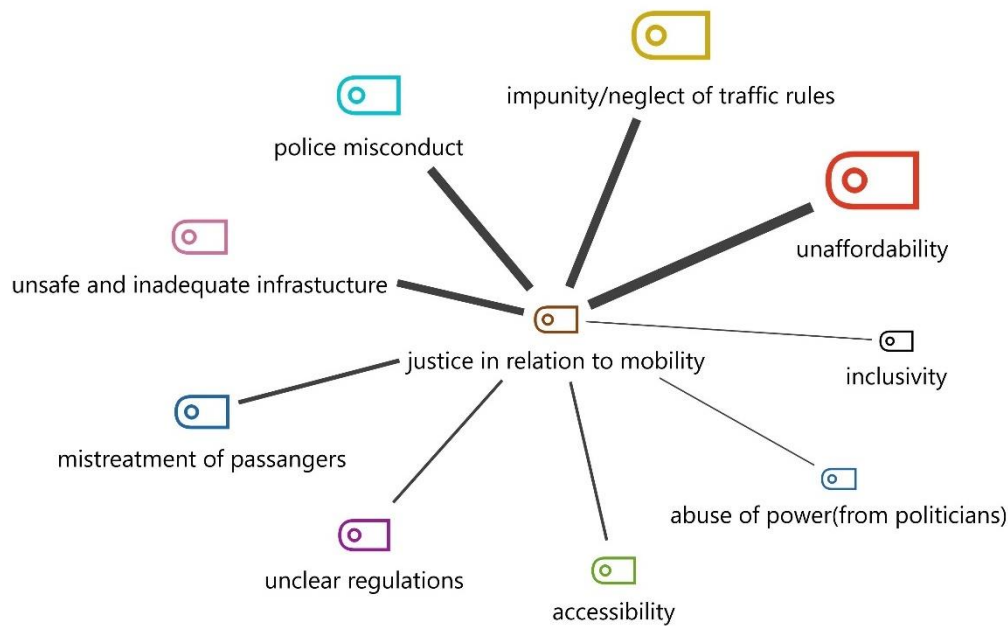


Figure 2: Association of justice with urban mobility in Nairobi.

Note: The thickness of the line and the size of the icon represents the frequency of the responses.

In Salamatu's experience, a slight change of weather can cause a dramatic change of fares.

The other day, I entered a matatu that was charging 50 shillings to Langata. It suddenly started drizzling and as soon as the first few droplets hit the ground, the fare went up by 100 shillings.

This experience was also shared by Regan,

the bus fare changes when you're not expecting. You've been used to paying a fixed amount from point A to B but because of some other reasons which are unexpected, the matatu conductor just decided the bus fare has gone up. And sometimes they take advantage when the situation is not favourable, especially when it rains or when there is a lot of traffic. So that's quite unfair.

This is a prevalent issue that creates obstacles for affordable and reliable transportation options for those with limited financial means. In many instances, commuters wait for more than one hour for the fares to return to an affordable rate, limiting the areas that are accessible within a specific time frame.

The cost of public transportation primarily accounts for the substantial pedestrian population in Nairobi, as many individuals cannot bear the high and fluctuating costs associated with paratransit. Anita, a pedestrian, described her daily struggle of walking due to unaffordability of public transit saying,

I mainly walk for more than an hour (one-way) daily. This is not something I have chosen for myself. My circumstances have forced me. I would not say that I enjoy it, but I have gotten used to it! Sometimes I would like to get somewhere faster, but I am not able to pay for it. You know that 20 shillings (~\$20 cents) can take you for a number of stops but sometimes even the 20 shillings for fare is hard to come by. I walk during the week, then save some money to be able to afford a matatu to church on Sundays because my church is far.

For Wekesa, government intervention in the regulation of fares would make it affordable for him to use paratransit,

If the government could control the fares, I would at least be able to use public transport twice a week to the places that are a bit far for me. Now, I walk every day for part of my journey then when I can afford it, I take a matatu when I am somehow close to home because I cannot afford the high cost for the entire trip.

These accounts highlight the significant financial burden that high and fluctuating paratransit fares place on individuals. Public transport is a fundamental component of urban life as it provides essential access to employment education, healthcare and other livelihood opportunities. When public transport become unaffordable, it restricts people's ability to access these vital resources and participate fully in urban life. This restriction is perceived as unjust, both by those with limited financial means and even those who can afford it.

Police misconduct

A significant proportion of the respondents, particularly those who use motorized vehicles such as private cars and paratransit, highlighted police misconduct as a major contributor to injustice within the mobility landscape. In this context, police misconduct encompasses inappropriate behaviour by law enforcement personnel including soliciting bribes and profiling based on various factors. Profiling, in particular, revolves around the type of vehicle being used as pointed out by Hawi,

Police tend to be biased based on the model or type of car. If it's very big, then you probably won't have any issues. Maybe they'll assume it might be someone who has high political influence. But if it's just a normal car, then you'll just face issues similar to public transport operators.

Chengo shared a similar observation stating,

Most of the matatu operators are arrested for a simple mistake but if someone with an SUV (Sport Utility Vehicle) does the same mistake, they would not be penalized in the same manner.

These comments emphasize how partiality in law enforcement contributes to perceptions of injustice.

The issue of police misconduct in Kenya is pervasive and has been the subject of recent research by Onyango (2022). The study highlights the prevalence of bribery, often characterized by coded language which creates a complex interaction between traffic policemen and motorists, resulting in mutually beneficial gains. Some respondents recounted witnessing such transactions between traffic police officers and paratransit operators, as mentioned by Chacha, a paratransit user who explained,

I have even seen it. You see that matatu conductor come out with something and they exchange it [with the police officer].

The possibility of paying bribes sets off a chain of consequences where injustices affect both paratransit operators and users alike. According to Jane, another paratransit user,

The public transport operators have to pay police every day. As a consequence, it increases the amount of fare that I pay to get to town, because they are businessmen, and they have to account for that lost money in one way or another.

A similar finding emerged from the study on socially just transportation in Kenya (Kamau and Manga, 2020) which revealed that the expenses incurred due to bribery among the paratransit operators are ultimately shifted to the end users.

The culture of bribery has given rise to a mutually reinforcing cycle in which the police anticipate motorists to offer bribes for traffic violations, while motorists perceive it as a convenient means to avoid lengthy court proceedings. As Musa, a private car user, candidly admitted,

the problem is that we have a lot of hurdles. The traffic officer wants something, so you decide to break the rule and bribe them. If I have an extra 500 Shillings (~\$5) when they ask me, I will pay them otherwise, I will end up wasting my whole day.

Elias, another private car user, shared a similar sentiment, stating,

me in fact I hate to be caught in the morning. Because that means they take you then go keep you somewhere. And then you go to court in the afternoon. So, my time will be wasted.

Bribing has become a perverse issue viewed as a means to avoid inconvenience. However, this behaviour is also exacerbated by the lack of clarity in traffic regulations as noted by Femi,

I bribe my way out of a traffic ticket because I don't know what the policeman will do if he takes me to court. If I know I've overlapped in traffic, and I will be taken to court for overlapping, and I will pay the fine for overlapping, then that's a system whereby I know my offense. But we are in a system whereby I don't know what the policeman is going to charge me with, and I don't know what I will pay for.

Her rationale for payment of bribes for traffic violations underscores the lack of transparency in traffic penalties, revealing an underlying issue in the traffic regulations.

The Kenya Traffic Act lists traffic offenses, however, these regulations, as revealed in this research, are often vague and lack clarity when it comes to specifying the consequences for certain offenses. For example, Part 9, Section 86 on the offences of reckless driving states:

Any person who on any road or in any public place drives any vehicle, other than a motor vehicle, recklessly or at a speed or in a manner which is dangerous to the public, having regard to all the circumstances of the case, including the nature, condition and use of the road and the amount of traffic which is actually at the time or which might reasonably be expected to be on the road, shall be guilty of an offence and liable to a fine not exceeding one hundred thousand shillings or to imprisonment for a term not exceeding two years or to both (Kenya Traffic Act CAP 403)

The statement initially outlines an offense related to reckless driving for any vehicle other than a motor vehicle on the road. However, in the context of Nairobi, where motor vehicles predominantly occupy the road space, it raises the question of which specific non-motor vehicles are typically encountered on the roads, aside from cyclists who generally travel at considerably lower speeds.

Additionally, the lack of clarity stems from the vague and subjective language used in defining the offense. Terms such as “recklessly”, “dangerous to the public” and “including the nature, condition, and use of the road”, are open to interpretation and may vary based on individual perspectives. Consequently, it becomes challenging for both motorists and traffic police to establish the precise boundaries for such an offense, potentially leading to

inconsistent enforcement and exploitation of loopholes where acts of bribery persist and flourish.

The prevalent culture of bribery has facilitated efforts to circumvent bureaucratic hurdles and prevent time wastage. This has given rise to impunity and neglect of traffic regulations, which many respondents associated with injustices in the mobility landscape.

Impunity/neglect of traffic regulations

According to the respondents, paratransit operators are identified as the primary perpetrators when it comes to neglecting traffic regulations and managing to evade consequences. While this research did not get to interview paratransit operators, most of the views were expressed by paratransit users and private car users who have witnessed the acts of bribery. This prevalent culture has resulted in acts of impunity and the disregard of traffic rules and regulations with motorists expecting that they can essentially buy their way out of fines or legal consequences. Amina, a public transport user, highlighted this dynamic by stating,

Sometimes the matatu drivers are on the wrong, but also I think they can take advantage of that because they know the end game is that the police would accept a bribe.

David, a private car user, echoed this sentiment stating,

first of all the matatus don't follow rules. Most of the time, they get away because they're able to buy their way out of traffic offences. There are so many unroadworthy vehicles, but they still operate, they break the law, and they get away with it.

Esther, another private car user, shared a similar observation:

Matatus do not obey traffic. They drive recklessly and carry beyond their capacity. They drop off and pick up passengers in undesignated areas and I always have to take caution whenever a matatu is in front of me.

These accounts collectively illustrate the perception that paratransit operators often flout traffic regulations and operate with a sense of impunity due to their ability to offer bribes.

This erosion of the rule of law primarily due to acts of bribery within the transportation system has far-reaching consequences for all the road users. The fluctuating fares that paratransit commuters experience, as mentioned in the previous section, create a financial burden for the commuting public.

Unsafe and inadequate infrastructure

Unsafe and inadequate infrastructure emerged as another significant finding concerning the link between mobility and justice. Respondents identified pedestrians and cyclists as the most vulnerable road users. Their vulnerability primarily stems from disparities in spatial infrastructure distribution. The existing infrastructure not only falls short in accommodating the high number of pedestrians but is also frequently appropriated for various other uses. These include access routes for motorcyclists and at times as pick-up and drop-off locations for paratransit operators. Consequently, pedestrians and cyclists often find themselves sharing the road with fast-moving motorists and are hence exposed to heightened risks while navigating the roads.

Several instances reveal paratransit and motorcyclists, locally referred to as *bodaboda*, encroaching onto pedestrian sidewalks and cycling lanes, compromising the safety of these vulnerable users. As outlined by two pedestrians, Tete and Ngechu,

In Nairobi, I think it's better to walk sometimes because of traffic. But then again, there are a lot of issues of pedestrian and vehicular conflict because there are no walkways. Most of the places don't have walkways and where they have put walkways, they are not ours. They are supposed to be ours but there is a lot of conflict with bodabodas, so it makes it so hard to walk.

I decided to start walking because I was trying to lose a few pounds. There are a lot of bodabodas on my route to work and the probability of you being knocked by a motorbike is very high even though you walk on pedestrian paths.

Non-compliance with traffic regulations frequently occurs even when pedestrians are in situations where they should have the right of way. One pedestrian, Zari, vividly expressed this issue:

Many times, you can be crossing the road, and you fear for your life yet you're on a zebra crossing. You don't know whether the driver will stop or not.

During the course of this research, observations were carried out on specific roads that register high foot traffic within a 3 km radius from the city centre. This investigation unveiled a concerning issue where certain pedestrian crossings were inadequately marked, not clearly visible and at times completely missing especially at road intersections. In many cases, drivers illustrated a lack of deterrence and failed to yield to pedestrians.

The tendency for drivers to rush through traffic, often neglecting pedestrians, can be attributed to several factors. Firstly, the absence of a holistic approach to road safety education that fails to emphasize consideration for pedestrian safety. Secondly, the frustrations arising

from traffic delays frequently compel drivers to resort to aggressive driving behaviour as they seek ways to navigate through congested roads quickly. As articulated by Mbako, a private car user,

When I'm trying to beat traffic, I'm not looking at the pedestrian who's trying to cross the road. I'll just be fast past a zebra crossing.

These factors compound the challenges in creating a safer and more equitable urban mobility landscape and in turn pose a safety risk among pedestrians leading to increased pedestrian crashes according to the National Transport and Safety Authority of Kenya (NTSA) accidents data.

What is the vision of an ideal and just mobility system?

The second part of this study on the linkage between mobility and justice asked respondents to envision an ideal and just mobility landscape. A recurring theme revolved around safety, civic education and prioritization of pedestrians' and cyclists' mobility needs.

Smart traffic technology

The integration of smart traffic technology, including automated traffic management systems is perceived as a way of improving traffic control and reducing the reliance on extensive human intervention. Sheila, a public transport user, stated,

We do not need police on the road trying to control traffic. We need information technology, technologies to make everything orderly you know.

This sentiment was echoed by Sadiq and Esther, two private car users who advocate for the installation of security cameras and automated system for penalties in traffic violations. They emphasized the importance of leveraging technology to create a more efficient and less human-dependent traffic management system.

In such an automated paradigm, the role of traffic police may arguably diminish particularly in routine traffic management tasks such as ensuring smooth flow at intersections and monitoring compliance with speed limits or traffic light signals. A central argument made by most of the respondents is that the reduction of traffic police involvement could help mitigate the police misconduct associated with bribery. Since smart technology systems are typically designed to operate based on predefined rules and clear algorithms, the subjective element in traffic enforcement would be significantly reduced. This argument is grounded on the notion that human interactions between traffic police and drivers often create opportunities for corrupt practices. Additionally, the inherent ambiguity in traffic regulations, coupled with discretionary authority vested in individual officers, leads to situations where

drivers feel compelled or incentivized to offer bribes as a means to evade fines or penalties. This shift from subjective human judgment to objective technology-driven enforcement holds the potential to minimize opportunities for bribery by providing an electronic record of traffic violations, thereby enhancing transparency and accountability in the enforcement process.

Nevertheless, the complete eradication of the role of traffic police is not without challenges and may give rise to concerns related to the employment of those currently involved in traffic enforcement. Moreover, the effective implementation of smart technology requires robust infrastructure and well-defined regulations. As such, while the integration of smart technology may offer promise in reducing police misconduct related to bribery, it requires thorough planning, regulatory frameworks, and an awareness of potential unintended consequences.

Affordable and efficient public transport

The emphasis on affordable and efficient public transport emerged as another key element of an ideal just mobility system. As expressed by Suleiman, a private vehicle user,

A just mobility system would be most importantly, regulation of fares for matatus. That is justice.

Wanjiru, another public transport user shared a similar view stating,

A just mobility system should be cost effective, you know, whatever time of the day you pay the same amount of money.

The high and fluctuating costs of paratransit pose a significant burden. The respondents' view on affordability, including those who use private vehicles, underscores the belief that public transport should not present a financial obstacle for any segment of the population. A just mobility system should ideally promote equity and inclusion, ensuring that everyone can afford and access reliable transportation options.

Efficiency in public transport is equally paramount. The interconnection between affordability and efficiency cannot be overlooked, as an efficient and cost-effective public transportation system can motivate more individuals to choose public transport over private vehicles. Many respondents, particularly those who use private vehicles emphasized that a scheduled and aesthetically pleasing bus system would ideally encourage them to use public transport more often especially given the rising cost of fuel that is presenting an economic burden. This shift can result in reduced congestion, lower carbon emissions, and an overall advancement of a just mobility landscape. This is however contingent on various factors, government commitment, deliberate investment in infrastructure to facilitate the seamless operation of public transport and the implementation of policies.

Overall, the findings from this research shed light on the numerous challenges prevalent in Nairobi's mobility landscape. The challenges have wide-ranging consequences that affect the daily lives of all city dwellers.

These issues encompass police misconduct that gives rise to impunity and neglect of traffic regulations, unaffordable public transportation, and unsafe and inadequate infrastructure for pedestrians and cyclists. In the current state of the mobility landscape, individuals across all socioeconomic backgrounds and choices of mobility mode are impacted. Private car users contend with traffic congestion, which leads to aggressive behaviour and lack of consideration for non-motorized users. Pedestrians and cyclists are exposed to risks of road crashes in sharing the road with motorists, due to inadequate infrastructure. Socioeconomic disparities emerge as some groups struggle to access affordable and reliable public transportation, while rampant police misconduct exacerbates the challenges within the entire mobility system.

Conclusion

This research has provided a nuanced exploration of the intricate relationship between justice and urban mobility in Nairobi, offering a unique perspective from the commuter's point of view. The concept of justice, with its multifaceted dimensions as reflected in the real-life experiences of individuals, provides profound insights from the perspective of mobility. Remarkably, the harmonious convergence between scholarly and public interpretations of justice, as observed in the context of Nairobi, suggests that the core principles of justice may not significantly differ between individuals in the global south and those in the global north, or even from the universal or scholarly perspective on justice. What distinguishes these perceptions is the influence of everyday interactions and experiences that shape which specific element of justice becomes prominent in one's consciousness. Justice, therefore, manifests as a practical, lived reality that is profoundly shaped by the social, cultural, and economic context in which individuals find themselves. This viewpoint underscores the importance of considering context and the real-life experiences of individuals when discussing and implementing justice-related policies and initiatives especially in the domain of urban mobility.

The distinctive mobility challenges encountered in Nairobi, such as unaffordability of paratransit, instances of police misconduct, impunity regarding traffic regulations, unsafe and inadequate infrastructure, and others, vary significantly from the challenges encountered by commuters in the case of the Los Angeles Metropolitan Transit mentioned in the introduction of this article. This emphasizes that the concept of justice in urban mobility is inherently dynamic and context specific.

Regarding the linkage between justice and urban mobility, four key factors have emerged from the narratives of the city's residents. First, unaffordable public transport stands

as a substantial barrier to justice in urban mobility. The high and fluctuating paratransit costs place a financial burden on the average commuter. This intensifies the economic disparities and hinders access to essential services and opportunities for many individuals, particularly those with limited financial means. Addressing this issue necessitates government intervention in either regulating fares while striking a balance between market-driven forces and the public interest or providing state-operated or state-managed public transport that is hitherto lacking.

The second key factor revolves around the pervasive issue of police misconduct and the culture of bribery, which hinders progress towards just mobility. Ambiguous regulations and legal uncertainties have created an environment where individuals resort to paying bribes as a convenient means to bypass bureaucratic obstacles and avoid time wastage. Respondents believe that implementing data-driven automated systems alongside clear traffic regulations that define offences and penalties could serve as interventions to effectively monitor and regulate traffic with efficiency and impartiality. This approach would ensure uniform treatment for all individuals, regardless of factors like social status, ethnicity, or personal connections, thereby reducing the opportunities of law enforcement officers to exploit their positions for financial gain or personal advantage.

The third significant factor is the prevalence of impunity in traffic regulations which is closely related to the issue of police misconduct. This connection is evident in the way violations often go unpunished, primarily because individuals can settle penalties with bribes. This culture of impunity empowers motorists to openly flout traffic rules, confident that they are unlikely to face consequences. As a result, road safety is compromised and the sense of injustice is exacerbated, particularly among vulnerable commuters. This behaviour generally promotes unsafe practices, contributing to a chaotic and hazardous mobility landscape.

Lastly, the absence of well-designed pedestrian pathways, dedicated cycling lanes, and other non-motorized facilities exacerbates the risks and inconveniences faced by those who rely on these modes of transport. In such an environment, injustices emerge, as these vulnerable road users face a compromised quality of life and are at an increased risk when sharing the road with motorized vehicles.

In the absence of robust enforcement and compliance with traffic regulations, the principles of fairness, safety, and accountability are compromised. The consequences are borne by individuals who adhere to the rules, as well as by the broader community, which faces heightened risks and inconveniences on the road. Addressing these challenges requires deliberate actions, including strengthening the enforcement of traffic regulations, fostering a culture of accountability, providing civic education through training of motorists on road safety as well as making the public aware of the regulations and their mobility rights.

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Conflict of interest

The author declares no conflict of interest.

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