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Vendor and pedestrian experiences of their 'right to the city' in street design and management in small urban centres in the Vhembe District, South Africa

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Research article

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Abstract

The demand for a spatial turn to enhance citizens' 'right to the city' is gaining more momentum in this era than previously. This is particularly evident within the South African urban space context. This article examines the vendor and pedestrian (street users) experiences of their 'right to the city' in street design and management in small urban centres in the Vhembe District of South Africa. The article adopted a case-study survey design and a mixed methods research approach. Data was collected by means of both key informant interviews with eight key experts in street design and management and a street intercept questionnaire survey administered to a total of 100 vendors and 400 pedestrians in the selected case study towns. Data analysis was done quantitatively through average users' satisfaction scores with a spatial quality and qualitatively through thematic analysis. Lefebvre's 'right to the city' theory was used to extract meaning from the research findings. The findings reveal that street users in all the towns of the study are dissatisfied with the spatial quality of safety, while accessibility was a challenge particularly in Thohoyandou Town. The findings reveal that economic, historical, and geographical differences affect street users' 'right to the city' experiences. Questions such as "Whose 'right to the city'?" and "Which 'right to the city'?" remain paradoxical. To create more spatially just streets, where vendors and pedestrians can enjoy their disparate 'right to the city' claims, users need to embrace the right to differences and municipalities in small urban centres need to continue to learn, experiment, and co-create urban space with the vendors and the pedestrians.

Keywords: The 'right to the city', spatial (in)justice, vendors and pedestrians, street design, street management, small urban centres

VERKOPER- EN VOETGANGERSERVARINGS VAN HUL 'REG OP DIE STAD' IN STRAATONTWERP EN -BESTUUR IN KLEIN STEDELIKE SENTRUMS IN DIE VHEMBE-DISTRIK, SUID-AFRIKA

Die eis vir 'n ruimtelike wending om burgers se 'reg op die stad' te versterk, kry meer momentum in hierdie era as voorheen. Dit is veral duidelik in die Suid-Afrikaanse stedelike ruimtekonteks. Hierdie artikel ondersoek die ervarings van verkopers en voetgangers (straatgebruikers) van hul 'reg op die stad' in straatontwerp en -bestuur in klein stedelike sentrums in die Vhembe-distrik van Suid-Afrika. Die artikel het 'n gevallestudie-opname-ontwerp en 'n gemengde metode-navorsingsbenadering gebruik. Data is ingesamel deur middel van sleutel-informant-onderhoude met agt sleutelkundiges in straatontwerp en -bestuur en 'n straatonderskepping-vraelysopname wat aan 'n totaal van 100 verkopers en 400 voetgangers in die geselekteerde gevallestudiedorpe geadministreer is. Data-analise is kwantitatief gedoen deur gemiddelde gebruikers se tevredenheidtellings met 'n ruimtelike kwaliteit en kwalitatief deur tematiese analise. Lefebvre se 'reg op die stad'-teorie is gebruik om betekenis uit die navorsingsbevindinge te onttrek. Die bevindinge toon dat straatgebruikers in al die dorpe ontevrede is met die ruimtelike kwaliteit van veiligheid, terwyl toeganklikheid veral in die Thohoyandou-dorp 'n uitdaging is. Die bevindinge toon dat ekonomiese, historiese en geografiese verskille straatgebruikers se 'reg tot die stad'-ervarings beïnvloed. Vrae soos "Wie se 'reg op die stad'?" en "Watter 'reg op die stad' bly dus paradoksaal. Om meer ruimtelik regverdige strate te skep waar verkopers en voetgangers hul uiteenlopende 'reg op die stad'-aansprake kan geniet, is dit nodig dat gebruikers die reg op verskille aangryp en munisipaliteite in klein stedelike sentrums moet voortgaan om te leer eksperimenteer en stedelike ruimte saam met die verkopers en voetgangers te skep.

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Sleutelwoorde: Die 'reg op die stad', klein stedelike sentrums, ruimtelike (on)geregtigheid, straatbestuur, straatontwerp, verkopers en voetgangers

LIPHILELO TSA BAREKISI LE LITAASO MABAPI LE 'TOKELO TSA BATHO LITOROPONG' MORALONG LE TSAMAISSONG EA LITERATA LITOROPONG TSE NYANE SETEREKENG SA VHEMBE, AFRIKA BOROA

Nakong ea joale ho feta pele, tlhokahalo ea phetoho ea libaka molemong oa ntlafatso ea litokelo tsa baahi ba litoropo e ntse e eketseha haholo. Sena se bonahala ka ho khetheha tikolohong ea litoropo tsa Afrika Boroa. Sengoliloeng sena se hlahloba liphilelo tsa barekisi le litaaso (basebelisi ba literata) mabapi le tokelo ea bona ea ho ea teropong, ho ikamahantsoe le meralo ea literata le taolo ea litoropo tse nyane Seterekeng sa Vhembe Afrika Boroa. Sengoliloeng se entsoe ka lipatlisiso 'moho le boithuto bo khethehileng ba libaka tse khethiloeng. Lintlha li ile tsa bokelloa ka lipuisano le litsebi tse robeli tse ka sehloohong tsa thero le tsamaiso ea literata. Ho boetse hoa etsoa liphuputso ka lethathamo la lipotso ka literata, tse fuoeng kakaretso ea barekisi ba 100 le batho ba 400 ba tsamaeang ka maoto litoropong tse khethiloeng tsa boithuto. Tlhahlobo e entsoe holima kakaretso ea lintlha tse bontshang khotsofalo ea basebelisi ba literata. Khotsofalo ena e entsoe ho ipapisitsoe le boleng ba sebaka. Khopolo ea Lefebvre ea 'tokelo tsa batho litoropong' e ile ea sebelisoa hobopa moelelo lipatlisisong tse entsoeng. Liphuputso li senola hore basebelisi ba literata litoropong tsohle tsa phuputso ha ba khotsofatsoe ke boleng ba tsona haholo holo mabapi le polokeho. Ka ho fetisisa toropong Thohoyandou, phepetso e ka sehlohong e bile ea bothata ba ho tsamaea literateng tsa toropo ena. Liphuputso li senola hore liphapang tsa moruo, tsa histori le tsa libaka li ama liphilelo tsa basebelisi ba literata 'tokelong ea litoropo. Lipotso tse kang "Ke tokelo batho bafeng litoropong?" le "tokelo efe ea batho litoropong?" li lula li sa hlaka. Ele ho theha literata ka toka, moo barekisi le litaaso li natefeloang ke lithloko tsa bona tse fapaneng tsa 'tokelo ea toropo,' basebelisi ba tlameha ho amohela liphapang tse teng lipakeng tsa bona, 'me bomasepala ba literopong tse nyane ba lokela ho tsoela pele ho ithuta, ho etsa liteko le ho theha litoropo ka kopanelo.

1. INTRODUCTION

Street spaces are an integral part of people's lives as they have the potential to offer multiple social, economic, environmental, and physical functions that can improve the quality of human settlements and people's livelihoods (Oranratmanee & Sachakul, 2014: 212; Deore & Lathia, 2019: 138; Mehta, 2019: 17; Tsoniyo, 2021: 1). Like elsewhere in the world, street spaces in the small urban centres of Vhembe District, South Africa, facilitate movement, meaning and meetings, and are thus sites for contestations and negotiations over the use of space by various users (Lynch, 1960: 47; Loukaitou-Sideris & Ehrenfeucht, 2009: 8; DHS, 2019: 96; Shaftoe, 2008: 12, 13; Bertolini, 2020: 734). Street space users are not homogeneous, but diverse (Mateo-Babiano, 2016: 109; Bivina & Parida, 2019: 4930). Street users thus have differential experiences of their 'right to the city' in the streets (Tsoniyo, 2021: 58).

The 'right to the city' can be loosely defined as the urban dwellers' ability to enjoy being able to use space and enjoy the benefits from the space (Lefebvre, 1968/1996: 157; Marcuse, 2009: 191). The 'right to the city' claims is a diverse portfolio of rights that users of street spaces require, including the right to safety, the right to access and the right to livelihoods, among other rights (Brown & Kristiansen, 2009: 19; Meneses-Reyes & Caballero-Juárez, 2014: 371; Middleton, 2018: 302). Closely related to this concept is the understanding of spatial justice. According to Marcuse (2012: 35), the 'right to the city' is founded on the moral claim of spatial justice and the right to public space. Adegeye and Coetzee (2019: 387) conceptualised spatial justice within the South African context as

[s]patial distribution of socially valued resources, such as education, employment, transport, health and housing in any society in such a way that everyone would have adequate access to them, with the disadvantaged of society being the first beneficiaries rather than the last.

The main principles of spatial justice that can be drawn from the above definition include fairness, access to resources, equity, and benefit to the disadvantaged or least advantaged groups (Soja, 2010: 20; Adegeye & Coetzee, 2019: 387-386). The design and management of street spaces should, therefore, ensure that the principles of spatial justice are met (Hartman & Prytherch, 2015: 26; Tsoniyo, 2021: 6). As such, disadvantaged groups of street users can enjoy or make claims to their 'right to the city'. This article argues that street design and management should always be informed by users' needs, so that produced street spatial qualities [these can either be just or unjust – also referred as spatial (in) justice] would enhance rather than suppress the users' experience of the 'right to the city' (Hartman & Prytherch, 2015: 27). To a greater extent, the existing street design and management practices in small urban centres such as street spatial qualities and implementation of street use regulation standards seem unfair and exclusionary of non-vehicular users such as vendors (street traders) and pedestrians (Deore & Lathia, 2019: 139; Bivina & Parida, 2019: 4930; Mehta, 2019: 16; Stratford, Waitt & Harada, 2020: 124; Tsoniyo, 2021: 42). This article views street traders and pedestrians as the least advantaged group of users of street spaces. They are currently not fully enjoying their 'right to the city' in small urban centres.

The creation of multi-functional pedestrian-friendly environs through the redesign and repurposing of public spaces usually translates to spatially just public spaces, where users enjoy their 'right to the city' (NACTO, 2016: 189; Williams, 2018: 158; Bertolini 2020: 5). For example, the street café culture, popularised

in European cities such as London and Paris, have led to an emergence of multicultural spaces of social encounters (Jones, Neal, Mohan, Connell, Cochrane & Bennett, 2015: 650). Wollongong in Australia was redesigned from a vehicle-oriented to a spatially just walkable city (Stratford *et al.*, 2020: 127). Pedestrianised streets in South Asian cities such as Melaka, Penang and Singapore attract tourists (Oranratmanee & Sachakul, 2014: 214). Street markets are a common phenomenon in cities in Thailand and China. They play a role in defining the social, cultural, and economic districts of the city (Oranratmanee & Sachakul, 2014: 214). Locally, the City of Johannesburg has successfully completed some inner-city renewal projects such as Constitution Hill, which was designed as a public space that keeps a strong sense of history and preserves the heritage (UN-Habitat, 2015: 58).

This article specifically aims to examine vendors' and pedestrians' perceptions of street space (sidewalks) spatial qualities that affect their 'right to the city' experience in the central business districts (CBDs) of selected small urban centres in Vhembe District. The study is topical within the South African context, as it foregrounds debates about small urban centres that not only are usually marginalised in street design and management discourses, but also characterise South African urban landscapes (Hoogendoorn & Visser, 2016: 95; Mashiri, Njenga, Chakwizira & Friedrich 2017:146). The question of the 'right to the city' and simultaneously spatial justice in street spaces within the South African context is in response to the call for a "spatial turn" that is being driven by post-apartheid progressive policy frameworks such as the Spatial Planning and Land-Use Management Act (SPLUMA) 16 of 2013 (Soja, 2010: 9; Mashiri *et al.*, 2017: 149).

Section 7 of SPLUMA explains why a spatial turn is necessary in South Africa, by outlining that there is a need to redress past spatial imbalances by improving land access

and use; including all persons in the development of Spatial Development Frameworks; creating flexible conditions for managing previously disadvantaged areas, and exercising discretion when considering land-use applications (South Africa, 2013: 18). These spatial justice intentions result in the socio-economic inclusion of disadvantaged communities, thus the attainment of the 'right to the city' claim for citizens. On a broader scale, the objective of this article aligns with sustainable development goals (SDGs), particularly goal number 11, which seeks "to make cities and human settlements inclusive, safe, resilient and sustainable" (UN, 2018: 8). The aim is to ensure that citizens enjoy their 'right to the city' through recognition of safe, accessible, and inclusive towns and cities that embrace the less advantaged groups of street space users.

2. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

In order to understand the 'right to the city' and spatial (in)justice, it is important to review the concepts and theory used in this article, namely street spaces and street space users, street design and management, as well as spatial qualities and Lefèbvre's 'right to the city' theory (1968).

2.1 Streets: Multi-functional spaces with a variety of users

The basic elements that make up streets are road carriageways (defined as the road width on that which a vehicle has no physical restriction) and the sidewalks (the key connecting points for non-vehicular street users) along them (Loukaitou-Sideris & Ehrenfeucht, 2009: 3; NACTO, 2016: 4; DHS, 2019: 96). As a central element forming the spatial framework of cities (Gehl, 2011: 14; Mehta & Bosson, 2021: 160; Bertolini, 2020: 735), street spaces also reflect a city's personality and impression (NACTO, 2016: 12). Streets can, therefore, be considered the basic

unit of urban space whereby people experience a city (Middleton 2018: 301). As public spaces, streets are sites where spatial (in)justices are apparent (Mehta, 2019: 17; Stratford *et al.*, 2020: 125). The phrase 'street spaces users' refers to people who utilise streets. However, they are regarded as a heterogeneous group (NACTO, 2016: 68; Bivina & Parida 2019: 4931; Bivina & Parida, 2019). Mateo-Babiano (2016: 109) defines street users by way of various social aspects (age, gender), mode of travel (pedestrians, cyclists, vehicular users), and the nature of their activities on the street (vendors, shoppers). They can also be categorised into users who use mainly the pavements or sidewalks (pedestrians and vendors), or non-vehicular users, and street users who mainly drive their vehicles on the carriageway (vehicular users). The way in which street spaces are used differs between these user types. Conflicts between different street users are thus inevitable in street spaces (Lefèbvre, cited in Kofman & Lebas, 1996: 35; Loukaitou-Sideris & Ehrenfeucht, 2009:9). Spatial (in)justice in streets and the disparate 'right to the city' claims emerge, as urban space is produced and reproduced through street design and management imperatives and as street design and management often favour the design of the carriageway for vehicular transport over sidewalks, which are the spaces for pedestrians (Hartman & Prytherch, 2015: 33). In most instances, the sidewalks in small urban centres are inadequately provided, too narrow and not clearly demarcated (Tsoriyo, 2021: 30).

2.2 Street design and management processes and spatial qualities

Street design is "an act of shaping or planning the urban environment", which entails transforming "abstract spaces to humanised places" (Carmona *et al.* 2003: 14). Street management entails the redress of all the malfunctions (spatial injustices) that may occur in the use of streets and that may cause potential threats

to the 'right to the city' and quality of urban dwellers (De Magalhães & Carmona, 2008: 112; Mehta, 2018: 16, Stratford *et al.*, 2020: 125), as users interact on street spaces daily (Middleton, 2018; Moroni, 2020). The processes of street design and management produce various socio-spatial dimensions or spatial qualities on street spaces such as safety, accessibility, legibility, variety, maintenance or vital infrastructure, and service (Shaftoe, 2008: 47; Mateo-Babiano, 2016: 110; Deore & Lathia, 2019: 139; Bivina & Parida, 2019: 4940; Stratford *et al.*, 2020: 127). The spatial qualities translate to various 'right to the city' claims to which users are entitled on street spaces. For example, street users have the right to safe and secure street spaces or the right to accessible space (Brown & Kristiansen, 2009: 193; Marcuse, 2009: 193).

The dominant street design practices such as markings, signing and signalling, adherence to design standards and traffic laws are more vehicle-oriented than people-/ non-vehicle- or pedestrian-oriented (Hartman & Prytherch, 2015: 37; Bivina & Parida, 2019: 4930). As a result, various conflicts and negotiations over the use of space emerge between the diverse users, as they interact on these streets. The conflicts and negotiations also explain the various forms of spatial (in)justices or 'right to the city' experiences of street users, as they interact on streets. For example, conflicts can emerge between pedestrians and vendors, and between non-vehicular users and vehicular users. Carmona *et al.* (2003: 13) contend that investment in street design, proactive design processes, political backing from national to local design policy levels, and the inclusion of tactical urban design are all likely to contribute to improved spatial justice in street spaces. Low, Taplin and Scheld (2009: 1) postulate that, "in this new century, we are facing a different kind of threat to public space: not one of disuse, but of patterns of design and urban management that are exclusive of some users". This

affirms that the processes of street design and management imperatives can (re)produce and distribute (in) justices over street space. This consequently affects the street users' 'right to the city' experience.

2.3 Henri Lefèbvre's 'right to the city' (1968)

Lefèbvre's (1968/1996: 63) theory postulates that various social space production processes affect urban dwellers' 'right to the city'. Soja (2010: 31) and Van Wyk (2015:31) describe policies, judicial interventions, programmes, strategies, and plans as the main urban space production processes whereby spatial (in)justices are produced and consequently users 'right to the city' claims are experienced disparately. Lefèbvre (1974/1991: 70) also argues that space production processes order urban spaces in a way that eradicates urbanity and deprives everyday urban dwellers or the working class of places of social encounter. For example, street production processes of street design and management in the small urban centres of Vhembe District are often automobile-centric than non-vehicular user- (inclusive of vendors and pedestrians) oriented (Tsoniyo, 2021: 127). Therefore, non-vehicular street space users are the everyday users whose

interaction with various socio-spatial qualities of street space affect how they experience their 'right to the city' disparately. Lefèbvre (cited in Kofman & Lebas, 1996: 35) contends that urban dwellers have the right to similarities and differences, because citizens generally have diverse and different needs. This makes the 'right to the city' concept a paradoxical concept that is complex and open to many interpretations (Marcuse, 2009: 189; Harvey, 2012: 5). In this article, street space users' 'right to the city' is defined as a set of various 'rights' or claims that users can have or enjoy on space. Infringement in making these claims are the injustices. This shows that spatial (in)justice and the 'right to the city' are inseparable concepts (Marcuse, 2012: 35).

3. CASE STUDY AREA

The case study small towns of Thohoyandou, Musina and Louis Trichardt in Vhembe District were purposively selected, based on their location in Limpopo province – one of the provinces with a large number of small towns though under-researched (Hoogendoorn & Visser, 2016: 97). These towns are administrative centres of the local municipalities of Thulamela, Musina and Makhado, respectively (see Figure 1).

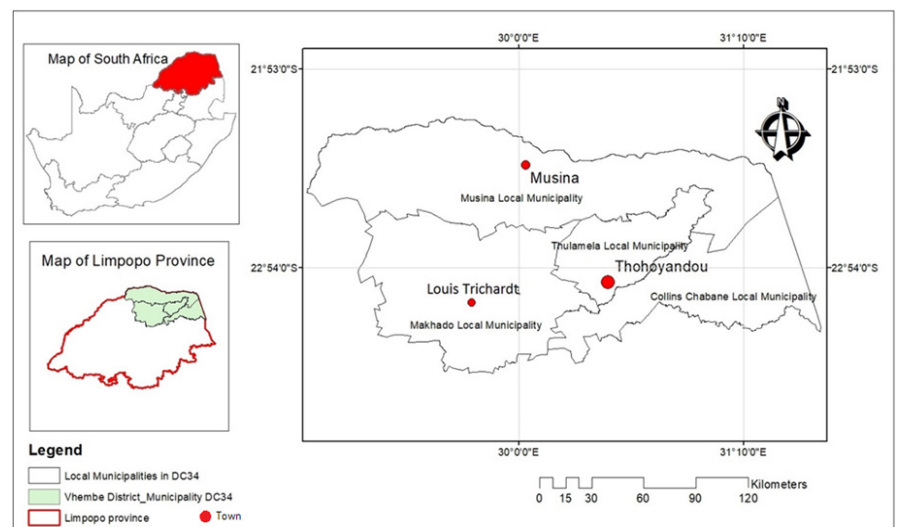


Figure 1: Location of the three settlements as administrative centres of their respective local municipalities

Source: Map drawn by Tsoniyo, 2021

The three selected small towns serve the surrounding urban and predominantly rural communities under their jurisdiction. Thohoyandou Town has an administrative, educational, and service economic base, supported by subsistence and a mixed commercial agricultural hinterland. However, it is very different from the other two towns, due to its political ecology, as a former homeland capital. Thulamela local municipality, the administrative authority of Thohoyandou Town, looks forward to attaining city status by 2030 (Thulamela Local Municipality, 2018: 1). Figure 2 shows a land-use map of Thohoyandou Town in relation to the spatial qualities of street design and management.

Musina Town was established as a mining town in 1904 (Musina Local Municipality, 2015: 1). Musina is a border town, which is the northern gateway to the rest of Africa. It has a large element of large-scale

commercial farming. However, the town was not planned with expectations for further expansion. This is evidenced by the presence of the National Freeway (National Road 1-N1) that cuts through the CBD of the town, thereby creating several challenges in the town. Figure 3 is a land-use map of Musina Town in relation to the spatial qualities of street design and management.

Louis Trichardt was established as a well-planned town for the White minority under the Town Planning Ordinance (No. 17 of 1939 and No. 15 of 1986). Louis Trichardt Town is characterised by large-scale commercial farming environment. The town has more expansive street spaces compared to Musina and Thohoyandou. These three small towns may all be in the same district municipality, but they have different cultural, economic, and politico-historical backgrounds and characters. It is thus likely that the users have different experiences

of street spatial qualities and their 'right to the city' in the three towns. Figure 4 is a land-use map of Louis Trichardt Town in relation to the spatial qualities of street design and management.

4. METHODOLOGY

4.1 Research design

This article assessed spatial (in) justice from the street space content in three small towns in the Vhembe District of South Africa. The article adopted a complementary case study survey design to compare vendors' and pedestrians' 'right to the city' experiences of the complex dynamics of street spaces' spatial qualities (Emuze 2016: 107). Vendors and pedestrians are involved in (re) shaping, (re)constructing, and (re) producing street spaces through social interaction. As such, they disparately experience their 'right to the city'. A mixed methods research approach allowed for both quantitative and qualitative data to be collected simultaneously, analysed separately, and thereafter merged (Creswell, 2014; Saunders, Lewis & Thornhill, 2016: 170). Qualitative data were collected through walk-by observations and street intercept surveys of the three case study areas (Buschmann (2019:858), in order to identify the qualities (safety, accessibility, legibility, variety, and maintenance, among others) that shape and constitute the vendors' and pedestrians' 'right to the city' (see Table 2). Quantitative data collected through interviews helped identify



Figure 2: The spatial qualities of some street spaces in Thohoyandou Town

Source: Images and map by author, 2020



Figure 3: The spatial qualities of some street spaces in Musina Town

Source: Images and map by author, 2020



Figure 4: The spatial qualities of some street spaces in Louis Trichardt Town

Source: Images and map by author, 2020

vendors' and pedestrians' satisfaction level with a particular street's spatial qualities. The reason for collecting both quantitative and qualitative data is to elaborate on specific findings from the case study observations and street intercept surveys on the spatial qualities, such as similar qualities suggested from interview respondents' groups (Creswell & Plano-Clark, 2011). In this article, street spatial qualities representations of vendors' and pedestrians' 'right to the city' are expressed as both objective and subjective measures (Stratford *et al.*, 2020: 135).

4.2 Population, sample, response

The study population included vendors and pedestrians from the small towns' CBD streets and the three local municipalities of the small towns of Thulamela, Musina, and Makhado. Sampling of vendors and pedestrians was done in multiple stages. The first stage considered each town as a cluster. In the second stage, streets spaces from each cluster (town) were grouped into various strata according to their hierarchy. Two access streets and one local distributor road were then purposively selected from each town. The main intent was to determine the most pragmatic way of sampling street users rather than the street spaces themselves. To determine the sample size of street users to be surveyed, the researcher employed the sample size calculation formula as illustrated in Figure 1.

$$n = \frac{z^2 \cdot p \cdot q}{e^2}$$

Where:
 z=1.96 (the confidence interval),
 p= 0.5 (proportion)
 q= 0.5 (1-p),
 e= 0.05 (level of significance)
 n=384.16* 130%= 499.41

Figure 1: Sampling size calculator
 Source: Fowler, 2012: 9

According to Fowler (2012: 9), adopting the sample size sampling formula is appropriate when there is no specific list of individuals in a population. Similarly, in this study, street space users keep changing in number, location, and form, so that their actual population could not be ascertained. To reduce the possibility of systematically excluding or eliminating some street space users from participating, users were over-sampled by 30% from 384 to 500 participants. The total urban population proportion (based on the 2011 South African census record) for each town was used to determine the sample size of vendors and pedestrians (StatsSA, 2013: online). Table 1 illustrates the number of sampled street space users from each town.

A non-probability method of quota sampling was employed in recruiting the vendors and pedestrians. The determining factors for quota sampling were gender and the nature of street activities. The population of females in the Vhembe District is estimated to be 53%, while males are 47% (StatsSA, 2018: 7).

This article ensured that the quota sampling design replicates the true composition of the District's population. As such the sample comprised more females (53%) than males. The research also sought to bring diversity of perceptions from street users engaged in diverse street activities. StatsSA (2019: 1) provides an estimate of 20% of the total population in South Africa to be employed in the informal sector. Users were thus categorised according to vendor and pedestrian activities at 80% (400) and 20% (100), respectively. Frequency of coming into town and location on the street was another key criterion considered in the sample selection. For example, vendors and pedestrians had to meet the criteria of coming to town at least once every week. It was assumed that these users were more familiar with street spaces in the small towns, unlike visitors who may not have experienced the various socio-spatial qualities on the street spaces.

The study used purposive sampling of eight spatial planning experts on street design and management from key planning institutions in Vhembe District, namely Vhembe District Municipality, Thualmela, Musina, and Makhado Local Municipalities, as well as the Urban and Regional Planning Department at the University of Venda. The selection criteria for each planning expert were based on the knowledge and experience they hold with regard to street spatial justice and 'right to the city'.

4.3 Data collection

Multiple data sources were used to gather data and to triangulate qualitative and quantitative evidence from secondary and primary data sources. This data collection was done as part of a broader study on spatial (in)justice on street spaces in small rural towns of Vhembe District in 2019 and 2020. The following secondary data sources supplied a wealth of information: Statistics South Africa (StatsSA), Spatial Planning and Land-Use Management Act (SPLUMA) 16 of 2013, Non-Motorised Transport Facilities Guidelines of 2014, and

Table 1: Sample size for street space users

Study area	Urban population	Population proportion (%)	Sample size	Average number of non-vehicular street space users sampled per street
Thohoyandou	69 453	51	255	85
Musina	42 678	31	155	52
Makhado	25 360	18	90	30
Total	137 491	100	500	167

Source: Tsoriyo, 2020: 101

the three municipalities' Integrated Development Plans (IDPs), Spatial Development Frameworks (SDFs), and local municipal by-laws. These were sourced from the websites of the case towns' local municipalities. Primary data were obtained from a combination of in-depth interviews, direct observation, and street intercept surveys. In-depth interviews were conducted with the eight key spatial planning experts. Direct observations were made anytime during the day and between 18:00 and 19:00 in the evening on the nine street spaces where street intercept surveys were conducted. After 19:00, the streets in the small towns have hardly any or no vendor or pedestrian activities. The observed conflicting street activities and (un)just spatial qualities were diarised and captured on camera.

Street intercept questionnaire surveys involved the administration of 500 questionnaires to 100 vendors and 400 pedestrians. These questionnaire surveys sought to gather vendors' and pedestrians' levels of satisfaction with street spaces' spatial qualities, in order to understand their 'right to the city' experiences. The spatial qualities were identified from meta-synthesis of various local and international literature that links the complex concepts of spatial justice, street spaces, street space users, and various theories of urban public space production (Tsoriyo, 2021: 66). In identifying and selecting the suitable spatial qualities from the literature, it was assumed that a variable should have social and place qualities that promote the justice principles (see introduction section) and enhance the vendors' and pedestrians' 'right to the city' claims. The specific indicators of each spatial quality were measured on a 5-point Likert scale (where 1 = very dissatisfied and 5 = very satisfied). Table 2 shows the spatial qualities and the measurable indicators that were assessed in data collection.

4.4 Data analysis and interpretation of the findings

Data was analysed using both quantitative and qualitative analysis techniques. Quantitative data from the questionnaire was analysed using Stata 14 in the form of descriptive statistics of mean satisfaction scores. A mean satisfaction score was calculated from the vendors' and pedestrians' responses on level of satisfaction or dissatisfaction with a particular spatial quality. The mean satisfaction score calculated and the mid-point satisfaction score were then compared. The mid-point satisfaction score is the value that a spatial quality is expected to have, in order to show that vendors and pedestrians are more satisfied than dissatisfied with specific indicators of a spatial quality. The qualitative data obtained from the questionnaires' open-ended questions consisted mostly of short phrases and a few, longer narrations. These responses were entered onto Nvivo and Atlas ti and the data was analysed, using text descriptions. In some instances, these descriptions were analysed, using the word 'cloud', an online application used to construe keywords or phrases from

the street users' comments. Data from observations was analysed deductively to relate the observed phenomena with the 'right to the city' theory. Thematic content analysis, as prescribed by Braun and Clarke (2006: 7), was employed in analysing data from the in-depth interviews. The theory of the 'right to the city' was used to extract deeper meaning from the data.

4.6 Research limitations

An attempt to count vendors and pedestrians proved very complicated, as these are a very dynamic group of individuals who often never assume a permanent state or position. They change their state unexpectedly, as they experience the street spaces. For example, vehicular users would also assume the state of pedestrians as soon as they parked their vehicles, and vendors would often assume the state of pedestrians. Therefore, this article does not claim that these findings are universal truths; rather, they merely embody the perceptions of the sampled vendors and pedestrians in the CBDs of three selected small towns.

Table 2: Variables for assessing spatial (in)justice from the street space content

Spatial quality	Indicator	Key sources
Safety	Presence of police Presence of other users Street lighting Non-anti-social behaviour Presence of cameras Roadside fences	Jacobs, 1961; Appleyard, Gerson & Lintell, 1981; Kott, 2011; NACTO, 2016; Middleton, 2018; Bivina & Parida, 2019; Stratford <i>et al.</i> , 2020
Accessibility	Wide sidewalks Non-interference of sidewalks with parking Availability of cycling lanes Barrier-free spaces	Bentley <i>et al.</i> , 1985; Varna, 2014; Mateo-Babiano, 2016; Deore & Lathia, 2019; Stratford <i>et al.</i> , 2020
Legibility	Relating to one's culture Familiarity with what features to find from start to end Well informed about street activities Memorable landmarks Clear street directional signs	Lynch, 1960; Bentley <i>et al.</i> , 1985; Desai, 2014; Varna, 2014; Bivina & Parida, 2019; DHS, 2019
Variety	Opportunities for work Opportunities for residing or living in the street Opportunities for playing Connects to shops Connects to the park Connects to malls Connects to the bus terminus Connects to the market	Bentley <i>et al.</i> , 1985; Shaftoe, 2008; Oranratmanee & Sachakul, 2014; Varna, 2014; NACTO, 2016; Middleton, 2018
Maintenance	General cleanliness Replacement of streetlights Availability of waste bins Availability of public toilets, maintenance of seating furniture, and pothole maintenance	De Magalhães & Carmona, 2008; Mateo-Babiano, 2016; NACTO, 2016; DRDLR, 2017; Ekhuruleni Metro Municipality, 2017; Mashiri <i>et al.</i> , 2017; Bivina & Parida, 2019; Moroni, 2020

Source: Tsoriyo, 2021: 66

5. RESULTS AND DISCUSSION

5.1 Street users’ perceptions of street space qualities and the ‘right to the city’ implications

This article mainly argues that vendors’ and pedestrians’ satisfaction perceptions of street spatial quality of safety, accessibility, legibility, variety, maintenance of street spaces affect their ‘right to the city’ claims. The corresponding ‘right to the city’ claims are the right to safety, the right to access, the right to identity, the right to opportunities and/or livelihoods, and the right to use-value of good public space. Just street space is characterised by its ability to meet its users’ various needs and enhance the users’ ‘right to the city’ experience (Mateo-Babiano, 2016: 109; Bivina & Parida, 2019: 4930). Therefore, if a non-vehicular user is satisfied with a particular quality, his/her needs on street space are met, thus enhancing his/her ‘right to the city’ claim. Dissatisfaction with a spatial quality, on the other hand, translates to infringed users’ ‘right to the city’ claims. Table 3 shows the survey results that measured the mean satisfaction level of vendors and pedestrians with the various street space spatial qualities.

5.2 Vendor and pedestrian perception of street safety and the ‘right to the city’

In Table 3, the low mean satisfaction score on safety in all the towns shows that vendors and pedestrians found the street spaces in the small towns to be lacking in the qualities that reflect safety. This shows that most of the sampled vendors and pedestrians were not enjoying their ‘right to the city’ claim of experiencing safe street spaces. For example, although some pavements in Thohoyandou Town were fenced (for the securitisation of private property), the vendors and pedestrians raised strong dissatisfaction with them. It was observed that the fences present an accessibility barrier and often restrict the movement of pedestrians who end up using the carriageway. Thus,

the fences also pose a safety threat, particularly to pedestrians. Figure 5 shows that pedestrians use a carriageway, due to the inaccessibility challenge posed by the fences.

As depicted in Figure 5, the fences on the street pavements infringe on the users’ ‘right to the city’ claim of experiencing safety on street spaces (NACTO, 2016: 12; Bivina & Parida, 2018: 4930). A lack in

satisfactory street safety qualities reflects unsafe and insecure streets that translate to a spatially unjust space. In Musina Town, vendors’ and pedestrians’ concerns focused more on non-antisocial behaviour. This was also confirmed during interviews with one local municipality official who emphasised that “Musina being a border town has serious security challenges, criminal activities are very high and



Figure 5: Fenced pavement posing a safety threat to pedestrians
Source: Image taken by Tsoriyo, 2020

Table 3: Street users’ mean satisfaction level with street qualities

Quality		Mean satisfaction level	Mid-point satisfaction mean	Interpretation of results
Safety	Thohoyandou	17.27	18	In all the three towns, the mean satisfaction levels with street safety are lower than the mean midpoint satisfaction score. This shows that the sampled users were generally more dissatisfied with the measures of safety on street spaces in the small urban centres. However, Louis Trichardt had a fairly higher score than Thohoyandou and Musina.
	Musina	17.39		
	Louis Trichardt	17.95		
Accessibility	Thohoyandou	9.89	12	The mean satisfaction score was lower than the midpoint satisfaction score in Thohoyandou, However, it was higher in Musina and Louis Trichardt.
	Musina	12.16		
	Louis Trichardt	13.7		
Legibility	Thohoyandou	18.23	15	The mean of users’ satisfaction with the quality of legibility of street spaces is above the mid-point mean of 15 in all towns.
	Musina	17.09		
	Louis Trichardt	17.56		
Variety	Thohoyandou	27.42	24	The mean of users’ satisfaction with the quality of street variety is above the mid-point mean of 24 in all towns.
	Musina	26.49		
	Louis Trichardt	27.83		
Maintenance	Thohoyandou	15.35	18	The mean of users’ satisfaction in Thohoyandou and Musina is below the mid-point satisfaction; it is, however, high for Louis Trichardt.
	Musina	15.81		
	Louis Trichardt	19.0		

Source: Authors, 2020

that's why the presence of police is more pronounced than in most [of the] small towns". This assertion explains that the border town's economic activities and geographical location influence spatial justice and 'right to the city' experience, as supported by Soja (2010: 9). The issues of street lighting were more prominent in Louis Trichardt Town. This shows that users' perception of a spatial quality sometimes differs with contexts. These findings confirm the complex and varied dynamics of the right to similarities and differences of street space users in the small towns (Lefèbvre, in Kofman & Lebas, 1996: 35).

5.3 Vendor and pedestrian perception of street accessibility and the 'right to the city'

In Table 3, more dissatisfaction with the quality accessibility as a measure of spatial justice on street spaces was highlighted in responses from Thohoyandou Town compared to the other two towns. This is attributed to inadequate sidewalk widths, following the stance taken by the municipality to be more accommodative of vehicles through the 2011 Urban Regeneration Programme. This aligns with arguments by Soja (2010: 8, 31) and Van Wyk (2015: 31) who state that processes of producing urban [street] spaces are sometimes responsible for (re)creating spatial

injustices. From observation of the streets in Musina Town, the accessibility challenge was not due to a lack of adequate sidewalks *per se*, but to the obstructions of sidewalks by other activities such as street trading and illegal parking. In Louis Trichardt Town, the vendors and pedestrians were generally satisfied with the accessibility of street spaces, because the town was designed with wide sidewalks of over the recommended minimum width of 1.2m (DHS, 2019: 247). Figure 6 shows that users in Louis Trichardt enjoy the ease of mobility on sidewalks due to their width sizes. This gives users the right to access, which is a form of spatial justice (Middleton, 2018: 302).

5.4 Vendor and pedestrian perception of street legibility and the 'right to the city'

All three selected small rural towns exhibited more satisfaction than dissatisfaction with the measures of legibility (see Table 3). The highest level of satisfaction was obtained in Thohoyandou, followed by Louis Trichardt and Musina towns. While naming of roads is an important indicator of street legibility that helps street users know where they are, this was missing in Thohoyandou Town (NACTO 2016: 58). However, vendors and pedestrians did not consider this dissatisfactory. Qualitative responses revealed that

users identify streets with nodes such as malls and government offices. Williams (2018: 160) explains that street users normally prioritise what they get from the existing spaces. As such, street users viewed some of the legibility considerations such as street names, prioritised by urban planning experts, differently. This reveals the complexity of understanding the 'right to the city', as contrasting views emerge between the different urban space producers in urban space production (Marcuse, 2009: 197).

5.5 Vendor and pedestrian perception of street variety and the 'right to the city'

Table 3 shows that the level of satisfaction with variety in all the three towns is high, even though, from observation, street spaces in the case study small towns do not offer space for residential or recreational activities. Contrary to Shaftoe's (2008: 26, 33) suggestion that streets are for mixed uses such as work, live and play, the street spaces in the small towns only permit essential activities such as walking and conducting street trade. However, they are not conducive to social and optional activities, as evidenced by a lack of adequate pedestrian-friendly infrastructure such as seating furniture. Gehl (2011: 9) argues that good public space should provide not only essential activities, but also social and optional activities. Street space users in SRTs find satisfaction and derive meaning from the spaces that are currently available rather than from idealised spaces. This concurs with Williams (2018: 161) who states that, "[i]t is very difficult for anyone to reimagine their life or their streets by simply thinking or talking about it when there is no opportunity". Conversations with municipality officials in all the three towns revealed that the local municipalities of Thulamela, Musina and Makhado still uphold the traditional functional views held over street spaces as mere movement passages and not as public which, in their right, are producers of (in) justice. This emerges from a lack of town-specific design guidelines



Figure 6: Wide sidewalk along a street in Louis Trichardt

Source: Tsoriyo, 2021: 212

but adherence to universal design standards such as the *Non-Motorised Transport Design Guidelines*. The application of universal design guidelines fails to capture the context-specific variations, as the standards assume that street spaces are similar in all places. Yet, in the selected small towns, the issues of inadequate space, lack of strategy, lack of skilled personnel and finances are hindrances to vendor- and pedestrian-friendly street design. This gives rise to spatial injustice in the form of inadequate pedestrian-friendly infrastructure. Consequently, users lack the experience of convivial and vibrant sociable public space (Shaftoe, 2009: 1; Mehta, 2019: 17). Consequently, this infringes street users' right to benefit from a variety of opportunities that street spaces should offer.

5.6 Vendor and pedestrian perception of street maintenance and the 'right to the city'

As shown in Table 3, the surveyed users in Louis Trichardt Town were satisfied with the condition of maintenance and management in street spaces, compared to Thohoyandou and Musina towns. In Thohoyandou Town, vendors and pedestrians strongly raised the issue of unavailability of street bins. The issue of paying a fee to use public toilets was a contentious one. The vendors and pedestrians were contesting that public toilets should be free to the public. The interviewed Thulamela Municipality official, however, contended that payment of a small fee of R2 by the public for using public toilets is a measure to regulate use and the fee contributes to buying toilet paper and detergents, as well as salaries for the cleaners. This shows a gap between how the municipality views the delivery of basic service and how street users expect the service to be delivered. This also shows the controversy of the meaning of public space, where the germane question is: "How public is a public space?" (Oranratmanee & Sachakul, 2014: 212). The surveyed vendors and pedestrians in Musina Town expressed dissatisfaction with

maintenance and management, particularly the unavailability of public toilets and pothole maintenance. Although vendors and pedestrians in Louis Trichardt expressed satisfaction with the maintenance of street spaces, the issue of lack of water and public toilets also came out strongly in the comments.

Other maintenance issues included lack of involvement of users and different stakeholders in street maintenance, causing various stakeholders to disconnect from the produced spaces (De Magalhães & Carmona, 2008: 112). In all three municipalities, different departments are involved in one aspect of street space administration. All municipalities lack Public Space Maintenance and Management Policy to give strategic direction on street maintenance and management. Moreover, all the local municipalities lack a specific public space management department that coordinates public space-specific programmes. Moreover, municipalities in the small towns rely mostly on government grants and own-source funds for carrying out street design and management-related projects. The interviews revealed that 'own source' funds for Thulamela and Musina Local Municipalities are inadequate to cover the costs of regular maintenance. By comparison, the farming industries in the area boost the Makhado Local Municipality's revenue. Although this revenue does not adequately cover all projects in the town, it is flexible to meet most of its day-to-day maintenance mandates. Inadequate funding negatively affects the quality of street space maintenance and, consequently, the diverse 'right to the city' experiences of vendors and pedestrians.

6. CONCLUSION

This article assessed the 'right to the city' experience of vendors and pedestrians flowing from their perceptions of street spaces spatial qualities of street design and management. It was established that vendors' and pedestrians' experience both justices and

injustices simultaneously on street spaces. Thus, they sometimes enjoy a particular 'right to the city' claim while simultaneously having another right infringed on the same space. The 'right to the city' experiences differ between towns and, in some instances, this is as a result of economic activities, geographical location, and the town's history. The local municipalities in small towns offer justice that is already controlled or packaged, due to inadequate financing and the application of universal design standards that are not context specific.

The article proposes three key recommendations in light of the findings. First, to enhance the 'right to the city' experiences of vendors and pedestrians, the Local Municipalities in these three towns should consider improving the spatial qualities that vendors and pedestrians found most dissatisfying. For example, street safety issues in all towns, maintenance issues in Musina and Thohoyandou Towns, and accessibility challenges in Thohoyandou Town. These issues can be addressed through multi-stakeholder consultation in street design and management. It is recommended that the local municipalities integrate the current under-resourced state-centred model of public space management with other models such as Public-Private Partnerships and User-Based Models that offer opportunities in terms of financing of projects, coordination, and street-use regulation.

Secondly, the local municipalities in the small towns should develop a Public Space Management Policy with clear intervention strategies that focus on the prioritisation of users' needs. This policy document can be used for resources mobilisation in applying for funding that can be channelled towards various street design and management projects that promote justice and improve the vendors' and pedestrians' 'right to the city' experience. The Public Space Management Policy should clearly lay down the roles and responsibilities of the various players or stakeholders in public space management.

Thirdly, in order to realise more spatially just outcomes where vendors and pedestrians have an enhanced 'right to the city' experience, the Local Municipalities in the small towns, together with users and private players as key stakeholders, need to assess what is feasible in their context and be willing to learn, unlearn, and experiment together through co-production or co-creation of street spaces in SRTs.

7. DISCLOSURE STATEMENT

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