Linkages Between Community Well-being and Access to Public Space:

An Environmental Justice Perspective

by

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ABSTRACT

Public spaces have been central to studies focused on the relationship between economic inequalities, well-being, and environmental justice. However, an integrated examination of access to public spaces that is cognizant of the exchanges which inform environmental justice and the well-being of minoritized communities, is yet to be extensively studied. Such exchanges and the unideal community outcomes thereof are important to highlight in understanding access, given the historical challenges that have emanated from them to hamper the beneficial utility of public spaces in vulnerable contexts. This dissertation addresses this gap through a three-article format. Article 1 comprises a conceptual synthesis of two theoretical frameworks namely Lefebvre's Tripartite Framework and Bishop's Network Theory of Well-being that respectively conceptualize the exchanges in space production and the positive outcomes, which emerge from human and non-human engagements towards well-being. The main contribution of this article is the merging of two bodies of scholarship which had yet to intersect to inform investigations of access through the exchanges across technical (e.g., planners), social (i.e., communities) and physical (e.g., built spaces like parks) dimensions, and linkages to positive community outcomes. Article 2 entails an empirical examination of how communities and technical experts perceive of the linkages between access and community well-being, through exchanges across public space dimensions. Through a multiple embedded case study, 19 community leaders and 4 key technical informants in Maryvale were engaged in participatory mapping interviews. Responses to

exchanges and outcomes thereof pertaining to the identified spaces, were deductively

coded guided by the conceptual synthesis developed in article 1. Both community leaders

and technical agents described access as emerging from perceptions of positive outcomes

linked to public space exchanges. Article 3 sought to understand how design

professionals (i.e., planners, building and landscape architects) who identify as ethnic

minorities, perceive of their role in facilitating access to public spaces. Through

interviews, 23 participants were engaged through a protocol guided by the conceptual

synthesis developed in article 1. Responses were inductively coded. Participants

described the role they play in exchanges, as focal to positive outcomes linked to access.

Keywords: Public Spaces; Access; Environmental Justice; Community Well-being.

DEDICATION

Here's to dad, Mr. James Ashun Brandful Godwyll. It had always been your dream to see

this day. Although you are not here, I know you are proud of me. Your Dr. Godwyll is

here, thanks for egging me on even in your absence! Thank you, dad, your legacy lives

on. To my mum, Mrs. Sophia Fynn Aggrey Godwyll, my solid rock and anchor, your

fervent prayers have been answered and it did not take only hard work but your amazing

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Perched beneath the mountains of the Akuapem-Togo range, in a small peri-urban community in Ghana called Koforidua, surrounded with lush greens and beautiful blue skies is my kith and kin, my blood and truth, my family! To all members of my small community who have made this dream a reality I say thank you. To the amazing team I work with at Young At Heart Ghana, especially my co-founder Martin Bruce, who have been pivotal in moving the organization forward to even greater heights over the last five years, I say a big thank you.

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INTRODUCTORY CHAPTER

The rise in inequality over the last four decades has been a central focus of several policy

debates. Evidence of this increase in inequality across the world, has been largely based

on disparities in income (Piketty, 2017). The proven correlations between income gaps

and factors which undermine society (e.g., social tensions, lack of trust, life expectancy

and mortality rate) (Babones, 2008; Durante et al., 2013), have extended the debates on

economic inequality into wider concerns for justice (Messner, 1980; Mishchuk,

Samoliuk, Bilan, & Streimikiene, 2018; Rakauskiene & Strunz, 2016; Verwiebe &

Wegener, 2000). Extensively explored among such concerns is the relationship between

income disparities and environmental justice. Environmental justice encompasses fair

treatment and meaningful involvement of people, irrespective of socio-economic class, in

planning and managing the environment (Bowen & Wells, 2002; Schlosberg, 2004; US

EPA, 2014). Given their idealization as resources which are open to individual and

collective use (Tinnevelt & Geenens, 2008), public spaces have been central to exploring

the relationship between economic inequalities and environmental justice (Low & Iveson,

2016). This includes gathering spaces such as parks, recreational centers, squares or

plazas, as well as connecting spaces such as streets and sidewalks (Stanley, Stark,

Johnston, & Smith, 2012).

Environmental justice, as it relates to the relationship between marginalized

populations and public spaces, has been variously examined through investigations of

access to public spaces (Rigolon & Németh, 2018; Zhang, Lu, & Holt, 2011). Such

investigations of access have predominantly focused on distributive justice a construct of

environmental justice, examined through the spatial relationships between public spaces and people in low-income contexts (Macedo & Haddad, 2016; Wen, Zhang, Harris, & Holt, 2013). Other investigations of access to public spaces in low-income contexts, have focused on procedural justice and interactional justice, which are also constructs of environmental justice (Low, 2013). In relation to procedural justice, access to public spaces has been explored through examinations of the inclusion of vulnerable populations in decision making processes (Low & Iveson, 2016; Németh & Schmidt, 2011; Whitlock, 2007). Interactional justice investigations, have focused on the experiences of vulnerable populations within public spaces (Byrne, 2012; Crompton & Chuan, 1992; Hornik, Cutts, & Greenlee, 2016; Peace, Rowles, & Bernard, 2013). In all such examinations, access has been predominantly examined through investigations of separate constructs, however environmental justice is asserted to culminate in an integration of distributive, procedural and interactional justice (Rigolon, Fernandez, Harris, & Stewart, 2019).

A few studies have attempted to explore access to public spaces through an integration of the constructs of environmental justice. For example, some studies have explored the spatial relationships between public spaces (e.g., parks) and low-income neighborhoods (i.e., distributive justice), alongside interactional barriers such as the underrepresentation of some age groups in a locale, the presence of crime and traffic fatalities (i.e., interactional justice) (Cutts, Darby, Boone, & Brewis, 2009; Rigolon & Flohr, 2014;Weiss et al., 2011). However, studies which have examined individual environmental justice lenses (*i.e.,* only distributive, only procedural, or only interactional justice), have only been able to investigate access either through fair allocation, planning and design engagement or user experiences without a concurrent engagement with spatial

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and social enablers and barriers. For example, an examination focused on distributive justice would not have considered the social barriers to access related to planning and design (*i.e.,* procedural justice) or user experiences (*i.e.,* interactional justice). Such studies could not engage with barriers of access linked to *distrust* from the lack of engagement, alongside *social tensions* from untoward interactions within public spaces, even if they are within proximity. Comparably, a focus on only procedural justice, could provide insights on perceived access as an outcome of planning and design engagement. But barriers such as *community dissatisfaction* from the lack of programming (*i.e.,* interactional justice) or *danger* from the absence of crosswalks leading to the public space (*i.e.,* distributive justice) would not have been highlighted. Equally, focusing solely on interactional justice only offers perspectives on access in relation to user experiences. Yet, inhibitors such as *community dissatisfaction,* due to remoteness of the locale or *marginalization* emanating from the lack of inclusion in decision making, would not be emphasized. There is hence the need to adopt a lens to understanding access which illustrates how it can be holistically studied through a concurrent consideration of spatial and social enablers or barriers.

The need for integrated examinations of environmental justice, cognizant of spatial and social considerations, has fueled arguments for engagements with well-being (Edwards, Reid, & Hunter, 2016; Fraser, 2014; Nussbaum & Sen, 1993). Such arguments have been based on the assertion that just environments transcend fair spatial relationships, to include the related social and spatial factors considered as valuable to the well-being of communities (Sen, 2009). Minoritized and marginalized communities have been at the forefront of economic inequalities and focal to inquiries on environmental

justice and well-being (Bullard, 1993). However, while well-being is considered to be central to the intended outputs of environmental justice (Mohai, Pellow, & Roberts, 2009), it is yet to be centralized in integrated examinations of access to public spaces, in contexts predominantly inhabited by vulnerable populations. Yet to be extensively explored and studied is an integrated examination of access cognizant of the spatial and social exchanges that are perceived to contribute to the ability or inability of vulnerable communities to benefit from public spaces.

The spatial and social enablers and barriers which are characteristic of public spaces, are conceptualized in *Tripartite Framework* of space production as encompassing exchanges across three dimensions (Lefebvre & Nicholson-Smith, 1991). These dimensions are namely spatial practice (*i.e.,* spatial, and physical materializations of public spaces), representations of space (*i.e.,* plans and designs spearheaded by technical agents) and spaces of representation (*i.e.,* connections and expectations of the community of users). The resulting outcomes of exchanges that take place across the different dimensions, pertaining to well-being, are theorized in the *Network Theory of Well-being* (Bishop, 2005). While the outcomes of exchanges across the dimensions as conceptualized have historically hampered the beneficial utility of public spaces in vulnerable contexts (Low & Iveson, 2016), the two frameworks are yet to be synthesized in examinations of access that integrate the varying constructs of environmental justice. Such a synthesis would focus on access as relates to distributive, procedural and interactive constructs of environmental justice, realized from exchanges across the dimensions of public spaces that yield or inhibit community well-being. Research of this nature can contribute to the growing research focused on the relationship between built

environmental characteristics and well-being by augmenting insights on the linkages

between access to public spaces and community ideals. This dissertation addresses the

research gap through a three-article format. The three articles are related to each other but

mutually exclusive in their focal areas.

Article One

The first article comprised a conceptual paper which explores the theoretical linkages

between community well-being and exchanges across key dimensions of public spaces

(i.e., physical characteristics, technical experts, and communities). It draws a nexus

between the *Tripartite Framework* (Lefebvre & Nicholson-Smith, 1991) and the *Network*

Theory of Wellbeing (Bishop, 2005)*,* to conceptualize an integrated notion of access to

public spaces. The linkages between community well-being as conceptualized in the

Network Theory of Well-being (Bishop, 2005) and exchanges across key dimensions of

public spaces (specific to environmental justice constructs) as theorized in the *Tripartite*

Framework (Lefebvre & Nicholson-Smith, 1991), are explored to conceptualize the

opportunity to beneficially utilize a locale (*i.e.,* access). The main contribution of this

paper is the merging of these two important bodies of scholarship that have yet to

intersect, but which offer a formidable platform to advance knowledge on how exchanges

across technical (e.g., planners), social (i.e., communities) and physical (e.g., built spaces

like parks) can contribute to understanding linkages between access and community well-

being. The conceptual synthesis is illustrated through the discussion of specific examples

in Maryvale. This article has been revised and published in the *Journal of Environmental*

Planning and Management -https://doi.org/10.1080/09640568.2021.2007862.

Article Two

The purpose of the second article was to examine how communities and technical experts

perceive the linkages between access and community well-being, through the described

outcomes of exchanges among the dimensions of public spaces. In extant examinations,

access to public spaces has been studied as a measure of environmental justice, which

facilitates the realization of well-being ideals such as physical health, agency, or social

cohesion (Li, Fisher, & Brownson, 2005; Nutsford et al., 2013; Sallis & Glanz, 2006;

Srinivasan, O'Fallon, & Dearry, 2003; Stigsdotter et al., 2010). Yet to be examined

however, is how access emerges from the realization of well-being ideals linked to public

space related exchanges, which are focal to different constructs of environmental justice.

In vulnerable contexts such an examination is critical because, the community outcomes

that have historically emerged from different exchanges to strain access to resources in

the built environment (Bullard, 1998; 2018), encompass different constructs of

environmental justice (i.e., distributive, procedural and interactional justice) (Low, 2013).

Hence, the perceived community outcomes of the public space related exchanges that

place, offer an opportunity to examine the facilitators and barriers which contextualize

access. In this study access is examined as an outcome of the exchanges that take place

across public space dimensions (i.e., communities of place, physical characteristics, and

technical agents) and their perceived linkages to the realization of community ideals.

Through participatory mapping interviews, 19 community representatives and 4 key

technical informants, in Maryvale (a low-income minority majority context in Phoenix)

were engaged. Participants identified public spaces in the community and answered

questions related to the exchanges that take place. A total of 35 public spaces were

identified. Responses were deductively coded guided, by an intersection between the Tripartite Framework (Lefebvre & Nicholson-Smith, 1991) and the Network Theory of Well-being (Bishop, 2005), two bodies of work which are yet to intersect in the examination of access. The results show that both community representatives and technical agents describe the ability to benefit from a public space (*i.e.*, access) as emerging from community well-being ideals, which emanate from exchanges that are focal to varying environmental justice constructs. The study demonstrates that community ideals linked to the exchanges across public space dimensions, indeed offer an opportunity for an integrated examination of access.

Article Three

The third article focused on understanding how professionals (i.e., planners, building and landscape architects) who identify as ethnic minorities, perceive their role in facilitating access to public spaces. Specific attention is paid to perceptions of how planning and design are linked, if at all, to community well-being based on the exchanges that take place across the different dimensions of public spaces. Marginalized and minoritized communities have been prioritized in the goal of providing universal access to public spaces, given the historical barriers that have challenged the relationship between such groups and such locales (UNESCO, 2017). Representation in design practice has been asserted to be key in shaping equity in the built environment (Schindler, 2015; Zallio & Clarkson, 2021). However, the role played by minority professionals in facilitating access to public spaces is yet to be extensively examined. Barriers of access have emanated from the exchanges across user communities, design professionals and physical features of

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public spaces (Low, 2013; Low & Iveson, 2016). The study hence focuses on the described role minority design professionals (*i.e.,* planners, building and landscape architects) play in the exchanges that take place and the related community well-being outcomes, towards access. The conceptual framework adopted in the third article comprised of an intersection between *Lefebvre's Tripartite framework* and *Bishop's Network Theory of Well-being*, which respectively theorize the exchanges in space production and the well-being of groups. Through interviews, 23 design professionals belonging to ethnic minority based special interest groups, (e.g., Planners of Color, National Association of Minority Landscape Architects, National Organization of Minority Architects), were engaged to understand the perceived role they play in facilitating access through the highlighted exchanges and outcomes. Study participants described the role they play as agents of the ethnic minority groups they belong to, in exchanges that facilitate access during planning and design practice. This role was described as informed by the *lived experiences* of minority groups in the built environment, which encompassed *community history* and *personal experiences*. Participants described their roles in exchanges as focal to positive outcomes linked to procedural, distributive, and interactional justice. Such roles encompassed *inclusive processes* (facilitating community agency and sense of ownership)*,* the awareness of *contextual concerns* (comprising scarcity-based concerns and place-based meanings) and *feature considerations* (informed by needs awareness) respectively.

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Overarching Positionality Statement

Memories of my childhood in a small town in Ghana, sub-Saharan Africa, are rife

with nostalgic scenes of children gathered round in circles, ready for the stories of nature.

The gatherings were set amidst the bucolic scenes of the countryside, the water bodies,

and the dense forests in its purest form, jealously protected and preserved from any hint

of extinction by my community. I loved and still love these stories. They were stories

interlaced with morals told by the elderly. These stories were the primary channel,

through which lessons of our responsibility to the environment were passed down. From

the adventures of the river gods to the mighty mountain kings, each story highlighted the

scenes of our relationship with the environment. Even though we did not have

documented laws or drawn-out town plans, there was a general sense of order and

process, passed on from one generation to the other. With urbanization such social

systems have broken down, having no real effect on planning and management in the

area. Contrary to my experience with the environment growing up, my training as a

spatial scientist has emphasized management of the environment guided by laws and

frameworks that are enforced by state institutions through spatial planning strategies. All

over the world, the application of spatial planning strategies has had its fair share of

successes and failures which vary from one location to another. Spatial planning and its

implementation have economic and political constraints linked closely to the social

structures in a particular area (Lozano-Pérez, 1990). Common characteristics associated

to places where spatial planning strategies have failed include conflicts over land use,

ineffective representation of marginalized groups and lack of transparency in spatial

planning processes. My lived experience growing as a young girl in a social system,

which was self-organized to manage its environment, and my training as a spatial scientist, place me in a unique position that seeks to understand the relationship between social and spatial structures in environmental management.

Spatial science is foundationally informed by a positivist worldview which seeks to explain the arrangement of geographical elements through geometric and probabilistic functions (Urry, 1985). However, the explanation of spatial structure through 'natural order', has largely ignored the key role of human intentionality and meaning in the distribution of geographical objects (Werlen, 1993). This limitation has paved the way for interpretivist approaches to examining the relationship between space and society (Graham, 2013). Interpretivist worldviews conceptualized by scientists such as Rickert (1930) and Weber (1949), emphasize the ontological differences between natural and social systems. Notably, interpretivism departs from positivism which favors objective reasoning and functionalism, to explore knowledge through the meanings and interpretations of human society in different contexts (Lindsay, 2006). Interpretivism is a useful lens in urban sociology because it rejects the existence of a universal truth and upholds the position that truth is a function of interpretation (Williams, 2000). Given that this study explores access through perceptions of the relationship between public space production dimensions and community well-being, interpretivism is a relevant lens to employ. This statement is recaptured in Article 2 and Article 3.

REFERENCES

Babones, S. J. (2008). Income inequality and population health: Correlation and causality. *Social Science and Medicine*, *66*(7), 1614–1626. https://doi.org/10.1016/j.socscimed.2007.12.012

Bishop, M. A. (2005). *The good life : unifying the philosophy and psychology of well-being*.

Bowen, W. M., & Wells, M. V. (2002). The politics and reality of environmental justice: A history and considerations for public administrators and policy makers. *Public Administration Review*, *62*(6), 688–698. https://doi.org/10.1111/1540-6210.00251

Bullard, R. D. (1993). *The legacy of American apartheid and environmental racism. John's J. Legal Comment.* Retrieved from https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/sjjlc9&section=23

Byrne, J. (2012). When green is White: The cultural politics of race, nature and social exclusion in a Los Angeles urban national park. *Geoforum*, *43*(3), 595–611. https://doi.org/10.1016/j.geoforum.2011.10.002

Chakravorty, S. (2014). *Fragments of inequality: Social, spatial and evolutionary analyses of income distribution*. Retrieved from https://books.google.com/books?hl=en&lr=&id=_Vu4AwAAQBAJ&oi=fnd&pg=PP1&dq=Spatial+patterns+of+inequality+in+park+distribution+&ots=LUA6zEGDLR&sig=00UgvZPXJHpt5AeJO5T9exNOZMY

Crompton, J. L., & Chuan Lue, C. (1992). Patterns of equity preferences among californians for allocating park and recreation resources. *Leisure Sciences*, *14*(3), 227–246. https://doi.org/10.1080/01490409209513170

Cutts, B., Darby, K., Boone, C., & Brewis, A. (2009). City structure, obesity, and environmental justice: an integrated analysis of physical and social barriers to walkable streets and park access. *Social Science & Medicine*. Retrieved from https://www.sciencedirect.com/science/article/pii/S0277953609005395?casa_token=E22BaXP_b1kAAAAA:guSlcxV4NGqxAsv2gN9VdtRAH5ALum1Q62mNadEuVcHKgsQ39v_CbzwkuG1vSuEEmc1u9urVxBzU

Durante, F., Fiske, S. T., Kervyn, N., Cuddy, A. J. C., Akande, A. D., Adetoun, B. E., … Storari, C. C. (2013). Nations' income inequality predicts ambivalence in stereotype content: How societies mind the gap. *British Journal of Social Psychology*, *52*(4), 726–746. https://doi.org/10.1111/bjso.12005

Edwards, G. A. S., Reid, L., & Hunter, C. (2016). Environmental justice, capabilities, and the theorization of well-being. *Progress in Human Geography*, *40*(6), 754–769. https://doi.org/10.1177/0309132515620850

Fraser, N. (2014). *Justice interruptus: Critical reflections on the" postsocialist" condition*. Retrieved from https://books.google.com/books?hl=en&lr=&id=ELZpAwAAQBAJ&oi=fnd&pg=PP1&dq=Fraser,+N+(1997)+Justice+Interruptus:+Critical+Reflections+on+the+'Postsocialist'+&ots=JZ09RVqXXN&sig=yHgthR_RKUmwQ8-zUhTulOA_ICg

Graham, E.-. (2013). 2 Philosophies underlying human geography research'. *Methods in Human Geography:* Retrieved from https://books.google.com/books?hl=en&lr=&id=JXFGAQAAQBAJ&oi=fnd&pg=PA8&dq=reconstitution+of+human+geography+as+spatial+science+positivist+&ots=ejsjwI5Hji&sig=aCgebhyAqbEbnEULTajuOQWsBK8

Hornik, K., Cutts, B., & Greenlee, A. (2016). Community Theories of Change: Linking Environmental Justice to Sustainability through Stakeholder Perceptions in Milwaukee (WI, USA). *International Journal of Environmental Research and Public Health*, *13*(10), 979. https://doi.org/10.3390/ijerph13100979

Lefebvre, H., & Nicholson-Smith, D. (1991a). *The production of space*. Retrieved from https://books.google.com/books?hl=en&lr=&id=b9WWAwAAQBAJ&oi=fnd&pg=PA289&dq=social+production+of+space+lefebvre&ots=KV1rDJnnD9&sig=4m7Hdcqp22dyhdokcr4NV6NgyZI

Li, F., Fisher, K., & Brownson, R. (2005). Multilevel modelling of built environment characteristics related to neighbourhood walking activity in older adults. *Journal of Epidemiology & Community Health*, *59*(7), 558–564. Retrieved from https://jech.bmj.com/content/59/7/558.short

Lindsay, J. M. (2006). *Techniques in Human Geography*. Retrieved from https://books.google.com/books?hl=en&lr=&id=_9iEAgAAQBAJ&oi=fnd&pg=PP1&dq=interpretivism+and+human+geography&ots=i4xAi-cazN&sig=OhCGPb121OB4RKFL2AHewLy2Qak

Low, S. (2013). *Public space and diversity: Distributive, procedural and interactional justice for parks*. *m.gc.cuny.edu*. Retrieved from https://m.gc.cuny.edu/CUNY_GC/media/CUNY-Graduate-Center/PDF/Programs/Anthropology/Faculty/Public-Space-and-Diversity.pdf

Low, Setha, & Iveson, K. (2016). Propositions for more just urban public spaces. *City*, *20*(1), 10–31. https://doi.org/10.1080/13604813.2015.1128679

Lozano-Pérez, T. (1990). Spatial Planning: A Configuration Space Approach. In *Autonomous Robot Vehicles* (pp. 259–271). Springer New York. https://doi.org/10.1007/978-1-4613-8997-2_20

Maas, J., Verheij, R. A., De Vries, S., Spreeuwenberg, P., Schellevis, F. G., & Groenewegen, P. P. (2009). Morbidity is related to a green living environment. *Journal of Epidemiology and Community Health*, *63*(12), 967–973. https://doi.org/10.1136/jech.2008.079038

Maas, J., Verheij, R., Groenewegen, P., De Vries, S., & Spreeuwenberg, P. (2006). Green space, urbanity, and health: How strong is the relation? *Journal of Epidemiology and Community Health*, *60*(7), 587–592. https://doi.org/10.1136/jech.2005.043125

Macedo, J., & Haddad, M. A. (2016). Equitable distribution of open space: Using spatial analysis to evaluate urban parks in Curitiba, Brazil. *Environment and Planning B: Planning and Design*, *43*(6), 1096–1117. https://doi.org/10.1177/0265813515603369

Messner, S. (1980). Income inequality and murder rates: Some cross-national findings. *Comparative Social Research*. Retrieved from https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=86466

Mishchuk, H., Samoliuk, N., Bilan, Y., & Streimikiene, D. (2018). Income Inequality and its Consequences within the Framework of Social Justice. Retrieved April 2, 2021, from http://yadda.icm.edu.pl/yadda/element/bwmeta1.element.baztech-578044de-f1cd-4db3-81c0-3a8b07dd3384

Mohai, P., Pellow, D., & Roberts, J. (2009). Environmental justice. *Annual Review of Environment and Resources*, *34*, 405–430. https://doi.org/10.1146/annurev-environ-082508-094348

Németh, J., & Schmidt, S. (2011). The privatization of public space: modeling and measuring publicness. *Journals.Sagepub.Com*, *38*(1), 5–23. https://doi.org/10.1068/b36057

Nussbaum, M., & Sen, A. (1993). *The quality of life*. Retrieved from https://books.google.com/books?hl=en&lr=&id=QurkDwAAQBAJ&oi=fnd&pg=PP1&ots=1zylSWOzna&sig=5SR3jmoLceSKKZ025s1xzzdHTnk

Nutsford, D., Pearson, A. L., & Kingham, S. (2013). An ecological study investigating the association between access to urban green space and mental health. *Public Health*, *127*(11), 1005–1011. https://doi.org/10.1016/j.puhe.2013.08.016

Peace, S., Rowles, G., & Bernard, M. (2013). Social interactions in public spaces and places: A conceptual overview. *Environmental Gerontology. Making Meaningful Places in Old Age*. Retrieved from https://books.google.com/books?hl=en&lr=&id=PsXS_YUtQVoC&oi=fnd&pg=PA25&dq=social+access+to+public+spaces&ots=ehl8xDBfOY&sig=zrOEiNwx7dT7OsppAnS5pT_sr7c

Piketty, T. (2017). *Brahmin Left vs Merchant Right: Rising Inequality and the Changing Structure of Political Conflict. 129.199.194.17*. Retrieved from http://129.199.194.17/files/Piketty2018.pdf

Rakauskiene, O. G., & Strunz, H. (2016). Approach to reduction of socioeconomic inequality: Decrease of vulnerability and strengthening resilience. *Economics and Sociology*, *9*(4), 243–258. https://doi.org/10.14254/2071-789X.2016/9-4/15

Rigolon, A., Fernandez, M., Harris, B., & Stewart, W. (2019). An Ecological Model of Environmental Justice for Recreation. *Leisure Sciences*. https://doi.org/10.1080/01490400.2019.1655686

Rigolon, A., & Flohr, T. L. (2014). Access to Parks for Youth as an Environmental Justice Issue: Access Inequalities and Possible Solutions. *Buildings*, *4*, 69–94. https://doi.org/10.3390/buildings4020069

Rigolon, A., & Németh, J. (2018). What Shapes Uneven Access to Urban Amenities? Thick Injustice and the Legacy of Racial Discrimination in Denver's Parks. *Journal of Planning Education and Research*, 0739456X1878925. https://doi.org/10.1177/0739456X18789251

Sallis, J., & Glanz, K. (2006). The role of built environments in physical activity, eating, and obesity in childhood. *The Role of Built Environments in Physical Activity, Eating, and Obesity in Childhood. The Future of Children*, *16*(1), 89–108. Retrieved from https://muse.jhu.edu/article/194629/summary

Schindler, S. (2015). Architectural Exclusion: Discrimination and Segregation Through Physical Design of the Built Environment on JSTOR. Retrieved March 1, 2022, from https://www.jstor.org/stable/43617074?casa_token=71R6fGqK5pcAAAAA%3A3-4QD0AZ-GeX3K8ikoB01efLuTBb0rhYuEIfsyPXwcBEmvIfxaLqUw3C_8y6Vu4uWK_HYyzAXcH5BrscYY1W3LjOnCb53sG47ZB-Ehxqls68qwGx_5PF&seq=1#metadata_info_tab_contents

Schlosberg, D. (2004). Reconceiving Environmental Justice: Global Movements And Political Theories. *Rsa.Tandfonline.Com*, *13*(3), 517–540. https://doi.org/10.1080/0964401042000229025

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Sen, A. (2009). *The Idea of Justice Amartya Sen*. Retrieved from
https://books.google.com/books?hl=en&lr=&id=L-
_Lenq6TIsC&oi=fnd&pg=PR5&dq=Sen,+A+(2009)+The+Idea+of+Justice.&ots=qhuGv
n8ft8&sig=CdSwudv4TlZdTqD3VAd72iS6TH4

Srinivasan, S., O'Fallon, L. R., & Dearry, A. (2003). Creating Healthy Communities,
Healthy Homes, Healthy People: Initiating a Research Agenda on the Built Environment
and Public Health. *American Journal of Public Health*, *93*(9), 1446–1450.
https://doi.org/10.2105/AJPH.93.9.1446

Stanley, B. W., Stark, B. L., Johnston, K. L., & Smith, M. E. (2012). Urban Open Spaces
in Historical Perspective: A Transdisciplinary Typology and Analysis. *Urban
Geography*, *33*(8), 1089–1117. https://doi.org/10.2747/0272-3638.33.8.1089

Stigsdotter, U. K., Randrup, T. B., Ekholm, O., Schipperijn, J., Toftager, M., & Kamper-
Jørgensen, F. (2010). Health promoting outdoor environments - Associations between
green space, and health, health-related quality of life and stress based on a Danish
national representative survey. *Scandinavian Journal of Public Health*, *38*(4), 411–417.
https://doi.org/10.1177/1403494810367468

Tinnevelt, R., & Geenens, R. (2008). *Does truth matter?: Democracy and public space*.
Retrieved from https://link.springer.com/content/pdf/10.1007/978-1-4020-8849-0.pdf

UNESCO. (2017). Inclusion Through Access to Public Space. Retrieved April 3, 2021,
from http://www.unesco.org/new/en/social-and-human-sciences/themes/urban-
development/migrants-inclusion-in-cities/good-practices/inclusion-through-access-to-
public-space/

Urry, J. (1985). Social relations, space and time. *Social Relations and Spatial Structures*,
20–48. https://doi.org/10.1007/978-1-349-27935-7_3

US EPA. (2014). Environmental Justice.

Verwiebe, R., & Wegener, B. (2000). *Social Inequality and the Perceived Income Justice
Gap*. *Social Justice Research* (Vol. 13). Retrieved from
https://idp.springer.com/authorize/casa?redirect_uri=https://link.springer.com/article/10.1
023/A:1007545823040&casa_token=YGxTQNxQQucAAAAA:X2sgexzTreZocytHHpr
QWnR4wSR71AdZlOQ3wTIWrqLeAehhn6o4QBXGiFb5fJmAZMOo4HAhBYkOwj_V
ZQ

Weiss, C. C., Purciel, M., Bader, M., Quinn, J. W., Lovasi, G., Neckerman, K. M., &
Rundle, A. G. (2011). Reconsidering access: Park facilities and neighborhood
disamenities in New York City. *Journal of Urban Health*, *88*(2), 297–310.
https://doi.org/10.1007/s11524-011-9551-z

Wen, M., Zhang, X., Harris, C., & Holt, J. (2013). Spatial disparities in the distribution of parks and green spaces in the USA. *Annals of Behavioral Science*. Retrieved from https://academic.oup.com/abm/article-abstract/45/suppl_1/S18/4563966

Werlen, B. (1993). *Society action and space: an alternative human geography*. Retrieved from https://books.google.com/books?hl=en&lr=&id=72HvR3XttU4C&oi=fnd&pg=PP1&dq=reconstitution+of+human+geography+as+spatial+science+positivist+&ots=t6KnM7Opd3&sig=qZ4QlMdQ95d2KC7YA908C09SkCk

Whitlock, J. (2007). The role of adults, public space, and power in adolescent community connectedness. *Journal of Community Psychology*. Retrieved from https://onlinelibrary.wiley.com/doi/abs/10.1002/jcop.20161?casa_token=enDFbd1ZBakAAAAA:PVRSAu0T1y_Gq26WzTIr4b5hGuy5MDsfz_55AijpOSOmkF00_p906wP5C7yoVifA_5GGc6qNeVd9liHe

Williams, M. (2000). Interpretivism and generalisation. *Sociology*, *34*(2), 209–224. https://doi.org/10.1177/s0038038500000146

Wolch, J., Wilson, J. P., & Fehrenbach, J. (2005). Urban Geography Parks and Park Funding in Los Angeles: An Equity-Mapping Analysis. *Urban Geography*, *26*(1), 4–35. https://doi.org/10.2747/0272-3638.26.1.4

Zallio, M., & Clarkson, P. J. (2021). Inclusion, diversity, equity and accessibility in the built environment: A study of architectural design practice. *Building and Environment*, *206*, 108352. https://doi.org/10.1016/j.buildenv.2021.108352

Zhang, X., Lu, H., & Holt, J. B. (2011). Modeling spatial accessibility to parks: A national study. *International Journal of Health Geographics*, *10*. https://doi.org/10.1186/1476-072X-10-31

CHAPTER 2

ARTICLE 1

CONCEPTUALIZING LINKAGES BETWEEN COMMUNITY WELL-BEING
AND ACCESS TO PUBLIC SPACE: AN ENVIRONMENTAL JUSTICE
PERSPECTIVE

Abstract

The purpose of this conceptual paper is to explore access through the theoretical linkages between community well-being and exchanges across key dimensions of public spaces (i.e., physical characteristics, technical experts, and communities). It draws a nexus between the *Tripartite Framework* and the *Network Theory of Wellbeing,* to conceptualize an integrated notion of access to public spaces. The linkages between community well-being as conceptualized in the *Network Theory of Well-being* and exchanges across key dimensions of public spaces (specific to environmental justice constructs) as theorized in the *Tripartite Framework*, are explored to conceptualize the opportunity to beneficially utilize a locale (*i.e.,* access). The main contribution of this paper is its merging of these two important bodies of scholarship that have yet to intersect, but which offer a formidable platform to advance knowledge on how exchanges across technical (e.g., planners), social (i.e., communities) and physical (e.g., built spaces like parks) can contribute to understanding linkages between access and community well-being. The conceptual synthesis is illustrated through the discussion of specific examples in Maryvale. Keywords: Public Spaces; Access; Environmental Justice; Community Well-being.

Introduction

The rise in inequality over the last four decades has been a central focus of several policy

debates. Evidence of this increase in inequality across the world, has been largely based

on disparities in income (Alvaredo, Chancel, Piketty, Saez, & Zucman, 2018). However,

the debates on economic inequality have extended into wider concerns related to

community well-being (Lee, Kim, & Phillips, 2015). The concept of community well-

being is a group scale conceptualization of well-being. It is derived from the realization

of ideals that support the continuous existence and functioning of communities (i.e.,

groups place bound by a shared residential location) (Canadian Index of Wellbeing,

2013; OECD, 2008). Scholars have raised concerns related to the correlations between

income disparities and factors which undermine the well-being of communities (e.g.,

social tensions, lack of trust, low life expectancy and high mortality rate) (Babones, 2008;

Durante et al., 2013). The manifestation of economic inequalities in the built environment

is key to such concerns, given that poor environmental conditions can thwart the

manifestation of ideals such as community satisfaction, social interaction, and agency

(Aiyer & Zimmerman, 2015).

There is an intricate relationship between built environments and community

well-being, particularly within vulnerable contexts (Cox, Frere, West, & Wiseman,

2010). The built environment comprises human-made surroundings where daily work and

recreation occurs (Roof & Oleru, 2008). Scholars note that spatially segregated patterns

are often evident within built environments located in vulnerable neighborhoods (Bullard,

1993). For instance, minority predominant and low-income groups are often forced to

reside in close proximity to harmful environmental conditions like toxic waste dumping

sites. Such dire circumstances correlate with outcomes like low community satisfaction, reduced life expectancy and high mortality rate, which have implications for assessments of community well-being (Bullard, 1993; (Morello-Frosch, Pastor, Porras, & Sadd, 2002; Pastor, Sadd, & Hipp, 2001). Aside from the threats to community well-being, which stem from a community's unfair exposure to toxic and noxious disposal sites, barriers that prevent *access* to public spaces can also hinder the manifestation of community ideals (Aiyer & Zimmerman, 2015). For instance, high crime rates directly related to a given public space will likely inhibit community members from accessing the site and negatively affect their ability to exercise in the outdoors. From this vantage point, an important relationship exists between public spaces and community well-being that can be explored *vis-à-vis* the examination of the concept of access, particularly given that these common pool resources are designed for individual and collective use (Tinnevelt & Geenens, 2008;Sander, 2016).

Extant research on the implications of *access* to public spaces on well-being has generally occurred under the auspices of the environmental justice theoretical lens (Byrne, Wolch, & Zhang, 2009; Jennings, Johnson Gaither, & Gragg, 2012; Liotta, Kervinio, Levrel, & Tardieu, 2020; Mullenbach & Baker, 2020). Such examinations have predominantly focused on interrogating the relationship between well-being and access as an aspect of *distributive justice* (Li et al., 2005; Srinivasan et al., 2003; Stigsdotter et al., 2010; Talen, 1998). Distributive justice is a construct of environmental justice that highlights fair allocation of resources examined through the spatial relationships between vulnerable populations and environmental resources. Some studies have established positive relationships between public space allocations and well-being ideals by arguing

that the outcomes often include reduced obesity, lower mortality (Li et al., 2005), and increased mental health (Maas et al., 2006; Nutsford et al., 2013).

By contrast, scholarly examinations of well-being and public spaces that focus on *access* as relates to *interactional and procedural justice* have (to date) been relatively few. Interactional justice highlights fair experiences with resources while procedural justice explores meaningful involvement of different populations in decision making. Studies on access to public spaces as relates to interactional justice have generally focused on the experiences of vulnerable populations and their perceptions of social interaction and safety (Byrne, 2012; Crompton & Chuan, 1992 ; Hornik et al., 2016; Peace et al., 2013). By comparison, studies focused on access to public spaces as relates to procedural justice have highlighted the existence of exclusionary practices in decision making; they have also indicated that when inclusive mechanisms are deployed, vulnerable populations are more likely to experience high levels of civic engagement and agency (Bolin, Grineski, & Collins, 2005). Notably, examinations of the concept of access to public spaces that draw on environmental justice frameworks have predominantly addressed the three justice constructs (i.e., distributive, procedural and interactional) separately. However environmental justice as pertains to environmental resources like public spaces culminates in *an integratio*n of distributive, procedural and interactional justice (Rigolon, Fernandez, Harris, & Stewart, 2019), which have collective linkages to community well-being. Consequently, *access to public spaces is yet to be explored through an integration of the different constructs of environmental justice (i.e., distributive, procedural and interactional justice) which have linkages with community well-being*.

The distributional characteristics of public spaces, nature of interactions within public spaces and inclusion in planning and design, holistically inform the realization of community ideals and access. That is, a public space may exist within spatial proximity to a community, but such a resource may be perceived as inaccessible because of poor quality of interactions associated with the locale or the lack of community participation in planning and design. Such exchanges across society, physical characteristics and the technical agents responsible for planning and design have linkages to community well-being ideals such as physical health, agency and social interaction (Boone, Buckley, Grove, & Sister, 2009; Cutts, Darby, Boone, & Brewis, 2009; Weiss et al., 2011). From this vantage point, purposeful exchanges across the aforementioned dimensions collectively inform the realization and reinforcement of ideals towards community well-being with possible implications on access. For example, the inclusion of community members in planning, design and management of recreational spaces has implications of agency and a sense of ownership, which can in turn reinforce access (Boone, Buckley, Grove, & Sister, 2009). Access is thus a concept that is complexly linked to exchanges across multiple key dimensions (i.e., technical, social, and physical) towards community well-being. Hence, there is an intricate link between access, conceptualized as informed by engagements among key dimensions of public spaces towards the realization of community well-being ideals.

However, discussions of a plausible conceptual framework that encapsulates this complex relationship have to date remained scarce. Given that public spaces are shared resources at a community scale, exploring engagements among such dimensions of public spaces and the linkages to community well-being can provide added insights into the

factors that *undermine* access, particularly in low-income communities. Such communities have historically been at the forefront of injustices as pertains to built-environmental development, and the linkages to the well-being of such populations (Bullard, 1993). Hence, scholarship of this nature is vital in augmenting our understanding of access and environmental justice as relates to public spaces, as well as expanding knowledge on the key linkages between production of public spaces and community well-being.

Accordingly, the purpose of this conceptual paper is to *explore access through the theoretical linkages between community well-being and exchanges across key dimensions of public spaces (i.e., physical characteristics, technical experts, and communities).* This purpose is organized around three aims. Foremostly, drawing on environmental justice literature, as well as spatial theories specifically, the *Tripartite Framework* (Lefebvre & Nicholson-Smith, 1991), this paper commences with a detailed discussion on the concept of *access* to public spaces. Secondly, the nexus between exchanges across the key dimensions of public spaces and community well-being are explored drawing on the *Network Theory of Wellbeing* (Bishop, 2005). The overall goal of this conceptual synthesis is to explore how engagements among technical (e.g., planners), social (i.e., communities) and physical (e.g., built spaces like parks) dimensions to spatial production, can contribute to community well-being and perceived beneficial opportunities of use. Lastly, the applicability of the conceptual synthesis is illustrated through the discussion of four specific examples of public spaces in Maryvale, Arizona. These examples will animate the theoretical discussion on the concept of access to public spaces as relates to distributive, procedural, and interactive justice as well as their

respective linkages to community well-being. As a low-income neighborhood, predominantly comprised of ethnic minority residents, the village of Maryvale offers many exemplars of public space related outcomes.

Drawing on environmental justice literature, the subsequent section of this paper presents a detailed discussion on the concept of access. Through an elaboration of the *Tripartite Framework* (Lefebvre & Nicholson-Smith, 1991), the subsequent section presents three key dimensions (technical, social, and physical) of social production of space and their environmental justice related implications. The main contribution of this paper is its unique pairing of literature on social spatial production and environmental justice with scholarship on well-being (presented through the Network Theory of Well-being). This conceptual paper ends with a discussion that draws on the Maryvale examples to showcase how the aforementioned theoretical concepts *intersect* and *manifest* in a real-life context. It is important to note that any mention of communities in this manuscript is in reference to communities of place.

Conceptualizations of Public Spaces

There are a plethora of definitions of public space and numerous overlaps in the conceptualizations of this concept. In political theory, public spaces are regarded as the physical component of the public sphere; a construct of democracy characterized by free speech, open debate, and protests (Habermas, 1989). Urban sociologists, shifting away from solely prioritizing aesthetics and visual forms to human-centered designs and functions, describe public spaces as physical spaces with non-restricted access to the public, for recreation, social interaction, and civic functions (Carr, Stephen, Francis,

Rivlin, & Stone, 1992). The definition of public space in organizational and management disciplines, heavily draws on the economic theorization of public goods which are defined as publicly or privately managed goods available to the public for unrivaled and non-exclusive consumption. From this vantage point, public spaces are henceforth considered public goods (Murray, 2010).

As publicly funded resources, public spaces have been variously explored in environmental justice literature. Predominant in such explorations has been the engagement with Rawls, (1971) *Theory of Justice*. The theory equates justice to fairness through an equal claim to basic rights and *access* to opportunities through resource allocation. Drawing on this focus on resource allocation, examinations of access to public spaces have largely highlighted distributive justice (fair allocation) with particular attention to issues of spatial relationships between public spaces and different user communities (Abercrombie, Sallis, & Conway, 2008; Engelberg et al., 2016; Kim & Nicholls, 2018;Talen 1998;Wen et al., 2013).

Access Examined Through Distributive Justice

Proximity is a measure of access that is most frequently utilized to explore aspects of *distributive justice*. The geographical principle of distance decay (increase in distance is a constraint to the use of a facility) serves as the basis of measurements of access as a function of distance. For example, for facility P located at distance X, outside an asserted proximity, distance is assumed to constrain the means to utilize facility P. In its application to public spaces, walking distance between 1 to 1.5 miles, has been generally considered to be within acceptable proximity, in urban settings (Oh & Jeong, 2007).

Access to public spaces has been explored by investigating characteristics within a linear radius around a facility (Gu, Tao, & Dai, 2017). However, the actual routes to public facilities are often indirect and investigations within a straight-line radius may offer skewed results. Hence, distance measurement via network analysis techniques have been favored by some scholars over linear radii distance measurements based on the asserted oversimplification of the latter (Kuta, Odumosu, & Ajayi, 2014; Oh & Jeong, 2007).

Notably, proximity to public spaces, explored either based on a straight line or route distances, has been applied as a measure of access for vulnerable populations such as ethnic/racial minorities, rural populations, and low-income residents (see Macedo & Haddad, 2016; Omer, 2006). Some studies have also examined how public spaces such as parks are distributed, relative to other urban features in different settings (Liu, Zhang, Ting, and Liu 2020; (Macedo & Haddad, 2016). Varying associations have been found between the spatial distribution of public facilities, and demographical characteristics like race and economic classes, across different urbanization levels (Wen, Zhang, Harris, & Holt, 2013). These results highlight the need to examine other constructs critical to environmental justice investigations such as procedural justice (Mitchell, 2003).

Access Examined through Procedural Justice

Explored as an extension of Rawls Theory of Justice, *procedural justice* is concerned with fairness in processes that take place prior to resource development and allocation (Solum 2004). The injustices associated with the lack of representation of vulnerable populations in built environmental decisions has been explored in several contexts (see Abbott, 2013). Extant research shows evidence of correlations between low-income

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communities and landfill sites, toxic waste disposal and run-down neighborhoods (Blanton, 2011; Zimring, 2017). The structural biases faced by low-income communities are consistent with the challenges of organizing to have their concerns acknowledged and integrated into built environmental decisions.

An exploration of access through 'cultural politics', highlights how a history of political struggle among vulnerable populations (minority and/or low-income groups) has often led to socio-ecological exclusion in public space development processes (Byrne, 2012). Given that public spaces are public goods, public inclusion in development and management processes is vital to restoring and democratizing such locales (Holland, Clark, Katz, & Peace, 2007). In low-income contexts, conflicting interests may come into play when social agents are included in public space development processes (Hernández-Bonilla, 2008). However, the exclusion of social agents in planning, design, and development translates into problematic spaces, which are often abandoned for their inability to represent social ideals (Leary-Owhin, 2016). In examining access to public spaces, many studies have highlighted the need to explore local priorities and policies that influence the production of public spaces among vulnerable populations (Engelberg et al., 2016).

Access Examined Through Interactional Justice

Interactional justice refers to the many valuable experiences that users have within public spaces (Kabisch & Haase, 2014). Such experiences have been highlighted in public space discourses and academia, as being influenced by factors such as the love of nature or biophilia (Stigsdotter et al., 2010), quality of space and nature of social interactions

(Carmona, 2019; Francis, Giles-Corti, Wood, & Knuiman, 2012), as well as other socio-cultural expectations (Amin, 2008). Frameworks such as *The Place Diagram* highlight key constituents of what makes a 'public space good' based on experiences of use. The ability of public spaces to facilitate sociability through collective use, comfort, and cultural representation, can cast them as places which are of some social value in a locale (Project for Public Spaces, 2000). In an examination of public space projects, Worpole & Knox (2007) indicate that the success of public spaces (e.g., shopping areas, streets, markets, playgrounds, and parks) is dependent on the values placed on them as a result of social interactions, as much as it is dependent on planning and architectural designs. This statement is consistent with existing studies which showcase how public spaces that are perceived by society to be valuable, facilitate various user interactions (Jacobs, 1961). The interactions that take place in the production of public spaces, translates into perceived values of space which either result in barriers or enablers of use.

Public Spaces Access Examined Through Justice Intersections

In acknowledging the multi-dimensional nature of access, some studies have explored access to public spaces through intersections between various environmental justice constructs. Cutts et al., (2009) find that factors like quality, security, and cultural significance are some of the key determinants that inhibit access to a public space. Their study indicates that despite the finding that vulnerable groups (i.e., low income, minority races) were more likely to live near public spaces such as parks, in some contexts, the high incidence of crime and traffic fatalities in such locales counterbalanced the expected advantages. Weiss et al. (2011) also argue that beyond the proximity to public spaces in

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varying locales, barriers such as surrounding land-use characteristics (i.e., chemical dumping sites, low-income housing) perceived to be non-ideal, become deterrents of use. Hence, beyond availability of a resource, interactions with the resource and other users that are perceived as unsafe, unfair and/or exclusionary, can translate into barriers that prevent use. Both studies explore access through intersections between *distributive* and *interactional* justice.

Rigolon et al. (2019) explore a conceptualization of access to public spaces highlighting how distributive, procedural, *and* interactional justice conjointly impact utility. This exploration was done through an ecological lens which focused on how policy, physical, perceived, social, and individual environmental factors inform access and active recreational behavior. That study however does not explore how engagements among the key dimensions of public space (i.e., physical, technical, and social) are linked to access and contribute to the realization or otherwise of community well-being ideals. Scholars have explored the concept of well-being in relation to environmental justice in order to highlight important links between environmental resources and the attainment of well-being ideals such as health, agency, satisfaction, and safety at the community scale (Edwards et al., 2016; Fraser, 2014; Nussbaum & Sen, 1993). Such scholarship has advanced the argument that just environments transcend issues of fair spatial resource allocation, to include related socio-spatial factors perceived to facilitate well-being Nussbaum & Sen, 1993; Sen, 2009). But while well-being is considered as crucial to the intended outputs of environmental justice (Mohai et al., 2009), it has yet to be the focal point of studies that account for the dimensions of public spaces (*i.e.,* technical, social

and physical) and simultaneously adopt an integrated approach of all three constructs of justice (*i.e.,* distribution, procedural and interactional).

Access Reconceptualized

Given that public spaces are shared resources at a community scale, the relationship between built environments and community well-being can be better understood by exploring how social, technical, and physical engagements yield positive communal states to inform access and the reinforcement of such ideals.

Public Spaces and the Tripartite Framework

The *physical* (*i.e.,* a park), *technical* (*i.e.,* planners), and *social* (e.g., users) dimensions of public spaces are conceptualized in Lefebvre's seminal work on the *Tripartite Framework of Space Production* (Lefebvre & Nicholson-Smith, 1991). This framework categorizes the dimensions of space into *spatial practice*, *representations of space*, and *spaces of representation*, which make up the spatial triad (Lefebvre & Nicholson-Smith, 1991). Spatial practice comprises the physical characteristics of space encountered through everyday routines. It is also known as perceived space and it focuses on the manifestation of neo-capitalist and power-driven characteristics of urban redevelopment. Representations of space encompasses the technical and administrative conceptualizations of space (spearheaded by technical experts such as planners and architects), which manifest as plans, layouts, maps, and zoning policies. Spaces of representation entails societal idealizations of space arising from emotional, social, and cultural connections. In relation to public spaces, the nature of engagements that take place among these spatial and social dimensions either translate to the emergence of

accessible or inaccessible spaces that inhibit community ideals (Leary-Owhin, 2016).

Understanding how access and communal ideals emanate from these interactions can

provide insights into the nascent area of research focused on the relationships between

built environments and community well-being (Lee et al., 2015).

The intricate relationships formed between the dimensions of the spatial triad,

hence result in what Lefebvre describes as the social production of space. That is,

> [s]pace is not a scientific object removed from ideology or politics. It has always
>
> been political and strategic. There is an ideology of space. Because space, which
>
> seems homogeneous, which appears as a whole in its objectivity, in its pure
>
> form, such as we determine it, is a social product (Lefebvre & Nicholson-Smith,
>
> 1991)

By its very conceptualization as a spatial and social product, space is inseparable from

economic, political, and social ideals and thus connecting it to justice issues is plausible

(Williams, 2013). *Employing Lefebvre's conceptualization of space production to*

examine justice through access goes beyond examinations of spatiality, to include the

social enablers of use. Seminal adaptations of the framework that explore issues of

justice have highlighted the relational nature of space (Harvey, 2010). Such studies

indicate that cities must materialize the desires and lifestyles society yearns for, beyond

individual access to resources (Harvey, 2010). Soja's, (2016) influential work asserts that

"[a]s a starting point, spatial justice involves the fair and equitable distribution of socially

valued resources and the opportunities to use them" (2). Soja's (2016) position draws on

his previous adaptation of Lefebvre's spatial triad. Such key explorations of Lefebvre's

framework in relation to issues of justice, emphasize the importance of socio-spatial factors role in enabling or inhibiting the use of public spaces (*i.e.,* access).

Linkages Between Access and Community Well-Being

Building on the discussion on access, dimensions of public spaces, and the integration of the three constructs of justice presented in the previous sections, this part of the paper offers important linkages to the concept of well-being, by drawing on Network Theory of Well-being (Bishop, 2005). Specifically, this section examines how engagements between the physical, technical, and user dimensions that constitute space production as theorized in the *Tripartite Framework* (Lefebvre & Nicholson-Smith, 1991) can inform a comprehensive understanding of access that accounts for the realization and reinforcement of community ideals as theorized by Network Theory of Well-being (Bishop, 2005).

Network Theory of Well-Being

Bishop's (2005) *Network Theory of Well-being* provides a lens through which to understand how socio-spatial engagements translate to the realization or otherwise of community well-being. It theorizes well-being as a product of social and environmental interactions perceived to support group ideals. An intersection between the spatial triad framework and the theory of well-being presents an opportunity to understand the engagements that take place among the dimensions of space and the attainment or otherwise of community ideals. Bishop's (2005) conceptualizes well-being as the attainment and reinforcement of idealized states through human and non-human engagements. This theory accounts for philosophical conceptualizations and

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psychological examinations of well-being. It also encompasses constructs central to existing theories of well-being such as pleasure in hedonism, virtues in Aristotelian accounts, authentic happiness under eudaimonia, and desire satisfaction which informs *Desire Fulfilment Theory* (Haybron, 2006; Heathwood, 2015). Bishop (2005) argues that well-being as explored by both philosophers and psychologists has been examined through positive causal networks (PCNs) and positive fragments. PCNs are framed as self-perpetuating feedback loops of successful engagements made up of positive states. Through human and non-human engagements, positive states connect to form fragments which intricately connect and reinforce such states to create PCNs.

This theorization of well-being as a self-perpetuating positive state, is derived from the *Broaden and Build Theory*, which asserts that positive states broaden the 'thought and action repertoire', allowing for a wider range of thoughts to develop sustainable communal, intellectual, and physical assets (Fredrickson, 2004). Contrarily, negative causal networks (NCNs) entail continuous loops of negative states, comprising situations which are harmful and likely to reduce the robustness of PCNs. PCNs are robust if an increase in the number of positive states results in an increase in perceived well-being. Assuming that an individual is better off having more positive states (Lyubomirsky, King, & Diener, 2005), PCNs are strengthened by the presence of positive fragments and weakened by negative states (Bishop, 2005). Spreitzer, Sutcliffe, Dutton, Sonenshein, & Grant, (2005) examination of the relationship between social connectedness and thriving within an organization, highlights well-being in groups as a function of the different resources produced from human and non-human interactions.

This sets the stage for studying group well-being through the interactions which produce shared benefits.

Group well-being studies focus on examining the contribution individuals or organizations make to unlock the latent potential and possibilities of other individuals for human and organizational welfare (Dutton, Glynn, & Spreitzer, 2008). Bishop (2005) argues that group well-being is achieved through Positive Causal Networks (PCNs) which emanate from interactions perceived as valuable to a group. Drawing on Spreitzer et al's., (2005) contribution to positive organization scholarship, Bishop (2005) asserts that a Positive Causal Network (PCN) is created (e.g., resilience, support and belonging) when groups perceive interactions with each other, organizational structures, and resources as contributing positively to the group. For groups like communities that are bound by some localized scale, such positive states are theorized to result from engagements that support the realization of collective ideals and the continuous existence of the group (Bishop, 2005).

Among communities bound by some communal characteristics and residential scales, collective ideals emerge from a shared sense of purpose which translates into collective goals (Ledwith, 2020). This informs the pursuance of common good for the collective rather than the individual (Atkinson, Bagnall, Corcoran, South, & Curtis, 2020). This collective yearning for a community to flourish as an actualized and functioning group emphasizes communal ideals like social involvement, safe engagement, civility, nurturance, and participation (Ryan & Deci, 2001). Bearing communal living in mind, community well-being is hence not a simple function of the totality of individual well-being, *but the collective attainment of shared values towards*

the well-being of a group (Atkinson et al., 2020). In the built environment, such shared values have been demonstrated by for instance the existence of community led advocacy movements that demand ideals (*e.g.,* intergenerational equity, social norms, and values) beyond individual perspectives or interests (Burningham, Barnett, & Thrush, 2006; Devine-Wright, 2009). *Network Theory of Well-being* conceptualizes such ideals as positive states that result from social and spatial engagements perceived to contribute to the continuous existence of a group (Bishop 2005). Such positive states connect to form PCNs which reinforce other positive states while negative states reduce the robustness of PCNs and hinder group well-being.

  Network Theory of Well-being hence provides a lens for conceptualizing human and non-human interactions that result in positive or negative states and consequently promote or hinder well-being. Through an intersection between the tripartite framework and Bishop's theory, access to public spaces can be framed *based on whether* engagements across *material characteristics of space* (highlighted in spatial practice), *technical experts* (responsible for representations of space) and *communities* (with expectations highlighted in representations of space) *are perceived to enhance and reinforce positive communal states* and consequently perceived opportunity to beneficially utilize a locale. This intersection allows for an in-depth understanding of access based on perceived positive states and cycles (PCNs) valued by communities.

Illustrative Scenarios

Four examples of public spaces located in Maryvale, Arizona are discussed in the subsequent section to demonstrate the linkages between tripartite dimensional engagements, the notion of access emanating from such engagements, and the related positive or negative states related to community well-being. Cartwright Community Garden and Heart of Isaac Community Center are discussed to illustrate positive states while Maryvale Golf Course and Villa De Paz are drawn upon to highlight negative states derived from tripartite engagements and their influence on access.

Positive States and Enablers of Use

Drawing on the example of Maryvale, two community led public spaces are discussed which illustrate the linkages between tripartite engagements, positive states and networks that emerge through access as relates to distributive, procedural and interactional justice. Discussing enablers of utilizing spaces, (Lefebvre & Nicholson-Smith, 1991) presents the concept of differential space which denotes spaces that are determined as valuable to society. They may constitute spaces which satisfy socially valued ideals in their original or adapted intents and materializations. As highlighted by Bishop, (2005), such societal ideals when realized, trigger positive states which facilitate the continuous existence and functioning of society. The two examples discussed under facilitating positive states are akin to differential spaces.

Cartwright Community Garden

As a communal space, the Cartwright Community Garden was birthed from engagements between community members, the school district and partners, and landscape architects

(Valley of the Sun United Way, 2018). Prior to becoming a community garden, the space

was an empty lot which belonged to the school district. The community had idealizations

on the use of the space (i.e., spaces of representation) embodied in the desire of parents

and students to have a locale where they could spend time (Cole, 2018). Such

idealizations were spearheaded by community organizations like United Way, which has

sought to champion initiatives to systematically address racial inequalities (Valley of the

Sun United Way, 2018). Through a series of engagements, these ideals were aligned with

the school district's aim to initiate a wellness program through a community garden. The

expectations associated with use of this space, as highlighted by the different community

agents, were incorporated into designs by landscape architects who engaged with the

community (Design Studio for Community Solutions, 2020).

> Along 51st Avenue in the Maryvale area, there is a plot of land that just a year
> ago would have seemed like just a dirt patch. With a partnership formed
> between community members, Valley of the Sun United Way, Cartwright
> School District, and City of Phoenix Police and Fire it became a beautiful
> community garden for families and students to enjoy …To continue their
> involvement, on February 23 of this year, Fire and Police had a "Community
> Day" where they educated more than 120 students from the two schools on
> nutrition, gardening, and resiliency. (Valley of the Sun United Way 2018)

The above excerpt substantiates the argument that Cartwright Community Garden is a

quintessential example of a differential space because it was repurposed so as to ensure

that it was utilized by the community (see Lefebvre & Nicholson-Smith, 1991).

The engagement of community stakeholder in the repurposing of the empty lot into a utilized community garden, is a key example of community empowerment (Valley of the Sun United Way 2018). The linkages made between the community garden and community empowerment is associated with access to a communal space, emanating from the different tripartite dimensions. *Distributive justice* is satisfied when representatives responsible for planning within the district (representations of space) allocate an empty lot (spatial practice) for use as a community garden, allowing for access to a location within proximity, to host activities targeted at championing community health and wellness in the school district (Design Studio for Community Solutions, 2020). The decision to make this allocation was informed by engagements between community agents (parents, school children, united way) and school district representatives. Such engagements alongside the incorporation of community ideals (spaces of representation) in the plan and design of the space (representations of space) by landscape architects, satisfies *procedural justice*, and grants access to a space that is designed through processes which are associated with community agency and ownership, as indicated in the excerpt below:

> …[w]e learn about Maryvale and about the context both ecologically and
> socially and then we design…and I think it makes for a richer and more
> grounded design use. (Design Studio for Community Solutions 2020)

Furthermore, as showcased in the quote below, the physical layout and materialization of the resulting space, contributes to access based on the characteristics that facilitate

desired interactions within the space and foster a sense of community; by so doing,
augmenting *interactional justice*.

>…[w]ith the support of the school district, United Way, community groups,
>Councilman Danny Valenzuela, Chief of Fire, Chief of Police, a "Day of
>Service" launched with over 150 police, fire and cadets putting together an
>additional 30 garden beds! ...These are all now on an irrigation system. The
>garden also has 10 trees and a stage being built!" (Valley of the Sun United Way
>2018)

The narratives explored in the above paragraphs show that in describing the community
garden, reference is made to the overall positive impact it has on the community. This
positive impact is linked to communal states (e.g., resiliency, empowerment, and support)
realized out of engagements among the tripartite dimensions. Perceived access to the
garden, is hence closely tied to the positive states associated with engagements between
tripartite dimensions that satisfy distributive, procedural, and interactional justice.

Heart of Isaac Community Center

The Heart of Isaac Community Center is a grassroots-managed space, which emerged in
response to a request for a community hub. This was following calls from parents in the
Isaac Elementary School District for a center that provides a myriad of support services
for the community (i.e., spaces of representation). As indicated in the quote below, the
center is described as serving various community functions towards the satisfaction of
communal ideals.

> The Heart of Isaac Community Center will serve as a "community health hub"
> where the Isaac community can obtain support to overcome challenges, create
> healthy connections, and participate in opportunities that promote leadership and
> giving back to the community (Family Resource Network, 2014).

The school district repurposed a facility previously used as a storage space (i.e., Spatial Practice) and converted it into a communal space. By allocating this space to the community, the school district facilitated access to a shared communal space within proximity, towards satisfying *distributive justice*.

> This building here sat empty, we used it for storage and it became a great
> opportunity to make this a focal point in our community and really a symbol of
> the great work we can do when our families work together with the school
> district - Isaac School District superintendent Dr. Mario Ventura (Family
> Resource Network, 2014)

The excerpt above partly indicates that collaborating with the school district, the *Promotores* (community leaders who represent communal interests) spearheaded the transition of the space into a hub representative of community ideals (spaces of representation) (Heart of Isaac Community Center Fact Sheet, 2018). Such, engagements with community members in planning, design and development contributed to the emergence of community ownership and hence perceived access from the satisfaction of *procedural justice* (Frontdoors Media, 2017). Additionally, characteristics such as the historical gallery showcasing cultural connections and meeting spaces for different educational purposes, are a materialization of the expectations of use by the community (i.e., spaces of representation) (Heart of Isaac Community Center Fact Sheet, 2018).

Access is hence facilitated through the perceived value of experiences within the space towards *interactional justice*.

The narratives highlighted demonstrate how access to the 'Heart of Isaac Community Center' jointly emanates from the location of the space, the inclusion of the community in planning, design and development, and the characteristics that facilitate quality interactions during communal use. It is an example of groups of people with a shared vision and expectations of engagements within a public space (see Leary-Owhin, 2016).Such engagements are perceived to enhance the continuous existence of a group (i.e., group well-being) and such perceptions have linkages to facilitators of use (i.e., access) (see Leary-Owhin, 2016). As indicated by an influential local nonprofit organization, the center "serve[s] as a hub for resources, where community members can obtain support to overcome challenges, create healthy connections and participate in opportunities that promote leadership and giving back to the community" (Valley of the Sun United Way, 2017). Thus, access is shown as culminating in engagements between tripartite dimensions that are perceived to support the realization of positive states towards community well-being.

Engagements between members of communities of place who have societal idealizations of space (i.e., spaces of representation) and technical experts (e.g., planners and architects) responsible for planning and design (i.e., representations of space), have perceived implications on positive states such as agency, civic engagement, and social involvement (Chen & Qu, 2020;   Llano, 2020). It can be argued that the positive states which emerge from engagements among the dimensions of the tripartite framework co-exist with other positive states. Locational characteristics that facilitate the utility of

public spaces have associated linkages to positive states such as physical and mental health, which stem from judicious allocations of public spaces (i.e., distributive justice) to encourage use (Talen, 1998; Srinivasan et al., 2003; Stigsdotter et al. 2010). Such positive states co-occur with and reinforce other positive states (Mills, Clark, Ford, & Johnson, 2004). For instance, desirable social interactions (i.e., interactional justice) in spaces which can be conveniently utilized by the community due to proximity, result in positive communal affect and are correlated with other positive states like communal sharing (Petersen, Fiske, & Schubert, 2019). Similarly, positive states that foster agency and participation in planning and decision making (i.e., procedural justice) (Chen and Qu 2020; Llano 2020), reinforce states such as community satisfaction (Leary-Owhin 2016). Positive states associated with tripartite engagements facilitates access to public spaces while access to such spaces in-turn reinforces the realization of positive states.

Negative States and Deterrents of Use

In this session, two golf courses are discussed to illustrate links between public space related tripartite engagements, negative states and the networks that emerge from access as relates to distributive, procedural and interactional justice. Discussing deterrents of utilizing spaces, (Lefebvre & Nicholson-Smith, 1991) presents the concept of abstract space which denotes the commodification of space, centralized around its political and economic functions at the expense of its social ideals. Such spaces tend to be homogenized and they lack societal relevance. The lack of social relevance associated with abstract spaces may trigger negative states, considered by communities as

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detrimental to well-being (Bishop, 2005), hence stifling access to such spaces. The two examples discussed under negative states are akin to abstract spaces.

Maryvale Golf Course

The Maryvale Golf Course, which opened in 1961, sought to provide a public amenity accessible to all its residents. It comprised of a 130-acre championship length course managed by the City of Phoenix. However, after running at a deficit of $250,000 per year, a partnership between the City of Phoenix and Grand Canyon University attempted to save the city money. The golf course is found within the vicinity of several elementary and high schools, which meets considerations of *distributive justice* because it ensures proximity to a resource to facilitate convenient opportunities of use. Furthermore, to guarantee young residents in Maryvale benefit directly from the use of the course, year-round tutorials are frequently organized for students through a junior golf program.

The location of the course is infamous for having the two topmost car crash intersections in the Phoenix municipality (i.e., 75th Ave & Indian School Rd and 67th Ave & Indian School Rd) and it is in close proximity to other locales with high records of car crashes(National Highway Traffic Safety Administration, 2020). Such locational characteristics (i.e., spatial practice), perceived as potential threats to safety, can stifle perceived access to resources in the vicinity (Wiletsky, Choate, & Katz, 2007). The frequency of accidents at the aforementioned intersections has been largely blamed on physical characteristics (i.e., spatial practice) derived from design failures (i.e., representations of space) in the locale. Such conditions have been linked to unideal states such as a sense of danger, which is not complementary to well-being and consequently

access (Cutts et al., 2009). Additionally, scholarship shows that in low-income and minority dominant neighborhoods, systematic segregation evidenced in zoning and development planning (i.e., representations of space) has manifested in streets, playgrounds, and parks (i.e., spatial practice) that do not meet societal ideals (i.e., spaces of representation) and hence are perceived as unsafe for use. For instance, describing major roads in the vicinity, a local journalist indicates that the adopted "…[o]lder design lacks a lot of today's standard features like a lagging yellow arrow for left turns, a signal above each lane and a pedestrian walk button" (Estes, 2021). Such barriers of use associated with this area are complexly linked to *interactional justice*. Furthermore, barriers to access as relates to *procedural justice* also emerge as one juxtaposes community expectations (i.e., spaces of representation) and contradictions related to planning and technical ideals (i.e., representations of space). At the city scale and as indicated by Goth, (2015) in the excerpt below, residents have criticized the ill use of large sums of taxpayer funds invested into managing the golf courses.

> Critics question the need for city golf as demand for the sport lags and private
> courses are prolific in the region. They say paying back the borrowed money
> could be a lengthy process or fear it won't happen at all, depriving Phoenix of
> what could have been spent on new park equipment or more land for its
> preserves.

At a district scale and as partly indicated in the quote below, the decision to salvage the golf course through public-private partnership was largely determined at the city level and communicated to the district, as evidenced in the request for proposals:

The public-private partnership deal was finalized through a vote at the parks board, which

limited the involvement of residents in Maryvale and had negative implications on

community ownership of the space (Goth, 2015). Accordingly, despite the positive states

associated with the presence of a well-maintained green space in the community

(Godfrey, 2010), there are perceived barriers of access linked to the negative states

arising from tripartite engagements. Resultantly, access to the golf course has been

stifled due to concerns for safety in the locale and limited resident involvement in

decision making, all of which have contributed to lack of community ownership and

satisfaction (Goth 2015).

Villa De Paz Golf Course.

Villa De Paz is a residential neighborhood in Maryvale designated as a golf course

community in the original master plan developed by developer John F. Long (Amery et

al., 2011). After its development in 1970, the 18-hole facility provided a fairly priced

golfing avenue for its residents and the Maryvale community at large (Trott, 2013). The

resource functioned as a recreational point of pride for the community, which identified

as a golfing neighborhood (Bramnick, 2021). The golf course in Villa De Paz occupies a

central portion of the community and is surrounded by condos, single and multiple family

residences (Planning and Development Department, 2020). The central location of the

course (i.e., spatial practice) highlights the considerations for *distributive justice* because

the layout of the community (i.e., representations of space) was designed to facilitate its use as a community resource due to its proximity to residences (Planning and Development Department, 2020). But even though the golf course is a key feature of the layout of the community, and it has linkages to community satisfaction due to its proximity to residences, the company which privately owns the course has sought to convert it into residential development, citing financial challenges in running the golf course. Despite proposals made by its commercial owners to include public spaces such as pickleball, basketball courts and/or golf adaptations, in the new development, the community has continued to battle the conversion of the course into a residential facility (Fifield, 2021).

The community insisted that the course provides an aesthetically pleasing green space in the neighborhood, an aspect critical to community satisfaction because of its tie to the property values for local residences (Trott, 2013). Notably, the community successfully engaged with the City of Phoenix to trigger a rezoning of the area that limits the space to golf course use only (Planning and Development Department 2020). This rezoning was celebrated as a win for the community, symbolic of pursuing access to a community resource. As indicated by a technical agent, Alan Stephenson, acting Director for the Phoenix Planning and Development Department, "[i]t depends on what you, the community, wants to see and wants to do. If you stay organized, you could have a voice in this process" (Trott, 2013). The engagement between meanings the community attribute to the golf course (i.e., spaces of representation) and technical agents responsible for planning and design (i.e., representations of space) yielded a perceived satisfaction of *procedural justice*. However, the seeming progress made in championing access and

related linkages to community agency and satisfaction by satisfying procedural justice, was short lived, after the private owners of the golf course pursued a lawsuit against the city, asserting a reduction of property value due to the rezoning (Bramnick, 2021).

Wanting to avoid falling prey to an expensive lawsuit, the City of Phoenix has not pursued its initial rezoning policy. Hence the course remains shut down, as its commercial owners plan to continue pursuing redevelopment of residential facilities (Bramnick 2021). In its current unmaintained state, the golf course has turned into an open dirt lot and a hub for untoward behavior, since its closure in 2018. The emergence of this unregulated dirt lot is correlated with the rise in crime such as rape cases, robberies, homicides and assaults (Crime Statistics 2020). The closure of the golf course and the poorly maintained space that has emerged, is an affront to its desired aesthetic appeal and community satisfaction (Fifield 2021). This is coupled with the potential for untoward activity in the lots and the threats to safety. The negative states such as the lack of safety and dissatisfaction derived from the lack of cohesion between community idealizations of the golf course and physical characteristics stifle communal access to the space. The above-described engagements deter the continuous existence of the community (i.e., group well-being) and hinder use (i.e., access) (Leary-Owhin 2015). Access challenges related to the Villa De Paz Golf Course, hence arise from overarching negative states related to engagements among locational characteristics, decision making, and community ideals which have been linked to dissatisfaction, lack of agency, and unsafe interactions (Garcia 2021).

Negative states, such as those described in the above section, emanating from tripartite engagements which are deemed to be harmful to the community, trigger other

negative states. In Aiyer and Zimmerman's (2015) examination of the *Broken Window Theory*, they conclude that visual signs of disorder in shared built environmental resources, such as abandoned and unmaintained public facilities (spatial practice), are collectively despised by communities (spaces of representation) leading to negative states such as anti-social behavior and civil disorder, resultantly stifling access and reinforcing communal dissatisfaction. Similarly, contrary to the expectations of communities of place, interactions between neo-capitalist directed planning and zoning (i.e., representations of space) has translated into locational characteristics (i.e., spatial practice) which are incapable of, for instance, forestalling the occurrence of homeless populations (Rodgers, 2003).

Conclusion

This paper discusses linkages between access to public spaces and community well-being through an intersection between two theoretical frameworks, Tripartite Framework (Lefebvre & Nicholson-Smith, 1991) and Bishop's (2005) Network Theory of well-being. This intersection explores access to public spaces through an integrated approach of different constructs of environmental justice (i.e., distributive, procedural and procedural justice). Within this paper, the concept of access is framed as perceived opportunities of use derived from engagements with tripartite dimensions (i.e., spatial practice – physical and locational characteristics; representation of space – technical plans and designs; spaces of representation – societal idealizations of space). The study discusses how tripartite engagements perceived to be associated with the realization of positive communal states linked to distributive justice (e.g., physical, and mental health),

participatory justice (e.g., agency and participation) and interactional justice (e.g., social interaction and sense of community), connect to create a robust positive causal network towards community well-being.

This paper focuses on the cyclical relationship between access and community well-being to highlight linkages between the realization of communal well-being, perceived opportunities of beneficial utility (*i.e.,* access) and the consequent reinforcement of communal well-being (Srinivasan, O'Fallon and Dearry 2003; Stigsdotter et al. 2010). The study hence provides a lens through which further investigations of the linkages between built environmental resources and well-being can be explored. The subject matter in question is a research area that is galvanizing growing interest amongst scholars (Altomonte et al., 2020; Mouratidis, 2018; Thompson & Kent, 2014). The *Tripartite Framework* places an emphasis on society's role in determining the utility of built environmental resources, such as public spaces, because of their perceived value (Leary-Owhin 2015). Such perceived values contribute to community well-being. The linkages between well-being and built-environmental resources are a matter of enduring interest, especially in the context of low-income contexts, given the environmental injustices often suffered by such vulnerable populations (Agyeman, Bullard, & Evans, 2003; Bullard, 1993).

By developing a framework that highlights the linkages between opportunities of use and community well-being ideals, resulting from tripartite dimensions associated to public spaces (i.e., spatial practice, representations of spaces and spaces of representation), this study sets the stage for a more holistic examination of access. Just environments as perceived by users, go beyond the spatial relationships with resources to

include inclusion in decision making and desirable experiences, which are valued by communities and which enhance well-being (Crompton & Chuan, 1992; Hornik, Cutts, & Greenlee, 2016). From this vantage point, the framework developed hence provides a lens on which future research can examine how communities of place perceive access through the realization or otherwise of community well-being ideals associated with distributive, procedural and interactional justice, particularly as relates to vulnerable contexts. At the same time, this framework offers an opportunity for future research to explore how technical experts incorporate community perspectives related to access in the planning and development of public spaces. Such a scholarly focus is critical, given the socio-political tensions that have arisen from the lack of tandem between societal expectations, the physical characteristics, and the designing/planning of many low-income contexts (Bullard 1993).

REFERENCES

Abbott, J. (2013). *Sharing the city: community participation in urban management*. Retrieved from https://books.google.com/books?hl=en&lr=&id=-T75AQAAQBAJ&oi=fnd&pg=PP1&dq=non-participation+in+urban+planning+and+design&ots=txjQKJ72lU&sig=_lxoZzGjT95LDHyyCcCFDbVElCU

Abercrombie, L. C., Sallis, J. F., Conway, T. L., Frank, L. D., Saelens, B. E., & Chapman, J. E. (2008). Income and Racial Disparities in Access to Public Parks and Private Recreation Facilities. *American Journal of Preventive Medicine*, *34*(1), 9–15. https://doi.org/10.1016/j.amepre.2007.09.030

Agyeman, J, Bullard, R., & Evans, B. (2003). *Just sustainabilities: Development in an unequal world*. Retrieved from https://books.google.com/books?hl=en&lr=&id=I7QBbofQGu4C&oi=fnd&pg=PR7&dq=Agyeman+J,+Bullard+R,+Evans+B.+2003.+Just+Sustainabilities:+Development+in+an+Unequal+World.+Earthscan:+London&ots=Ih_TPrtsQf&sig=Mtov9songlllhVsJPX0QJbApHfQ

Agyeman, Julian, Bullard, R. D., & Evans, B. (2002). Exploring the Nexus: Bringing Together Sustainability, Environmental Justice and Equity. *Space and Polity*, *6*(1), 77–90. https://doi.org/10.1080/13562570220137907

Ahlbrandt, R. (2013). *Neighborhoods, People, and Community - Roger Ahlbrandt - Google Books*. Retrieved from https://books.google.com/books?hl=en&lr=&id=MZvwBwAAQBAJ&oi=fnd&pg=PR17&dq=people+are+likely+to+move+to+neighborhoods+with+similar+race+characteristics&ots=F7vZhVkwyr&sig=KjvBb71GtZ3qZijhUOacJPNy4T4#v=onepage&q=pe

Aiyer, S., & Zimmerman, M. (2015). From broken windows to busy streets: A community empowerment perspective. *Health Education & Behaviour*, *42*(2), 137–147. Retrieved from https://journals.sagepub.com/doi/abs/10.1177/1090198114558590?casa_token=1R9zKWuY6PYAAAAA:2Wk4SjWD9-uTqtI6nDSW20rABNMJCQdpH03Rods9fnegDMXDX2DzETlYmRFI7nPkl9sM-IER-6EL-U8

Altomonte, S., Allen, J., Bluyssen, P., Brager, G., Heschong, L., Loder, A., … Wargocki, P. (2020). Ten questions concerning well-being in the built environment. *Building and Environment*, *180*, 106949. https://doi.org/10.1016/j.buildenv.2020.106949

Altshuler, A. (1965). THE GOALS OF COMPREHENSIVE PLANNING. *Journal of the American Institute of Planners*, *31*(3), 186–195. https://doi.org/10.1080/01944366508978165

Alvaredo, F., Chancel, L., Piketty, T., Saez, E., & Zucman, G. (2018). *World inequality report 2018*. Retrieved from https://books.google.com/books?hl=en&lr=&id=uNqSDwAAQBAJ&oi=fnd&pg=PP1&dq=Rising+inequality+in+the+world+Thomas+Piketty.&ots=qickIBRgdz&sig=U4IBVX2QI4Pdb1GDxcXfgzXXZRM

Alvarez, L. (2018). Decolonizing Environmental Justice Studies: A Latin American Perspective. *Taylor & Francis*, *31*(2), 50–69. https://doi.org/10.1080/10455752.2018.1558272

Alwah, A., Li, W., Alwah, M., & Shahrah, S. (2021). Developing a quantitative tool to measure the extent to which public spaces meet user needs. *Urban Forestry & Urban*. Retrieved from https://www.sciencedirect.com/science/article/pii/S1618866721001771?casa_token=U0m1kOxnR4oAAAAA:gafeq8F17W0fqZt9gmR7TPD7RV0OY4N9AGbERicapsYuNcqEOn0tbQfm-aNtL-y6S-C4Bu7P1-M

American Cancer Society. (2019). Cancer Facts and Figures for African Americans 2019-2021. *American Cancer Society*, 43. Retrieved from https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/cancer-facts-and-figures-for-african-americans/cancer-facts-and-figures-for-african-americans-2019-2021.pdf

Amery, D., Vice, Z. V., Armstrong, S., Battle, A., Derie, G., Dubose, K., … Whitman, S. (2011). *Maryvale Core Urban Design*.

Amin, A. (2008). Collective culture and urban public space. *City*, *12*(1), 5–24. https://doi.org/10.1080/13604810801933495

Anderson, J., Ruggeri, K., Steemers, K., & Huppert, F. (2017). Lively Social Space, Well-Being Activity, and Urban Design: Findings From a Low-Cost Community-Led Public Space Intervention. *Environment and Behavior*, *49*(6), 685–716. https://doi.org/10.1177/0013916516659108

Anthony, K. (2001). Designing for diversity: Gender, race, and ethnicity in the architectural profession. *University of Illinois Press*.

Anthony, K. H. (2002). Designing for diversity: Implications for architectural education in the twenty-first century. *Journal of Architectural Education*. Routledge. https://doi.org/10.1162/104648802753657969

Arko-Adjei, A. (2011). Adapting land administration to the institutional framework of customary tenure: the case of peri-urban Ghana. Retrieved from

https://www.narcis.nl/publication/RecordID/oai:tudelft.nl:uuid%3A7964a2d2-11c1-46d9-96e2-054ba633a07c

Arnstein, S. (1969). A ladder of citizen participation. *AIP Journal*. Retrieved from http://geog.sdsu.edu/People/Pages/jankowski/public_html/web780/Arnstein_ladder_1969.pdf

Atkinson, S., Bagnall, A. M., Corcoran, R., South, J., & Curtis, S. (2020). Being Well Together: Individual Subjective and Community Wellbeing. *Journal of Happiness Studies*, *21*(5), 1903–1921. https://doi.org/10.1007/s10902-019-00146-2

Babones, S. J. (2008). Income inequality and population health: Correlation and causality. *Social Science and Medicine*, *66*(7), 1614–1626. https://doi.org/10.1016/j.socscimed.2007.12.012

Bach, L. (1980). Locational models for systems of private and public facilities based on concepts of accessibility and access opportunity. *Environment & Planning A*, *12*(3), 301–320. https://doi.org/10.1068/a120301

Bartlett, T. (2020). *What is "race" doing in a nice field like the Built Environment?* Retrieved from https://discovery.ucl.ac.uk/id/eprint/10110416/1/race_and_space_pdf_final-3.pdf

Barton, H. (2016). *City of well-being: A radical guide to planning*. Retrieved from https://books.google.com/books?hl=en&lr=&id=TCklDwAAQBAJ&oi=fnd&pg=PP1&dq=Planning+for+well-being&ots=NpfSbfeSd0&sig=5sdom3EIScUF5AlXnv5B0ZbZaBY

Benson, M., & Jackson, E. (2013). Place-making and Place Maintenance: Performativity, Place and Belonging among the Middle Classes. *Sociology*, *47*(4), 793–809. https://doi.org/10.1177/0038038512454350

Bishop, M. A. (2005). *The good life : unifying the philosophy and psychology of well-being*.

Blanton, R. (2011). Chronotopic Landscapes of Environmental Racism. *Wiley Online Library*, *21*(SUPPL. 1). https://doi.org/10.1111/j.1548-1395.2011.01098.x

Bloemers, T., Daniels, S., Fairclough, G., & Pedroli, B. (2010). *Landscape in a Changing World*. Retrieved from www.esf.org

Bolin, B, Grineski, S., & Collins, T. (2005). The geography of despair: Environmental racism and the making of South Phoenix, Arizona, USA. *Human Ecology Review*. Retrieved from https://www.jstor.org/stable/24707530?casa_token=5ouAkEBERisAAAAA:MaPbo_4m7

gdrNPS8elpB9lljCwKYQF19FBM17W9ozVqrtcjXY5o-
uCmq5h33oQHTnStJbUkuhzOePx_ozm3lnOnfYsQxSCHI6qbgVe_FXUhoMuTvvsNH

Bolin, Bob, Grineski, S., & Collins, T. (2005). The Geography of Despair : Environmental Racism and the Making of South Phoenix , Arizona , USA Environmental Racism : Conceptual Issues. *Human Ecology Review*, *12*(2), 156–168.

Boone, C. G. (2008). Environmental Justice as Process and New Avenues for Research. *Environmental Justice*, *1*(3), 149–154. https://doi.org/10.1089/env.2008.0530

Boone, C. G., Buckley, G. L., Grove, J. M., & Sister, C. (2009a). Parks and people: An environmental justice inquiry in Baltimore, Maryland. *Annals of the Association of American Geographers*, *99*(4), 767–787. https://doi.org/10.1080/00045600903102949
Boone, C. G., Buckley, G. L., Grove, J. M., & Sister, C. (2009b). Parks and people: An environmental justice inquiry in Baltimore, Maryland. *Annals of the Association of American Geographers*, *99*(4), 767–787. https://doi.org/10.1080/00045600903102949

Bowen, W. M., & Wells, M. V. (2002). The politics and reality of environmental justice: A history and considerations for public administrators and policy makers. *Public Administration Review*, *62*(6), 688–698. https://doi.org/10.1111/1540-6210.00251

Brabec, E. (2004). Multiple Landscape: Merging Past and Present in Landscape Planning, (June). Retrieved from https://scholarworks.umass.edu/cgi/viewcontent.cgi?article=1003&context=larp_faculty_pubs

Brabham, D. C. (2009). Crowdsourcing the public participation process for planning projects. *Planning Theory*, *8*(3), 242–262. https://doi.org/10.1177/1473095209104824

Bramley, G., Dempdey, N., Power, S., Brown, C., & Watkins, D. (2009). Social sustainability and urban form: Evidence from five British cities. *Environment and Planning A*. https://doi.org/10.1068/a4184

Bramnick, L. (2021). The Future of the Villa de Paz Golf Course Remains Uncertain - Law Office of Laura B.

Brown, B., & Cropper, V. (2001). New urban and standard suburban subdivisions: Evaluating psychological and social goals. *Journal of the American Planning Association*, *67*(4), 402–419. https://doi.org/10.1080/01944360108976249

Brown, G. G., & Pullar, D. V. (2012). International Journal of Geographical Information Science An evaluation of the use of points versus polygons in public participation geographic information systems using quasi-experimental design and Monte Carlo simulation. *Taylor & Francis*, *26*(2), 231–246. https://doi.org/10.1080/13658816.2011.585139

Brown, G. (2012). Public Participation GIS (PPGIS) for regional and environmental planning: Reflections on a decade of empirical research. *Espace.Library.Uq.Edu.Au*. Retrieved from https://espace.library.uq.edu.au/view/UQ:294305

Brown, G., Kelly, M., & Whitall, D. (2014). Which 'public''? Sampling effects in public participation GIS (PPGIS) and volunteered geographic information (VGI) systems for public lands management.' *Journal of Environmental Planning and Management*, *57*(2), 190–214. https://doi.org/10.1080/09640568.2012.741045

Bullard, R. (1993). *Anatomy of Environmental Racism and the Environmental Justice Movement*.

Bullard, R. (1993). *The legacy of American apartheid and environmental racism. John's J. Legal Comment.* Retrieved from https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/sjjlc9&section=23

Bullard, R.D. (2018). *Dumping in dixie: Race, class, and environmental quality, third edition. Dumping in Dixie: Race, Class, and Environmental Quality, Third Edition*. Taylor and Francis. https://doi.org/10.4324/9780429495274

Butler, A. (2014). *Developing Theory of Public Involvement in Landscape Planning*.

Burningham, K., Barnett, J., & Thrush, D. (2006). The limitations of the NIMBY concept for understanding public engagement with renewable energy technologies: a literature review. Retrieved from http://opus.bath.ac.uk/37144/

Byrne, J. (2012). When green is White: The cultural politics of race, nature and social exclusion in a Los Angeles urban national park. *Geoforum*, *43*(3), 595–611. https://doi.org/10.1016/j.geoforum.2011.10.002

Byrne, J., Wolch, J., & Zhang, J. (2009). Planning for environmental justice in an urban national park. *Journal of Environmental Planning and Management*, *52*(3), 365–392. https://doi.org/10.1080/09640560802703256

Canadian Index of Wellbeing. (2013). Domains and indicators | Canadian Index of Wellbeing | University of Waterloo. Retrieved September 7, 2020, from https://uwaterloo.ca/canadian-index-wellbeing/what-we-do/domains-and-indicators

Caplan, A. S., & Gilham, J. (2005). Included against the odds: Failure and success among minority ethnic built-environment professionals in Britain. *Construction Management and Economics*, *23*(10), 1007–1015. https://doi.org/10.1080/01446190500310700

Carmona, M, Magalhães, C. de, & Hammond, L. (2008). *Public space: the management dimension*. Retrieved from https://books.google.com/books?hl=en&lr=&id=-

5wMe5cqIDIC&oi=fnd&pg=PP1&dq=Forms+indicative+of+public+spaces&ots=p97dm
5R6ub&sig=t7DiZISSRYqbq4QhxBUVn8-fHuQ

Carmona, M. (2015). Re-theorising contemporary public space: a new narrative and a new normative. *Journal of Urbanism: International Research on Placemaking and Urban Sustainability*, *8*(4), 373–405. https://doi.org/10.1080/17549175.2014.909518

Carmona, M. (2019). Place value: place quality and its impact on health, social, economic and environmental outcomes. *Journal of Urban Design*, *24*(1), 1–48. https://doi.org/10.1080/13574809.2018.1472523

Carmona, M. (2021). *Public places urban spaces: The dimensions of urban design*. *Public Places Urban Spaces: The Dimensions of Urban Design*. Taylor and Francis. https://doi.org/10.4324/9781315158457

Carr, S, Stephen, C., Francis, M., Rivlin, L., & Stone, A. (1992). *Public space*. Retrieved from https://books.google.com/books?hl=en&lr=&id=pjo4AAAAIAAJ&oi=fnd&pg=PR9&dq =Carr,+S.,+Francis,+M.,+Rivlin,+L.+G.,+and+Stone,+A.+M.,+1992,+Public+Space.+Ca mbridge,+UK:+Cambridge+University+Press&ots=eyw80M3x83&sig=LmHD5fM-gC9aD4EXHmlvOFGiWDM

Carr, Stephen. (1992). *Public space*. Cambridge University Press.

Chakraborty, J., Maantay, J. A., & Brender, J. D. (2011). Disproportionate proximity to environmental health hazards: Methods, models, and measurement. *American Journal of Public Health*, *101*(SUPPL. 1). https://doi.org/10.2105/AJPH.2010.300109

Chakravorty, S. (2014). *Fragments of inequality: Social, spatial and evolutionary analyses of income distribution*. Retrieved from https://books.google.com/books?hl=en&lr=&id=_Vu4AwAAQBAJ&oi=fnd&pg=PP1&d q=Spatial+patterns+of+inequality+in+park+distribution+&ots=LUA6zEGDLR&sig=00 UgvZPXJHpt5AeJO5T9exNOZMY

Chaskin, R. J., & Garg, S. (1997). The Issue of Governance in Neighborhood-Based Initiatives. *Urban Affairs Review*, *32*(5), 631–661. https://doi.org/10.1177/107808749703200502

Chen, Y., & Qu, L. (2020). Emerging Participative Approaches for Urban Regeneration in Chinese Megacities. *Journal of Urban Planning and Development*, *146*(1), 04019029. https://doi.org/10.1061/(asce)up.1943-5444.0000550

City of Pheonix. (2022). City of Phoenix. Retrieved March 20, 2022, from https://mapping-phoenix.opendata.arcgis.com/

Cnaan, R., Boddie, S., McGrew, C., & Kang, J. (2006). *The other Philadelphia story: How local congregations support quality of life in urban America*. Retrieved from https://books.google.com/books?hl=en&lr=&id=M358KUkuQT8C&oi=fnd&pg=PR9&dq=Cnaan,+Boddie,+%26+McGrew,+2006&ots=X00xH7Vu_s&sig=zuLqL9Q778xtDpUSSKneqsiuEao

Cohen, D. A., Han, B., Derose, K. P., Williamson, S., Marsh, T., Raaen, L., & McKenzie, T. L. (2016). The Paradox of Parks in Low-Income Areas: Park Use and Perceived Threats. *Environment and Behavior*, *48*(1), 230–245. https://doi.org/10.1177/0013916515614366

Cole, R. (2018). Community recreates garden for Cartwright School District after fire. Retrieved May 26, 2021, from https://www.12news.com/article/news/local/valley/community-recreates-garden-for-cartwright-school-district-after-fire/75-505524355

Coles, R., & Millman, Z. (2013). *Landscape, well-being and environment*. Retrieved from https://books.google.com/books?hl=en&lr=&id=4fUJAgAAQBAJ&oi=fnd&pg=PP1&dq=The+need+for+diversity+in+landscape+design+profession+&ots=psYPoVMqXP&sig=ouORZya13wwPtOE0_qH9EVLpb0M

Conrad, E., Cassar, L. F., Jones, M., Eiter, S., Izaovičová, Z., Barankova, Z., … Izaovič Ova, Z. (2011). Mike Christie & Ioan Fazey (2011) Rhetoric and Reporting of Public Participation in Landscape Policy. *Journal of Environmental Policy & Planning*, *13*(1), 23–47. https://doi.org/10.1080/1523908X.2011.560449

Cox, D., Frere, M., West, S., & Wiseman, J. (2010). Developing and using local community wellbeing indicators: Learning from the experience of Community Indicators Victoria. *Australian Journal of Social Issues*, *45*(1), 71–88. https://doi.org/10.1002/j.1839-4655.2010.tb00164.x

Crompton, J. L., & Chuan Lue, C. (1992). Patterns of equity preferences among californians for allocating park and recreation resources. *Leisure Sciences*, *14*(3), 227–246. https://doi.org/10.1080/01490409209513170

Crompton, J., & Wicks, B. (1988). Implementing a Preferred Equity Model for the Delivery of Leisure Services in the US. Context. *Leisure Studies*, *7*, 287–403.

Cutter, S. ., Boruff, B. ., & Shirley, W. . (2012). *Social Vulnerability to Environmental Hazards n*. https://doi.org/10.1111/1540-6237.8402002

Cutts, B., Darby, K., Boone, C., & Brewis, A. (2009). City structure, obesity, and environmental justice: an integrated analysis of physical and social barriers to walkable

streets and park access. *Social Science & Medicine*. Retrieved from
https://www.sciencedirect.com/science/article/pii/S0277953609005395?casa_token=E22
BaXP_b1kAAAAA:guSlcxV4NGqxAsv2gN9VdtRAH5ALum1Q62mNadEuVcHKgsQ3
9v_CbzwkuG1vSuEEmc1u9urVxBzU

Daniere, A., & Douglass, M. (2008). *The politics of civic space in Asia: Building urban communities*. Retrieved from
https://books.google.com/books?hl=en&lr=&id=jXV8AgAAQBAJ&oi=fnd&pg=PP1&d
q=Public+participation+in+planning+in+Asia&ots=GRm_ZvOaEt&sig=0rEhqBOjMzqX
XDm2T87fM-vedjY

Davidoff, P. (1965). ADVOCACY AND PLURALISM IN PLANNING. *Journal of the American Institute of Planners*, *31*(4), 331–338.
https://doi.org/10.1080/01944366508978187

Day, K. (2006, December). Active living and social justice: Planning for physical activity in low-income, Black, and Latino communities. *Journal of the American Planning Association*. https://doi.org/10.1080/01944360608976726

De Graft-Johnson, A., Manley, S., & Greed, C. (2005). Diversity or the lack of it in the architectural profession. *Construction Management and Economics*, *23*(10), 1035–1043.

Deming, M., & Swaffield, S. (2011). *Landscape architectural research: Inquiry, strategy, design*. Retrieved from
https://books.google.com/books?hl=en&lr=&id=dYCFDwAAQBAJ&oi=fnd&pg=PR11
&dq=Landscape+Architectural+Research+Inquiry,+Strategy,+Design&ots=kaAI6-
hEhq&sig=bENOj1485cG1yVJ7BYmuwhwG2D0

Design Studio for Community Solutions. (2020). *A Conversation About the Village Greens Project*. Retrieved from
https://www.youtube.com/watch?v=Xtsorwy_H1E&list=PLE5RXDO6gwzz_tA1iXlSI22
IBrEX57HAe&index=2&t=381s

Devine-Wright, P. (2009). Rethinking NIMBYism: The role of place attachment and place identity in explaining place-protective action. *Journal of Community & Applied Social Psychology*, *19*(6), 426–441. https://doi.org/10.1002/casp.1004

Dupre, K. (2019, February 21). Trends and gaps in place-making in the context of urban development and tourism: 25 years of literature review. *Journal of Place Management and Development*. Emerald Group Holdings Ltd. https://doi.org/10.1108/JPMD-07-2017-0072

Durante, F., Fiske, S. T., Kervyn, N., Cuddy, A. J. C., Akande, A. D., Adetoun, B. E., … Storari, C. C. (2013). Nations' income inequality predicts ambivalence in stereotype content: How societies mind the gap. *British Journal of Social Psychology*, *52*(4), 726–746. https://doi.org/10.1111/bjso.12005

Dutton, J. E., Glynn, M. A., & Spreitzer, G. (2008). Positive organizational scholarship. *The SAGE Handbook of Organizational Behavior*, *1*, 693-712. Retrieved from http://webuser.bus.umich.edu/janedut/POS/Dutton-GlynnPOS.pdf

Edwards, G. A. S., Reid, L., & Hunter, C. (2016). Environmental justice, capabilities, and the theorization of well-being. *Progress in Human Geography*, *40*(6), 754–769. https://doi.org/10.1177/0309132515620850

Eggertsen Teder, M. (2019). Placemaking as co-creation–professional roles and attitudes in practice. *CoDesign*, *15*(4), 289–307. https://doi.org/10.1080/15710882.2018.1472284

Engelberg, J. K., Conway, T. L., Geremia, C., Cain, K. L., Saelens, B. E., Glanz, K., … Sallis, J. F. (2016). Socioeconomic and race/ethnic disparities in observed park quality. *BMC Public Health*, *16*(1), 1–11. https://doi.org/10.1186/s12889-016-3055-4

Estes, C. (2021). The Valley's Most Dangerous Intersections | KJZZ's The Show. Retrieved June 7, 2021, from https://theshow.kjzz.org/content/1663430/here-are-most-dangerous-intersections-metro-phoenix

Fairclough, A. (2016). State of the Art Historians and the Civil Rights Movement, *24*(3), 387–398.

Family Resource Network. (2014). Heart of Isaac Community Center. Retrieved July 31, 2021, from https://familyresourceaz.org/resources/heart-of-issac-community-center

Feagin, J., Orum, A., & Sjoberg, G. (1991). *A case for the case study*. Retrieved from https://books.google.com/books?hl=en&lr=&id=7A39B6ZLyJQC&oi=fnd&pg=PA1&dq=Feagin,+J.,+Orum,+A.,+and+Sjoberg,+G.+(1991).+A+Case+for+Case+Study.+Chapel+Hill,+NC:+University+of+North+Carolina+Press&ots=H-cz17noa5&sig=fifsf-dxJeCg4tvhmJBLU_Y6870

Fifield, J. (2021). Shuttered Villa De Paz Golf Course in limbo after Phoenix stops development. Retrieved August 2, 2021, from https://www.azcentral.com/story/news/local/phoenix/2021/01/13/shuttered-villa-de-paz-golf-course-limbo-after-phoenix-stops-development/3736130001/

Finkelstein, D. M., Petersen, D. M., & Schottenfeld, L. S. (2017). Promoting children's physical activity in low-incomecommunities in Colorado: What are the barriers and opportunities? *Preventing Chronic Disease*, *14*(12). https://doi.org/10.5888/pcd14.170111

Fischer, C., Stockmayer, G., Stiles, J., & Hout, M. (2008). Distinguishing the geographic levels and social dimensions of US metropolitan segregation, 1960–2000. *Springer*, *35*(6), 739. Retrieved from https://idp.springer.com/authorize/casa?redirect_uri=https://link.springer.com/article/10.1353/dem.2004.0002&casa_token=BUr0uOnwN2MAAAAA:BWRGnr98J1AW7wJYi77NJzCo70uqceQLVs6dOY4UF5ipw9Xsavl-rln35NwjiyM4vvLYLDynDu26Rr2M06o

Fitzpatrick, K., Shi, X., Willis, D., & Niemeier, J. (2018). Obesity and place: Chronic disease in the 500 largest U.S. cities. *Obesity Research and Clinical Practice*, *12*(5), 421–425. https://doi.org/10.1016/j.orcp.2018.02.005

Floyd, M. F. (2014). Social Justice as an Integrating Force for Leisure Research. *Leisure Sciences*, *36*(4), 379–387. https://doi.org/10.1080/01490400.2014.917002

Francis, J., Giles-Corti, B., Wood, L., & Knuiman, M. (2012). Creating sense of community: The role of public space. *Journal of Environmental Psychology*, *32*(4), 401–409. https://doi.org/10.1016/j.jenvp.2012.07.002

Fraser, B. (2014). Maxism and Urban Culture.

Fraser, N. (2014). *Justice interruptus: Critical reflections on the" postsocialist" condition*. Retrieved from https://books.google.com/books?hl=en&lr=&id=ELZpAwAAQBAJ&oi=fnd&pg=PP1&dq=Fraser,+N+(1997)+Justice+Interruptus:+Critical+Reflections+on+the+'Postsocialist'+&ots=JZ09RVqXXN&sig=yHgthR_RKUmwQ8-zUhTulOA_ICg

Fredrickson, B. L. (2004). The broaden-and-build theory of positive emotions. *Books.Google.Com*, *359*(1449), 1367–1377. https://doi.org/10.1098/rstb.2004.1512

Friedmann, J. (1971). *The Future of Comprehensive Urban Planning: A Critique*. *Source: Public Administration Review* (Vol. 31).

Frontdoors Media. (2017). Heart of Isaac Community Center Opens in Maryvale. Retrieved from https://frontdoorsmedia.com/heart-of-isaac-community-center-opens-in-maryvale/

Gale, R., & Naylor, S. (2002). Religion, planning and the city. *Ethnicities*, *2*(3), 387–409. https://doi.org/10.1177/14687968020020030601

Girardi, R. (2021). 'It's easy to mistrust police when they keep on killing us': A queer exploration of police violence and LGBTQ+ Victimization. *Journal of Gender Studies*. https://doi.org/10.1080/09589236.2021.1979481

Giulietti, & Assumpção. (2019). The Production of Urban Public Space:A Lefebvrian Analysis of Castlefield, Manchester. *Journal of Chemical Information and Modeling*, *53*(9), 1689–1699. https://doi.org/10.1017/CBO9781107415324.004

Given, L. (2015). *100 questions (and answers) about qualitative research*. Retrieved from
https://books.google.com/books?hl=en&lr=&id=dfeRBgAAQBAJ&oi=fnd&pg=PP1&ots=pti9BoTjz6&sig=HSz_ZJQlQ_PSeYG1Yxb38_ksZZY

Global Water Partnership. (2010). *Global Program Review Working for a World Free of Poverty the World Bank Group* (Vol. 4).

Godfrey, W. (2010). *Maryvale Golf Course*.

Godwyll, J. M., & Buzinde, C. N. (2022). Conceptualizing linkages between community well-being and access to public space : an environmental justice perspective, 1–23.

Gordon, E., Elwood, S., & Mitchell, K. (2016). Critical spatial learning: participatory mapping, spatial histories, and youth civic engagement. *Children's Geographies*, *14*(5), 558–572. https://doi.org/10.1080/14733285.2015.1136736

Goth, B. (2015). GCU opens Maryvale course as Phoenix weighs golf debt.
Gould, K., & Lewis, T. (2016). *Green gentrification: Urban sustainability and the struggle for environmental justice*. Retrieved from
https://books.google.com/books?hl=en&lr=&id=raOuDAAAQBAJ&oi=fnd&pg=PP1&ots=D_WmhCr-Ok&sig=2_adVOqTAl8PvNE09VOGIg1ultg

Graham, E.-. (2013). 2 Philosophies underlying human geography research'. *Methods in Human Geography:* Retrieved from
https://books.google.com/books?hl=en&lr=&id=JXFGAQAAQBAJ&oi=fnd&pg=PA8&dq=reconstitution+of+human+geography+as+spatial+science+positivist+&ots=ejsjwI5Hji&sig=aCgebhyAqbEbnEULTajuOQWsBK8

Groat, L., & Wang, D. (2013). *Architectural research methods*. Retrieved from
https://books.google.com/books?hl=en&lr=&id=sUf5DPJyEqAC&oi=fnd&pg=PR1&ots=OJ4uMzIngc&sig=E0uK6Gy0VbpYd3F7lb6MhtW4qh0

Groshong, L., Wilhelm Stanis, S. A., Kaczynski, A. T., & Hipp, J. A. (2020). Attitudes About Perceived Park Safety Among Residents in Low-Income and High Minority Kansas City, Missouri, Neighborhoods. *Environment and Behavior*, *52*(6), 639–665. https://doi.org/10.1177/0013916518814291

Gu, X., Tao, S., & Dai, U. (2017). Spatial accessibility of country parks in Shanghai, China. *Urban Forestry & Urban Greening*. Retrieved from https://www.sciencedirect.com/science/article/pii/S1618866716305556?casa_token=NvTdQzKjLdQAAAAA:F200kaWt24r43UzVkhHvlSS2fDS-GFENPY1i8N4n6gi9iReIdSc6oltFNPMoyplsYG8eZO2m4unY

Habermas, J. (1989). *The structural transformation of the public sphere*. *MIT Press Cambridge*.

Harvey, D. (2010). *Social justice and the city*. Retrieved from https://books.google.com/books?hl=en&lr=&id=VCwLi2nVmooC&oi=fnd&pg=PA5&dq=harvey+1973+social+justice&ots=RgujMe71XT&sig=3P7qHkWCgYkt4bbMinvOcIs1Cby

Haybron, D. (2006). Well-being and virtue. *Ethics & Soc.* Retrieved from https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/jetshy2&section=9&casa_token=OdiLcMYAWQUAAAAA:SgT-kECoInTgATACxLsG114jzflxRNJXZkbAdWR-JIMj8-iKq7hN48crvEWAIl_Q23coSV-t

Heart of Isaac Community Center Fact Sheet. (2018). Heart of Isaac Community Center.

Heathwood, C. (2015). Desire-fulfillment theory. *The Routledge Handbook of Philosophy of Well-Being*, 135–147.

Hernández-Bonilla, M. (2008). Contested public space development: The case of low income neighbourhoods in Xalapa, Mexico. *Landscape Research*, *33*(4), 389–406. https://doi.org/10.1080/01426390802191162

Hirsch, A. (2006). Lawrence halprin's public spaces: Design, experience and recovery. three case studies. *Studies in the History of Gardens and Designed Landscapes*, *26*(1), 1–4. https://doi.org/10.1080/14601176.2006.10435451

Holifield, R., Porter, M., & Walker, G. (2011). *Spaces of environmental justice*. Retrieved from https://books.google.com/books?hl=en&lr=&id=UnG3DNhw6nIC&oi=fnd&pg=PT10&dq=environmental+justice+and+public+spaces&ots=6BViYkjbOe&sig=ao3VIYQHhN35v5ORlkYr9zW59yI

Holland, C., Clark, A., Katz, J., & Peace, S. (2007). Social interactions in urban public places - Open Research Online. Retrieved January 19, 2021, from http://oro.open.ac.uk/7445/

Hood Washington, S. (2004). *Packing Them In: An Archaeology of Environmental Racism in Chicago*. Retrieved from https://www.researchgate.net/publication/265231935

Hornik, K., Cutts, B., & Greenlee, A. (2016). Community Theories of Change: Linking Environmental Justice to Sustainability through Stakeholder Perceptions in Milwaukee (WI, USA). *International Journal of Environmental Research and Public Health*, *13*(10), 979. https://doi.org/10.3390/ijerph13100979

Hornik, K., Cutts, B., Greenlee, A., Chakraborty, J., Grineski, S. E., & Collins, T. W. (2016). Community Theories of Change: Linking Environmental Justice to Sustainability through Stakeholder Perceptions in Milwaukee (WI, USA). *Mdpi.Com*. https://doi.org/10.3390/ijerph13100979

Hutomo, A. S., & Fuad, A. H. (2020). Engagement and well-being in public space. Case study: Suropati park Jakarta. *Evergreen*, *7*(1), 138–143. https://doi.org/10.5109/2740970

Imrie, R., & Street, E. (2014). Autonomy and the socialisation of architects. *The Journal of Architecture*, *19*(5), 723–739. https://doi.org/10.1080/13602365.2014.967271

Innes, J., & Booher, D. (2000). Public participation in planning: new strategies for the 21st century. Retrieved from https://escholarship.org/uc/item/3r34r38h

Innes, J., & Booher, D. (2010). *Planning with complexity: An introduction to collaborative rationality for public policy*. Retrieved from https://www.taylorfrancis.com/books/9781135194277

Irazábal, C. (2012). Journal of Urbanism: International Research on Placemaking and Urban Sustainability Beyond "Latino New Urbanism": advocating ethnurbanisms. *Journal of Urbanism: International Research on Placemaking and Urban Sustainability*, *5*(3), 241–268. https://doi.org/10.1080/17549175.2012.701817

Jacobs, J. (1961). The Death and Life of Great American Cities. *Modern Library Ed*. Retrieved from https://scholar.google.com/scholar?hl=en&as_sdt=0%2C3&q=Jacobs%2C+J.+1961.+The+Death+and+Life+of+Great+American+Cities.+New+York%3A+Random+House.&btnG=

Jay, M., Peters, K., Buijs, A. E., Gentin, S., Kloek, M. E., & O'Brien, L. (2012). Towards access for all? Policy and research on access of ethnic minority groups to natural areas in four European countries. *Forest Policy and Economics*, *19*, 4–11. https://doi.org/10.1016/j.forpol.2011.12.008

Jennings, V., Johnson G., & Gragg, R. S. (2012, February 1). Promoting environmental justice through urban green space access: A synopsis. *Environmental Justice*. https://doi.org/10.1089/env.2011.0007

Jian, I. Y., Luo, J., & Chan, E. H. W. (2020). Spatial justice in public open space planning: Accessibility and inclusivity. *Habitat International*, *97*(February), 102122. https://doi.org/10.1016/j.habitatint.2020.102122

Kabisch, N., & Haase, D. (2014). Green justice or just green? Provision of urban green spaces in Berlin, Germany. *Landscape and Urban Planning*, *122*, 129–139. https://doi.org/10.1016/j.landurbplan.2013.11.016

Kadushin, C. (1968). Power, influence and social circles: A new methodology for studying opinion makers. *American Sociological Review*. Retrieved from https://www.jstor.org/stable/2092880?casa_token=lQnXsi8d8N4AAAAA:04GCyfxJ1ln XfsgNYmmFHNOT6Obb2fsTk3_0qxl_R0_6IwshCE6kbBRmQUAovU_jJxUpzKP0S_i6 HvS_1QzaUUtHAq4mvIsWFv2jAVAov93u2z2AvkMp

Kahn, R., & Cannell, C. (1957). The dynamics of interviewing; theory, technique, and cases. Retrieved from https://psycnet.apa.org/record/1957-07878-000

Kim, J., & Nicholls, S. (2018). Access for all? Beach access and equity in the Detroit metropolitan area. *Journal of Environmental Planning and Management*, *61*(7), 1137–1161. https://doi.org/10.1080/09640568.2017.1335187

Knox. (1980). Measures of Accessibility as Social Indicators.

Krivý, M., & Kaminer, T. (2013). Introduction : The Participatory Turn in Urbanism, 1–6.

Kuo, F. E., & Faber Taylor, A. (2004). A potential natural treatment for attention-deficit/hyperactivity disorder: Evidence from a national study. *American Journal of Public Health*, *94*(9), 1580–1586. https://doi.org/10.2105/AJPH.94.9.1580

Kuta, A., Odumosu, J., & Ajayi, O. (2014). Using a GIS-based network analysis to determine urban greenspace accessibility for different socio-economic groups, specifically related to deprivation in. *Pdfs.Semanticscholar.Org*. Retrieved from https://pdfs.semanticscholar.org/48e1/17740aab018c31cf58fd78fb6921e1b739aa.pdf

Larson, L. R., Jennings, V., & Cloutier, S. A. (2016). Public parks and wellbeing in urban areas of the United States. *PLoS ONE*, *11*(4). https://doi.org/10.1371/journal.pone.0153211

Law, L. (2002). Defying disappearance: Cosmopolitan public spaces in Hong Kong. *Urban Studies*, *39*(9), 1625–1645. https://doi.org/10.1080/00420980220151691

Leary-Owhin, E. (2016). Exploring The Production Of Urban Space.

Leary-Owhin, E. (2015). A Fresh Look at Lefebvre's Spatial Triad and Differential Space: A Central Place in Planning Theory? *2nd Planning Theory Conference University of the West of England*, 1–8.

Leary-Owhin, M. E. (2016). Exploring the production of urban space: Differential space in three post-industrial cities. *Exploring the Production of Urban Space: Differential Space in Three Post-Industrial Cities*, 1–365.

Leary-Owhin, M. E. (2013). A Lefebvrian analysis of the production of glorious, gruesome public space in Manchester. *Progress in Planning*, *85*, 1–52. https://doi.org/10.1016/j.progress.2012.12.002

Ledwith, M. (2020). *Community development: A critical approach*. Retrieved from https://books.google.com/books?hl=en&lr=&id=8yjJDwAAQBAJ&oi=fnd&pg=PR8&dq=community+development+ledwith&ots=qriEP3jkze&sig=P81kJhgCFNveJws5yUa3YNrv0AE

Lee, J., Kurisu, K., An, K., & Hanaki, K. (2015). Development of the compact city index and its application to Japanese cities. *Urban Studies*, *52*(6), 1054–1070. https://doi.org/10.1177/0042098014536786

Lee, S. J. (2015). Well-Being and Community Development Conceptions and Applications. https://doi.org/10.1007/978-3-319-12421-6

Lee, S., Kim, Y., & Phillips, R. (2015). Exploring the Intersection of Community Well-Being and Community Development (pp. 1–7). https://doi.org/10.1007/978-3-319-12421-6_1

Lefebvre, H., & Nicholson-Smith, D. (1991a). *The production of space*. Retrieved from https://books.google.com/books?hl=en&lr=&id=b9WWAwAAQBAJ&oi=fnd&pg=PA289&dq=social+production+of+space+lefebvre&ots=KV1rDJnnD9&sig=4m7Hdcqp22dyhdokcr4NV6NgyZI

Lertzman, R. (2015). *Environmental Melancholia: Psychoanalytic dimensions of engagement*. *Environmental Melancholia: Psychoanalytic Dimensions of Engagement*. Taylor and Francis Inc. https://doi.org/10.4324/9781315851853

Li, F., Fisher, K., & Brownson, R. (2005). Multilevel modelling of built environment characteristics related to neighbourhood walking activity in older adults. *Journal of Epidemiology & Community Health*, *59*(7), 558–564. Retrieved from https://jech.bmj.com/content/59/7/558.short

Lindsay, J. M. (2006). *Techniques in Human Geography*. Retrieved from https://books.google.com/books?hl=en&lr=&id=_9iEAgAAQBAJ&oi=fnd&pg=PP1&dq =interpretivism+and+human+geography&ots=i4xAi-cazN&sig=OhCGPb121OB4RKFL2AHewLy2Qak

Liotta, C., Kervinio, Y., Levrel, H., & Tardieu, L. (2020). Planning for environmental justice-reducing well-being inequalities through urban greening. *Environmental Science & Policy*. Retrieved from https://www.sciencedirect.com/science/article/pii/S146290111931086X?casa_token=D8 TO7fhtypYAAAAA:KtZTSocqzttu_45MYOpG7nzjQHuzaTpjDi_sGZSY4Y-SCrbar58Lb5jQQHVIdgLlxSVS5fpFaD0

Llano, P. (2020). From the urban project to the participative public space project: A historical approach. *Módulo Arquitectura CUC*. Retrieved from https://52.0.212.120/moduloarquitecturacuc/article/download/2887/2768

Loukaitou-Sideris, A. (1995). Urban Form and Social Context: Cultural Differentiation in the Uses of Urban Parks. *Journal of Planning Education and Research*, *14*(2), 89–102. https://doi.org/10.1177/0739456X9501400202

Low, S. (1996). Spatializing culture: the social production and social construction of public space in Costa Rica. *American Ethnologist*. Retrieved from https://anthrosource.onlinelibrary.wiley.com/doi/abs/10.1525/ae.1996.23.4.02a00100?cas a_token=sTb7GzxhvlEAAAAA:UKM_Gt3d8g5f9RlKg6OLT5QeN3LHG001rKQrvUg WHrop8vj3LpfsQIEoTn7dbR_XQuyA5_EEMoNWvslW

Low, S. (2013). *Public space and diversity: Distributive, procedural and interactional justice for parks*. *m.gc.cuny.edu*. Retrieved from https://m.gc.cuny.edu/CUNY_GC/media/CUNY-Graduate-Center/PDF/Programs/Anthropology/Faculty/Public-Space-and-Diversity.pdf

Low, S, & Smith, N. (2013). *The politics of public space*. Retrieved from https://books.google.com/books?hl=en&lr=&id=x8T7qheiI2oC&oi=fnd&pg=PR1&dq=p ublic+spaces&ots=RNobH0r5qD&sig=wsxlhKvLzCRj4b35I1aUmSeP3-g

Low, S, Taplin, D., & Scheld, S. (2009). *Rethinking urban parks: Public space and cultural diversity*. Retrieved from https://books.google.com/books?hl=en&lr=&id=cUhYBCSAYIEC&oi=fnd&pg=PR5&d q=Park+amenities+as+indicators+of+differential+space&ots=NvXqIm0XCs&sig=XAg9 TcWL6t5EoDmpsh1QscY2HjY

Low, S. (2016). Public space and diversity: Distributive, procedural and interactional justice for parks. In *The Ashgate Research Companion to Planning and Culture* (pp. 295–309). Taylor and Francis. https://doi.org/10.4324/9781315613390-33

Low, S. & Iveson, K. (2016). Propositions for more just urban public spaces. *City*, *20*(1), 10–31. https://doi.org/10.1080/13604813.2015.1128679

Low, SM, Taplin, D., & Scheld, S. (2009). *Rethinking urban parks: Public space and cultural diversity*. Retrieved from https://books.google.com/books?hl=en&lr=&id=cUhYBCSAYIEC&oi=fnd&pg=PR5&dq=how+historical+cultural+values+have+been+lost+in+built+design+&ots=NwTpLm-VBs&sig=e2VIVHevAyLxAyz0C5YbbxwqA2o

Lozano-Pérez, T. (1990). Spatial Planning: A Configuration Space Approach. In *Autonomous Robot Vehicles* (pp. 259–271). Springer New York. https://doi.org/10.1007/978-1-4613-8997-2_20

Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin*, *131*(6), 803–855. https://doi.org/10.1037/0033-2909.131.6.803

Maas, J., Verheij, R. A., De Vries, S., Spreeuwenberg, P., Schellevis, F. G., & Groenewegen, P. P. (2009). Morbidity is related to a green living environment. *Journal of Epidemiology and Community Health*, *63*(12), 967–973. https://doi.org/10.1136/jech.2008.079038

Maas, J., Verheij, R., Groenewegen, P., De Vries, S., & Spreeuwenberg, P. (2006). Green space, urbanity, and health: How strong is the relation? *Journal of Epidemiology and Community Health*, *60*(7), 587–592. https://doi.org/10.1136/jech.2005.043125

Macedo, JB, & Haddad, M. (2016). Equitable distribution of open space: Using spatial analysis to evaluate urban parks in Curitiba, Brazil. *Environment and Planning*. Retrieved from https://journals.sagepub.com/doi/abs/10.1177/0265813515603369?casa_token=Ljt3ID01f-sAAAAA:re6lzqM5gNHgjIOPJklPnbYiE4f3qKRLjOXsT_-St_K6mi296BdJiP99tlGmn1fcTcLnoQ7sTSkIGw

Macedo, Joseli, & Haddad, M. A. (2016a). Equitable distribution of open space: Using spatial analysis to evaluate urban parks in Curitiba, Brazil. *Environment and Planning B: Planning and Design*, *43*(6), 1096–1117. https://doi.org/10.1177/0265813515603369

Macedo, Joseli, & Haddad, M. A. (2016b). Equitable distribution of open space: Using spatial analysis to evaluate urban parks in Curitiba, Brazil. *Environment and Planning B: Planning and Design*, *43*(6), 1096–1117. https://doi.org/10.1177/0265813515603369

Madanipour, A. (2004). Marginal public spaces in European cities. *Journal of Urban Design*, *9*(3), 267–286. https://doi.org/10.1080/1357480042000283869

Magallanes, F. (2020). 100 YEARS OF DEEP TIME : CELA 2020. In *For Whites Only: A Timely Commentary about Latino Culture and Landscape Architecture* (p. 240).

Makhzoumi, J., Egoz, S., & Pungetti, G. (2011). *The right to landscape: contesting landscape and human rights*. Retrieved from https://books.google.com/books?hl=en&lr=&id=3mWkxPJJ2o4C&oi=fnd&pg=PR9&dq=Egoz,+S.,+Makhzoumi,+J.+%26+Pungetti,+G.+(eds.)+(2011)+The+right+to+landscape:+contesting+landscape+and+human+rights,+Farnham:+Ashgate+Publishing+Limited&ots=T7GHqLQ2pH&sig=sAx4E7S-0_obDYWBCdN2GdA0iDY

Manning T. (1999). The minority-race planner in the quest for a just city, *7*(3), 227–247. https://doi.org/10.1177/1473095208094822

Mansouri, S., Bagh, E., & Foroughi, M. (2018). The Concept of Participation in Landscape Design. *The Monthly Scientific Journal of Bagh-E Nazar*, *15*(62), 17–24. Retrieved from http://www.bagh-sj.com/m/&url=http://www.bagh-sj.com/article_66282.html?lang=en

Massey, D. S. (1990). American Apartheid: Segregation and the Making of the Underclass. *American Journal of Sociology*, *96*(2), 329–357. https://doi.org/10.1086/229532

Massey, R. (2004). *Environmental Justice: Income, Race, and Health A GDAE Teaching Module on Social and Environmental Issues in Economics*. *Citeseer*. Retrieved from http://ase.tufts.edu/gdaehttp://ase.tufts.edu/gdae

McGaw, J., Pieris, A., & Potter, E. (2011, December 1). Indigenous place-making in the city: Dispossessions, occupations and implications for cultural architecture. *Architectural Theory Review*. https://doi.org/10.1080/13264826.2011.621544

Mehta, V. (2007). Lively streets: Determining environmental characteristics to support social behavior. *Journal of Planning Education and Research*, *27*(2), 165–187. https://doi.org/10.1177/0739456X07307947

Messner, S. (1980). Income inequality and murder rates: Some cross-national findings. *Comparative Social Research*. Retrieved from https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=86466

Metzger, J. T. (1996). The Theory and Practice of Equity Planning: An Annotated Bibliography. *Journal of Planning Literature*, *11*(1), 112–126. https://doi.org/10.1177/088541229601100106

Mills, J., Clark, M. S., Ford, T. E., & Johnson, M. (2004). Measurement of communal strength. *Personal Relationships*, *11*(2), 213–230. https://doi.org/10.1111/j.1475-6811.2004.00079.x

Mishchuk, H., Samoliuk, N., Bilan, Y., & Streimikiene, D. (2018). Income Inequality and its Consequences within the Framework of Social Justice. Retrieved April 2, 2021, from http://yadda.icm.edu.pl/yadda/element/bwmeta1.element.baztech-578044de-f1cd-4db3-81c0-3a8b07dd3384

Mitchell, D. (2003). *The right to the city: Social justice and the fight for public space*. Retrieved from https://books.google.com/books?hl=en&lr=&id=2NKoBQAAQBAJ&oi=fnd&pg=PP1&dq=Forms+indicative+of+public+spaces&ots=jZcBeSpE15&sig=l6AgxDq6oNFrSprKpOCjvQkuJrw

Mladenka, K. R. (1989). The Distribution of an Urban Public Service. *Urban Affairs Quarterly*, *24*(4), 556–583. https://doi.org/10.1177/004208168902400405

Mladenka, K. R., & Hill, K. Q. (1977). The distribution of benefits in an urban environment: Parks and Libraries in Houston. *Urban Affairs Review*, *13*(1), 73–94. https://doi.org/10.1177/107808747701300104

Mohai, P., Pellow, D., & Roberts, J. (2009). Environmental justice. *Annual Review of Environment and Resources*, *34*, 405–430. https://doi.org/10.1146/annurev-environ-082508-094348

Morello-Frosch, R., Pastor, M., Porras, C., & Sadd, J. (2002). Environmental justice and regional inequality in Southern California: Implications for furture research. *Environmental Health Perspectives*, *110*(SUPPL. 2), 149–154. https://doi.org/10.1289/ehp.02110s2149

Morris, A. (1986). *The origins of the civil rights movement*.

Morse, W. C., Lowery, D. R., & Steury, T. (2014). Exploring Saturation of Themes and Spatial Locations in Qualitative Public Participation Geographic Information Systems Research. *Society and Natural Resources*, *27*(5), 557–571. https://doi.org/10.1080/08941920.2014.888791

Mouratidis, K. (2018b). Built environment and social well-being: How does urban form affect social life and personal relationships? *Cities*, *74*, 7–20. https://doi.org/10.1016/j.cities.2017.10.020

Mouratidis, K. (2018c). Rethinking how built environments influence subjective well-being: a new conceptual framework. *Journal of Urbanism: International Research on Placemaking and Urban Sustainability*, *11*(1), 24–40. https://doi.org/10.1080/17549175.2017.1310749

Mullenbach, L., & Baker, L. (2020). Environmental Justice, Gentrification, and Leisure: A Systematic Review and Opportunities for the Future. *Leisure Sciences*, *42*(5–6), 430–447. https://doi.org/10.1080/01490400.2018.1458261

Murdock, E. (2019). Rethinking environmental spaces and racism. *The Routledge Handbook of Philosophy of the City*. Retrieved from https://books.google.com/books?hl=en&lr=&id=QAKqDwAAQBAJ&oi=fnd&pg=PT40 7&dq=environmental+racism+public+spaces&ots=cmB8N83CNV&sig=VUP26VfJn6A8 W-yZnN6wW71BraQ

Murray, M. (2010). Private Management of Public Spaces: Nonprofit Organizations and Urban Parks. *Harvard Environmental Law Review*, *34*. Retrieved from https://heinonline.org/HOL/Page?handle=hein.journals/helr34&id=181&div=&collection =

Nash, V., & Christie, I. (2003). *Making sense of community*. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.467.2295&rep=rep1&type=pdf

National Highway Traffic Safety Administration. (2020). Overview of motor vehicle crashes in 2019, (December), No. DOT HS 813 060. Retrieved from https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813060

Neighborhood Services Department. (2022). By Geographic Area - NSDOnline.Web. Retrieved March 19, 2022, from https://nsdonline.phoenix.gov/NeighborhoodOrgs/ByGeographicArea

Németh, J., & Schmidt, S. (2011). The privatization of public space: modeling and measuring publicness. *Journals.Sagepub.Com*, *38*(1), 5–23. https://doi.org/10.1068/b36057

Newton, N. (1971). *Design on the land: The development of landscape architecture*. Retrieved from https://books.google.com/books?hl=en&lr=&id=wbg9FQdNTAYC&oi=fnd&pg=PR21& dq=lack+of+inclusion+of+public+in+landscape+architecture&ots=XjUxF1_tME&sig=D amFuj57bnIyG5XGElewAg3a0IU

Nicholls, S., & Shafer, C. (2001). Measuring Accessibility and Equity in a Local Park System: The Utility of Geospatial Technologies to Park and Recreation Professionals. *Journal of Park & Recreation*, *19*(4). Retrieved from http://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authtype =crawler&jrnl=07351968&AN=31728465&h=eHcwHRE%2Fv7rqI%2Fyy9NLsX9f4ef WQaC%2Bmg7jnSghUIiSYrTXBmkpljlgF38o5mrpEaOoNAhf0BWhky2RKp0oxZg%3 D%3D&crl=c

Nussbaum, M., & Sen, A. (1993). *The quality of life*. Retrieved from https://books.google.com/books?hl=en&lr=&id=QurkDwAAQBAJ&oi=fnd&pg=PP1&ot s=1zylSWOzna&sig=5SR3jmoLceSKKZ025s1xzzdHTnk

Nutsford, D., Pearson, A. L., & Kingham, S. (2013). An ecological study investigating the association between access to urban green space and mental health. *Public Health*, *127*(11), 1005–1011. https://doi.org/10.1016/j.puhe.2013.08.016

OECD. (2008). 2008 OECD Household Survey on Environmental Attitudes and Behaviour : Data Corroboration.

Oh, K., & Jeong, S. (2007a). Assessing the spatial distribution of urban parks using GIS. *Landscape and Urban Planning*, *82*(1–2), 25–32. https://doi.org/10.1016/j.landurbplan.2007.01.014

Oh, K., & Jeong, S. (2007b). Assessing the spatial distribution of urban parks using GIS. *Landscape and Urban Planning*, *82*(1–2), 25–32. https://doi.org/10.1016/j.landurbplan.2007.01.014

Omer, I. (2006). Evaluating accessibility using house-level data: A spatial equity perspective. *Computers Environment and Urban Systems*, *30*(3), 254–274. Retrieved from https://www.sciencedirect.com/science/article/pii/S0198971505000530?casa_token=aMo FyJcv6GQAAAAA:QHjwTT6T3iHR9HMwzD_PEkOeA1IFr1oI-ayY2dCCOkfAWU_5fdFcoMfzRSagKd5a29OMQNws2ZjI

Oranratmanee, R., & Sachakul, V. (2014). Streets as Public Spaces in Southeast Asia: Case Studies of Thai Pedestrian Streets. *Journal of Urban Design*, *19*(2), 211–229. https://doi.org/10.1080/13574809.2013.870465

Othengrafen, F., & Reimer, M. (2013). The embeddedness of planning in cultural contexts: Theoretical foundations for the analysis of dynamic planning cultures. *Environment and Planning A*, *45*(6), 1269–1284. https://doi.org/10.1068/a45131
Parker, G., & Street, E. (2018). Advocacy planning: *Enabling Participatory Planning*, 43–60. https://doi.org/10.2307/j.ctt22h6qbk.9

Pastor, M., Sadd, J., & Hipp, J. (2001). Which came first? Toxic facilities, minority move-in, and environmental justice. *Journal of Urban Affairs*, *23*(1), 1–21. https://doi.org/10.1111/0735-2166.00072

Pastor, M., Sadd, J. L., & Morello-Frosch, R. (2004, June). Waiting to inhale: The demographics of toxic air release facilities in 21st-century California. *Social Science Quarterly*. https://doi.org/10.1111/j.0038-4941.2004.08502010.x

Peace, S., Rowles, G., & Bernard, M. (2013). Social interactions in public spaces and places: A conceptual overview. *Environmental Gerontology. Making Meaningful Places in Old Age*. Retrieved from https://books.google.com/books?hl=en&lr=&id=PsXS_YUtQVoC&oi=fnd&pg=PA25&dq=social+access+to+public+spaces&ots=ehl8xDBfOY&sig=zrOEiNwx7dT7OsppAnS5pT_sr7c

Peters, K. (2010). Leisure Sciences Being Together in Urban Parks: Connecting Public Space, Leisure, and Diversity. *Taylor & Francis*, *32*(5), 418–433. https://doi.org/10.1080/01490400.2010.510987

Petersen, E., Fiske, A. P., & Schubert, T. W. (2019). The Role of Social Relational Emotions for Human-Nature Connectedness. *Frontiers in Psychology*, *10*, 2759. https://doi.org/10.3389/fpsyg.2019.02759
Phoenix City--Maryvale (West) PUMA, AZ - Profile data - Census Reporter. (2019). Retrieved February 24, 2021, from https://censusreporter.org/profiles/79500US0400123-phoenix-city-maryvale-west-puma-az/

Piketty, T. (2017). *Brahmin Left vs Merchant Right: Rising Inequality and the Changing Structure of Political Conflict. 129.199.194.17*. Retrieved from http://129.199.194.17/files/Piketty2018.pdf

Planning and Development Department. (2020). *City of Phoenix. Staff Report*. Retrieved from https://online210.psych.wisc.edu/wp-content/uploads/PSY-210_Unit_Materials/PSY-210_Unit01_Materials/Frost_Blog_2020.pdf%0Ahttps://www.economist.com/special-report/2020/02/06/china-is-making-substantial-investment-in-ports-and-pipelines-worldwide%0Ahttp://

Project for Public Spaces. (2000). *How to turn a place around: a handbook for creating successful public spaces*. Retrieved from https://scholar.google.com/scholar_lookup?hl=en&publication_year=2000&author=PPS&title=How+to+Turn+a+Place+Around%3A+A+Handbook+for+Creating+Successful+Public+Spaces

Pulido, L. (2000a). Rethinking environmental racism: White privilege and urban development in southern California. *Annals of the Association of American Geographers*, *90*(1), 12–40. https://doi.org/10.1111/0004-5608.00182

Pulido, L. (2000b). Rethinking Environmental Racism: White Privilege and Urban Development in Southern California. *Annals of the Association of American Geographers*, *90*(1), 12–40. https://doi.org/10.1111/0004-5608.00182

Pulido, L. (2000c). Rethinking Environmental Racism: White Privilege and Urban Development in Southern California. *Annals of the Association of American Geographers*, *90*(1), 12–40. https://doi.org/10.1111/0004-5608.00182

Rakauskiene, O. G., & Strunz, H. (2016). Approach to reduction of socioeconomic inequality: Decrease of vulnerability and strengthening resilience. *Economics and Sociology*, *9*(4), 243–258. https://doi.org/10.14254/2071-789X.2016/9-4/15

Raleigh, E., & Galster, G. (2015). Neighborhood Disinvestment, Abandonment, and Crime Dynamics. *Journal of Urban Affairs*, *37*(4), 367–396. https://doi.org/10.1111/juaf.12102

Rawls, J. (1971). A theory of justice.

Ribot, J. C., & Peluso, N. L. (2003). A theory of access. *Rural Sociology*, *68*(2), 153–181. https://doi.org/10.1111/j.1549-0831.2003.tb00133.x

Rigolon, A, Fernandez, M., Harris, B., & Stewart, W. (2019). An Ecological Model of Environmental Justice for Recreation. *Leisure Sciences*, *0400*. https://doi.org/10.1080/01490400.2019.1655686

Rigolon, Alessandro. (2016, September 1). A complex landscape of inequity in access to urban parks: A literature review. *Landscape and Urban Planning*. Elsevier B.V. https://doi.org/10.1016/j.landurbplan.2016.05.017

Rigolon, Alessandro, Fernandez, M., Harris, B., & Stewart, W. (2019). An Ecological Model of Environmental Justice for Recreation. *Leisure Sciences*. https://doi.org/10.1080/01490400.2019.1655686

Rigolon, Alessandro, & Flohr, T. L. (2014). Access to Parks for Youth as an Environmental Justice Issue: Access Inequalities and Possible Solutions. *Buildings*, *4*, 69–94. https://doi.org/10.3390/buildings4020069

Rigolon, Alessandro, & Németh, J. (2018). What Shapes Uneven Access to Urban Amenities? Thick Injustice and the Legacy of Racial Discrimination in Denver's Parks. *Journal of Planning Education and Research*, 0739456X1878925. https://doi.org/10.1177/0739456X18789251

Rishbeth, C. (2001). Ethnic minority groups and the design of public open scape: An inclusive landscape? *Landscape Research*, *26*(4), 351–366. https://doi.org/10.1080/01426390120090148

Rittel, H. W. J., & Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy Sciences*, *4*(2), 155–169. https://doi.org/10.1007/BF01405730

Robinette, G. (1975). Landscape Architecture - a Profession Designed for Minorities.pdf.

Rodgers, D. (2003). Youth gangs in Colombia and Nicaragua: new forms of violence, new theoretical directions? *Reaping Causality, Exploring Linkages and Violence*. Retrieved from https://www.researchgate.net/profile/Dennis_Rodgers/publication/30528703_Youth_gangs_in_Colombia_and_Nicaragua_new_forms_of_violence_new_theoretical_directions/links/560661b508ae8e08c08d38d7.pdf#page=117

Roisman, F. (1995). The Lessons of American Apartheid: The Necessity and Means of Promoting Residential Racial Integration. Retrieved from https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/ilr81&section=21

Roman, C., & Chalfin, A. (2008). Fear of walking outdoors: A multilevel ecologic analysis of crime and disorder. *American Journal of Preventive Medicine*. Retrieved from https://www.sciencedirect.com/science/article/pii/S074937970800069X?casa_token=aiCs7fWWmdAAAAAA:lroEMftkVJNCkKvSzo1ePJwqtkUHzRtZwB287zIQ6-K-Y7zWeQbqeSH-BdqAN6acUjon-m9p3iE

Roof, K., & Oleru, N. (2008). Public health: Seattle and King County's push for the built environment. *Journal of Environmental Health*. Retrieved from https://www.jstor.org/stable/26327656?casa_token=YMdKZ0MQRPQAAAAA:X1-KNiZ_TEz-wldii_sQ9b9KIlliWbkBUy-ka89N7XEgEodYU_2dE0kFAPeM1Nruy-TwHzlqDstij_ImeYl1NeeMiZjWURsw0rolpIXCWqHV1wpsoS2L

Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*. https://doi.org/10.1146/annurev.psych.52.1.141

Sallis, J., & Glanz, K. (2006). The role of built environments in physical activity, eating, and obesity in childhood. *The Role of Built Environments in Physical Activity, Eating, and Obesity in Childhood. The Future of Children*, *16*(1), 89–108. Retrieved from https://muse.jhu.edu/article/194629/summary

Sampson, R. J. (2003). The Neighborhood Context of Well-Being. *Perspectives in Biology and Medicine*, *46*(19). https://doi.org/10.1353/pbm.2003.0073

Sander, H. A. (2016). Assessing impacts on urban greenspace, waterways, and vegetation in urban planning. *Journal of Environmental Planning and Management*, *59*(3), 461–479. https://doi.org/10.1080/09640568.2015.1017041

Schindler, S. (2015). Architectural Exclusion: Discrimination and Segregation Through Physical Design of the Built Environment on JSTOR. Retrieved March 1, 2022, from https://www.jstor.org/stable/43617074?casa_token=71R6fGqK5pcAAAAA%3A3-4QD0AZ-

GeX3K8ikoB01efLuTBb0rhYuEIfsyPXwcBEmvIfxaLqUw3C_8y6Vu4uWK_HYyzAXc
H5BrscYY1W3LjOnCb53sG47ZB-
Ehxqls68qwGx_5PF&seq=1#metadata_info_tab_contents

Schlosberg, D. (2004). Reconceiving Environmental Justice: Global Movements And
Political Theories. *Rsa.Tandfonline.Com*, *13*(3), 517–540.
https://doi.org/10.1080/0964401042000229025

Schlossberg, M., & Shuford, E. (2005). Delineating public& participation in PPGIS.
Retrieved from http://scholarsbank.uoregon.edu/xmlui/handle/1794/1343

Selgrath, J. ., Gergel, S. ., & Vincent, C. . (2018). Incorporating spatial dynamics greatly
increases estimates of long-term fishing effort: a participatory mapping approach.

Sell, J. L. (1992). Children and toxic hazards: The Maryvale cancer cluster. In *Assoc.
Amer. Geoeg. 88th Annu. Meet. San Diego, California*.

Sen, A. (2009). *The Idea of Justice Amartya Sen*. Retrieved from
https://books.google.com/books?hl=en&lr=&id=L-
_Lenq6TIsC&oi=fnd&pg=PR5&dq=Sen,+A+(2009)+The+Idea+of+Justice.&ots=qhuGv
n8ft8&sig=CdSwudv4TlZdTqD3VAd72iS6TH4

Shi, S., Gou, Z., & Chen, L. (2014). How does enclosure influence environmental
preferences? A cognitive study on urban public open spaces in Hong Kong. *Sustainable
Cities and Society*. Retrieved from
https://www.researchgate.net/profile/Shulin_Shi/publication/262641864_How_does_encl
osure_influence_environmental_preferences_A_cognitive_study_on_urban_public_open
_spaces_in_Hong_Kong/links/59d9a904a6fdcc2aad0d97f5/How-does-enclosure-
influence-environment

Sister, C., Jennifer, A., Wolch, A., & Wilson, J. (2010). Got green? addressing
environmental justice in park provision. *Springer*. https://doi.org/10.1007/s10708-009-
9303-8

Sister, C., Wolch, J., & Wilson, J. (2010). Got green? addressing environmental justice in
park provision. *GeoJournal*. https://doi.org/10.1007/s10708-009-9303-8

Smith, B., & Grenon, P. (2004). The Cornucopia of Formal-Ontological Relations.
Dialectica. Retrieved from https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1746-
8361.2004.tb00305.x?casa_token=YAIM20reiR0AAAAA:jTWIs3_W_l52mBomBResB
cl_D_7-L-oizKqKeOxql5GJUf8B9wJUZmalXgQ62caXAmDlMPoiqC1atq0p

Soja, E. W. (2016). The City and Spatial Justice. *Justice et Injustices Spatiales*, 56–72.
https://doi.org/10.4000/books.pupo.415

Spreitzer, G., Sutcliffe, K., Dutton, J., Sonenshein, S., & Grant, A. (2005, September). A socially embedded model of thriving at work. *Organization Science*. https://doi.org/10.1287/orsc.1050.0153

Srinivasan, S., O'Fallon, L. R., & Dearry, A. (2003). Creating Healthy Communities, Healthy Homes, Healthy People: Initiating a Research Agenda on the Built Environment and Public Health. *American Journal of Public Health*, *93*(9), 1446–1450. https://doi.org/10.2105/AJPH.93.9.1446

Stake, R. (2005). Qualitative case studies. Retrieved from https://psycnet.apa.org/record/2005-07735-017

Stanley, B. W., Stark, B. L., Johnston, K. L., & Smith, M. E. (2012). Urban Open Spaces in Historical Perspective: A Transdisciplinary Typology and Analysis. *Urban Geography*, *33*(8), 1089–1117. https://doi.org/10.2747/0272-3638.33.8.1089

Stickells, L. (2011). The right to the city: rethinking architecture's social significance.

Stigsdotter, U. K., Randrup, T. B., Ekholm, O., Schipperijn, J., Toftager, M., & Kamper-Jørgensen, F. (2010). Health promoting outdoor environments - Associations between green space, and health, health-related quality of life and stress based on a Danish national representative survey. *Scandinavian Journal of Public Health*, *38*(4), 411–417. https://doi.org/10.1177/1403494810367468

Stodolska, M., Shinew, K. J., Acevedo, J. C., & Izenstark, D. (2011). Perceptions of urban parks as havens and contested terrains by Mexican-Americans in Chicago neighborhoods. *Leisure Sciences*, *33*(2), 103–126. https://doi.org/10.1080/01490400.2011.550220

Sullivan, D., & Picarsic, J. (2012). The Subtleties of Social Exclusion: Race, Social The Subtleties of Social Exclusion: Race, Social Class, and the Exclusion of Blacks in a Racially Class, and the Exclusion of Blacks in a Racially Mixed Neighborhood Mixed Neighborhood The Subtleties of Soc. *Sociology Mind*, *2*(2), 153–157. https://doi.org/10.4236/sm.2012.22020

Sweeney, M. (2005). Planning for public spaces in multiethnic contexts: A case study of Mountain Sights, Montreal. *ProQuest Dissertations and Theses*, *D*, 457. Retrieved from https://search.proquest.com/dissertations-theses/planning-public-spaces-multiethnic-contexts-case/docview/305378528/se-2?accountid=41849

Sweet, E., & Etienne, H. (2011). Commentary: Diversity in urban planning education and practice. *Journal of Planning Education and Research*, *31*(3), 332–339. https://doi.org/10.1177/0739456X11414715

Talen, E. (1998a). Visualizing fairness: Equity maps for planners. *Journal of the American Planning Association*, *64*(1), 22–38. https://doi.org/10.1080/01944369808975954

Talen, E, & Anselin, L. (1998). Assessing Spatial Equity: An Evaluation of Measures of Accessibility to Public Playgrounds. *Environment and Planning A: Economy and Space*, *30*(4), 595–613. https://doi.org/10.1068/a300595

Talen, Emily. (1997). The social equity of urban service distribution: An exploration of park access in pueblo, colorado, and macon, georgia. *Urban Geography*, *18*(6), 521–541. https://doi.org/10.2747/0272-3638.18.6.521

Talen, Emily. (2010). The spatial logic of parks. *Journal of Urban Design*, *15*(4), 473–491. https://doi.org/10.1080/13574809.2010.502335

Thomas, J. (2013). *Redevelopment and race: Planning a finer city in postwar Detroit*. Retrieved from https://books.google.com/books?hl=en&lr=&id=PpCWAgAAQBAJ&oi=fnd&pg=PR1&dq=Planners+who+are+part+of+minority+races+&ots=BAj5Gf1lQ_&sig=RA12Bv4IRBbs85vIGGx0CaUF5GU

Thompson, I. (2000). Aesthetic, social and ecological values in landscape architecture: A discourse analysis. *Ethics, Place and Environment*, *3*(3), 269–287. https://doi.org/10.1080/713665903

Thompson, S., & Kent, J. (2014). Healthy built environments supporting everyday occupations: Current thinking in urban planning. *Journal of Occupational Science*, *21*(1), 25–41. https://doi.org/10.1080/14427591.2013.867562

Tinnevelt, R., & Geenens, R. (2008). *Does truth matter?: Democracy and public space*. Retrieved from https://link.springer.com/content/pdf/10.1007/978-1-4020-8849-0.pdf

Trefry, J., & Watson, L. (2013). The silenced voices of architectural discourse: promoting inclusion through qualitative research. *Enquiry The ARCC Journal for Architecture*. Retrieved from https://185.52.151.100/index.php/arccjournal/article/view/867030026

Trott, R. (2013). Villa de Paz golf course set to close | Archives | westvalleyview.com. Retrieved August 2, 2021, from https://www.westvalleyview.com/archives/villa-de-paz-golf-course-set-to-close/article_f1f13c5c-e3c1-5045-8012-789bfdfdeb0b.html

Tulloch, D. (2003). What Ppgis Really Needs Is ... *2nd Annual Public Participation GIS Conference: URISA*. Retrieved from http://downloads2.esri.com/campus/uploads/library/pdfs/58993.pdf

Turner, D. (2010). *Qualitative Interview Design: A Practical Guide for Novice Investigators*. *The Qualitative Report* (Vol. 15). Retrieved from http://www.nova.edu/ssss/QR/QR15-3/qid.pdf

UN-Habitat. (2018). *SDG Indicator 11.7.1 Training Module: Public Space*. Nairobi. Retrieved from https://unhabitat.org/sites/default/files/2020/07/indicator_11.7.1_training_module_public _space.pdf

UNESCO. (2017). Inclusion Through Access to Public Space. Retrieved April 3, 2021, from http://www.unesco.org/new/en/social-and-human-sciences/themes/urban-development/migrants-inclusion-in-cities/good-practices/inclusion-through-access-to-public-space/

Urry, J. (1985). Social relations, space and time. *Social Relations and Spatial Structures*, 20–48. https://doi.org/10.1007/978-1-349-27935-7_3

US EPA. (2014). Environmental Justice.

Vajjhala, S. P. (2005). Integrating GIS and Participatory Mapping in Community Development Planning. In *ESRI international users conference*. Retrieved from http://www.iapad.org/

Valley of the Sun United Way. (2017). Maryvale Family Resource Center to Open November 2. Retrieved May 26, 2021, from https://vsuw.org/news/maryvale-family-resource-center-to-open-november-2

Valley of the Sun United Way. (2018). The History of the Cartwright Community Garden. Retrieved from https://vsuw.org/blog/the-history-of-the-cartwright-community-garden

Verwiebe, R., & Wegener, B. (2000). *Social Inequality and the Perceived Income Justice Gap*. *Social Justice Research* (Vol. 13). Retrieved from https://idp.springer.com/authorize/casa?redirect_uri=https://link.springer.com/article/10.1 023/A:1007545823040&casa_token=YGxTQNxQQucAAAAA:X2sgexzTreZocytHHpr QWnR4wSR71AdZlOQ3wTIWrqLeAehhn6o4QBXGiFb5fJmAZMOo4HAhBYkOwj_V ZQ

Weiss, C. C., Purciel, M., Bader, M., Quinn, J. W., Lovasi, G., Neckerman, K. M., & Rundle, A. G. (2011). Reconsidering access: Park facilities and neighborhood disamenities in New York City. *Journal of Urban Health*, *88*(2), 297–310. https://doi.org/10.1007/s11524-011-9551-z

Wen, M., Zhang, X., Harris, C., & Holt, J. (2013a). Spatial disparities in the distribution of parks and green spaces in the USA. *Annals of Behavioral Science*. Retrieved from https://academic.oup.com/abm/article-abstract/45/suppl_1/S18/4563966

Wen, M., Zhang, X., Harris, C., & Holt, J. (2013b). Spatial disparities in the distribution of parks and green spaces in the USA. *Annals of Behavioral Science*. Retrieved from https://academic.oup.com/abm/article-abstract/45/suppl_1/S18/4563966

Wendel, H., Zarger, R., & Mihelcic, J. (2012). Accessibility and usability: Green space preferences, perceptions, and barriers in a rapidly urbanizing city in Latin America. *Landscape and Urban Planning*. Retrieved from https://www.sciencedirect.com/science/article/pii/S0169204612001892?casa_token=9Gg6zASC4AsAAAAA:xIo98A6ZBMhoskdoG4uK-TLgIFkKO_S5hcBBNdry_VJ-hpVkBKWp4MoEsbJq3m46MPcJLJabkL4

Werlen, B. (1993). *Society action and space: an alternative human geography*. Retrieved from https://books.google.com/books?hl=en&lr=&id=72HvR3XttU4C&oi=fnd&pg=PP1&dq=reconstitution+of+human+geography+as+spatial+science+positivist+&ots=t6KnM7Opd3&sig=qZ4QlMdQ95d2KC7YA908C09SkCk

Wheeler, S. M. (2004). *Planning for sustainability: Creating livable, equitable and ecological communities*. *Planning for Sustainability: Creating Livable, Equitable and Ecological Communities* (Vol. 9780203300). https://doi.org/10.4324/9780203300565

Whitlock, J. (2007). The role of adults, public space, and power in adolescent community connectedness. *Journal of Community Psychology*. Retrieved from https://onlinelibrary.wiley.com/doi/abs/10.1002/jcop.20161?casa_token=enDFbd1ZBakAAAAA:PVRSAu0T1y_Gq26WzTIr4b5hGuy5MDsfz_55AijpOSOmkF00_p906wP5C7yoVifA_5GGc6qNeVd9liHe

Whyte, WH. (1980). The social life of small urban spaces. Retrieved from https://trid.trb.org/view/521122

Whyte, William. (1980). The Social Life of Small Urban Spaces City : Rediscovering the Center. *Washington: The Conservation Foundation, D.C.*, *VIII*(1).
Wiletsky, L., Choate, D., & Katz, C. (2007). Making strides in Maryvale. Retrieved from https://asu.pure.elsevier.com/en/publications/making-strides-in-maryvale
Williams, J. (2013). *"Toward a Theory of Spatial Justice."*

Williams, M. (2000). Interpretivism and generalisation. *Sociology*, *34*(2), 209–224. https://doi.org/10.1177/s0038038500000146

Wilson, S., Hutson, M., & Mujahid, M. (2008). How planning and zoning contribute to inequitable development, neighborhood health, and environmental injustice.

Environmental Justice, 1(4), 211–216. Retrieved from
https://www.liebertpub.com/doi/abs/10.1089/env.2008.0506

Wiseman, J., & Brasher, K. (2008). Community wellbeing in an unwell world: Trends, challenges, and possibilities. *Journal of Public Health Policy*.
https://doi.org/10.1057/jphp.2008.16

Witten, K., & Ivory, V. (2018). Urban public spaces, social inclusion and health. In *Routledge Handbook of Health Geography* (pp. 259–266). Taylor and Francis.
https://doi.org/10.4324/9781315104584-37

Wolch, J., Wilson, J. P., & Fehrenbach, J. (2005). Urban Geography Parks and Park Funding in Los Angeles: An Equity-Mapping Analysis. *Urban Geography*, *26*(1), 4–35.
https://doi.org/10.2747/0272-3638.26.1.4

Worpole, K., & Knox, K. (2007). *The social value of public spaces*.

Yin, R. (2011). *Applications of case study research*. Retrieved from
https://books.google.com/books?hl=en&lr=&id=FgSV0Y2FleYC&oi=fnd&pg=PP1&dq
=Case+Study+&ots=42f3UtwpMk&sig=Kz_UGNuODhyhMuT_kZGS_jlJ018

Yin, R. (2017). *Case study research and applications: Design and methods*. Retrieved from
https://books.google.com/books?hl=en&lr=&id=fHE3DwAAQBAJ&oi=fnd&pg=PP1&d
q=in,+R.+K.+(2017).+Case+study+research+and+applications:+Design+and+methods,&
ots=bBAh7r8GSq&sig=TDt1prnJhQ7Fc2Xzqr8xgb2JfZM

Yuan, Q., & Wang, J. (2021). Goods movement, road safety, and spatial inequity: Evaluating freight-related crashes in low-income or minority neighborhoods. *Journal of Transport Geography*, *96*(February), 103186.
https://doi.org/10.1016/j.jtrangeo.2021.103186

Zallio, M., & Clarkson, P. J. (2021). Inclusion, diversity, equity and accessibility in the built environment: A study of architectural design practice. *Building and Environment*, *206*, 108352. https://doi.org/10.1016/j.buildenv.2021.108352

Zapata, M. A., & Bates, L. K. (2015). Symposium: Equity Planning Revisited Equity Planning Revisited. *Journal of Planning Education and Research*, *35*(3), 245–248.
https://doi.org/10.1177/0739456X15589967

Zenk, S. N., Schulz, A. J., Israel, B. A., James, S. A., Bao, S., & Wilson, M. L. (2005). Neighborhood Racial Composition, Neighborhood Poverty, and the Spatial Accessibility of Supermarkets in Metropolitan Detroit. *American Journal of Public Health*, *95*(4), 660–667. https://doi.org/10.2105/AJPH.2004.042150

Zhang, X., Lu, H., & Holt, J. B. (2011). Modeling spatial accessibility to parks: A national study. *International Journal of Health Geographics*, *10*. https://doi.org/10.1186/1476-072X-10-31

Zimring, C. (2017). *Clean and white: A history of environmental racism in the United States*. Retrieved from https://books.google.com/books?hl=en&lr=&id=OtmRDgAAQBAJ&oi=fnd&pg=PP9&dq=environmental+racism+public+spaces&ots=BRbrgE6PQb&sig=erVd9c9eUgBG-ALjOxaZ85WYi_E

CHAPTER 3

ARTICLE 2

**EXAMINING THE LINKAGES BETWEEN COMMUNITY WELL-BEING AND
ACCESS TO PUBLIC SPACES: AN ENVIRONMENTAL JUSTICE
PERSPECTIVE**

Abstract

The purpose of this study was to examine how communities and technical experts

perceive the linkages between community well-being and access, through the described

outcomes of exchanges among the dimensions of public spaces. In extant examinations,

access to public spaces has been studied as a measure of environmental justice, which

facilitates the realization of well-being ideals such as physical health, agency, or social

cohesion. Yet to be examined however, is how access emerges from the realization of

well-being ideals linked to public space related exchanges that are focal to different

constructs of environmental justice. In vulnerable contexts such an examination is critical

because, the community outcomes that have historically emerged from different

exchanges to strain access to resources in the built environment, encompass different

constructs of environmental justice (i.e., distributive, procedural and interactional

justice). Hence, the perceived outcomes of the public space related exchanges that place,

offer an opportunity to examine the facilitators and barriers which contextualize access.

In this study access is examined as an outcome of exchanges that take place across public

space dimensions (i.e., communities of place, physical characteristics, and technical

agents) and their perceived linkages to the realization of community ideals. Through

participatory mapping interviews, 19 community representatives and 4 key technical

informants, in Maryvale (a low-income minority majority context in Phoenix) were engaged. Participants identified public spaces in the community and answered questions related to the exchanges that take place. A total of 35 public spaces were identified. Responses were deductively coded guided, by an intersection between the *Tripartite Framework* and the *Network Theory of Well-being*, two bodies of work which are yet to intersect in the examination of access. The results show that both community representatives and technical agents describe the ability to benefit from a public space (*i.e*., access) as emerging from community well-being ideals, which emanate from exchanges that are focal to varying environmental justice constructs. The study demonstrates that community ideals linked to the exchanges across public space dimensions, indeed offer an opportunity for an integrated examination of access.

Keywords: Public Spaces; Access; Environmental Justice; Community Well-being

Introduction

Idealized as shared environmental resources with unrestricted access, public spaces have garnered considerable attention in environmental justice research (Boone 2008; Byrne, Wolch, and Zhang 2009; Holifield, Porter, and Walker 2011; Jennings, Johnson Gaither, and Gragg 2012). In most studies, access has been conceptualized as a key measure for environmental justice. Conceptualizations of access have principally augmented knowledge related to *distributive justice*, through research on spatial access (*i.e.,* proximity to and dispersion of public spaces)(Knox, 1980; Talen, 1998, 2010). In such examinations, spatial relationships between communities and public spaces emanating from planning and design have been explored as indicators of just allocation (Abercrombie et al., 2008; Talen, 1997; Wolch, Wilson, & Fehrenbach, 2005). Environmental justice scholarship focused on the nexus between vulnerable populations (i.e., low-income, racial minority neighborhoods) and access to public spaces has generally highlighted the stark differences that often characterize allocations of public spaces among different racial and income communities (Bolin, Grineski, & Collins, 2005; Murdock, 2019; Pulido, 2000; Zimring, 2017).

There have been varying scholarly conclusions regarding the relationship between vulnerable populations and the distribution patterns of public spaces (Abercrombie et al., 2008). While some studies have found evidence of injustices in the spatial relationships between racial minority groups and public spaces (Bolin, Grineski, & Collins 2005; Gould & Lewis, 2016; Hood Washington 2004), other studies have showcased positive associations (see Cutts, Darby, Boone, & Brewis, 2009). The aforementioned inconclusive results justify the need to further explore access to public spaces through

spatial relationships *in addition to* social barriers and enablers of use, particularly in the context of vulnerable communities (see Abercrombie et al., 2008; Engelberg et al., 2016; Rigolon, 2016). Adopting a more comprehensive conceptualization of access, such as the above described, some scholars have examined social and spatial barriers associated with public spaces while also accounting for demographical data on dimensions like crime, traffic fatalities, and noxious land use (Cutts, Darby, Boone, & Brewis, 2009; Weiss et al., 2011). To date however, scholarship on access within vulnerable contexts has yet to incorporate community members' perceptions of their desires and ideals associated with public spaces, yet such opinions are vital to augmenting knowledge on spatial relationships and other environmental justice related matters.

Studies have found that just environments, as perceived by users, *transcend* spatial access to include social factors such as inclusion in decision making and other desirable interactions that are valued by communities (Crompton & Chuan, 1992; Hornik, Cutts, & Greenlee, 2016). Such communally valued states are linked to community well-being and offer insights into access as an integrated concept (see Edwards, Reid, & Hunter, 2016; Lee, 2015). For example, community satisfaction is an ideal that has been associated with proximity to public spaces and it fulfills distributive justice (Larson, Jennings, & Cloutier 2016). Similarly, agency as a communal ideal has been linked to satisfying procedural justice through the inclusion of the public in design and planning (Boone et al., 2009). Comparably, desirable experiences with and within public spaces, which satisfy interactional justice, have positive links to communal ideals like sense of community (Francis et al., 2012).

Each of the aforementioned justice constructs provides crucial insights into communal ideals and when examined collectively they have the potential of offering a more nuanced foundation from which to understand spatial interactions. In vulnerable contexts, such an examination is critical because of the history and barriers which contextualize access beyond the individual constructs of environmental justice. For instance, the incidence of crime in public parks, which is a common occurrence in low-income contexts, stifles access to such unsafe locales even if they are within proximity and satisfy distributive justice (Weiss et al., 2011). Similarly, even though public engagement processes exist to satisfy procedural justice, historical tensions which have arisen from systemic biases in resource allocation, planning, design, and management, may impede access due to the lack of trust and unmet expectations during public engagement processes (Boone, 2008). Comparably, impediments to ideals like sense of belonging and social cohesion, as relates to the experiences that take place in a public space, may hinder access to such locales which are open to all populations for use to satisfy interactional justice (Francis et al., 2012). It is thus important to explore how communities, particularly those in vulnerable contexts, perceive of access by examining the linkages between the realization of community ideals related to all three constructs of environmental justice (*i.e.,* distributive, procedural and interactional justice). Additionally, it is also critical to understand how professionals, tasked with developing built environments within vulnerable contexts, have dealt with community well-being ideals whilst concurrently accounting for the notion of access.

As one considers the context of vulnerable communities, the question of how community perceptions of access have been incorporated in planning and designing of public spaces is an enduring one, given the historical tensions that have existed between vulnerable populations and professionals tasked with developing built environments (Agyeman, Bullard, & Evans, 2002; Bullard, 1993; Smith & Grenon, 2004). Hence, scholarly examinations of the perceived linkages between community well-being ideals and access to public spaces juxtaposed with the consideration, or otherwise, of such perceptions in planning and design, can provide critical insights to the burgeoning body of research on the nexus between built environments and well-being (Mouratidis, 2018c; Sampson, 2003). The above presented research focus requires an understanding of how perceived access is derived from the realization of community ideals associated with spatial characteristics, decision making processes, and expectations of desirable experiences manifesting within public space. Accordingly, and drawing on a case study research design, *the purpose of the second article was to examine how communities and technical experts perceive the linkages between access and community well-being, through the described outcomes of exchanges across the dimensions of public spaces.* (i.e., communities of place, physical characteristics, and technical agents). Specifically, participatory mapping interviews will be used to examine such perceived linkages. The study site for this research is Maryvale, one of the economically developing urban villages in Phoenix, Arizona. Participatory mapping interviews were used to identify public spaces in each neighborhood and to seek the opinions of community leaders/organizers and technical experts (i.e., planners, building and landscape architects).

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Conceptual Framework

The theoretical foundation that informs the research purpose of this study is the intersection between Lefebvre & Nicholson-Smith's, (1991) *Tripartite Framework* and Bishop's (2005) *Network Theory of Well-being*, two bodies of work which have yet to intersect in the examination of access. The *Tripartite Framework* theorizes space as entailing the interactions between spatial, technical, and social dimensions (Lefebvre & Nicholson-Smith, 1991), while the *Network Theory of Well-being*, conceptualizes community well-being as collectively idealized states that are perceived to ensure the continuous existence of groups (Bishop, 2005). The coming together of these two frameworks is needed to better understand how access emerges as an outcome of the exchanges connected to public spaces and the realization of collectively idealized states. Space as a social and spatial product is theorized as the result of exchanges between: Spatial Practice, which denotes material characteristics of space; Representations of Space, which represents technical conceptualizations made by planners and policy makers; and, Spaces of Representation, which highlights social idealizations of space (Lefebvre & Nicholson-Smith, 1991). The way such engagements are socially perceived, either result in differential spaces (*i.e.,* spaces that are perceived as valuable by society) or abstract spaces (i.e., dead spaces abhorred by society) (Lefebvre & Nicholson-Smith, 1991).

In Bishop's (2005) *Network Theory of Well-being*, engagements perceived as contributing to ideals of individuals and society at large, are theorized to result in positive states which are reinforced by other successful engagements. An intersection between the *Tripartite Framework* (Lefebvre & Nicholson-Smith, 1991) and the *Network Theory of*

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Well-being (Bishop, 2005) allows for an exploration of how societal perceptions on space production interactions informs collectively idealized outcomes as relates to well-being. Among vulnerable populations issues like exclusion from planning processes and segregated zoning policies along with poorly maintained physical spaces, have stifled the attainment and reinforcement of communal ideals such as civic engagement, agency and social interaction (Blanton, 2011; Byrne, 2012; Low & Smith, 2013; Massey, 2004). Hence, socio-technical exchanges (*i.e.,* between Spaces of Representation and Representations of Space) and socio-physical engagements (*i.e.,* between Spaces of Representation and Spatial Practice), deemed not to enhance the realization of communal ideals, have implications on the well-being of communities. Such outcomes related to the exchanges that take place, could have perceived implications on access to the locales, which are yet to be explored.

The linkages between access to public spaces and well-being have been predominantly explored through the causal relationship between access and well-being. Specific to public spaces, the fair locations of public space resources (*i.e.,* distributive justice), meaningful engagements with technical representatives (i.e., procedural justice) and the quality of interactions (*i.e.,* interactional justice), have been linked to access and consequently the well-being of a community. Yet the reverse may also hold. Adapting Ribot & Peluso, (2003) definition of access as the ability to derive benefits from resources, exchanges across the dimensions of public spaces (i.e., communities of place, locational features, and technical agents), may be considered to yield community ideals which facilitate perceived opportunities for beneficial utility. Such exchanges are conceptualized in the network theory of well-being (Bishop, 2005) as successful

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engagements with the world, which are perceived to yield positive states. In relation to well-being at a group scale, the positive states realized are critical to the continuous existence or functioning of the said group.

The intersection between the tripartite framework and network theory of well-being denotes a conceptualization of public space related exchanges and the realization of positive states from such engagements. This intersection offers a lens through which the ability to benefit from a public space (*i.e.,* access) can be examined as an outcome of the perceived linkages between exchanges that take place and the realization or inhibition of community (Godwyll & Buzinde, 2022). It should be noted that the responses to the interview questions asked of community leaders/organizers and technical experts (i.e., planners, building and landscape architects) were deductively coded by drawing on the theoretical intersection between the *Tripartite Framework* (Lefebvre & Nicholson-Smith, 1991) and *Network Theory of Well-being* (Bishop, 2005).

Literature Review

The proceeding sections discusses the notion of access from an environmental justice lens. Foremostly, the roots of environmental justice and engagements with the concept is examined through a focus on the context of the United States. This is followed by a discussion on environmental justice and access to public spaces, as relates to vulnerable populations. Examinations of access to public spaces as a facilitator of well-being, are discussed thereafter. Literature on the conceptual frameworks the *Tripartite Framework* (Lefebvre & Nicholson-Smith, 1991) and the *Network Theory of Well-being* (Bishop,

2005) which are intersected to examine access through the exchanges that take place and the realization or otherwise of communal ideals, is subsequently highlighted.

Roots of Environmental Justice in United States

Environmental justice highlights the fair distribution of environmental resources alongside inclusion in governance and planning, independent of race or socio-economic characteristics (Schlosberg, 2004). In the United States, its roots are traced to the civil rights movement in the US, from the late 1940's to the late 1960's, which were characterized by discrimination against black people in the South (Morris, 1986). The civil rights movement fought for reforms in response to inequalities such as racial segregation in schools, segregation in the armed services, discrimination in the criminal justice system, bus segregation and employment discrimination (Fairclough, 2016). While the struggle for equality made monumental strides evidenced by executive orders, legal reforms and laws, environmental inequalities continued to plague minority-majority communities well after the end of the first phase of the civil rights movement, which ended in the late 1960's (Morris, 1986).

Evidence of the environmental injustice was seen in the trends in high and rising numbers of cancer cases prevalent among minorities from the 1970's to the 1990's (American Cancer Society, 2019). In several studies, locations of toxic waste disposal sites, landfills and industrial plants were found to be spatially correlated with black, low-income communities which consequently led to exposure to health related hazards (Bullard, 1993; Chakraborty, Maantay, & Brender, 2011; Pastor, Sadd, & Morello-Frosch, 2004; Pulido, 2000). Additionally, the unflattering characteristics of planned

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environments occupied by minorities were apparent (Massey, 1990; Bullard, 1993; Roisman, 1995; Zenk et al., 2005). The 'White Flight' in the late 1960's was characterized by massive movements of white people from inner cities to the suburbs (Ahlbrandt, 2013). Mostly white and affluent income classes, continued to became more and more spatially segregated through the 1970's to 1990's and this was related with lags in development in minority predominant neighborhoods (Fischer, Stockmayer, Stiles, & Hout, 2008). Vulnerable groups (i.e., low-income minority communities) continue to suffer from environmental injustices evidenced by their asserted relationships with access to public spaces (Aiyer & Zimmerman, 2015; Bullard, 1993; Roisman, 1995; Tolan et al., 2003; Zenk et al., 2005).

Environmental Justice and Public Space Access

Investigations of environmental justice among vulnerable populations have predominantly focused on how resources are justly distributed. Distributive justice models like the compensatory equity model have been developed drawing on Rawls, (1971)'s ,'Difference Principle', which emphasizes equitable resource allocation through a prioritization of the needs of the vulnerable. The model stresses on the 'unequal treatment of unequals' (Bach, 1980; Lucy, 1981), through an examination of access based on the spatial distribution of public resources across vulnerable populations (Crompton & Wicks, 1988; Crompton & Lue, 1992). Distributive justice in public spaces allocation among vulnerable groups, hence, focuses on investigating access through spatial relationships. In the United States, disparities in public space distribution based on race and income have had varying impacts in varying contexts. In a study of the distribution of

parks and libraries in Houston, Mladenka & Hill, (1977) conclude that there is no

significant difference in park sizes across different socio-economical contexts. The study

further indicates that while parks were spatially clustered in low-income communities,

public library resources favored higher income communities. In a longitudinal study

conducted 12 years later, Mladenka's (1989) work on the distribution of park and

recreation services in Chicago, revealed that race and later class, were major drivers of

distribution. According to that study, distribution patterns of parks showed clusters

around communities of higher income levels across 22 years.

Studies conducted in more recent times highlight varying associations between

low-income and BIPOC (Black, Indigenous, People of Color) populations, and the

distribution of public spaces such as recreational facilities, open spaces and parks, across

different urbanization levels in the US (Wen, Zhang, Harris, & Holt, 2013). The type of

public space, its maintenance and function, as well as local priorities and policies all have

implications on assessments of environmental justice (Abercrombie et al., 2008;

Engelberg et al., 2016). Exploring a more holistic examination of access, some studies

have found that while public spaces such as small parks may be spatially accessible to

vulnerable populations, certain age groups may be vastly underrepresented in such

jurisdictions, leading to barriers of use for such demographics (Cutts, Darby, Boone, &

Brewis, 2009; Rigolon & Flohr, 2014). In addition to neighborhood composition, context

specific characteristics such as high crime rates, traffic fatalities and noxious surrounding

land-use have also been jointly explored with spatial relationships to investigate access

conceptualized through opportunities and barriers of use (Weiss et al., 2011). Missing in

such integrated examinations of access is an incorporation of other considerations in

relation to procedural and interactional justice, which have been determined to impact access.

While environmental justice has been extensively explored through access as a measure of distributive justice, studies have shown that procedural and interactional injustices also result in enablers or barriers of access. Procedural justice refers to meaningful involvement in decision making (Stewart, 2014) and, interactional justice, highlights experiences within physical environment (Roberts, 2009). For example, the history of exclusion from planning decisions and zoning policies which result in segregation of vulnerable populations, translate into interactions which facilitate ethno-racist barriers of use (Blanton, 2011; Byrne, 2012; Massey, 2004). Additionally, limitations of public engagement in decision making, common to BIPOC and low-income groups, inhibits the satisfaction of procedural justice and consequently access (Boone, 2008). Similarly, perceptions associated to undesirable interactions with the material characteristics of public spaces (e.g., poorly maintained parks, lack of facilities) leads to socio-physical interactions which inhibit use (Biernacka, Kronenberg, & Łaszkiewicz, 2020). Conditions that stifle interactional justice across marginalized or minoritized populations, like the absence of symbolic cultural features (Amin, 2008; Mannarini, Tartaglia, Fedi, & Greganti, 2010), or poor social interactions within space (Peace, Rowles, & Bernard, 2013), also have consequences on access. Yet, none of the examinations that have sought a more holistic approach to understanding access to public spaces, bearing in mind the contextual barriers which characterize vulnerable contexts, have jointly incorporated considerations of distributive, procedural and interactional justice.

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Rigolon, Fernandez, Harris, & Stewart's (2019) developed an ecological model of environmental justice for recreation. In this model justice is theorized as culminating in the realization of the three key components of environmental justice. The model centralizes the individual as realizing justice from different outputs associated with the different components in an ecological system. Accessibility is examined as one of the outcomes of justice for individuals, directly pertaining to distributive and interactional justice in the perceived environment. In vulnerable contexts however, the ability to benefit from a recreational space, transcends accessibility as an outcome for an individual. The tensions associated to the key constructs of environmental justice such as perceived biases in resource allocation, unfruitful engagements between community members and technical agents and policing of minorities in public spaces have implied meaning and inferences for the collective (Low, 2013). Hence, it is important to examine the outcomes from exchanges across the related dimensions of public spaces as pertains to the values associated to them at a collective scale. The realization or impediment to community well-being ideals, provides a lens through which such values can be examined. Given the history and emphasis on the nature of exchanges that have occurred among the different dimensions, the outcomes of engagements as perceived by technical agents, must also be accounted for in such an examination. An intersection between the tripartite framework and the network theory of well-being, provides a lens through which public space exchanges and associated community ideals, as perceived by community representatives and technical agents, can be examined as linked to the perceived ability to benefit from a public space (i.e., access).

Methodology

The proceeding sections discuss the methodology adopted for this study. It foremostly

explicates the selection of case study as an approach and justifies its use, given the

purpose of this study. It proceeds to highlight case selection and design, the data

collection approach, study sample, data tools and data analysis procedure.

Case Study

The study utilizes case study design as a research approach. Case study research is an

intensive and systematic approach to studying a contemporary phenomenon within its

real-life context (Stake, 2005; Yin, 2017). The phenomenon under study referred to as

case(s), depends on the subject matter of inquiry (Yin, 2011). Cases may encompass

decisions, processes, programs, organizations, neighborhoods, cities or regions (Yin,

2011). One of its foremostly asserted qualities is the emphasis case study research places

on exploring the complex relationships between various parts of a study (Stake, 2005).

The relationships between urban environments and social systems, have long been

asserted to have multiple dimensions (Rittel & Webber, 1973). This complexity sets the

stage for advancing case study research in such inquiries (Groat & Wang 2013). Given

this quality, case study research is not nascent to inquiries that have sought to understand

the complexities between society and urban environments. Seminal inquiries by Jacobs,

(1961) and Whyte, (1980) in seeking to understand how public spaces influence urban

vitality, and how people use and interact with open spaces, respectively, employed case

study as a research approach. Case studies continue to be a popular research approach in

inquiries on the present form and function of public spaces and how society drives this

phenomenon (Carmona, 2015; Carr, 1992; Hirsch, 2006; Law, 2002; Oranratmanee &
Sachakul, 2014).

The first step towards justifying the selection of case study research is exploring
the substance and the form of the research question (Yin, 2017). This research seeks to
answer how community and technical representatives perceive barriers and enablers of
public space use in low-income contexts. Specifically, it asks how communities in low-
income contexts which may be within proximity to public spaces perceive the ability to
benefit from a public space through public space production interactions and the
associated impacts on community well-being. Societal perceptions are hence the unit of
analysis. Particularly societal perceptions on how interactions among social agents (i.e.,
user community), technical agents (i.e., planners, policy makers) and physical features
(i.e., material characteristics) are associated with community well-being will be
explored. Such an inquiry demands an in-depth analysis of the perceived associations
between interactions among the dimensions of the tripartite framework of space
production and community well-being in low-income contexts. This requires engagement
with *multiple evidence sources* (e.g., data collected in relation to the different sub-units)
which capture perceptions on the social barriers and enablers of the beneficial utility of
public spaces in low-income communities. The multiple dimensions at play as well as the
need for triangulation of multiple evidence sources justifies the use of case study research
as a study approach (Yin, 2017).

One of the rationales for a single case study approach, is to explore a common
case (Yin, 2017). As Yin, (2017) highlights, the focus of such explorations is on 'the

circumstances and conditions of an everyday situation'. Hence, as an approach to exploring a common case, single case studies highlight societal processes that can be connected to a theoretical interest. For example, they have been used to explore the relationship between social capital and impoverishment in underserved urban communities through socio-institutional structures (Small, 2004). Considering that the current study seeks to explore the relationship between access and community well-being through socio-physical and socio-technical structures connected to public spaces, as single case study approach is indeed applicable. Specifically, an embedded case study design is utilized to explore different sub-units of analysis.

Case Selection and Design

Maryvale, an economically impoverished urban village in the greater Phoenix Metropolitan area is the study site on which this research is designed. Though the 8th largest municipality in Arizona, Maryvale has the second highest percentage of residents below the poverty line (Census Reporter, 2019). Concerns for environmental justice are not new to Maryvale. It is infamously known for being a 'cancer cluster' in the late 1980's owing to years of toxic waste dumping from surrounding industries which introduced contaminants into water (Raleigh & Galster, 2015). However, in relation to public spaces, Maryvale boasts of having a good number within proximity to neighborhoods. While proximity to public spaces may be an indicator of access, Maryvale is also infamously known for high crime statistics and a lack of inclusivity and representation of low-income neighborhoods during decision making processes of publicly resourced projects (Wiletsky, Choate, & Katz, 2007). Additionally, Maryvale is

spatially segregated, along income and racial lines. Given its status as a predominantly low-income context, and the associated challenges that have emerged in relation to different populations and built-environmental resources, Maryvale is well-suited as the main unit for analysis (the "case").

In previous studies neighborhood association leaders and community organizers have been highlighted as playing a key role in championing the interests of residents within a particular geographical scale (see Chaskin & Garg, 1997). The election to engage the aforementioned leaders and organizers as participants who represent societal perspectives is not new to environmental justice research. While such leaders, in some instances, have been criticized as being discriminatory and exclusionary (Sullivan & Picarsic, 2012), in vulnerable settings where there are shared environmental interests, they have been key to representing collective concerns (see Hornik, Cutts, & Greenlee, 2016). In such contexts, community groups have historically played a major role in representing environmental justice concerns (Bullard, 1993; Cnaan, Boddie, McGrew & Kang, 2006). The aforementioned community representatives comprised the first sub-unit of analysis. Given the work such representatives pursue towards collective interests, such participants were engaged as the first sub-unit of analysis to understand community perceptions on exchanges that take place in space production and linkages to community well-being. Design professionals are primarily responsible for shaping the built environment (Wilson, Hutson, & Mujahid, 2008). Such professionals work in tandem with recreational managers who provide added insights on public space development (Carmona, Magalhães, & Hammond, 2008). The second sub-unit of analysis comprised of technical agents such as planners, landscape architects and recreational managers.

Considering that such experts are primarily responsible for planning and designing public spaces in Maryvale, they form the second sub-unit of analysis to highlight how technical experts perceive the linkages between tripartite engagements and community outcomes.

Data Collection

The data collected for this study comes from two categories of evidence sources. The categories comprise evidence provided by community representatives and information harnessed from technical experts, through participatory mapping interviews. The section below describes the participatory mapping interview process, the study sample and the tools which were utilized.

Participatory Mapping Interviews

Participatory mapping interviews are a data collection process under 'Public Participation in Geographical Information Systems' (PPGIS). PPGIS emphasizes the need for processes and tools that prioritize public inclusion in decision making and policy creation by ensuring equitable representation across board the identified stakeholders (Brown, Kelly, & Whitall, 2014; Schlossberg & Shuford, 2005; Tulloch, 2003). It provides an avenue for experts to understand situations from lived experience of local stakeholders through mapping processes and participant engagement (Brown, 2012). While participants have been predominantly engaged through surveys, there have been calls on the need to explore diverse data collection techniques (Brown & Pullar, 2012). The adaptation of participatory mapping interviews as a technique for engaging participants has proven useful for studies which have sought to garner in-depth understanding on community resources (Selgrath, Gergel, & Vincent, 2018). In the current study,

participatory mapping interviews were conducted to understand the linkages between

access to public spaces and community well-being as perceived by communities as well

as technical experts (i.e., planners, building and landscape architects) responsible for

planning and design. As highlighted in Figure 1, the questions asked during participatory

interviews were informed by the conceptual synthesis adopted. The questions asked, were

guided by the afore discussed conceptual framework which intersects the *Tripartite*

Framework (Lefebvre & Nicholson-Smith, 1991) and the *Network Theory of Well-being*

(Bishop, 2005).
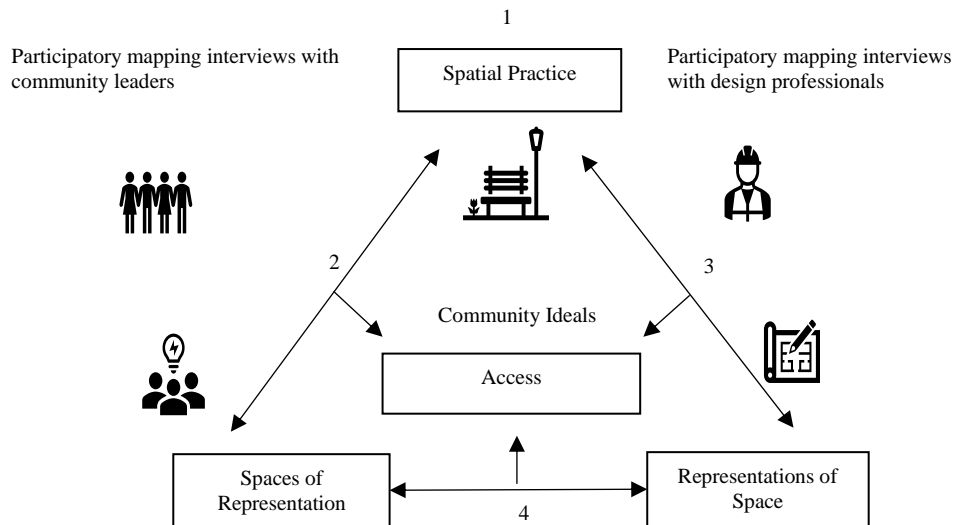
Figure 1 Connection between Interview Questions and Conceptual Framework

During the participatory mapping interviews, community leaders and organizers were

asked the following questions:

1. Identify public places in Maryvale.

2. Please share your opinion on locational characteristics and their outcomes for the

    community.

3. Please share your opinion on interactions within public spaces and their outcomes for the community.

4. Describe how you have engaged in planning and design processes related to the spaces identified. Please also share your opinions on the outcomes for community.

Question 1 garners community insights on public spaces the community engages with. The public spaces to be identified were restricted to places of open use available to be utilized by individuals and community alike (UN-Habitat, 2018). Questions 2 garners perspectives on distributive justice. Such insights are based on perceptions on locational characteristics of public spaces (i.e., Spatial Practice) materializing from plans and designs (i.e., Representations of Space), which result in the realization or otherwise of positive community outcomes. Question 3 provides insights on interactional justice. Such insights are based on the social and physical interactions that take place (i.e., Spaces of Representation) within the identified public spaces (i.e., Spatial Practice) and the community outcomes perceived to be associated with such interactions. Question 4 seeks to collect specific insights on procedural justice. It highlights the perceived import of community perspectives (i.e., Spaces of Representation) in translating into plans and designs (i.e., Representations of Space) and the realization of positive/negative outcomes on the community.

Similarly, technical agents (i.e., planners, building and landscape architects) who participated in the participatory mapping interviews were asked the following questions:

1. Identify public spaces in Maryvale which you planned, designed, or developed.

2. Please share your opinion on locational characteristics which manifest from planning and design of public spaces and their outcomes for the community.

3. Please share your opinion on the interactions within public spaces and their outcomes for the community.

4. Please share your opinion on how the community has been engaged in planning and design processes for public spaces. Please also share your opinions on the outcomes for community.

Question 1 highlighted insights held by technical experts on where to find public spaces they have been technically involved with. Question 2 focuses on distributive justice; such insights are based on how technical experts perceive locational characteristics of public spaces (*i.e.,* Spatial Practice) from plans and designs (*i.e.,* Representations of Space), which result in the realization or otherwise of positive community outcomes. Question 3 focuses on interactional justice in order to understand how technical experts perceive social and physical interactions (*i.e.,* Spaces of Representation) within the public spaces they identified (*i.e.,* Spatial Practice) and the related outcomes. Question 4 seeks to collect specific insights on procedural justice. It highlights the perceived import of community perspectives (*i.e.,* Spaces of Representation) in translating into plans and designs (*i.e.,* Representations of Space) and the realization of positive/negative outcomes on the community.

In the context of Maryvale, community leaders have been pivotal in stakeholder engagement efforts, which have sought to understand socially perceived barriers and enablers of the ability to benefit from a public space (Wiletsky et al., 2007). As the first sub-unit of analysis, community leaders selected for this study included neighborhood association leaders and community organizers who self-identify as people who work for the interest of the community. Neighborhood association leaders are representatives of groups of residents or property owners, registered with the Neighborhood Services Department, who organize at the neighborhood scale (Neighborhood Services Department, 2022). Another group of leaders who are key to stakeholder engagements as pertains to the built environment are community organizers; these are people who work with different community-led organizations in Maryvale to represent and advocate for the needs of residents (Wiletsky et al., 2007).

In this study, neighborhood associations published on the Neighborhood Services Department (NSD) website were contacted through the correspondence information provided. Overall, five out of the 21 leaders listed on the website responded to the call for participation. Additionally, through an internet search an initial list of five community-led organizations whose works had been highlighted in media reports, were contacted to participate in the study. More participants were recruited for the study through a formal snow-ball sampling technique. This is a sampling technique developed by Kadushin (1968), which allows the interviewer to build off an initial list of respondents and expand that list through recommendations, till a point of saturation. Using this sampling technique, the leaders who were initially identified and engaged were asked to

recommend other neighborhood leaders and community organizers to engage. Technical

agents responsible for planning and design, entailed the second sub-unit of analysis. The

perspectives of such professionals were garnered through engagements with key

informants in Maryvale. Key informants are participants of specific competence that can

speak to the subject of inquiry due to training or related experience (Bernard, Wutich, &

Ryan, 2016). The key informants identified comprised the village planner in the Planning

Division, two principal landscape architects and a recreational manager in the Parks and

Recreational Department, who work in the Maryvale area. The highlighted informants

were contacted through their listed correspondence details.

A total of 23 participants were engaged in participatory mapping interviews.

Neighborhood leaders and community organizers comprised 19 of the participants, along

with four key informants. All the community representatives and technical agents who

participated had over five years of experience working in the Maryvale general area. Six

of the community participants engaged identified as non-Hispanic white, while 13 of

them identified as having Hispanic ethnicity. The numbers recorded for each ethnic

category was expected considering that most residents in Maryvale are of Hispanic

origin. Contrastingly, three of the key informants identified as non-Hispanic white and

one was of Hispanic origin.

Data Collection Tools

The community leaders, organizers and technical agents who participated in this study,

were individually engaged through physical engagements and via zoom; a video

conferencing platform. The decision to either engage participants through physical

meetings or remote platform, was informed by the awareness that some respondents would prefer virtual engagements due to health and safety concerns in the era of Covid-19 pandemic. The participatory mapping process was facilitated by a map created with ArcGIS online and ArcMap.

A polygon shapefile of the boundary of Maryvale was downloaded from the open data repository (City of Pheonix, 2022). A point shapefile named 'public spaces' was created in ArcMap to hold the public spaces identified. The public spaces shapefile had three fields. The fields comprised a unique numeric column for each record, an alpha numeric code for each respondent and a text field for the name of the public space identified. A new map was created in ArcGIS Online, named 'Public Spaces (Maryvale)' and a satellite imagery map was selected as base map. The aforementioned shapefiles were imported into ArcGIS online. Participants foremostly listed public spaces in the Maryvale general area. The participatory mapping exercise was done through a digital platform. Digital mapping activities have been studied and highlighted as a viable approach to participatory mapping (Gordon, Elwood, & Mitchell, 2016; Vajjhala, 2005).

Participants who were engaged through physical meetings were presented with a tablet through which they viewed the map, searched for public spaces, and marked each locale. On the other hand, participants who were engaged through zoom, were presented with the map through the screen share function. Participants confirmed the location of each locale after each search, and the interviewer placed the assigned marker at each confirmed point. The unique numeric column for each record was autogenerated, and the related fields namely the alpha numeric code for each respondent and the text field for the name of the public space was filled out (See output of participatory mapping here -

https://arcg.is/1ajGW9). The questions asked, as pertains to each identified locale were recorded with an audio recorder during physical meetings and for virtual meetings zoom recordings were uploaded unto a secure cloud storage. The recordings were manually transcribed.

Data Analysis

The responses to questions asked in relation to each of the identified spaces were qualitatively analyzed. Responses were deductively coded by drawing on the *Tripartite Framework* and the *Network Theory of Well-being*. The transcribed texts from recordings were coded with MAXQDA 2020 software. Responses which linked locational characteristics, planning and design processes, and user interactions, to the perceived ability to benefit from a public space (*i.e.,* access), based on the associated ideals were coded under beneficial outcomes. These outcomes comprised *beneficial spatial characteristics*, *beneficial engagement processes* and *beneficial experiences* respectively. On the other hand, responses which linked locational characteristics, planning and design processes, and user interactions to the perceived inability to benefit from a public space (*i.e.,* hinderance to access), based on the associated negative conditions were coded under strained outcomes. The strained outcomes comprised *unbeneficial spatial characteristics*, *strained engagement processes*, *strained experiences,* respectively. Table 1 provides further details on deductive coding.

Table 1 Main Thematic Areas and Subcategories Informed by Deductive Coding

Research Questions	Main Thematic Categories	Sub-Categories: Beneficial Outcomes	Sub-Categories: Strained Outcomes
Technical agents and community leaders Please share your opinion on locational characteristics and their outcomes for the community	Spatial characteristics	**Beneficial spatial characteristics** • Healthy practices (*e.g.*, physical, and mental health enhancing activity sources within proximity) • Safety (*e.g.*, absence of potential harm in the associated locale) • Convenience (*e.g.*, ease of realizing desired goal due to proximity) • Satisfaction (*e.g.*, contentedness over a situation in the surrounding environ) • Social cohesion (*e.g.*, state of camaraderie arising from social interactions in a nearby locale) • Empowerment (*e.g.*, proximity to opportunity source where autonomy and self-determination can be realized)	**Unbeneficial spatial characteristics** • Danger (*e.g.*, presence of potential harm in the locale) • Dissatisfaction (*e.g.*, discontentedness over a situation in the surrounding environ)
Technical agents and community leaders Please share your opinion on how the community has been engaged in planning and design processes	Community engagement in planning and design	**Beneficial engagement processes** • Sense of ownership (*e.g.*, recognized responsibility over a resource from engagement processes) • Sense of agency (*e.g.*, recognized ability to initiate desirable actions through engagement)	**Strained engagement processes** • Distrust (*e.g.*, state of doubt as relates to credibility of a process) • Marginalization (*e.g.*, exclusion from a desired benefit)
Technical agents and community leaders Please share your opinion on interactions within public spaces and their outcomes for the community	User experiences within the public space	**Beneficial experiences** • Healthy practices (*e.g.*, physical, and mental health enhancing activities) • Social cohesion (*e.g.*, state of camaraderie arising from social interactions) • Empowerment (*e.g.*, programming at a public space where autonomy and self-determination can be realized) • Safety (*e.g.*, state related to use of features or social interactions free from potential harm)	**Strained experiences** • Dissatisfaction (*e.g.*, discontentedness over the lack of a facility in a public space) • Social tensions (*e.g.*, lack of camaraderie arising from social interactions)

Positionality Statement

Memories of my childhood in a small town in Ghana, sub-Saharan Africa, are rife with nostalgic scenes of children gathered round in circles, ready for the stories of nature. The gatherings were set amidst the bucolic scenes of the countryside, the water bodies, and the dense forests in its purest form, jealously protected and preserved from any hint of extinction by my community. I loved and still love these stories. They were stories interlaced with morals told by the elderly. These stories were the primary channel, through which lessons of our responsibility to the environment were passed down. From the adventures of the river gods to the mighty mountain kings, each story highlighted the scenes of our relationship with the environment. Even though we did not have documented laws or drawn-out town plans, there was a general sense of order and process, passed on from one generation to the other. With urbanization such social systems have broken down, having no real effect on planning and management in the area. Contrary to my experience with the environment growing up, my training as a spatial scientist has emphasized management of the environment guided by laws and frameworks that are enforced by state institutions through spatial planning strategies.

All over the world, the application of spatial planning strategies has had its fair share of successes and failures which vary from one location to another. Such strategies have been largely founded in positivist and post-positivist worldviews which have sought to frame and explain the arrangement of geographical elements through geometric and probabilistic functions (Urry, 1985). However, the explanation of spatial structure through 'natural order', has largely ignored the key role of human intentionality in the distribution of geographical objects (Werlen, 1993). This limitation has paved the way for

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interpretivist approaches to examining the relationship between space and society (Graham, 2013). This limitation has paved the way for interpretivist approaches to examining the relationship between space and society (Graham, 2013). Interpretivist worldviews conceptualized by scientists such as Rickert (1930) and Weber (1949), emphasize the ontological differences between natural and social systems. Notably, interpretivism departs from positivism which favors objective reasoning and functionalism, to explore knowledge through the meanings and interpretations of human society in different contexts (Lindsay, 2006). Given that this study seeks to examine access through perceptions held by community leaders and technical agents, of the relationship between public space production interactions and community well-being, interpretivism is employed as the lens through which this study is conducted.

Findings

This section captures responses from community leaders and organizers residing in Maryvale as well as the technical agents who have worked on development projects in the area. Where relevant, responses from community leaders and organizers are juxtaposed to those of technical agents to discern points of conversion and divergence.

Identification of Public Spaces by Participants

Community leaders and organizers identified a total of 33 public spaces. The public spaces identified were categorized according to how they are classified by the Phoenix Parks and Recreational Department (2018). The identified locales comprised of 15 green spaces (14 parks and 1 community garden), 4 pools, 3 sports facilities, 3 recreational centers, 3 educational centers, 4 community centers, and 1 shopping facilities, which

made up 45.5%, 12.10%, 9.1%, 9.1%, 9.1%, and 12.1 % and 3.0% of the locales

identified respectively. As shown in Table 2, The public spaces identified were further

classified based on service extent as delineated by UN-Habitat (2018), under 4 types of

spatial scales namely pocket, neighborhood, community and regional. Pocket parks

denote small open areas often created on nonregular shaped land which are repurposed as

public spaces to serve the immediate neighborhood. Neighborhood service extents refer

to spaces which are focal to and used by residents in neighborhoods. Community service

extents denote locales which serve a larger geographic area beyond the surrounding

neighborhood and are often characterized by diverse facilities and amenities. Regional

service extents refer to areas with a service reach that extends beyond one local

government area in their communal and recreational functions. Based on this UN-

Habitat, (2018) classification, the 15 green spaces identified comprised: 4 pocket parks, 4

neighborhood parks, 5 community parks, 1 community garden and 1 regional park. Out

of the pools identified, 2 were designated to provide service at the neighborhood extent,

while 2 served a community extent. Of the 3 sporting facilities, 1 served a neighborhood,

while 2 provided service at a regional scale. The community, education, and recreational

centers identified, provided service at the community scale. As highlighted in extant

research that draws on PGIS exercises, saturation in the current study was attained when

no new geographic themes (in terms of type and service extent) emerged after new

participants were included (see Morse, Lowery, & Steury, 2014). In this study, saturation

occurred by the time the 15th participant was interviewed, after which no new geographic

theme was observed.

Notably, technical agents were also asked to identify public spaces in Maryvale but as relates to locales that they had planned, designed, or developed. There are many public spaces identified by both groups of respondents and where possible these will be highlighted in subsequent responses. Technical agents identified a total of 18 public spaces they had been directly involved in planning and designing (as shown in Table 1). The public spaces identified were categorized according to how they are classified by the Phoenix Parks and Recreational Department (2018). The identified locales comprised of 10 green spaces, 1 pool, 2 sports facilities, 1 recreational center, 2 educational centers, 1 community center and 1 shopping center, which made up 55.6%, 5.5%, 11.1%, 5.5%, 11.1%, 5.5% and 5.5% respectively. The public spaces identified technical agents were also further classified using the UN-Habitat (2018) classification which yielded: 1 pocket, 3 neighborhood, 5 community, and 1 regional park (see Table 2).

Table 2 Public Spaces Identified by Participants

Type	Public Spaces Identified By Community	Public Spaces Identified by Technical Agents
Green Space	El Oso Park Starlight Park Desert West Park Marivue Park Sueno Park Holiday Park Maryvale Park Dust Devil Park Ladmo Park Fire station Park Grand Canal Trail Point Moya Park Falcon Park Cartwright Community Garden Willow Park	El Oso Park Starlight Park Desert West Park Marivue Park Sueno Park Holiday Park Maryvale Park Dust Devil Park Orme Park C 4020 Pocket Park
Pool	Maryvale Pool Starlight Pool Falcon Pool Holiday Pool	Maryvale Pool
Sports Facility	Villa De Paz Golf Course American Family Fields Maryvale Golf course	Villa De Paz Golf Course American Family Fields
Recreational Center	Maryvale Community Center (Multipurpose) Boys and Girls Club Watts Family YMCA	Maryvale Community Center (Multipurpose)
Educational Center	Bret Tarver Learning Center Desert Sage Library Palo Verde Library	Bret Tarver Learning Center Desert Sage Library
Community Center	Chicanos Por La Causa Community Center Golden Gate Community Center Heart of Isaac Community Center Desert West Community Center	Desert West Community Center
Shopping Center	Desert Sky Mall	Desert Sky Mall

The identified pool was designated to provide service at the community extent. Of the two sporting facilities identified, 1 served a neighborhood, while the other provided service at a regional scale. The recreational center provided service at a community scale, while the community garden served a neighborhood extent. The educational centers

identified provided service at a community extent, while the community center and the

shopping center served a regional scale. The 17 public spaces highlighted by the key

informants, were identified a total of 23 times. Figure 2 highlights the number of times

each public space was identified by community leaders/organizers and technical agents,

and it also delineates the relevant service extent category. Figure 3 showcases a map of

public spaces identified by community leaders/organizers and technical agents and the

related service extent categories. Both groups of participants identified public spaces

across different types and service extent categories. The proceeding sections highlight

responses to interview questions asked in relation to each of the public spaces identified.

The questions asked were focused on respondents' perceptions on locational

characteristics, planning and design, and user experiences related to each identified space.
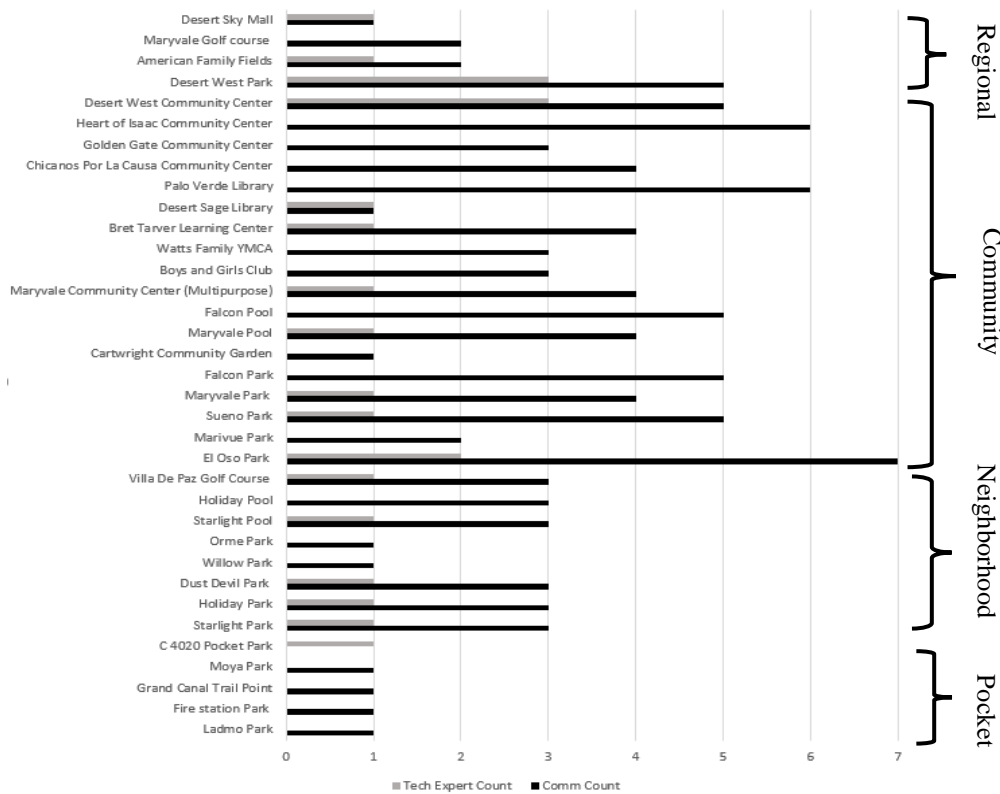
Figure 2 Public Spaces Identified by Participants

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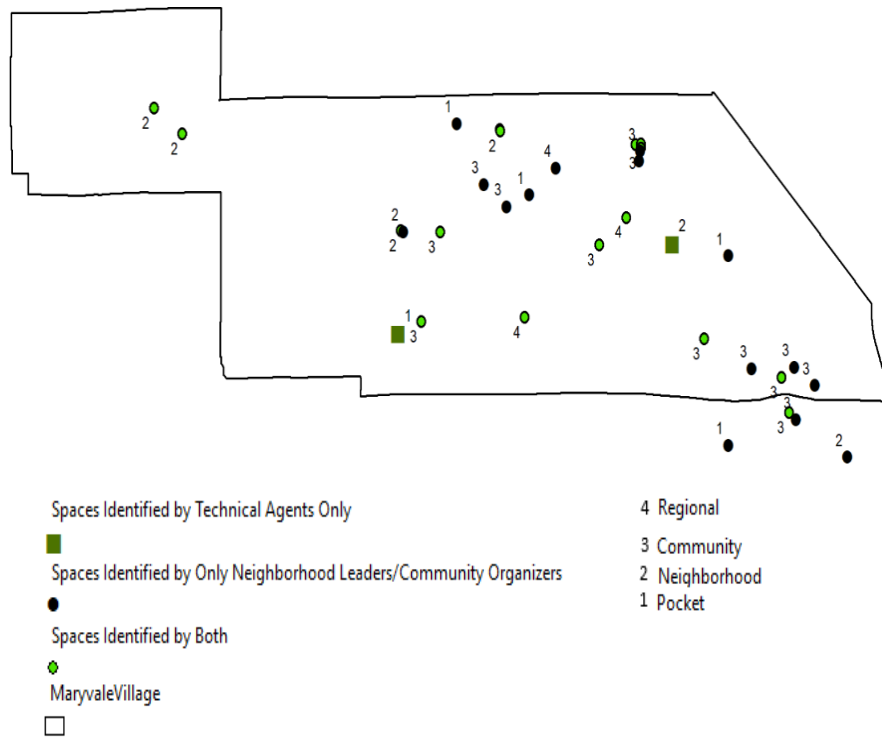
Figure 3 Map of Public Spaces Identified by Participants

It is interesting to note that, some of the public spaces identified by both community and technical representatives fell outside the administrative boundaries of Maryvale. These were explained as public spaces which were used by and continue to serve the community, prior to the adaptation of the Phoenix general plan which delineated the 9 urban villages into 15 urban villages.

Locational Characteristics as Perceived by Participants

The responses given by participants were categorized under three main thematic categories: *Spatial characteristics*, *Community engagement in planning and design and User Experiences*. The main categories were each informed by two subcategories (see

Table 1), comprising of codes that described beneficial or strained outcomes, which were perceived to be linked to ability or inability to benefit from a public space. Responses to follow-up questions associated to locational characteristics of the identified spaces added insights to the perceived linkages between spatial characteristics and the facilitation or inhibition of the ability to benefit from a resource. *Spatial Characteristics* emerged as a broad theme from the responses given. This broad theme was informed by sub-categories which highlighted *Beneficial Spatial Characteristics and Unbeneficial Spatial Characteristics*, respectively linked to interactions with spatial features perceived to either facilitate or inhibit the realization of ideals, deemed by community as advantageous.

Beneficial Spatial Characteristics - Community Leads

In describing locational characteristics and the outcomes thereof as relates to the public spaces identified, participants pointed out spatial characteristics associated to each locale and the perceived linkages to beneficial outcomes which facilitated use. Spatial features considered to be beneficial by participants comprised the closeness to a public space where beneficial ideals were realized and ideal surrounding land-use which facilitated the ability to benefit from such resources. Participants described closeness to a public space in relation to distances from reference points. Terms such as 'close by', 'walking distance' and 'walk or bike to', were used to indicate the perceived proximity to public spaces. The ability to benefit from a public space was described as resulting from proximity to public spaces perceived to facilitate the realization of beneficial outcomes. The described outcomes included healthy practices and social cohesion (see descriptions

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in Table 1). For instance, the excerpts below showcase the ability to benefit from a public space (*i.e.,* access) as linked to healthy practices (*e.g.,* physical activities) realized at public spaces within *proximity*.

> [t]he community surrounding it has a park [Marivue Park], you know, *an easily accessible park*, you know you don't have to get in your car and drive to it, you can walk to it, you could bike to it … there is soccer that goes on there because of little leagues. Well soccer is very popular very popular Hispanic sport, so it means you know a lot, as far as that goes it's just you know it's a way of life – Participant 11

> [t]he [Fire Station pocket park] location being you know closest and next to those homes right there, so it's inviting, so you'll see so many leagues are using it there's soccer leagues that use it and others like you know flag football – Participant 4

> [a]fter school, students go play basketball, because of the *walking distance to it* [Golden Gate] from where their neighborhood is, if they live west of the school. – Participant 16

> Most of the homes in that area are older they have small backyards. So if you want to have an area to run around and you know play on the grass, that's really the place [El Oso Park] that can push you to do it – Participant 2.

Similarly, the excerpts below showcase how access can be described as resulting from the realization of *social cohesion*, through interactions which are facilitated by the proximity of public spaces.

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I went to Maryvale high school, this park [El Oso Park] is just like next to it, so

as soon as you get out of Maryvale High school you like cross it like right there,

so I know, everybody from high school like really enjoyed going to that park…

so fun to play just to have a hangout after school. To just meet up with people…

really helpful – Participant 6

And it's [Moya Park] walking distance every one of these mobile homes and

even these houses that are over a little bit on to the east. it's walking distance and

you can get there without crossing any major street. The fact that it is easily

accessible, for all these kids you know…by all of these homes and it's the only

thing available. It's like they finally have a place that they could go have a picnic

if they wanted to or some place to sit …The kids had absolutely no place outside

of school. And so the idea was to do something. That they could go to on a

Saturday morning or during the summer – Participant 14.

But when I have gotten there [Holiday Park] there's just a lot of children and

sometimes unaccompanied and they're those who are a little older and I mean

everybody seems, to be very relaxed and just at ease because it's within a

neighborhood – Participant 5

that's also a very heavily community used space ….it [Desert West Park] has

one of our biggest community centers [which hosts lots of gatherings] and its

very used and the location of it is really cool because it's surrounded by homes

so it's easily you know accessible walking so it's very popular - Participant 11

Additionally, participants highlighted beneficial spatial characteristics as comprising

land-use characteristics of the surrounding locale described to be linked to ideals like

convenience and *safety,* which facilitated the ability to benefit from a public space. For

instance, *convenience*, described as an ideal which results in perceived ability to benefit

from public spaces due to characteristics associated to the surrounding environment is

demonstrated in the excerpts below:

> I think most of our community probably accesses this park [Dust Devil Park]
>
> from the south. There's some parking right off 107. As well as off camelback
>
> there to the north – Participant 1

> It's [El Oso Park] in between a high school and I believe in elementary school.
>
> So, you get an overflow of a lot of kids in that area for sports, more than
>
> anything. Baseball fields, you know people go and play soccer on the weekends.
>
> It fills up there's always a lot of people there. In Arizona where everything's kind
>
> of dry and arid, you know it's nice to see grass, not everyone has grass so it's a
>
> luxury. It's just a huge outlet for you know a low-income community, you know
>
> there's a lot of apartments close by also which don't have access to grass or
>
> yards. So, it just gives some freedom – Participant 7.

> The community believes it [Desert West Park] has this positive outcome
>
> because since it's very close to surrounding homes they don't have to go drive
>
> and waste time to find a park with more basketball courts - Participant 6

> You have free parking spot as well it's a part of why a lot of people will take
>
> advantage of the playground that's there [Holiday Park] – Participant 4.

Similarly, the excerpts below highlight how the ability to benefit from a resource, results

from the realization of *safety* as an ideal perceived to be associated with the surrounding

locale.

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Its [Watts Family YMCA] accessible because it's in a neighborhood, … [a]nd

there's a school as well behind this one so it gives off this impression of safety

because we associate schools with safety and children, you know – Participant 5

[y]ou don't have to cross a major road to get to it [Sueno Park] – Participant 15

I feel like some people think that it's relatively safe, since the police station is

located basically in the park or like off to the corner of the park [Desert West

Park] – Participant 13

I see a lot of I see a lot of women use it they'll meet up together … like I said, I

think that it's very safe, because you know it's next to the fire house [Firehouse

Pocket Park] – Participant 11

Respondents also pointed to locational features and related outcomes, which inhibited the

beneficial utility of each of the public spaces identified. These are showcased in the

proceeding section.

Unbeneficial Spatial Characteristics - Community Leads

Spatial characteristics such as remoteness to a public space and unideal surrounding land-

use characteristics were alluded to. Remoteness to a public space was described relative

to points of interests such as residential neighborhoods. The perceived scarcity of public

spaces, where beneficial community ideals could be realized, was highlighted through

terms which suggested scarcity and farness to a public space. Additionally, the responses

given by participants, pointed to land-use characteristics which were linked to negative

conditions such as *dissatisfaction and danger* (see description in Table 1) that were

considered as unbeneficial to community and consequently inhibited the benefits of such

public spaces. Examples of responses which highlight how the inability to benefit from a

resource is linked to negative conditions like *dissatisfaction* and unideal locational

characteristics, as showcased in the excerpts below:

The families that were a little bit further West said Falcon Park was too far.
There's a huge lack of public spaces in the community. Kids need space to run
and explore get out of their houses, get off electronics. Public spaces are key to
physical health. You know, because a lot of them that are kind of stagnant, aren't
used to going out or walking or playing outside you know it's a negative it
contributes to negative behavioral health. You get depression, anxiety. You have
other health issues you know diabetes is on the rise of blood pressure and
obesity so. You know that's why we need more additional public spaces and
encourage kids to get out there – Participant 7.

There's usually a fair lack of any actual amenities [Maryvale Park], and most of
them, you know they're not really places there, not a lot to really do – Participant
1

For many of us who moved here so long ago, there was no congestion around
us...We came here because we liked that openness and we liked that nature, and
the golf course [Villa De Paz Golf Course] gave us some semblance of that, that
large green space, you know in the neighborhood, where we see crickets, you
see frogs certain times of the year……All of that stuff is gone... It's affected our
aesthetics. This has also affected the quality of the air because there's a lot more
dust coming off of that and that's awful – Participant 3

Parking is a little bit of an issue there [Dust Devil Park] in that there's not a lot of parking for you know where it is located and the number of people. There were issues with that and, of course, if you look at the street. There's not a lot of room we had some challenges with people parking in *cul de sac* and that sort of thing. So if there's a big event neighbors can get a little bit upset but by and large everything's been going pretty good. I don't know of any specific issues that have caused problems – Participant 2

The quotes below illustrate examples of responses which highlight how the inability to benefit from a resource is connected to negative conditions like *danger* and unideal locational characteristics:

It's [Maryvale Park] close to Indian school which major street a lot of you know, accidents, you know fatalities, so that I think that that's why it's not been safe and then it's not surrounded by immediate homes and or apartment complexes – Participant 11

So the learning center [Bret Tarver Learning Center] yeah that intersection is so dangerous. I know there's data around like the fatalities. it impacts those spaces. They actually like built a bridge nobody uses it…because they're not talking to the Community that is going to be using this bridge and they are not having conversations with the Community. It's a beautiful but nobody uses it ……Stoplights and ad hoc lights and sidewalks and all those things I think it's about accessibility right, being able to feel safe it's about public safety it's really interesting because public safety for this Community does not mean more police. For this community means I have to how do I safely walk to the park, how do I safely have my children walk to school – Participant 15

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I think some of the other challenges in that area [Falcon Park] have to do with

like street design so there's not a lot of sidewalks there. So, like kids and

families are walking on streets that are unsafe, avenue and McDowell is one of

the intersections with the most fatalities like car fatalities and so it's a very

dangerous intersection. There's not a lot of crosswalks that can lead to accessible

public spaces that create safety. These challenges and issues create barriers to

access – Participant 16

[i]t's [Desert West Park] really close to the main road, so people are speeding, or

they don't obey traffic laws so it might be like unsafe crossing the street, to get

to the park if you're walking or you're not in a car – Participant 13

As demonstrated in the various excerpts above, positive, or negative conditions linked to

the locational characteristics of each the identified public spaces are perceived to either

facilitate or inhibit the ability to benefit from identified locale.

When technical agents were asked about locational characteristics and the

perceived outcomes of such features on the community, a variety of insightful responses

were recorded. As was the case with the responses provided by the community

leaders/organizers, the responses from technical agents pertaining to the category of

Spatial Characteristics were classified under two broad subcategories: *Beneficial Spatial*

characteristics and *Unbeneficial Spatial Characteristics*. Details regarding these are

further highlighted in the proceeding sections.

Beneficial Spatial Characteristics - Technical Agents

Technical agents described locational characteristics linked to the ability of a community

to benefit from a resource. Codes which highlighted such perceptions informed the

emergence of *Beneficial Spatial Characteristics* as a thematic category. Participants

referred to factors such as proximity and ideal land use characteristics as attributes which

facilitate the beneficial utility of public spaces. References made to proximity and ideal

land use characteristics referenced locational features which facilitated the realization of

ideals such as *convenience* and *safety* (See description in Table 1). The linkages between

the ability to beneficially utilize a public space and described associations between

locational characteristics and convenience as a beneficial outcome is demonstrated in the

quotes below:

> With this size of park [El Oso Park], this is a community park, so it has a larger
>
> service radius and it's designed in a way that people can actually drive to it. We
>
> still do get quite a few people that can walk to the park, you know we try to
>
> provide connections to the community...we tried to make sure that there was a
>
> welcoming park by creating connections to the community walkways and those
>
> kinds of things we felt like it made it a lot easier to connect the community with
>
> the park– Participant 2

> [i]n that situation [Desert Sage Library], you have two schools, you can see
>
> them on you know kind of on the left side of that street and then you also have a
>
> library. Certainly, made the case, not only for approving you know the
>
> multifamily use space there …but also asking for that space at the corner given
>
> that the core plan (informed by community inputs) is meant to facilitate you
>
> know open spaces, a lot of shade, you know and creating more walkable areas –
>
> Participant 1

Similarly, the excerpts below highlight how the ability to benefit from a resource, results from the realization of safety as an ideal described as associated with the locational features.

> We make sure there is a safe path for them to be able to come to the park [El Oso Park], because we know that sometimes these parks can be the only turf, grass for many people that don't have grass in the front yards or their backyards here in Arizona – Participant 2

> That's a neighborhood park [Starlight Park] and that's a little more specific to the local neighborhood there. This is one of our busiest parks just around to a point where there was some concern about parking on the street and making it a little bit more dangerous for kids to just come walking to the park, and so we ended up getting rid of parking it was actually on the street, just because people would hit kids and currently running through each other. So, we built a small parking lot which has had a lot of impact on this one- Participant 2

> Also light overflow; for a previously really lit area [Desert West Park], the neighborhood may like it that way. If it was a dark area in the neighborhood, they would prefer to have it more lit up for safety – Participant 4

Unbeneficial Spatial Characteristics - Technical Agents

Contrastingly, the theme *Unbeneficial Spatial Characteristics* was informed by codes that pointed to linkages between locational features, which emerge from planning and design, and the inability of a community to benefit from a public space. When describing *Unbeneficial Spatial Characteristics*, participants referred to barriers like distance and unideal land use characteristics that impeded the advantageous utility of public spaces.

References made to public spaces that were remotely located, were described as linked to the inability to engage in healthy practices, such conditions coupled with unideal surrounding land-use were described to be linked to negative conditions such as *dissatisfaction* (See description in Table 1). The quotes below demonstrate locational characteristics, which are linked to dissatisfaction as a negative condition which hinders the ability to benefit from a public space.

> It's hard to get there [Bret Tarver Learning Center]. You can see there is a little bit of a residential neighborhood kind of behind it. But in order for those folks to get into this building you have to get to 35th avenue, then go up to McDowell, come around all the way up front - Participant 4

> There are certain landmarks that kind of separate neighborhoods that we're talking about like they're at the side of grand avenue and not going to cross to the other side of that triangle. Yeah so that's a physical barrier. Most kids that live on one side are prevented from going to things on the other side, like the Maryvale Community Center. I think those kind of structures that are just part of the landscape in general, really shows where you can hang out and what kind of programs you can participate in. Yeah it's definitely a barrier when we are offering programs - Participant 4.

> [t]here's a lot of tagging in this park [Starlight Park]. And I think primarily it's because of the location in the sense of it's a bus stop and so there's different rival gangs and different rival people trying to outdo the next, and so the playground does get tagged often - Participant 2.

> I think for Holiday Pool, it might be the age of the community…maybe kids
>
> used to go to the pool when they were younger, but as soon as they got to high
>
> school, they would never. And I just think it just one of those things where
>
> people's mindsets in that area, have changed a little bit -Participant 1.

The excerpts above show that technical agents recognize the linkages between locational characteristics manifesting from plans and designs and the perceived ability of community to benefit or otherwise from a public space.

Both neighborhood leaders/community organizers and technical agents, described linkages between access and the emerging outcomes from exchanges between users and locational characteristics. The perceived linkages were similar across public spaces of varying service extents. That is, irrespective of intended service reach, both groups of participants described access to public spaces, as linked to the realization of ideals at public spaces within proximity. Technical agents highlighted the geographical extent the different service categories were expected to serve. However, as shown in Figure 4, despite the service classification (i.e., pocket, neighborhood, community, regional), closeness to a locale and the ability to realize community ideals such as healthy practices, convenience, social cohesion, and safety, were referenced by both groups when describing the ability to beneficially utilize a space.
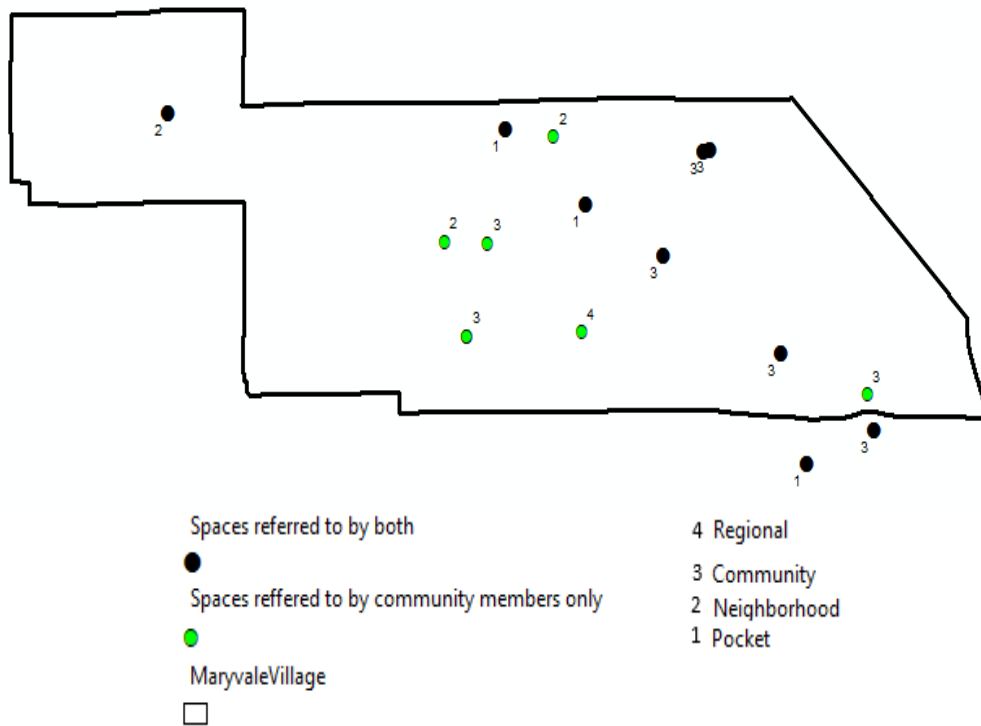
Figure 4 Access as Described Across Different Service Classification Types

Experiences in Public Spaces Perceived by Participants

This thematic category of *User Experiences with Interaction within Public Spaces* was

informed by two sub-categories namely *Beneficial Experiences and Strained*

Experiences.

Beneficial Experiences-Community Leads

Participants described interactions in public spaces, through the outcomes associated to

experiences with other users (e., family members, residential neighbors, and the

community at large), features of public space (i.e., amenities and facilities), and

management (e.g., leadership and programming). Participants pointed to how such

interactions within public spaces were perceived to be related to either beneficial or
strained outcomes which consequently facilitate the ability to utilize such spaces. The
beneficial outcomes from the exchanges described to be linked to the ability to benefit
from a public space included *social cohesion, healthy practices, empowerment, and
safety*. Examples of quotes which showcase the described linkages between access and
interactions that result in *social cohesion* are showcased in the excerpts below:

> I think in all places, and especially in the Latino community family gatherings is
> a big part of their way of life. It's primarily a Hispanic community and I think
> that it would be very discouraging to them if they were to lose that, it [El Oso
> Park] helps with family get-togethers and to have a place to go – Participant 2

> At the park [Dust Devil Park] you run into people you speak to them, people
> who are here with their children and children speak to each other. I think they
> get to know each other better. For the rec center, I'm sure that the ladies that are
> in all those exercise classes make new friends that way. Well, it makes us more
> cohesive, it makes neighbors more inclined to be involved - Participant 3

> [J]ust the few people that I've talked to you know, while we were helping out
> with something there [Heart of Isaac Community Center], everybody smiles and
> they're all so appreciative and you can tell that it's just it's just got a good energy,
> you know you can tell people come there and they're not afraid , they're
> comfortable and know that they're going to be able to get what they need –
> Participant 14

> I think that the mall [Desert Sky Mall] within like the last few years has turned
> into like a cultural center for Maryvale, just like the opening of the swap me

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there. And the swap me being largely like a lot of Mexican and Latino goods of different kinds and the food even and it's just it's turned into this this like cultural landmark for us like this is where everybody gathers…it's kind of interesting to see so in general the mall is seen kind of as like a festive place you go to. if you're looking for like a Mexican good or something that reminds you of home, you can go there to purchase it, you know it will probably be there – Participant 5

Also, one thing that I noticed in this space [Desert West Park], too, is that there's certain murals that bring the Community together and you'll see people take pictures of them have load them on social media. You know tag the artist and things like that, on the city of phoenix have also funded a different mural to bring awareness of domestic violence, you know Maryvale has domestic violence as one of it's main issues – Participant 4

You know everyone's willing to help, [Chicanos Por La Causa Community Center] a community-based program so …there are a lot of people from the community coming in and working in different programs… as clients and then as volunteers and so it's continuously growing and the community is connected by just offering more things every week and, like the food bank is a big thing – Participant 7

I see every morning families, mom's, parents using it to exercise to meet others there [Canal Point Pocket] so you'll see cars, you know parked along it and other

community members meet up there and we'll do you know some exercises and

like I said because it's an available empty green lot – Participant 11

Below are quotes which showcase the described linkages between access and interactions that result in the facilitation of *health practices*:

If you don't have enough green, if you don't have any green areas to go to, I

think the mental health and well-being of the people diminishes. Dust devil park

is open it's used a lot, there's the skatepark up there and the splash pad. The

community uses it quite a lot its where you go to kick a soccer ball, have a

picnic, it's just important. You can kind of go outside get some fresh air. –

Participant 2

It's a place [Desert West Mall] to go to during the weekends, to go like leisurely

walk around with the family – Participant 5

People like open space [Canal Point Pocket Park] where you can just go and

kick a soccer ball and won't go too far out – Participant 4

[T]hat one is a nice park, it's got a lot of facilities, I mean there's a lot of space

there lots of green there's like walking and bicycle trials – Participant 14

Starlight Park has ramadas, it's got swing sets, it's got open areas, it's got

bathrooms, and it's used by the community, all the time – Participant 2

Examples of quotes which showcase the described linkages between access and

interactions that result in *empowerment* are showcased in the excerpts below:

Well it's [Watts Family YMCA] kind of like a free daycare for older kids. You

know just parents and all they can take their kids there and they can be on

computers and the basketball court or. They can work out a little bit during summer there's the pool so yeah – Participant 7

It [Cartwright Community Garden] promoted growing fresh fruit and vegetables in garden beds there. Students grew that food from seed and then harvested and cooked it, so then it's promoted like learning where your food comes from healthier eating …. You know when doing these classes, I think the students participated so well and loved it – Participant 11

The pool [Maryvale Pool] I know many people who don't know how to swim and they've had lessons there when it actually does open, and I think that's what makes people gravitate to that as a swimming lessons that they provide- Participant 6.

I think some people go there [Heart of Isaac Community Center] weekly and they use the different facilities, whether it's borrowing a laptop to look for a job or if it's making an appointment to meet with an organization there to renew for state benefits or simply going through the clothing donations that they may need for a child, so they do all these things, and then it just helps them elevate their life, you know – Participant 17

The excerpts below showcase the described linkages between access and *safety* as a beneficial outcome from interactions with public space features (e.g., facilities and amenities).

Size is the biggest selling point [El Oso Park] for especially like in the time of COVID where people just wanted to get out for a little while and still social

distance like they were able to do it at that park. And had a safe way to hold big

family gatherings parties and birthdays – Participant 7

They have access to like arts and crafts things like that summer programs as

children. Is always like a good indicator, children have a safe space it's a good

place [Watts Family YMCA] to be - Participant 7

its [Holiday Pool] fenced off, so that it gets more of a sense of safety like so that

nobody can just waltz in there. So yeah so if your kids go there you feel a little

more secure about that– Participant 5

You know they're never concerned that something bad is going to happen when

they're there [Heart of Isaac Community Center]. They know that their kids can

go play in the in the children's area while they're you know learning something

or taking a class. And their child is going to be safe, that someone is going to be

watching them, just like you know, we know that. That attention will be paid to

what's going on – Participant 14.

Respondents also referred to user experiences, which inhibited the beneficial utility of

each of the public spaces identified. These are showcased in the proceeding section.

Strained Experiences - Community Leads

Interactions within public spaces which were regarded as strained, were predominantly

linked to negative conditions such as *dissatisfaction and danger*, (See description in

Table 1) perceived to inhibit the beneficial utility of a public space. The excerpts below

demonstrate examples of the described linkages between inhibitions to access and

dissatisfaction as a negative condition which results from interactions within public

spaces:

> And of course, there's occasional homeless people that gather on it [Villa De Paz
> Golf Course]. Where the greens used to be and stuff, people are riding their dirt
> bikes and they're four wheelers so that raises dust and makes it noisy, so they're
> not very happy about that – Participant 2

> [t]hey would like to you know traditionally, gather in the park [Falcon Park].
> You know and bring their picnics and have their big family, you know family
> things there, and you know I mean there's not a shade structure there's nothing
> there really that you know, is really going to be inviting – Participant 14

> The golf course [Villa De Paz Golf Course] whether you golf or not. It was just
> teeming with birds and reptiles and the ponds are full of turtles and ducks… now
> its just dead grass and dust. A lot of people who up here because of the golf
> course have moved away. A lot of people that did not golf, just loved the
> neighborhood, I mean, it was just a treat to drive off as a busy street and into the
> neighborhood. And you see this expanse of green somewhere in the city. There
> used to be a lot of shade on Campbell from the trees on the golf course on those
> areas were crossover from one side of the street to the other. And the kids used it
> to sit around on area in the afternoon on the way home from school and that's
> gone. So the sense of community has definitely taken a dip – Participant 3

> I think the school district decided after that they did not want to open it [Moya
> Park] up as much as the original plan was. They changed the superintendent. I
> think it is probably not as accessible as it was – Participant 14

The excerpts below demonstrate examples of the described linkages between inhibitions to access and *social tensions* as a negative condition which results from interactions within public spaces:

> Because it's open for anyone to walk in [Chicanos Por La Causa Community Center] you know we unfortunately have you know people suffering drug abuse coming in to use our restrooms and squat in there and you know sometimes, it can be a little rough – Participant 4.

> The other thing is as it is no longer a golf course [Villa De Paz Golf Course]. I mean people actually pull campers onto the golf course and started living there. The police have had to chase off people … the crime on the golf course has increased I think it's been a detriment to this neighborhood. It is not an advantage to the neighbors in any way. Its easy access to somebody's backyard if you're a thief in the night. Its just not that good – Participant 3

> Because even though it's [Willow Park] a city owned property, and it's maintained, there really aren't any resources. In the past, there used to be a person assigned to do recreation development for the children and you know, be able to do those things. But now it's more it's an open space, you know, where there's a soccer field there, a basketball court there, there's a small child or children playground, but there was still concern about it because you never know the propensity for needles or other things – Participant 8.

> [t]here's obviously opportunity for negative interactions there [Desert West Mall] because you are bringing such a large potentially large group of people together, which could you know, cause conflict – Participant 5

The section above demonstrated the positive or negative conditions linked to the user experiences with other users, public space features and management, perceived by neighborhood leaders/community organizers to either facilitate or inhibit the ability to benefit from identified public spaces. When technical agents were asked about the expected interactions that take place within public spaces that influence planning and design, and the perceived outcomes of such interactions on community, a variety of responses were recorded. These responses were deductively coded guided by the highlighted frameworks. The responses given by technical agents were categorized under a broad category named *User Experiences within Public Spaces*. This broad category was informed by two subcategories: *Beneficial Experiences* and *Strained Experiences*. Details regarding these are further highlighted in the proceeding sections.

Beneficial Experiences - Technical Agents

Technical agents highlighted the interactions expected to take place within public spaces to facilitate the ability of a community to benefit from a resource. Codes which highlighted such perceptions informed the emergence of *Beneficial Interactions* as a sub thematic category under *Interactions within public spaces*. Participants referred to interactions among users, features, and management, linked to positive outcomes such as *satisfaction, social cohesion, safety, and empowerment*. The excerpts below showcase quotes which demonstrate linkages between access as resulting from community satisfaction from interactions:

> I worked with the applicant to ensure that there was a minimum square footage
>
> for the location of that open space [C 4020 Pocket Park], a minimum number of
>
> benches, you know, making sure that they had requirements so that you know, at

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the end of the day, their development would have open space and the shade, and

all the things that the community wants, through the core plan and that they are

tied to it through a legally binding zoning stipulation – Participant 1

They really love their sports out there, and in particular soccer that's the biggest

sport in the Maryvale, so we were able to build some different amenities there

[El Oso Park] that we hadn't built anywhere else – Participant 2

[w]e have to replace the playground [Starlight Park] about every six years or so,

six to seven years, and the reason being is that it gets so much play. The

community was very pleased – Participant 2

Every year, we have a pot of money, so what we'll do is go through maintenance

[Desert West Park]. We fix glaring light or add light where its dark so the

neighborhood appreciates that, because now there's no glare, there's no you

know flood spillover lighting into their that's so huge for the community, that's

stuff they appreciate - Participant 3

Originally it was for a library, but it didn't really meet the needs of the

community as a library. They offered it to the parks department, and we took it

over to over programs that meet their needs – Participant 4

The quotes below showcase quotes which demonstrate linkages between access as

resulting from the realization of safety from interactions:

We redid the soccer field, it was a safety issue because it was old and we had

seems coming up and kids are running around and be very easy for them to trip

and fall or hurt themselves playing soccer [El Oso Park]. We redid it, so that the community can continue to use it, rather than close it down - Participant 3.

the better and the more lit up it is [Desert West], we don't have to worry about you know untoward things going on – Participant 4

We can see where homeless would take over or gang violence can happen back there [Marivue Park], you know kids safety, all those types of things that a lot of the firms don't really think about because they're looking at the aesthetics of it. So that's where our role is to make sure yeah let's get creative let's get really make this interesting, but at the same time, we have to make sure it is safe – Participant 2

Input from participants, as indicated below, demonstrate linkages between access as resulting from empowering interactions:

The inside of that building [Bret Tarver Learning Center]is a computer lab there was an area that was a library that we've turned into a meeting room. It has a coding room where there are different classes like 3D printing classes we run computer classes in English and Spanish and everything from basic you know how to log in and get your email – Participant 4.

For a park this big [Desert West], there is a multigenerational center. So, it has a facility for older generation in that area and then we also work with human services. There are programs there as well, to help support them and their goals and human services department here in parks or a city, and so we share facility with them and always have sports complexes where it's more of a destination, where you can have a tournament play you know kind of spaces – Participant 2

You know this [Desert West] has affected a lot of the kids in a positive way.
There is a program that will run at the Community Center called phoenix tunes
and it's a it's a program for kids that are 13 to 17 and it's kind of a it's like a club
like an after school club but more than that it's a lifestyle and the kids that are in
the program I've mentored by staff, they get exposed to things outside , there is
no referential basis, as opposed to take a field trip in school and it's you know, to
the museum and it's all about you know, a task that you got to take them to get
back or whatever and we use all the recreational motivation that we can you
know get the kids into the door, so that they can have those positive reaction or
interaction with staff and each other and this program is running 10 different
centers throughout the city – Participant 4

The comments below showcase connections between access as resulting from the
realization of social cohesion from interactions:

The community was interested in a gathering space not just for smaller groups,
but for larger groups, and so we provided some fairly large ramadas at this park
[El Oso Park] and then one thing that we did as well is a big, large space in the
center of the park and the intent was to create a gathering space for the
community to have larger community events – Participant 2.

Desert West is an open space where the Community was able to you know use
it, when we used to meet in- person we met at desert West Community Center
it's a great facility, and it was really well used – Participant 1

[s]plitting up the basketball court in the playground, is one of the things we did
because playgrounds are usually young kids and basketball courts are teenagers

and older kids that have a different vocabulary, that you have your kids

probably shouldn't use, you know, so we tell them stuff like that, I mean, I think

that goes a long ways as far as if I'm a parent of a young kid And I don't have

basketballs fall under the playground I go I have all these rowdy kids playing

into each other plan this sport – Participant 3

Strained Experiences - Technical Agents

Technical agents also referenced the interactions that take place in public spaces which

hinder the ability of a community to benefit from a resource. Codes which pointed to

such perceptions informed the emergence of the subcategory, *Unbeneficial interactions*.

Participants highlighted interactions among users, features, and management, emanating

from planning and design, which were linked to negative outcomes such as

dissatisfaction, and social tensions, (See description in Table 1) which informed planning

and design decisions. Examples of references to *dissatisfaction* are captured in the

excerpts below:

Sometimes I know you know the community can get disheartened because it

does take a long time to be built [C 4020 Pocket Park]. And sometimes it

doesn't always get built you know, a property owner may change their mind or

the market might just you know tank and it doesn't get built – Participant 1.

it's not that it's not well maintained and it's not that it's not a very good space

[Holiday Park]. Sometimes that park is somewhat forgotten – Participant 2

So it's just one of those facilities that is smaller in scale but has a small center on

it like a rec center on it [Holiday Park], but we've had to close down that facility,

just because of COVID – Participant 4.

Examples of references to *social tensions* are captured in the excerpts below:

> Maryvale Park is a pretty rough park for us, and I think mostly because of the
>
> homeless population that's moved into that park-Participant 2.

> Most of our parks, unless they have a community center on them, they don't
>
> have staff programming actual activities. At such sites we've had issues like
>
> crime which are barriers to better uses of the park [Falcon Park]– Participant 3

The excerpts above, show that technical agents recognize the linkages between the

interactions that take place within public spaces and the perceived ability of community

to benefit or otherwise from a public space.

Both neighborhood leaders/community organizers and technical agents, described

the ability to beneficially utilize public spaces as linked to the nature of interactions

within public spaces. The perceived linkages were widely similar across public spaces of

varying service extents. That is, the interactions and related outcomes described to be

linked to access were consistent across the different groups of respondents, despite the

service classifications. For instance, neighborhood leaders/community organizers

referenced satisfaction or the lack thereof, as an outcome associated to interactions with

facilities, amenities, or programming at public spaces of varying type and extent. While

technical agents pointed out that the availability of facilities, amenities and programming

was expected to increase with an increase in service extent, they also linked access and

satisfaction or otherwise in relation to the presence or absence of such features and

programs. Such similarities in the described linkages showcased how outcomes such as

satisfaction as relates to features transcends technical categorizations of public spaces and expected allocation of facilities. For example, despite the expectation that neighborhood spaces are not technically expected to have programming, both community members and technical agents highlighted that the absence of such could trigger dissatisfaction and consequently the perceived inability to benefit from a space. Other outcomes which were referenced across type and service extent included outcomes such as *safety, healthy practices, empowerment, and social cohesion.*

Planning/Design Processes as Perceived by Participants

Responses to follow-up questions on planning and design as relates to the identified spaces provided insights to understanding the perceived linkages between processes and community outcomes which either facilitated or inhibited the ability to use a resource. *Community Engagement in Planning and Design* emerged as a broad theme from the responses given. This broad theme was informed by sub-categories which highlighted processes considered to be linked to positive outcomes - *Beneficial planning and design processes* and processes considered to be linked to negative outcomes - *Strained planning and design engagement.*

Beneficial Engagement - Community Leads

In responding to planning and design processes for the identified spaces and the perceived outcomes thereof, participants pointed to processes which allowed for community engagement and led to outcomes which facilitated the ability to benefit from such resources. In such responses, participants explained that processes which engaged community members in planning and design, provided an opportunity to communicate

the concerns, needs and expectations of community. Such processes were described with terms such as 'engaged the community' 'work side by side', and 'worked with'. Processes which integrated community perspectives in planning and design were linked to the realization of positive states such as a *sense of agency and sense of ownership*, (see to Table 1 for descriptions). While respondents mentioned that in some instances community members did not receive everything they asked for, engagements which allowed for consensus building still yielded positive outcomes for community and consequently the perceived ability to benefit from the resource. The excerpts below showcase the perceived linkages between access and community engagement in planning and design which led to the realization of a *sense of agency*.

> I think that the fact that they engaged the community…was very beneficial because people didn't get everything they wanted, but they did get many things, such as the skatepark because they wanted a place for the kids who were skating like down at the grocery stores and they would be skating you know, on the school grounds and kind of tearing stuff up. So, the fact that we got them off those areas and into…an environment where the facility [Desert West Park] is designed for doing what they want to do, that's beneficial – Participant 2.

> We were able to support the community in identifying what it is that they wanted and in partnership, you know, we were able to get the community to work side by side with developers with city officials to design a lot of this stuff…and in the end you get projects like a park where community is like engaging they're participating, they're using it, they're taking care of it, um it's really beautiful so that's kind of what we have with Sueno Park – Participant 15.

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[a]t the very beginning stages we worked with landscape architects that came in and helped us, so kind of like did charrette and things like that, so that we can make sure to make the space [Cartwright Community Garden] again for the community by the community – Participant 11.

There were people who have been there for a long time and from the conception of the park [Dust Devil Park]. The community has been there saying here's what we want, how they want it, the larger park more amenities, and the size. Then the developers came down, then they modified you know what their drafts were – Participant 2

The excerpts below showcase the perceived linkages between access and community engagement in planning and design which led to the realization of a *sense of ownership*.

So, from the very beginning um the Heart of Isaac Community Center has always been driven by the Community, and it is very much owned by the community and it continues to be sustained by the families that utilize it – Participant 16

[a]t the very beginning stages, we worked with landscape architects that came in and helped us so kind of like did Charrette and things like that, so that we can make sure to make the space [Cartwright Community Garden] again for the community by the community – Participant 11

Strained Engagement - Community Leads

Neighborhood leaders/community organizers also described planning and design

processes which were considered as either exclusionary or tokenistic. Participants

described strains in engagement processes as characterized by a complete lack of

inclusion, and tokenistic procedures, comprising the failure to integrate community

expectations, alongside a lack of consensus building. In the responses given, the lack of

engagement and frustrations with the process were linked to negative conditions such as

distrust and *dissatisfaction* (refer to Table 1 for descriptions).

The excerpts below showcase the perceived linkages between access and negative

conditions like *dissatisfaction* from exclusive planning and design processes.

Quite frankly, if I'm being honest, which I always am, the city was not helpful at

all and in helping us fight the case [Villa De Paz Golf Course]. You know we

didn't know anything about the rules of planning commission meetings and how

you have to fill out speaker cards and how you need to…donate your time, if

you want to get one speaker to be able to give a counter presentation. There

were many points along the way we were given incorrect information when we

went to the planning meetings… the community was pretty frustrated with what

we felt like was a lack of really trying to help the community to understand how

this process works, so that we can fight it – Participant 1

So we've been involved in all that we had many public meetings. Almost every

block watch meeting the last three years, has a golf course component in it to

keep the people aware and we have one or two people who are running facebook

pages, which are dedicated to save or build a course or stop development, I

forget the exact title of it. But yeah there's an active community component to

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get it back to being a green area…the fact is we had talked to the City of

Phoenix about trying to basically turn it into a community park, lush you know

bike paths, walking paths. And the city said no, we don't have enough money to

maintain it – Participant 2.

All of the people that work so hard to keep that as a golf course were very

dissatisfied…Evidently the voice of the community does not count – Participant

3

We have so many [vacant lots], than they do in any part of the city. These lots

have been vacant since I moved here. 29 years ago, waste. And we have tried to

engage on the need to establish places for our youth, families of all ages to go to

no avail – Participant 12

[t]here is like 45 [vacant lots]. That are owned by the City of Phoenix and

they're just sitting there… we have shared that there is so much opportunity to

like turn those lots into public spaces, where people can gather. But they're like

they're just kind of locked in for years. Which is really unfortunate and that's

been a battle, I know that the community has had it with the city. I'm not sure

what their plan is for those lots but it keeps people from being able to like go out

and enjoy you know, gather and have physical activity – Participant 14

On the original planning committee is, I think you know and the parks and

recreation department came a couple years ago pre covid and they had showed a

map. Of all of the remaining open spaces for parkland you know that the City of

Phoenix had, and they were showing the ones they were going to sell off. To

kind of reduce the amount of maintenance space that the City of Phoenix had to

operate, and it was hilarious look at the map and see that, like 90% of every

park, they were nixing was all basically in Maryvale – Participant 1.

Comments from participants, as indicated below, illustrate connections between access

and negative conditions like *distrust* from exclusive planning and design processes.

I doubt there is much communication between community and experts on this

[Falcon Park] because, a lot of these families are primarily Spanish speaking

families and so there's a lot of distrust in parts of the community, especially

those that are primarily Hispanic, in the whole process of trying to get help or

trying to communicate their needs, if that makes sense. I think a lot of it is that

some of them may not have immigrated legally…so I think some of those

people who felt forgotten, it caused a legacy of distrust – Participant 14

And of course, the developer [Villa De Paz Golf Course] did say there will be

some park area throughout the high density building but of course, I trust them

as far as I can throw them, as does the rest of the neighborhood – Participant 3

The excerpts above demonstrate the positive or negative conditions linked to planning

and design processes, perceived to either facilitate or inhibit the ability to benefit from

identified public spaces. The responses recorded when technical agents were asked about

planning and design processes and the perceived outcomes of such interactions on

community, were deductively coded based on the earlier discussed frameworks. Such

responses informed a broad category named *Community Engagement in Planning and

Design.* This broad category was informed by two subcategories: *Beneficial planning and

design processes* and *Unbeneficial planning and design processes*. Details regarding

these are further highlighted in the proceeding sections.

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Beneficial Engagement - Technical Agents

Technical agents described planning and design processes that were linked to beneficial

outcomes on community which facilitate the beneficial use of public spaces. Codes

pointing to processes associated to such outcomes informed the emergence of *Beneficial*

planning and design processes as a sub thematic category. Participants referred to

processes linked to positive outcomes such as *sense of agency and sense of ownership*

(See description in Table 1) and the linkages to a community benefiting from a public

space. Examples of references related to linkages between access and the realization of a

sense of agency from planning and design engagements, are captured in the excerpts

below:

> When we were doing a park renovation or redoing the master plan [Marivue
>
> Park], what we have is called steering committee, steering committee meetings
>
> and basically like, they reach out to the community and they'll put together a
>
> four to five person committee and there are people like you know principals of
>
> schools and in the nearby areas are or community members neighborhood
>
> presidents. In theory these people are supposed to have the voice of the
>
> community and that's why we bring them in - Participant 3
>
> Every rezoning case, its is required to do community outreach so they have to
>
> send out letters, they have to host a neighborhood meeting. This was, you know
>
> this was a virtual meeting normally there are in person, but the idea is for them
>
> to be able to engage with the community on that. In addition, the core plan,
>
> which was approved about five years ago was created through a lot of
>
> Community input so having the policy to support me asking that applicant to put

that public space [C 4020 Pocket Park] there, I think, was helpful because all of

that policy came to play – Participant 1.

Examples of references related to linkages between access and the realization of a sense of ownership from planning and design engagements are captured in the excerpts below:

[t]his one [El Oso Park] has one of the only archery ranges that we have in the

city and that was something that they were very proud of, and that they wanted

to hold on to, and so we made sure that that was incorporated in the design,

when we completed the project when we started this project. It's a very nice

park which is well-designed, the community loves it. I don't think we've had

much common complaints about the park in many years just because of the way

that it was designed, it was finalized in 2013 and constructed – Participant 2.

[u]sually what we'll do is we'll have a public process of input on things at the

space [Desert West Park] that they would like to see what kind of interest the

neighborhood has…. It makes rational sense, that people are involved in the

planning of it that they would be more likely to first of all, use the space, and

second of all to really kind of take care of the space and self-police and you

know, make sure all the right things are happening space- Participant 4.

Strained Engagement - Technical Agents

Technical agents also described planning and design processes that were linked to

unbeneficial outcomes on community which inhibit the beneficial use of public spaces.

Codes pointing to processes associated to such outcomes informed the emergence of

Unbeneficial planning and design processes as a sub thematic category. Participants

referred to processes linked to negative outcomes such as *dissatisfaction* with the process

and *distrust*, (See description in Table 1) and the linkages to the inability of the

community to benefit from a public space. Examples of references related to linkages between access and the realization of a *dissatisfaction* from planning and design engagements, are captured in the excerpts below:

> The golf course [Villa De Paz Golf Course] is currently closed , there was a plan by that private owner to develop parts of it (the golf course) into single family homes, the residents who had been in you know the already established homes, were not okay with that you know they feared, you know impacts on their home values and you know, stating that we bought on a golf course for a specific reason and now I'm not going to be living, you know, on a golf course – Participant 1.

> [w]ithin the steering committee, you know, they were on the opposite ends of things… and usually we were trying to find some middle ground so we're supporting both – Participant 2.

Examples of references related to linkages between access and the realization of a *distrust* from planning and design engagements, are captured in the excerpts below:

> You can go through our entire city, and there are all kinds of contradictions to our designations, which is the hard part you know, so I go in there and say yeah this is neighborhood park typically wouldn't put a restroom here [Holiday Park]. And the community says, but what about this park and what about that park there? - Participant 3.

> I think some of the worst parks [Falcon Park]   are in areas where people don't feel like they have the right to complain, you know see that, like it's just apathy like if I say something nothing will get done anyway to get done or not I'm

afraid to say something, because maybe I'm here illegally and I don't want to

you know, put the spotlight on my neighborhood or my neighbors neighborhood

or you know you have some family members that will be up there

undocumented some of those folks feel like they don't have a home - Participant

4.

The excerpts above, show that technical agents recognize the linkages between the planning and design engagements that take place and the perceived ability of community to benefit or otherwise from a public space. Both neighborhood leaders/community organizers and technical agents, described the ability to beneficially utilize public spaces as linked to the outcomes of exchanges that take place during planning and design processes. The perceived linkages were had variations across public spaces of varying service extents. Technical agents constantly referred to stipulations on community members to include in decision making (based on technical directives and service extent) and prioritized such members in the associated outcomes like *sense of agency* and *sense of ownership.* By contrast, neighborhood leaders/community organizers referred to the broader community when describing *sense of agency* and *sense of ownership* as associated outcomes which resulted in the ability to benefit from public spaces, across different service classifications.

Discussion

The participatory mapping interviews with community representatives (*i.e.,* neighborhood leaders and community organizers) and technical agents (*i.e.,* design professionals and recreation manager) illuminated the perceived linkages between the ability to benefit from a public space (*i.e.,* access) and the realization of ideals from

public space related exchanges. Across different types of public spaces and service extent classifications, the recurrent mention of positive states in responses that pointed to perceived beneficial outcomes was consistent with references to the ability to benefit from public spaces (*i.e.,* access). On the other hand, the consistent mention of negative conditions in responses which pointed to unbeneficial outcomes was in alignment with references to the inability to benefit from a public space (*i.e.,* inhibited access). This study demonstrates how exchanges *across public space dimensions* (as conceptualized by Lefebvre, 1991) are connected to the *realization/inhibition of community well-being* (as theorized by Bishop, 2005) and consequently how these interactions influence one's perceived ability/inability to *benefit from a public space (i.e., access)* (see Figure 5). The subsequent sections demonstrate the connections across the different constructs of environmental justice and *access* as an outcome of community well-being ideals.
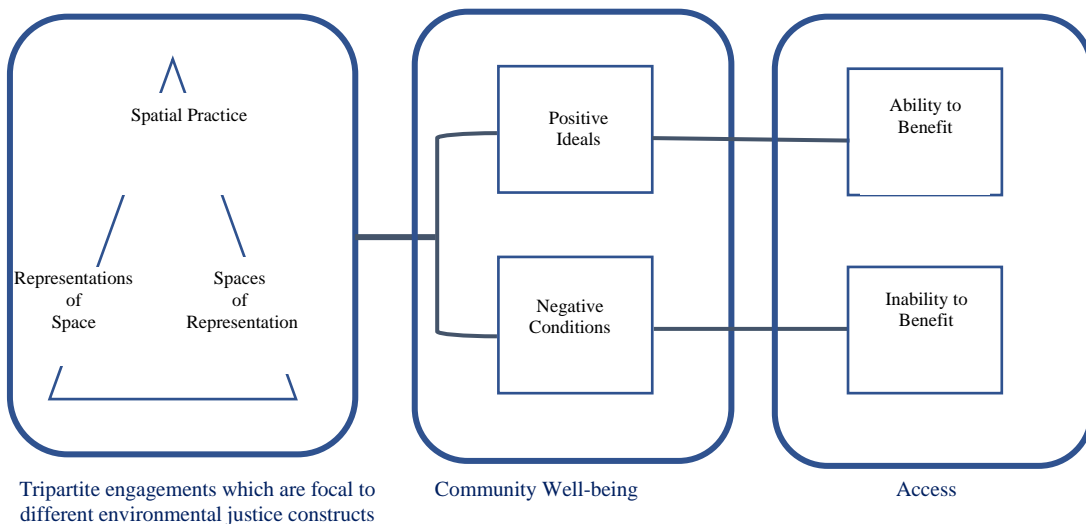
Figure 5 Access Demonstrated as an Emergent Outcome

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Access, Spatial Characteristics and Community Well-being

The linkage between *justice* and *access*, as relates to distributive justice, has been

discussed in research that juxtaposes spatial characteristics to access (see Jian, Luo, &

Chan, 2020; Oh & Jeong, 2007). In such studies, access has been examined through the

locational features that exist to enable the use of public spaces. Spatial features

determined to enable use include proximity, innocuous land-use and enabling transit

characteristics (Macedo & Haddad, 2016; Weiss et al., 2011). In contrast, characteristics

such as remoteness, noxious land-use and mobility inhibiting layouts, have been

determined to stifle access (Weiss et al., 2011). In terms of its connections to well-being,

access as an outcome associated with spatial characteristics has been asserted to lead to

several well-being ideals. For instance, various studies have demonstrated that spatial

access has a positive relationship with well-being ideals such as physical activity,

reduced obesity and mortality at the neighborhood scale (Li, Fisher, & Brownson, 2005;

Sallis & Glanz, 2006; Srinivasan, O'Fallon, & Dearry, 2003; Stigsdotter et al., 2010).

Similarly, access to public spaces has also been described as having positive implications

on mental health in residential communities (Maas et al., 2009; Maas, Verheij,

Groenewegen, De Vries, & Spreeuwenberg, 2006; Nutsford et al., 2013). Therefore, the

impact of access on well-being has been well established. The current study further

advances knowledge related to the ties between access and community well-being, as

pertains to spatial characteristics. Based on the responses given by both community and

technical representatives, the ability to benefit from a public space (*i.e.,* access) is

described as connected to spatial characteristics (*i.e.,* Spatial Practice) which materialize

from plans and designs (i.e., Representations of Space). The findings showed that such spatial characteristics which were categorized as either beneficial or unbeneficial were focal to distributive justice and the perceived ability to benefit from a public space (*i.e.,* access).

The references participants made to *Beneficial Spatial Characteristics* highlighted ideals which were described as associated with locational features that enhanced the ability to benefit from a public space (*i.e.,* access). References were made to ideals such as *safety*, *convenience, empowerment,* and *healthy practices,* which were described as facilitating access to public spaces. For instance, both community and technical representatives referenced how features in the surrounding locales (e.g., a police station, fire house) were perceived as facilitating *safety*, and consequently the ability to benefit from a public space. On the other hand, participants referenced *Unbeneficial Spatial Characteristics* which encompassed negative conditions such as *community dissatisfaction* and *danger* related to locational features that inhibited access. For example, *danger* and *community dissatisfaction* were described as a negative condition associated with transportation infrastructure that inhibit access to a locale such as, the absence of sidewalks or crosswalks. The concerns associated with safety, due to the occurrence of crime and mobility infrastructure, resonate with studies which have highlighted the correlations between traffic fatality and marginalized/minoritized neighborhoods (Cutts et al., 2009;Yuan & Wang, 2021). Correspondingly, participants' mentioning of conditions like danger in reference to *Unbeneficial Spatial Characteristics* complements work done by Weiss et al., (2011) which highlights barriers to access pertaining to noxious land use in the surrounding environment.

Access, Engagement and Community Well-being

The linkage between justice and access as pertains to procedural justice has been illustrated in research on the concept of access and its connection to planning and design processes (Jian et al., 2020; Setha Low & Iveson, 2016). In existing studies, the challenges of access to public spaces in vulnerable contexts has been examined as related to injustices such as the history of exclusion, systemic biases, and the lack of representation and advocacy (Boone, 2008; Low & Iveson, 2016). Examinations which have focused on the linkages between well-being and access, as an outcome of procedural justice, have predominantly focused on the implications of access on well-being. The inclusion of community members in design and planning has been found to have positive associations with public spaces, which are well utilized for different activities that foster resilience and sense of belonging (Anderson, Ruggeri, Steemers, & Huppert, 2017; Mehta, 2007). Hence, as an outcome of procedural justice, the impact of access on well-being has been well established. The current study augments this line of research by highlighting the intricate connection between justice, access, and well-being realized through planning and design engagements. The responses given by both community and technical representatives, in relation to the engagement between community expectations (*i.e.,* Spaces of Representation) in planning and design (*i.e.,* Representations of Space), showcased the perceived linkages between *Beneficial Engagement* and *access* on one hand as well as *Strained Engagement* and *inhibitions to access* on the other hand.

When explaining the ability to benefit from a public space (*i.e.,* access), participants made reference to *Beneficial Planning and Design Processes* to highlight ideals which they perceived as connected to planning and design processes. The

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described linkages between ideals such as *sense of agency* and *sense of ownership* and

engagement processes, illustrate how outcomes from participation can be associated with

perceived ability to benefit from a public space. Contrastingly, the references to *Strained*

Planning and Design Engagement were informed by negative conditions such as *distrust*

and *marginalization*, which were described to be linked to the inability to benefit from a

public space. The described perceptions resonate with existing literature on concepts of

non-participation and tokenism in Arnstein's (1969) ladder of participation. Research on

non-participation has explored the approaches to community inclusion in planning and

design of public spaces and scholars have stressed the importance of perceived outcomes

associated with different engagements (see Hutomo & Fuad, 2020; Witten & Ivory,

2018).

Access, Experiences and Community Well-being

The connection between justice and access, as pertains to interactional justice has been

examined through the linkages between user experiences and access (Low & Iveson,

2016). The nature of experiences within public spaces has been focal to existing

examinations. Some examinations have highlighted how ethno-racial factors such as

cultural preferences and racialized identities are connected to social-ecological exclusion

and discriminatory practices like over-policing and bias (Byrne, 2012; Girardi, 2021).

Other studies have focused on the quality of public spaces, in relation to factors such as

size, facilities and programming and the related implications on user experiences in

vulnerable contexts (Cohen et al., 2016; Groshong, Wilhelm Stanis, Kaczynski, & Hipp,

2020). While such studies have highlighted the social enablers and barriers of access,

they do not examine the facilitators and inhibitions of use, as linked to community well-being in vulnerable contexts. An understanding of the connections between access and community well-being related to user experiences is advanced in this study. The responses from participants highlighted how social and physical interactions (*i.e.,* Spaces of Representation) within public spaces (*i.e.,* Spatial Practice) inform *Beneficial Experiences* or *Strained Experiences* to facilitate or inhibit access.

When explaining the ability to benefit from a public space (*i.e.,* access), participants made reference to *Beneficial Experiences* to highlight ideals which they described as connected to public space interactions. Both groups of participants described ideals like*, social cohesion, healthy practices, and safety* as linked to user experiences which facilitated the ability to benefit from a public space *(i.e.,* access*)*. In describing linkages to ideals like *social cohesion*, references were made to features and facilities such as shaded areas with seats for gatherings, which supported cultural practices and celebrations of Hispanic festivities, like *Quinceañera*, *El Día de Los Niños*, and *Dia de los Muertos*. Remarks made in reference to features which facilitated key ethnic celebrations is in line with studies which have emphasized cultural differentiation in the use of public spaces (see Loukaitou-Sideris, 1995). For instance, some studies have found that Hispanic populaces typically have larger families and hence find it more convenient to utilize parks for family gatherings (Stodolska, Shinew, Acevedo, & Izenstark, 2011). Similarly, in describing how an ideal such as *healthy practices* were connected to the ability to benefit from a public space, alluded to connections to physical activities such as soccer which drew a lot of community interest. Hence, the presence of spatial features which supported such sports were favorably regarded by the community. Also, references

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made to ideals like *empowerment* emphasized the typical challenges endured by low-income communities. Programming geared towards skills development and literacy at no/minimum cost were also described by participants as facilitating the beneficial utility of public spaces.

The described relationships between the ability to benefit from a public space and the presence of features and programming which facilitate empowering, cultural and health activities have implications for public space design and management. While public spaces technically classified to serve pocket and neighborhood extents are not typically designed to have facilities and programming for the above highlighted purposes, a case can be made for adapting such spaces to the cultural functions and needs of the communities they serve. Such an adaptation can further enhance community well-being and this would resonate with extant studies, which indicate that public spaces designed to maximize use by the immediate population have been linked to the realization of ideals such as sense of community/cohesion and sense of belonging (Thompson & Kent, 2014). By contrast, respondents' reference to *Strained User Experiences* were described as connected to conditions such as *social tensions* and *dissatisfaction*, which were perceived to be linked to the inability to benefit from a public space. References made to *social tensions* as a negative condition, highlighted the occurrence of potentially unsafe engagements and untoward activities within public spaces. Similarly, participants' references that pointed to *dissatisfaction*, in essence explained the absence or unavailability of facilities linked to the identity and values of the community.

Key Contributions

A key contribution of the current research study is the illustration of access as an outcome of community ideals which are realized from the exchanges among public space dimensions, (see Figure 5). The exchanges across the dimensions, as theorized by (Lefebvre, 1991), are conceptualized to be focal to the different constructs of justice (Godwyll & Buzinde, 2022). Spatial characteristics (*i.e.,* Spatial Practice) which materialize from plans and designs (i.e., Representations of Space) are key to distributive justice (*i.e.,* fair allocation). Similarly, planning and design (*i.e.*, Representations of Space) engagements which seek to incorporate community perspectives (*i.e.*, Spaces of Representation) are focal to procedural justice (*i.e.,* meaningful involvement). Likewise, user experiences (*i.e.*, Spaces of Representation) within public spaces (*i.e.,* Spatial Practice) are critical to interactional justice (*i.e.,* quality encounters). The responses given by participants on outcomes of exchanges associated to each identified space illustrated how well-being is perceived to be realized from physical and social engagements as conceptualized by Bishop (2005). The described relationships between the highlighted exchanges and ideals or negative conditions showcased that access can be holistically examined through the ability or otherwise to benefit from a public space.

The current study's examination of access through the perceived outcomes of exchanges that take place allows for the consideration of all *three constructs of environmental justices*. This is an important undertaking because had the study only examined individual environmental justice lenses (*i.e.,* only distributive, only procedural, or only interactional justice), it would have only been able to investigate access either through fair allocation, planning and design engagement or user experiences. For

example, an examination focused on distributive justice would not have considered the

social barriers to access related to planning and design (*i.e.,* procedural justice) or user

experiences (*i.e.,* interactional justice). However, through this lens participants could

describe barriers of access as linked to *distrust* from the lack of engagement, alongside

social tensions from untoward interactions within public spaces, even if they are within

proximity. Comparably, a focus on only procedural justice, would have provided insights

on perceived access as an outcome of planning and design engagement. But barriers such

as *community dissatisfaction* from the lack of programming (*i.e.,* interactional justice) or

danger from the absence of crosswalks leading to the public space (*i.e.,* distributive

justice) would not have been highlighted. Equally, focusing solely on interactional justice

would have offered perspectives on access in relation to user experiences. Yet, inhibitors

such as *community dissatisfaction,* due to remoteness of the locale or *marginalization*

emanating from the lack of inclusion in decision making, would not have been

emphasized. The lens adopted in examining access in this current study thus illustrates

how access can be holistically studied through its relationship to well-being.

In addition to the aforementioned academic contributions, this study also offers

several practice related insights related to the nexus between justice, well-being, and

access. For instance, the references participants made to safety at various facilities (*e.g.,*

police stations and firehouses) in the immediate locale, provide insights into the need for

plans and layouts which support access to public spaces. The connections participants

drew between ideals such as safety and access, and negative conditions like danger and

inhibitions to access, provide further evidence on how features in the surrounding

environment, alongside transportation infrastructure, can facilitate or hinder perceived

access. Furthermore, existing studies have shown that low-income communities and minoritized populations are most dependent on public spaces, given the limitations of backyard and/front yard space in housing units (Brown & Cropper, 2001; Fitzpatrick, Shi, Willis, & Niemeier, 2018). Other studies have highlighted how economic difficulties in vulnerable contexts, translate into mobility challenges which become an added barrier to access (Pasaogullari & Doratli, 2004). The barriers of mobility coupled with the limitations of residential outdoor space, have been central to existing research which has suggested that residential neighborhoods should be prioritized in the allocation of public spaces located in vulnerable contexts (*i.e.,* neighborhood destinations) (Giles-Corti et al., 2016).

Participants' described ideals like *convenience* in connection to access across different types and service classifications of public spaces. Such described connections, alongside the contextual mobility barriers highlighted in existing studies, offer further evidence on the need to consider proximity to neighborhoods when selecting locations for public spaces across type and service extent classification. Equally, participants reference to ideals such as *healthy practices and empowerment,* were seen across public spaces of varying types and service extents. Amidst the limited outdoor space opportunities at home and economic constraints, such references also reiterate the need to prioritize neighborhood destinations in the selection of locations for varying type and intended service extents.

In their description of the linkages between negative conditions such as distrust and marginalization and the inability to benefit from a public space, participants alluded to the history of disengagement and fear of victimization. Such accounts inform

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conversations and approaches that need to be at the center of planning and design

engagement processes (*i.e.,* procedural justice). The environmental injustices that have

occurred in Maryvale, which led to its reputation as a 'cancer cluster', have been traced

to systemic negligence that has bred social tensions and fostered lack of trust (Sell, 1992).

Therefore, the history of disengagement and fear of victimization in Maryvale, regularly

referenced participants in relation to planning and design processes, may provide

evidence for the need for reparative approaches to engagement during the planning of

public spaces. This suggestion is in line with existing studies which have asserted the

need to acknowledge and address previous injustices of planning practice during

engagements with the community (Lertzman, 2015). Comparably, impediments to the

ability to benefit from public spaces described as linked to unideal user experiences in

vulnerable contexts (interactional justice), also provides insights to public space

management. Considering the contextual challenges which include economic hardships

that limit the ability of community members to pay for features and programming

elsewhere, such interventions should be adapted to public spaces to facilitate access. This

suggestion is consistent with studies which have asserted that the presence of

programming is a crucial enabler of use, especially in low-income contexts (Finkelstein,

Petersen, & Schottenfeld, 2017).

Conclusion

The purpose of this study was to examine how communities and technical experts

perceive of the linkages between access and community well-being, which emerge from

engagements among the dimensions of public spaces. The conceptual framework adopted

comprised of an intersection between the *Tripartite Framework* (Lefebvre & Nicholson-Smith, 1991) and *Network Theory of Well-being* (Bishop, 2005) two bodies of work which to date have yet to be combined within an empirical assessment of access. The study is set in Maryvale, an economically developing and Hispanic majority urban village in Phoenix, Arizona. It was selected as a study site because of the sharp economic contrasts across neighborhoods as well as its minority-majority status, which have translated into environmental injustices. Such injustices have cultivated social tensions and fostered a sense of lack of trust between the community and technical agents. Participatory mapping interviews were utilized to engage community representatives (neighborhood leaders/community organizers) and key technical informants (village planner, landscape architects and recreational manager). Participants described access as an outcome of exchanges pertaining to identified public spaces in the community and their perceived linkages to well-being.

The main contribution of this paper is an illustration of how access can be examined through the nexus between exchanges across different public space dimensions and the well-being ideals that emerge from such engagements (as conceptualized by intersecting the *Tripartite Framework* (Lefebvre & Nicholson-Smith, 1991) and *Network Theory of Well-being* (Bishop, 2005). This study provides key insights on a more holistic approach to examining access by taking into consideration the contextual barriers and conditions that impede access to public spaces in vulnerable areas, which go beyond the individual constructs of environmental justice. It does this by illustrating how access is described (by participants) as emerging from community well-being ideals realized from public space related exchanges that satisfy different constructs of environmental justice.

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The study found that exchanges, which are related to distributive, procedural and interactional justice were described as linked to the realization or inhibition of well-being ideals and consequently the ability to benefit from a public space (*i.e.,* access). These findings build on extant research which has predominantly examined access as an outcome of individual constructs of environmental justice that facilitate well-being. The findings of this study have profound implications for planning and design practice, particularly when one considers the complex interactions between professionals and communities of place as well as ramifications related to community well-being. The insights garnered from the current study highlight the need to consider economic and mobility barriers when making locational considerations. Similarly, the sentiments of distrust from historical tensions can inform planning and design approaches and engagements which facilitate the perceived ability to benefit from a public space. Likewise, the importance of cultural differentiation and contextual needs can contribute to the enhancement of management process that facilitate access.

The holistic lens provided by this study sets the stage for future research projects that adopt a quantitative and longitudinal lens to investigate the causal relationship between specific ideals and perceived access to public spaces over time. Furthermore, this line of research can also determine whether the explanatory power of different community well-being measures vary as diverse ideals interact. Research of this nature can indeed contribute to the growing research focused on the relationship between built environmental characteristics and well-being by augmenting insights on the linkages between access to public spaces and community ideals. Key concerns have been raised about the increase in inequality across the world, stemming from the widening income

disparities, and the related implications on injustices in the built environment. Public

space access has been asserted to play a key role in fostering equity and inclusion

(UNESCO, 2017). Hence studies focused on better understanding access to public space,

especially among vulnerable populations, are key to bridging the gaps that exist between

income disparities and environmental justice.

REFERENCES

Abbott, J. (2013). *Sharing the city: community participation in urban management*. Retrieved
from https://books.google.com/books?hl=en&lr=&id=-
T75AQAAQBAJ&oi=fnd&pg=PP1&dq=non-
participation+in+urban+planning+and+design&ots=txjQKJ72lU&sig=_lxoZzGjT95LDH
yyCcCFDbVElCU

Abercrombie, L. C., Sallis, J. F., Conway, T. L., Frank, L. D., Saelens, B. E., & Chapman, J. E.
(2008). Income and Racial Disparities in Access to Public Parks and Private Recreation
Facilities. *American Journal of Preventive Medicine*, *34*(1), 9–15.
https://doi.org/10.1016/j.amepre.2007.09.030

Agyeman, J, Bullard, R., & Evans, B. (2003). *Just sustainabilities: Development in an
unequal world*. Retrieved from
https://books.google.com/books?hl=en&lr=&id=I7QBbofQGu4C&oi=fnd&pg=PR7&dq
=Agyeman+J,+Bullard+R,+Evans+B.+2003.+Just+Sustainabilities:+Development+in+an
+Unequal+World.+Earthscan:+London&ots=Ih_TPrtsQf&sig=Mtov9songlllhVsJPX0QJ
bApHfQ

Ahlbrandt, R. (2013). *Neighborhoods, People, and Community - Roger Ahlbrandt -
Google Books*. Retrieved from
https://books.google.com/books?hl=en&lr=&id=MZvwBwAAQBAJ&oi=fnd&pg=PR17
&dq=people+are+likely+to+move+to+neighborhoods+with+similar+race+characteristics
&ots=F7vZhVkwyr&sig=KjvBb71GtZ3qZijhUOacJPNy4T4#v=onepage&q=people are
likely to move to nei

Aiyer, S., & Zimmerman, M. (2015). From broken windows to busy streets: A
community empowerment perspective. *Health Education & Behaviour*, *42*(2), 137–147.
Retrieved from
https://journals.sagepub.com/doi/abs/10.1177/1090198114558590?casa_token=1R9zKW
uY6PYAAAAA:2Wk4SjWD9-
uTqtI6nDSW20rABNMJCQdpH03Rods9fnegDMXDX2DzETlYmRFI7nPkl9sM-IER-
6EL-U8

Altomonte, S., Allen, J., Bluyssen, P., Brager, G., Heschong, L., Loder, A., … Wargocki,
P. (2020). Ten questions concerning well-being in the built environment. *Building and
Environment*, *180*, 106949. https://doi.org/10.1016/j.buildenv.2020.106949

Altshuler, A. (1965). THE GOALS OF COMPREHENSIVE PLANNING. *Journal of the
American Institute of Planners*, *31*(3), 186–195.
https://doi.org/10.1080/01944366508978165

Alvaredo, F., Chancel, L., Piketty, T., Saez, E., & Zucman, G. (2018). *World inequality report 2018*. Retrieved from https://books.google.com/books?hl=en&lr=&id=uNqSDwAAQBAJ&oi=fnd&pg=PP1&dq=Rising+inequality+in+the+world+Thomas+Piketty.&ots=qickIBRgdz&sig=U4IBVX2QI4Pdb1GDxcXfgzXXZRM

American Cancer Society. (2019). Cancer Facts and Figures for African Americans 2019-2021. *American Cancer Society*, 43. Retrieved from https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/cancer-facts-and-figures-for-african-americans/cancer-facts-and-figures-for-african-americans-2019-2021.pdf

Amin, A. (2008). Collective culture and urban public space. *City*, *12*(1), 5–24. https://doi.org/10.1080/13604810801933495

Anthony, K. (2001). Designing for diversity: Gender, race, and ethnicity in the architectural profession. *University of Illinois Press.*

Anthony, K. H. (2002). Designing for diversity: Implications for architectural education in the twenty-first century. *Journal of Architectural Education*. Routledge. https://doi.org/10.1162/104648802753657969

Arnstein, S. (1969). A ladder of citizen participation. *AIP Journal*. Retrieved from http://geog.sdsu.edu/People/Pages/jankowski/public_html/web780/Arnstein_ladder_1969.pdf

Atkinson, S., Bagnall, A. M., Corcoran, R., South, J., & Curtis, S. (2020). Being Well Together: Individual Subjective and Community Wellbeing. *Journal of Happiness Studies*, *21*(5), 1903–1921. https://doi.org/10.1007/s10902-019-00146-2

Babones, S. J. (2008). Income inequality and population health: Correlation and causality. *Social Science and Medicine*, *66*(7), 1614–1626. https://doi.org/10.1016/j.socscimed.2007.12.012

Bernard, H., Wutich, A., & Ryan, G. (2016). *Analyzing qualitative data: Systematic approaches*. Retrieved from https://books.google.com/books?hl=en&lr=&id=yAi1DAAAQBAJ&oi=fnd&pg=PP1&dq=Analyzing+qualitative+data+bernard&ots=SynyREIRBi&sig=8G9xe6OdibiFvUigYSO2lpgu89Y

Bishop, M. A. (2005). *The good life : unifying the philosophy and psychology of well-being*.

Blanton, R. (2011). Chronotopic Landscapes of Environmental Racism. *Wiley Online Library*, *21*(SUPPL. 1). https://doi.org/10.1111/j.1548-1395.2011.01098.x

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Bolin, B, Grineski, S., & Collins, T. (2005). The geography of despair: Environmental racism and the making of South Phoenix, Arizona, USA. *Human Ecology Review*. Retrieved from https://www.jstor.org/stable/24707530?casa_token=5ouAkEBERisAAAAA:MaPbo_4m7 gdrNPS8elpB9lljCwKYQF19FBM17W9ozVqrtcjXY5o-uCmq5h33oQHTnStJbUkuhzOePx_ozm3lnOnfYsQxSCHI6qbgVe_FXUhoMuTvvsNH

Bolin, Bob, Grineski, S., & Collins, T. (2005). The Geography of Despair : Environmental Racism and the Making of South Phoenix , Arizona , USA Environmental Racism : Conceptual Issues. *Human Ecology Review*, *12*(2), 156–168.

Boone, C. G. (2008). Environmental Justice as Process and New Avenues for Research. *Environmental Justice*, *1*(3), 149–154. https://doi.org/10.1089/env.2008.0530

Boone, C. G., Buckley, G. L., Grove, J. M., & Sister, C. (2009a). Parks and people: An environmental justice inquiry in Baltimore, Maryland. *Annals of the Association of American Geographers*, *99*(4), 767–787. https://doi.org/10.1080/00045600903102949

Bowen, W. M., & Wells, M. V. (2002). The politics and reality of environmental justice: A history and considerations for public administrators and policy makers. *Public Administration Review*, *62*(6), 688–698. https://doi.org/10.1111/1540-6210.00251
Boyatzis, R. (1998). *Transforming qualitative information: Thematic analysis and code development*. Retrieved from https://books.google.com/books?hl=en&lr=&id=_rfClWRhIKAC&oi=fnd&pg=PR6&dq =Boyatzis+(1998),+&ots=EBnNzkao_h&sig=o2wLl3yDOKNO49fZStISwM46DKY

Bramnick, L. (2021). The Future of the Villa de Paz Golf Course Remains Uncertain - Law Office of Laura B.

Brown, B., & Cropper, V. (2001). New urban and standard suburban subdivisions: Evaluating psychological and social goals. *Journal of the American Planning Association*, *67*(4), 402–419. https://doi.org/10.1080/01944360108976249

Brown, G. G., & Pullar, D. V. (2012). International Journal of Geographical Information Science An evaluation of the use of points versus polygons in public participation geographic information systems using quasi-experimental design and Monte Carlo simulation. *Taylor & Francis*, *26*(2), 231–246. https://doi.org/10.1080/13658816.2011.585139

Brown, G. (2012). Public Participation GIS (PPGIS) for regional and environmental planning: Reflections on a decade of empirical research. *Espace.Library.Uq.Edu.Au*. Retrieved from https://espace.library.uq.edu.au/view/UQ:294305

Brown, G. Kelly, M., & Whitall, D. (2014). Which 'public''? Sampling effects in public participation GIS (PPGIS) and volunteered geographic information (VGI) systems for public lands management.' *Journal of Environmental Planning and Management*, *57*(2), 190–214. https://doi.org/10.1080/09640568.2012.741045

Brown, A. J., Sherrard, H. M., & Shaw, J. H. (1969). introduction to town and country planning. Angus and Robertson. Retrieved from http://agris.fao.org/agris-search/search.do?recordID=US201300456505

Bullard, R. D. (1993). *The legacy of American apartheid and environmental racism*. *John's J. Legal Comment.* Retrieved from https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/sjjlc9&section=23

Bullard, R. D. (2018). *Dumping in dixie: Race, class, and environmental quality, third edition*. *Dumping in Dixie: Race, Class, and Environmental Quality, Third Edition*. Taylor and Francis. https://doi.org/10.4324/9780429495274

Burningham, K., Barnett, J., & Thrush, D. (2006). The limitations of the NIMBY concept for understanding public engagement with renewable energy technologies: a literature review. Retrieved from http://opus.bath.ac.uk/37144/

Byrne, J. (2012). When green is White: The cultural politics of race, nature and social exclusion in a Los Angeles urban national park. *Geoforum*, *43*(3), 595–611. https://doi.org/10.1016/j.geoforum.2011.10.002

Byrne, J., Wolch, J., & Zhang, J. (2009a). Planning for environmental justice in an urban national park. *Journal of Environmental Planning and Management*, *52*(3), 365–392. https://doi.org/10.1080/09640560802703256

Canadian Index of Wellbeing. (2013). Domains and indicators | Canadian Index of Wellbeing | University of Waterloo. Retrieved September 7, 2020, from https://uwaterloo.ca/canadian-index-wellbeing/what-we-do/domains-and-indicators

Carmona, M, Magalhães, C. de, & Hammond, L. (2008). *Public space: the management dimension*. Retrieved from https://books.google.com/books?hl=en&lr=&id=-5wMe5cqIDIC&oi=fnd&pg=PP1&dq=Forms+indicative+of+public+spaces&ots=p97dm5R6ub&sig=t7DiZISSRYqbq4QhxBUVn8-fHuQ

Carmona, M. (2015). Re-theorising contemporary public space: a new narrative and a new normative. *Journal of Urbanism: International Research on Placemaking and Urban Sustainability*, *8*(4), 373–405. https://doi.org/10.1080/17549175.2014.909518

Carmona, M. (2019). Place value: place quality and its impact on health, social, economic and environmental outcomes. *Journal of Urban Design*, *24*(1), 1–48. https://doi.org/10.1080/13574809.2018.1472523

Carmona, M. (2021). *Public places urban spaces: The dimensions of urban design*. *Public Places Urban Spaces: The Dimensions of Urban Design*. Taylor and Francis. https://doi.org/10.4324/9781315158457

Carr, S, Stephen, C., Francis, M., Rivlin, L., & Stone, A. (1992). *Public space*. Retrieved from https://books.google.com/books?hl=en&lr=&id=pjo4AAAAIAAJ&oi=fnd&pg=PR9&dq=Carr,+S.,+Francis,+M.,+Rivlin,+L.+G.,+and+Stone,+A.+M.,+1992,+Public+Space.+Cambridge,+UK:+Cambridge+University+Press&ots=eyw80M3x83&sig=LmHD5fM-gC9aD4EXHmlvOFGiWDM

Chakraborty, J., Maantay, J. A., & Brender, J. D. (2011). Disproportionate proximity to environmental health hazards: Methods, models, and measurement. *American Journal of Public Health*, *101*(SUPPL. 1). https://doi.org/10.2105/AJPH.2010.300109

Chakravorty, S. (2014). *Fragments of inequality: Social, spatial and evolutionary analyses of income distribution*. Retrieved from https://books.google.com/books?hl=en&lr=&id=_Vu4AwAAQBAJ&oi=fnd&pg=PP1&dq=Spatial+patterns+of+inequality+in+park+distribution+&ots=LUA6zEGDLR&sig=00UgvZPXJHpt5AeJO5T9exNOZMY

Chaskin, R. J., & Garg, S. (1997). The Issue of Governance in Neighborhood-Based Initiatives. *Urban Affairs Review*, *32*(5), 631–661. https://doi.org/10.1177/107808749703200502

City of Pheonix. (2022). City of Phoenix. Retrieved March 20, 2022, from https://mapping-phoenix.opendata.arcgis.com/

Cnaan, R., Boddie, S., McGrew, C., & Kang, J. (2006). *The other Philadelphia story: How local congregations support quality of life in urban America*. Retrieved from https://books.google.com/books?hl=en&lr=&id=M358KUkuQT8C&oi=fnd&pg=PR9&dq=Cnaan,+Boddie,+%26+McGrew,+2006&ots=X00xH7Vu_s&sig=zuLqL9Q778xtDpUSSKneqsiuEao

Cohen, D. A., Han, B., Derose, K. P., Williamson, S., Marsh, T., Raaen, L., & McKenzie, T. L. (2016). The Paradox of Parks in Low-Income Areas: Park Use and Perceived Threats. *Environment and Behavior*, *48*(1), 230–245. https://doi.org/10.1177/0013916515614366

Cole, R. (2018). Community recreates garden for Cartwright School District after fire. Retrieved May 26, 2021, from https://www.12news.com/article/news/local/valley/community-recreates-garden-for-cartwright-school-district-after-fire/75-505524355

Cox, D., Frere, M., West, S., & Wiseman, J. (2010). Developing and using local community wellbeing indicators: Learning from the experience of Community Indicators Victoria. *Australian Journal of Social Issues*, *45*(1), 71–88. https://doi.org/10.1002/j.1839-4655.2010.tb00164.x

Crompton, J. L., & Chuan Lue, C. (1992). Patterns of equity preferences among californians for allocating park and recreation resources. *Leisure Sciences*, *14*(3), 227–246. https://doi.org/10.1080/01490409209513170

Crompton, J., & Wicks, B. (1988). Implementing a Preferred Equity Model for the Delivery of Leisure Services in the US. Context. *Leisure Studies*, *7*, 287–403.

Cutts, B., Darby, K., Boone, C., & Brewis, A. (2009). City structure, obesity, and environmental justice: an integrated analysis of physical and social barriers to walkable streets and park access. *Social Science & Medicine*. Retrieved from https://www.sciencedirect.com/science/article/pii/S0277953609005395?casa_token=E22BaXP_b1kAAAAA:guSlcxV4NGqxAsv2gN9VdtRAH5ALum1Q62mNadEuVcHKgsQ39v_CbzwkuG1vSuEEmc1u9urVxBzU

Devine-Wright, P. (2009). Rethinking NIMBYism: The role of place attachment and place identity in explaining place-protective action. *Journal of Community & Applied Social Psychology*, *19*(6), 426–441. https://doi.org/10.1002/casp.1004

Durante, F., Fiske, S. T., Kervyn, N., Cuddy, A. J. C., Akande, A. D., Adetoun, B. E., … Storari, C. C. (2013). Nations' income inequality predicts ambivalence in stereotype content: How societies mind the gap. *British Journal of Social Psychology*, *52*(4), 726–746. https://doi.org/10.1111/bjso.12005

Edwards, G. A. S., Reid, L., & Hunter, C. (2016). Environmental justice, capabilities, and the theorization of well-being. *Progress in Human Geography*, *40*(6), 754–769. https://doi.org/10.1177/0309132515620850

Engelberg, J. K., Conway, T. L., Geremia, C., Cain, K. L., Saelens, B. E., Glanz, K., … Sallis, J. F. (2016). Socioeconomic and race/ethnic disparities in observed park quality. *BMC Public Health*, *16*(1), 1–11. https://doi.org/10.1186/s12889-016-3055-4

Fairclough, A. (2016). State of the Art Historians and the Civil Rights Movement, *24*(3), 387–398.

Finkelstein, D. M., Petersen, D. M., & Schottenfeld, L. S. (2017). Promoting children's physical activity in low-incomecommunities in Colorado: What are the barriers and opportunities? *Preventing Chronic Disease*, *14*(12). https://doi.org/10.5888/pcd14.170111

Fischer, C., Stockmayer, G., Stiles, J., & Hout, M. (2008). Distinguishing the geographic levels and social dimensions of US metropolitan segregation, 1960–2000. *Springer*, *35*(6), 739. Retrieved from https://idp.springer.com/authorize/casa?redirect_uri=https://link.springer.com/article/10.1 353/dem.2004.0002&casa_token=BUr0uOnwN2MAAAAA:BWRGnr98J1AW7wJYi77 NJzCo70uqceQLVs6dOY4UF5ipw9Xsavl-rln35NwjiyM4vvLYLDynDu26Rr2M06o

Fitzpatrick, K., Shi, X., Willis, D., & Niemeier, J. (2018). Obesity and place: Chronic disease in the 500 largest U.S. cities. *Obesity Research and Clinical Practice*, *12*(5), 421–425. https://doi.org/10.1016/j.orcp.2018.02.005

Francis, J., Giles-Corti, B., Wood, L., & Knuiman, M. (2012). Creating sense of community: The role of public space. *Journal of Environmental Psychology*, *32*(4), 401–409. https://doi.org/10.1016/j.jenvp.2012.07.002

Fraser, B. (2014). Maxism and Urban Culture.

Fraser, N. (2014). *Justice interruptus: Critical reflections on the" postsocialist" condition*. Retrieved from https://books.google.com/books?hl=en&lr=&id=ELZpAwAAQBAJ&oi=fnd&pg=PP1&d q=Fraser,+N+(1997)+Justice+Interruptus:+Critical+Reflections+on+the+'Postsocialist'+ &ots=JZ09RVqXXN&sig=yHgthR_RKUmwQ8-zUhTulOA_ICg

Fredrickson, B. L. (2004). The broaden-and-build theory of positive emotions. *Books.Google.Com*, *359*(1449), 1367–1377. https://doi.org/10.1098/rstb.2004.1512

Girardi, R. (2021). 'It's easy to mistrust police when they keep on killing us': A queer exploration of police violence and LGBTQ+ Victimization. *Journal of Gender Studies*. https://doi.org/10.1080/09589236.2021.1979481

Godwyll, J. M., & Buzinde, C. N. (2022). Conceptualizing linkages between community well-being and access to public space : an environmental justice perspective, 1–23.

Gordon, E., Elwood, S., & Mitchell, K. (2016). Critical spatial learning: participatory mapping, spatial histories, and youth civic engagement. *Children's Geographies*, *14*(5), 558–572. https://doi.org/10.1080/14733285.2015.1136736

Goth, B. (2015). GCU opens Maryvale course as Phoenix weighs golf debt.

Gould, K., & Lewis, T. (2016). *Green gentrification: Urban sustainability and the struggle for environmental justice*. Retrieved from https://books.google.com/books?hl=en&lr=&id=raOuDAAAQBAJ&oi=fnd&pg=PP1&ots=D_WmhCr-Ok&sig=2_adVOqTAl8PvNE09VOGIg1ultg

Graham, E.-. (2013). 2 Philosophies underlying human geography research'. *Methods in Human Geography:* Retrieved from https://books.google.com/books?hl=en&lr=&id=JXFGAQAAQBAJ&oi=fnd&pg=PA8&dq=reconstitution+of+human+geography+as+spatial+science+positivist+&ots=ejsjwI5Hji&sig=aCgebhyAqbEbnEULTajuOQWsBK8

Groat, L., & Wang, D. (2013). *Architectural research methods*. Retrieved from https://books.google.com/books?hl=en&lr=&id=sUf5DPJyEqAC&oi=fnd&pg=PR1&ots=OJ4uMzIngc&sig=E0uK6Gy0VbpYd3F7lb6MhtW4qh0

Groshong, L., Wilhelm Stanis, S. A., Kaczynski, A. T., & Hipp, J. A. (2020). Attitudes About Perceived Park Safety Among Residents in Low-Income and High Minority Kansas City, Missouri, Neighborhoods. *Environment and Behavior*, *52*(6), 639–665. https://doi.org/10.1177/0013916518814291

Gu, X., Tao, S., & Dai, U. (2017). Spatial accessibility of country parks in Shanghai, China. *Urban Forestry & Urban Greening*. Retrieved from https://www.sciencedirect.com/science/article/pii/S1618866716305556?casa_token=NvTdQzKjLdQAAAAA:F200kaWt24r43UzVkhHvlSS2fDS-GFENPY1i8N4n6gi9iReIdSc6oltFNPMoyplsYG8eZO2m4unY

Habermas, J. . (1989). *The structural transformation of the public sphere*. *MIT Press Cambridge*.

Harvey, D. (2010). *Social justice and the city*. Retrieved from https://books.google.com/books?hl=en&lr=&id=VCwLi2nVmooC&oi=fnd&pg=PA5&dq=harvey+1973+social+justice&ots=RgujMe71XT&sig=3P7qHkWCgYkt4bbMinvOcIs1cBY

Haybron, D. (2006). Well-being and virtue. *Ethics & Soc.* Retrieved from https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/jetshy2&section=9&casa_token=OdiLcMYAWQUAAAAA:SgT-kECoInTgATACxLsG114jzflxRNJXZkbAdWR-JIMj8-iKq7hN48crvEWAIl_Q23coSV-t

Heart of Isaac Community Center Fact Sheet. (2018). Heart of Isaac Community Center.

Heathwood, C. (2015). Desire-fulfillment theory. *The Routledge Handbook of Philosophy of Well-Being*, 135–147.

Hernández-Bonilla, M. (2008). Contested public space development: The case of low income neighbourhoods in Xalapa, Mexico. *Landscape Research*, *33*(4), 389–406. https://doi.org/10.1080/01426390802191162

Hirsch, A. (2006). Lawrence halprin's public spaces: Design, experience and recovery. three case studies. *Studies in the History of Gardens and Designed Landscapes*, *26*(1), 1–4. https://doi.org/10.1080/14601176.2006.10435451

Holifield, R., Porter, M., & Walker, G. (2011). *Spaces of environmental justice*. Retrieved from https://books.google.com/books?hl=en&lr=&id=UnG3DNhw6nIC&oi=fnd&pg=PT10&dq=environmental+justice+and+public+spaces&ots=6BViYkjbOe&sig=ao3VIYQHhN35v5ORlkYr9zW59yI

Holland, C., Clark, A., Katz, J., & Peace, S. (2007). Social interactions in urban public places - Open Research Online. Retrieved January 19, 2021, from http://oro.open.ac.uk/7445/

Hood Washington, S. (2004). *Packing Them In: An Archaeology of Environmental Racism in Chicago*. Retrieved from https://www.researchgate.net/publication/265231935

Hornik, K., Cutts, B., & Greenlee, A. (2016). Community Theories of Change: Linking Environmental Justice to Sustainability through Stakeholder Perceptions in Milwaukee (WI, USA). *International Journal of Environmental Research and Public Health*, *13*(10), 979. https://doi.org/10.3390/ijerph13100979

Hutomo, A. S., & Fuad, A. H. (2020). Engagement and well-being in public space. Case study: Suropati park Jakarta. *Evergreen*, *7*(1), 138–143. https://doi.org/10.5109/2740970

Jacobs, J. (1961). The Death and Life of Great American Cities. *Modern Library Ed*. Retrieved from https://scholar.google.com/scholar?hl=en&as_sdt=0%2C3&q=Jacobs%2C+J.+1961.+The+Death+and+Life+of+Great+American+Cities.+New+York%3A+Random+House.&btnG=

Jennings, V., Johnson Gaither, C., & Gragg, R. S. (2012, February 1). Promoting environmental justice through urban green space access: A synopsis. *Environmental Justice*. https://doi.org/10.1089/env.2011.0007

Jian, I. Y., Luo, J., & Chan, E. H. W. (2020). Spatial justice in public open space planning: Accessibility and inclusivity. *Habitat International*, *97*(February), 102122. https://doi.org/10.1016/j.habitatint.2020.102122

Kabisch, N., & Haase, D. (2014). Green justice or just green? Provision of urban green spaces in Berlin, Germany. *Landscape and Urban Planning*, *122*, 129–139. https://doi.org/10.1016/j.landurbplan.2013.11.016

Kadushin, C. (1968). Power, influence and social circles: A new methodology for studying opinion makers. *American Sociological Review*. Retrieved from https://www.jstor.org/stable/2092880?casa_token=lQnXsi8d8N4AAAAA:04GCyfxJ1ln XfsgNYmmFHNOT6Obb2fsTk3_0qxl_R0_6IwshCE6kbBRmQUAovU_jJxUpzKP0S_i6 HvS_1QzaUUtHAq4mvIsWFv2jAVAov93u2z2AvkMp

Kent, J. L., & Thompson, S. (2014). The Three Domains of Urban Planning for Health and Well-being. *Journal of Planning Literature*, *29*(3), 239–256. https://doi.org/10.1177/0885412214520712

Kim, J., & Nicholls, S. (2018). Access for all? Beach access and equity in the Detroit metropolitan area. *Journal of Environmental Planning and Management*, *61*(7), 1137–1161. https://doi.org/10.1080/09640568.2017.1335187

Knox. (1980). Measures of Accessibility as Social Indicators.

Kuta, A., Odumosu, J., & Ajayi, O. (2014). Using a GIS-based network analysis to determine urban greenspace accessibility for different socio-economic groups, specifically related to deprivation in. *Pdfs.Semanticscholar.Org*. Retrieved from https://pdfs.semanticscholar.org/48e1/17740aab018c31cf58fd78fb6921e1b739aa.pdf

Larson, L. R., Jennings, V., & Cloutier, S. A. (2016). Public parks and wellbeing in urban areas of the United States. *PLoS ONE*, *11*(4). https://doi.org/10.1371/journal.pone.0153211

Law, L. (2002). Defying disappearance: Cosmopolitan public spaces in Hong Kong. *Urban Studies*, *39*(9), 1625–1645. https://doi.org/10.1080/00420980220151691

Ledwith, M. (2020). *Community development: A critical approach*. Retrieved from https://books.google.com/books?hl=en&lr=&id=8yjJDwAAQBAJ&oi=fnd&pg=PR8&dq =community+development+ledwith&ots=qriEP3jkze&sig=P81kJhgCFNveJws5yUa3YN rv0AE

Lee, J., Kurisu, K., An, K., & Hanaki, K. (2015). Development of the compact city index and its application to Japanese cities. *Urban Studies*, *52*(6), 1054–1070. https://doi.org/10.1177/0042098014536786

Lee, S. J. (2015). Well-Being and Community Development Conceptions and Applications. https://doi.org/10.1007/978-3-319-12421-6

Lee, S., Kim, Y., & Phillips, R. (2015). Exploring the Intersection of Community Well-Being and Community Development (pp. 1–7). https://doi.org/10.1007/978-3-319-12421-6_1

Lefebvre, H., & Nicholson-Smith, D. (1991a). *The production of space*. Retrieved from https://books.google.com/books?hl=en&lr=&id=b9WWAwAAQBAJ&oi=fnd&pg=PA289&dq=social+production+of+space+lefebvre&ots=KV1rDJnnD9&sig=4m7Hdcqp22dyh dokcr4NV6NgyZI

Lertzman, R. (2015). *Environmental Melancholia: Psychoanalytic dimensions of engagement. Environmental Melancholia: Psychoanalytic Dimensions of Engagement.* Taylor and Francis Inc. https://doi.org/10.4324/9781315851853

Li, F., Fisher, K., & Brownson, R. (2005). Multilevel modelling of built environment characteristics related to neighbourhood walking activity in older adults. *Journal of Epidemiology & Community Health*, *59*(7), 558–564. Retrieved from https://jech.bmj.com/content/59/7/558.short

Lindsay, J. M. (2006). *Techniques in Human Geography*. Retrieved from https://books.google.com/books?hl=en&lr=&id=_9iEAgAAQBAJ&oi=fnd&pg=PP1&dq =interpretivism+and+human+geography&ots=i4xAi-cazN&sig=OhCGPb121OB4RKFL2AHewLy2Qak

Liotta, C., Kervinio, Y., Levrel, H., & Tardieu, L. (2020). Planning for environmental justice-reducing well-being inequalities through urban greening. *Environmental Science & Policy*. Retrieved from https://www.sciencedirect.com/science/article/pii/S146290111931086X?casa_token=D8 TO7fhtypYAAAAA:KtZTSocqzttu_45MYOpG7nzjQHuzaTpjDi_sGZSY4Y-SCrbar58Lb5jQQHVIdgLlxSVS5fpFaD0

Llano, P. (2020). From the urban project to the participative public space project: A historical approach. *Módulo Arquitectura CUC*. Retrieved from https://52.0.212.120/moduloarquitecturacuc/article/download/2887/2768

Loukaitou-Sideris, A. (1995). Urban Form and Social Context: Cultural Differentiation in the Uses of Urban Parks. *Journal of Planning Education and Research*, *14*(2), 89–102. https://doi.org/10.1177/0739456X9501400202

Low, S. . (1996). Spatializing culture: the social production and social construction of public space in Costa Rica. *American Ethnologist*. Retrieved from https://anthrosource.onlinelibrary.wiley.com/doi/abs/10.1525/ae.1996.23.4.02a00100?cas a_token=sTb7GzxhvlEAAAAA:UKM_Gt3d8g5f9RlKg6OLT5QeN3LHG001rKQrvUg WHrop8vj3LpfsQIEoTn7dbR_XQuyA5_EEMoNWvslW

Low, S. (2013). *Public space and diversity: Distributive, procedural and interactional justice for parks*. *m.gc.cuny.edu*. Retrieved from https://m.gc.cuny.edu/CUNY_GC/media/CUNY-Graduate-Center/PDF/Programs/Anthropology/Faculty/Public-Space-and-Diversity.pdf

Low, S, & Smith, N. (2013). *The politics of public space*. Retrieved from https://books.google.com/books?hl=en&lr=&id=x8T7qheiI2oC&oi=fnd&pg=PR1&dq=public+spaces&ots=RNobH0r5qD&sig=wsxlhKvLzCRj4b35I1aUmSeP3-g

Low, S, Taplin, D., & Scheld, S. (2009). *Rethinking urban parks: Public space and cultural diversity*. Retrieved from https://books.google.com/books?hl=en&lr=&id=cUhYBCSAYIEC&oi=fnd&pg=PR5&dq=Park+amenities+as+indicators+of+differential+space&ots=NvXqIm0XCs&sig=XAg9TcWL6t5EoDmpsh1QscY2HjY

Low, S. (2016). Public space and diversity: Distributive, procedural and interactional justice for parks. In *The Ashgate Research Companion to Planning and Culture* (pp. 295–309). Taylor and Francis. https://doi.org/10.4324/9781315613390-33

Low, S., & Iveson, K. (2016). Propositions for more just urban public spaces. *City*, *20*(1), 10–31. https://doi.org/10.1080/13604813.2015.1128679

Low, S.M, Taplin, D., & Scheld, S. (2009). *Rethinking urban parks: Public space and cultural diversity*. Retrieved from https://books.google.com/books?hl=en&lr=&id=cUhYBCSAYIEC&oi=fnd&pg=PR5&dq=how+historical+cultural+values+have+been+lost+in+built+design+&ots=NwTpLm-VBs&sig=e2VIVHevAyLxAyz0C5YbbxwqA2o

Lucy, W. (1981). Equity and Planning For Local Services. *Journal of the American Planning Association*, *47*(4), 447–457. https://doi.org/10.1080/01944368108976526

Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin*, *131*(6), 803–855. https://doi.org/10.1037/0033-2909.131.6.803

Maas, J., Verheij, R. A., De Vries, S., Spreeuwenberg, P., Schellevis, F. G., & Groenewegen, P. P. (2009). Morbidity is related to a green living environment. *Journal of Epidemiology and Community Health*, *63*(12), 967–973. https://doi.org/10.1136/jech.2008.079038

Maas, J., Verheij, R., Groenewegen, P., De Vries, S., & Spreeuwenberg, P. (2006). Green space, urbanity, and health: How strong is the relation? *Journal of Epidemiology and Community Health*, *60*(7), 587–592. https://doi.org/10.1136/jech.2005.043125

Macedo, Joseli, & Haddad, M. A. (2016a). Equitable distribution of open space: Using spatial analysis to evaluate urban parks in Curitiba, Brazil. *Environment and Planning B: Planning and Design*, *43*(6), 1096–1117. https://doi.org/10.1177/0265813515603369

Macedo, Joseli, & Haddad, M. A. (2016b). Equitable distribution of open space: Using spatial analysis to evaluate urban parks in Curitiba, Brazil. *Environment and Planning B: Planning and Design*, *43*(6), 1096–1117. https://doi.org/10.1177/0265813515603369

Magallanes, F. (2020). 100 YEARS OF DEEP TIME : CELA 2020. In *For Whites Only: A Timely Commentary about Latino Culture and Landscape Architecture* (p. 240).

Massey, D. S. (1990). American Apartheid: Segregation and the Making of the Underclass. *American Journal of Sociology*, *96*(2), 329–357. https://doi.org/10.1086/229532

Massey, R. (2004). *Environmental Justice: Income, Race, and Health A GDAE Teaching Module on Social and Environmental Issues in Economics*. *Citeseer*. Retrieved from http://ase.tufts.edu/gdaehttp://ase.tufts.edu/gdae

McGaw, J., Pieris, A., & Potter, E. (2011, December 1). Indigenous place-making in the city: Dispossessions, occupations and implications for cultural architecture. *Architectural Theory Review*. https://doi.org/10.1080/13264826.2011.621544

Mehta, V. (2007). Lively streets: Determining environmental characteristics to support social behavior. *Journal of Planning Education and Research*, *27*(2), 165–187. https://doi.org/10.1177/0739456X07307947

Messner, S. (1980). Income inequality and murder rates: Some cross-national findings. *Comparative Social Research*. Retrieved from https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=86466

Mills, J., Clark, M. S., Ford, T. E., & Johnson, M. (2004). Measurement of communal strength. *Personal Relationships*, *11*(2), 213–230. https://doi.org/10.1111/j.1475-6811.2004.00079.x

Mishchuk, H., Samoliuk, N., Bilan, Y., & Streimikiene, D. (2018). Income Inequality and its Consequences within the Framework of Social Justice. Retrieved April 2, 2021, from http://yadda.icm.edu.pl/yadda/element/bwmeta1.element.baztech-578044de-f1cd-4db3-81c0-3a8b07dd3384

Mitchell, D. (2003). *The right to the city: Social justice and the fight for public space*. Retrieved from https://books.google.com/books?hl=en&lr=&id=2NKoBQAAQBAJ&oi=fnd&pg=PP1&dq=Forms+indicative+of+public+spaces&ots=jZcBeSpE15&sig=l6AgxDq6oNFrSprKpOCjvQkuJrw

Mladenka, K. R. (1989). The Distribution of an Urban Public Service. *Urban Affairs Quarterly*, *24*(4), 556–583. https://doi.org/10.1177/004208168902400405

Mladenka, K. R., & Hill, K. Q. (1977). The distribution of benefits in an urban environment: Parks and Libraries in Houston. *Urban Affairs Review*, *13*(1), 73–94. https://doi.org/10.1177/107808747701300104

Mohai, P., Pellow, D., & Roberts, J. (2009). Environmental justice. *Annual Review of Environment and Resources*, *34*, 405–430. https://doi.org/10.1146/annurev-environ-082508-094348

Morello-Frosch, R., Pastor, M., Porras, C., & Sadd, J. (2002). Environmental justice and regional inequality in Southern California: Implications for furture research. *Environmental Health Perspectives*, *110*(SUPPL. 2), 149–154. https://doi.org/10.1289/ehp.02110s2149

Morris, A. . (1986). *The origins of the civil rights movement*.

Morse, W. C., Lowery, D. R., & Steury, T. (2014). Exploring Saturation of Themes and Spatial Locations in Qualitative Public Participation Geographic Information Systems Research. *Society and Natural Resources*, *27*(5), 557–571. https://doi.org/10.1080/08941920.2014.888791

Mouratidis, K. (2018a). Built environment and social well-being: How does urban form affect social life and personal relationships? *Cities*, *74*(June 2017), 7–20. https://doi.org/10.1016/j.cities.2017.10.020

Mouratidis, K. (2018b). Built environment and social well-being: How does urban form affect social life and personal relationships? *Cities*, *74*, 7–20. https://doi.org/10.1016/j.cities.2017.10.020

Mouratidis, K. (2018c). Rethinking how built environments influence subjective well-being: a new conceptual framework. *Journal of Urbanism: International Research on Placemaking and Urban Sustainability*, *11*(1), 24–40. https://doi.org/10.1080/17549175.2017.1310749

Mullenbach, L., & Baker, L. (2020). Environmental Justice, Gentrification, and Leisure: A Systematic Review and Opportunities for the Future. *Leisure Sciences*, *42*(5–6), 430–447. https://doi.org/10.1080/01490400.2018.1458261

Murdock, E. (2019). Rethinking environmental spaces and racism. *The Routledge Handbook of Philosophy of the City*. Retrieved from https://books.google.com/books?hl=en&lr=&id=QAKqDwAAQBAJ&oi=fnd&pg=PT40 7&dq=environmental+racism+public+spaces&ots=cmB8N83CNV&sig=VUP26VfJn6A8 W-yZnN6wW71BraQ

Murray, M. (2010). Private Management of Public Spaces: Nonprofit Organizations and Urban Parks. *Harvard Environmental Law Review*, *34*. Retrieved from https://heinonline.org/HOL/Page?handle=hein.journals/helr34&id=181&div=&collection =

Neighborhood Services Department. (2022). By Geographic Area - NSDOnline.Web. Retrieved March 19, 2022, from https://nsdonline.phoenix.gov/NeighborhoodOrgs/ByGeographicArea

Németh, J., & Schmidt, S. (2011). The privatization of public space: modeling and measuring publicness. *Journals.Sagepub.Com*, *38*(1), 5–23. https://doi.org/10.1068/b36057

Nussbaum, M., & Sen, A. (1993). *The quality of life*. Retrieved from https://books.google.com/books?hl=en&lr=&id=QurkDwAAQBAJ&oi=fnd&pg=PP1&ot s=1zylSWOzna&sig=5SR3jmoLceSKKZ025s1xzzdHTnk

Nutsford, D., Pearson, A. L., & Kingham, S. (2013). An ecological study investigating the association between access to urban green space and mental health. *Public Health*, *127*(11), 1005–1011. https://doi.org/10.1016/j.puhe.2013.08.016

OECD. (2008). 2008 OECD Household Survey on Environmental Attitudes and Behaviour : Data Corroboration.

Oh, K., & Jeong, S. (2007a). Assessing the spatial distribution of urban parks using GIS. *Landscape and Urban Planning*, *82*(1–2), 25–32. https://doi.org/10.1016/j.landurbplan.2007.01.014

Oranratmanee, R., & Sachakul, V. (2014). Streets as Public Spaces in Southeast Asia: Case Studies of Thai Pedestrian Streets. *Journal of Urban Design*, *19*(2), 211–229. https://doi.org/10.1080/13574809.2013.870465

Pastor, M., Sadd, J., & Hipp, J. (2001). Which came first? Toxic facilities, minority move-in, and environmental justice. *Journal of Urban Affairs*, *23*(1), 1–21. https://doi.org/10.1111/0735-2166.00072

Pasaogullari, N., & Doratli, N. (2004). Measuring accessibility and utilization of public spaces in Famagusta. *Cities*, *21*(3), 225–232. https://doi.org/10.1016/j.cities.2004.03.003

Pastor, M., Sadd, J. L., & Morello-Frosch, R. (2004, June). Waiting to inhale: The demographics of toxic air release facilities in 21st-century California. *Social Science Quarterly*. https://doi.org/10.1111/j.0038-4941.2004.08502010.x

Peace, S., Rowles, G., & Bernard, M. (2013). Social interactions in public spaces and places: A conceptual overview. *Environmental Gerontology. Making Meaningful Places in Old Age*. Retrieved from https://books.google.com/books?hl=en&lr=&id=PsXS_YUtQVoC&oi=fnd&pg=PA25&dq=social+access+to+public+spaces&ots=ehl8xDBfOY&sig=zrOEiNwx7dT7OsppAnS5pT_sr7c

Petersen, E., Fiske, A. P., & Schubert, T. W. (2019). The Role of Social Relational Emotions for Human-Nature Connectedness. *Frontiers in Psychology*, *10*, 2759. https://doi.org/10.3389/fpsyg.2019.02759

Phoenix City--Maryvale (West) PUMA, AZ - Profile data - Census Reporter. (2019). Retrieved February 24, 2021, from https://censusreporter.org/profiles/79500US0400123-phoenix-city-maryvale-west-puma-az/

Piketty, T. (2017). *Brahmin Left vs Merchant Right: Rising Inequality and the Changing Structure of Political Conflict*. *129.199.194.17*. Retrieved from http://129.199.194.17/files/Piketty2018.pdf

Planning and Development Department. (2020). *City of Phoenix*. *Staff Report*. Retrieved from https://online210.psych.wisc.edu/wp-content/uploads/PSY-210_Unit_Materials/PSY-210_Unit01_Materials/Frost_Blog_2020.pdf%0Ahttps://www.economist.com/special-report/2020/02/06/china-is-making-substantial-investment-in-ports-and-pipelines-worldwide%0Ahttp://

Project for Public Spaces. (2000). *How to turn a place around: a handbook for creating successful public spaces*. Retrieved from https://scholar.google.com/scholar_lookup?hl=en&publication_year=2000&author=PPS&title=How+to+Turn+a+Place+Around%3A+A+Handbook+for+Creating+Successful+Public+Spaces

Pulido, L. (2000a). Rethinking environmental racism: White privilege and urban development in southern California. *Annals of the Association of American Geographers*, *90*(1), 12–40. https://doi.org/10.1111/0004-5608.00182

Rakauskiene, O. G., & Strunz, H. (2016). Approach to reduction of socioeconomic inequality: Decrease of vulnerability and strengthening resilience. *Economics and Sociology*, *9*(4), 243–258. https://doi.org/10.14254/2071-789X.2016/9-4/15

Raleigh, E., & Galster, G. (2015). Neighborhood Disinvestment, Abandonment, and Crime Dynamics. *Journal of Urban Affairs*, *37*(4), 367–396. https://doi.org/10.1111/juaf.12102

Rawls, J. (1971). A theory of justice.

Ribot, J. C., & Peluso, N. L. (2003). A theory of access. *Rural Sociology*, *68*(2), 153–181. https://doi.org/10.1111/j.1549-0831.2003.tb00133.x

Rigolon, A, Fernandez, M., Harris, B., & Stewart, W. (2019). An Ecological Model of Environmental Justice for Recreation. *Leisure Sciences*, *0400*. https://doi.org/10.1080/01490400.2019.1655686

Rigolon, Alessandro. (2016, September 1). A complex landscape of inequity in access to urban parks: A literature review. *Landscape and Urban Planning*. Elsevier B.V. https://doi.org/10.1016/j.landurbplan.2016.05.017

Rigolon, Alessandro, & Flohr, T. L. (2014). Access to Parks for Youth as an Environmental Justice Issue: Access Inequalities and Possible Solutions. *Buildings*, *4*, 69–94. https://doi.org/10.3390/buildings4020069

Rittel, H. W. J., & Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy Sciences*, *4*(2), 155–169. https://doi.org/10.1007/BF01405730

Rodgers, D. (2003). Youth gangs in Colombia and Nicaragua: new forms of violence, new theoretical directions? *Reaping Causality, Exploring Linkages and Violence*. Retrieved from https://www.researchgate.net/profile/Dennis_Rodgers/publication/30528703_Youth_gangs_in_Colombia_and_Nicaragua_new_forms_of_violence_new_theoretical_directions/links/560661b508ae8e08c08d38d7.pdf#page=117

Roisman, F. (1995). The Lessons of American Apartheid: The Necessity and Means of Promoting Residential Racial Integration. Retrieved from https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/ilr81&section=21

Roof, K., & Oleru, N. (2008). Public health: Seattle and King County's push for the built environment. *Journal of Environmental Health*. Retrieved from https://www.jstor.org/stable/26327656?casa_token=YMdKZ0MQRPQAAAAA:X1-KNiZ_TEz-wldii_sQ9b9KIlliWbkBUy-ka89N7XEgEodYU_2dE0kFAPeM1Nruy-TwHzlqDstij_ImeYl1NeeMiZjWURsw0rolpIXCWqHV1wpsoS2L

Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*. https://doi.org/10.1146/annurev.psych.52.1.141

Sallis, J., & Glanz, K. (2006). The role of built environments in physical activity, eating, and obesity in childhood. *The Role of Built Environments in Physical Activity, Eating, and Obesity in Childhood. The Future of Children*, *16*(1), 89–108. Retrieved from https://muse.jhu.edu/article/194629/summary

Sampson, R. J. (2003). The Neighborhood Context of Well-Being. *Perspectives in Biology and Medicine*, *46*(19). https://doi.org/10.1353/pbm.2003.0073

Sander, H. A. (2016). Assessing impacts on urban greenspace, waterways, and vegetation in urban planning. *Journal of Environmental Planning and Management*, *59*(3), 461–479. https://doi.org/10.1080/09640568.2015.1017041

Schindler, S. (2015). Architectural Exclusion: Discrimination and Segregation Through Physical Design of the Built Environment on JSTOR. Retrieved March 1, 2022, from https://www.jstor.org/stable/43617074?casa_token=71R6fGqK5pcAAAAA%3A3-4QD0AZ-GeX3K8ikoB01efLuTBb0rhYuEIfsyPXwcBEmvIfxaLqUw3C_8y6Vu4uWK_HYyzAXcH5BrscYY1W3LjOnCb53sG47ZB-Ehxqls68qwGx_5PF&seq=1#metadata_info_tab_contents

Schlosberg, D. (2004). Reconceiving Environmental Justice: Global Movements And Political Theories. *Rsa.Tandfonline.Com*, *13*(3), 517–540. https://doi.org/10.1080/0964401042000229025

Schlossberg, M., & Shuford, E. (2005). Delineating public & participation in PPGIS. Retrieved from http://scholarsbank.uoregon.edu/xmlui/handle/1794/1343

Selgrath, J. ., Gergel, S. ., & Vincent, C. . (2018). Incorporating spatial dynamics greatly increases estimates of long-term fishing effort: a participatory mapping approach.

Sell, J. L. (1992). Children and toxic hazards: The Maryvale cancer cluster. In *Assoc. Amer. Geoeg. 88th Annu. Meet. San Diego, California*.

Sen, A. (2009). *The Idea of Justice Amartya Sen*. Retrieved from https://books.google.com/books?hl=en&lr=&id=L-_Lenq6TIsC&oi=fnd&pg=PR5&dq=Sen,+A+(2009)+The+Idea+of+Justice.&ots=qhuGvn8ft8&sig=CdSwudv4TlZdTqD3VAd72iS6TH4

Sharp, T. (1945). Town planning.

Smith, B., & Grenon, P. (2004). The Cornucopia of Formal-Ontological Relations. *Dialectica*. Retrieved from https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1746-8361.2004.tb00305.x?casa_token=YAIM20reiR0AAAAA:jTWIs3_W_l52mBomBResBcl_D_7-L-oizKqKeOxql5GJUf8B9wJUZmalXgQ62caXAmDlMPoiqC1atq0p

Soja, E. W. (2016). The City and Spatial Justice. *Justice et Injustices Spatiales*, 56–72. https://doi.org/10.4000/books.pupo.415

Srinivasan, S., O'Fallon, L. R., & Dearry, A. (2003). Creating Healthy Communities, Healthy Homes, Healthy People: Initiating a Research Agenda on the Built Environment and Public Health. *American Journal of Public Health*, *93*(9), 1446–1450. https://doi.org/10.2105/AJPH.93.9.1446

Stake, R. (2005). Qualitative case studies. Retrieved from https://psycnet.apa.org/record/2005-07735-017

Stanley, B. W., Stark, B. L., Johnston, K. L., & Smith, M. E. (2012). Urban Open Spaces in Historical Perspective: A Transdisciplinary Typology and Analysis. *Urban Geography*, *33*(8), 1089–1117. https://doi.org/10.2747/0272-3638.33.8.1089

Stewart, W. (2014). Leisure Research to Enhance Social Justice. *Leisure Sciences*. Taylor and Francis Inc. https://doi.org/10.1080/01490400.2014.916961

Stigsdotter, U. K., Randrup, T. B., Ekholm, O., Schipperijn, J., Toftager, M., & Kamper-Jørgensen, F. (2010). Health promoting outdoor environments - Associations between green space, and health, health-related quality of life and stress based on a Danish national representative survey. *Scandinavian Journal of Public Health*, *38*(4), 411–417. https://doi.org/10.1177/1403494810367468

Stodolska, M., Shinew, K. J., Acevedo, J. C., & Izenstark, D. (2011). Perceptions of urban parks as havens and contested terrains by Mexican-Americans in Chicago neighborhoods. *Leisure Sciences*, *33*(2), 103–126. https://doi.org/10.1080/01490400.2011.550220

Sullivan, D., & Picarsic, J. (2012). The Subtleties of Social Exclusion: Race, Social The Subtleties of Social Exclusion: Race, Social Class, and the Exclusion of Blacks in a Racially Class, and the Exclusion of Blacks in a Racially Mixed Neighborhood Mixed Neighborhood The Subtleties of Soc. *Sociology Mind*, *2*(2), 153–157. https://doi.org/10.4236/sm.2012.22020

Talen, E. (1998). Visualizing fairness: Equity maps for planners. *Journal of the American Planning Association*, *64*(1), 22–38. https://doi.org/10.1080/01944369808975954

Talen, E, & Anselin, L. (1998). Assessing Spatial Equity: An Evaluation of Measures of Accessibility to Public Playgrounds. *Environment and Planning A: Economy and Space*, *30*(4), 595–613. https://doi.org/10.1068/a300595

Talen, E. (1997). The social equity of urban service distribution: An exploration of park access in pueblo, colorado, and macon, georgia. *Urban Geography*, *18*(6), 521–541. https://doi.org/10.2747/0272-3638.18.6.521

Talen, E. (2010). The spatial logic of parks. *Journal of Urban Design*, *15*(4), 473–491. https://doi.org/10.1080/13574809.2010.502335

Thompson, I. (2000). Aesthetic, social and ecological values in landscape architecture: A discourse analysis. *Ethics, Place and Environment*, *3*(3), 269–287. https://doi.org/10.1080/713665903

Thompson, S., & Kent, J. (2014). Healthy built environments supporting everyday occupations: Current thinking in urban planning. *Journal of Occupational Science*, *21*(1), 25–41. https://doi.org/10.1080/14427591.2013.867562

Tinnevelt, R., & Geenens, R. (2008). *Does truth matter?: Democracy and public space*. Retrieved from https://link.springer.com/content/pdf/10.1007/978-1-4020-8849-0.pdf

Trott, R. (2013). Villa de Paz golf course set to close | Archives | westvalleyview.com. Retrieved August 2, 2021, from https://www.westvalleyview.com/archives/villa-de-paz-golf-course-set-to-close/article_f1f13c5c-e3c1-5045-8012-789bfdfdeb0b.html

Tulloch, D. (2003). What Ppgis Really Needs Is ... *2nd Annual Public Participation GIS Conference: URISA*. Retrieved from http://downloads2.esri.com/campus/uploads/library/pdfs/58993.pdf

UN-Habitat. (2018). *SDG Indicator 11.7.1 Training Module: Public Space*. Nairobi. Retrieved from https://unhabitat.org/sites/default/files/2020/07/indicator_11.7.1_training_module_public _space.pdf

UNESCO. (2017). Inclusion Through Access to Public Space. Retrieved April 3, 2021, from http://www.unesco.org/new/en/social-and-human-sciences/themes/urban-development/migrants-inclusion-in-cities/good-practices/inclusion-through-access-to-public-space/

Urry, J. (1985). Social relations, space and time. *Social Relations and Spatial Structures*, 20–48. https://doi.org/10.1007/978-1-349-27935-7_3

Vajjhala, S. P. (2005). Integrating GIS and Participatory Mapping in Community Development Planning. In *ESRI international users conference*. Retrieved from http://www.iapad.org/

Verwiebe, R., & Wegener, B. (2000). *Social Inequality and the Perceived Income Justice Gap*. *Social Justice Research* (Vol. 13). Retrieved from https://idp.springer.com/authorize/casa?redirect_uri=https://link.springer.com/article/10.1 023/A:1007545823040&casa_token=YGxTQNxQQucAAAAA:X2sgexzTreZocytHHpr QWnR4wSR71AdZlOQ3wTIWrqLeAehhn6o4QBXGiFb5fJmAZMOo4HAhBYkOwj_V ZQ

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Weiss, C. C., Purciel, M., Bader, M., Quinn, J. W., Lovasi, G., Neckerman, K. M., & Rundle, A. G. (2011). Reconsidering access: Park facilities and neighborhood disamenities in New York City. *Journal of Urban Health*, *88*(2), 297–310. https://doi.org/10.1007/s11524-011-9551-z

Wen, M., Zhang, X., Harris, C., & Holt, J. (2013a). Spatial disparities in the distribution of parks and green spaces in the USA. *Annals of Behavioral Science*. Retrieved from https://academic.oup.com/abm/article-abstract/45/suppl_1/S18/4563966

Werlen, B. (1993). *Society action and space: an alternative human geography*. Retrieved from https://books.google.com/books?hl=en&lr=&id=72HvR3XttU4C&oi=fnd&pg=PP1&dq=reconstitution+of+human+geography+as+spatial+science+positivist+&ots=t6KnM7Opd3&sig=qZ4QlMdQ95d2KC7YA908C09SkCk

Whitlock, J. (2007). The role of adults, public space, and power in adolescent community connectedness. *Journal of Community Psychology*. Retrieved from https://onlinelibrary.wiley.com/doi/abs/10.1002/jcop.20161?casa_token=enDFbd1ZBakAAAAA:PVRSAu0T1y_Gq26WzTIr4b5hGuy5MDsfz_55AijpOSOmkF00_p906wP5C7yoVifA_5GGc6qNeVd9liHe

Whyte, W.H. (1980). The social life of small urban spaces. Retrieved from https://trid.trb.org/view/521122

Wiletsky. (2015). Making Strides in Maryvale, (October).

Wiletsky, L., Choate, D., & Katz, C. (2007). Making strides in Maryvale. Retrieved from https://asu.pure.elsevier.com/en/publications/making-strides-in-maryvale

Williams, J. (2013). *"Toward a Theory of Spatial Justice."*

Williams, M. (2000). Interpretivism and generalisation. *Sociology*, *34*(2), 209–224. https://doi.org/10.1177/s0038038500000146

Wilson, S., Hutson, M., & Mujahid, M. (2008). How planning and zoning contribute to inequitable development, neighborhood health, and environmental injustice. *Environmental Justice, 1*(4), 211–216. Retrieved from https://www.liebertpub.com/doi/abs/10.1089/env.2008.0506

Witten, K., & Ivory, V. (2018). Urban public spaces, social inclusion and health. In *Routledge Handbook of Health Geography* (pp. 259–266). Taylor and Francis. https://doi.org/10.4324/9781315104584-37

Wolch, J., Wilson, J. P., & Fehrenbach, J. (2005). Urban Geography Parks and Park Funding in Los Angeles: An Equity-Mapping Analysis. *Urban Geography*, *26*(1), 4–35. https://doi.org/10.2747/0272-3638.26.1.4

Worpole, K., & Knox, K. (2007). *The social value of public spaces*.

Yin, R. (2011). *Applications of case study research*. Retrieved from https://books.google.com/books?hl=en&lr=&id=FgSV0Y2FleYC&oi=fnd&pg=PP1&dq=Case+Study+&ots=42f3UtwpMk&sig=Kz_UGNuODhyhMuT_kZGS_jlJ018

Yin, R. (2017). *Case study research and applications: Design and methods*. Retrieved from https://books.google.com/books?hl=en&lr=&id=fHE3DwAAQBAJ&oi=fnd&pg=PP1&dq=in,+R.+K.+(2017).+Case+study+research+and+applications:+Design+and+methods,&ots=bBAh7r8GSq&sig=TDt1prnJhQ7Fc2Xzqr8xgb2JfZM

Yuan, Q., & Wang, J. (2021). Goods movement, road safety, and spatial inequity: Evaluating freight-related crashes in low-income or minority neighborhoods. *Journal of Transport Geography*, *96*(February), 103186. https://doi.org/10.1016/j.jtrangeo.2021.103186

Zenk, S. N., Schulz, A. J., Israel, B. A., James, S. A., Bao, S., & Wilson, M. L. (2005). Neighborhood Racial Composition, Neighborhood Poverty, and the Spatial Accessibility of Supermarkets in Metropolitan Detroit. *American Journal of Public Health*, *95*(4), 660–667. https://doi.org/10.2105/AJPH.2004.042150

Zhang, X., Lu, H., & Holt, J. B. (2011). Modeling spatial accessibility to parks: A national study. *International Journal of Health Geographics*, *10*. https://doi.org/10.1186/1476-072X-10-31

Zimring, C. (2017). *Clean and white: A history of environmental racism in the United States*. Retrieved from https://books.google.com/books?hl=en&lr=&id=OtmRDgAAQBAJ&oi=fnd&pg=PP9&dq=environmental+racism+public+spaces&ots=BRbrgE6PQb&sig=erVd9c9eUgBG-ALjOxaZ85WYi_E

CHAPTER 4

ARTICLE 3

FACILITATING ACCESS TO PUBLIC SPACE THROUGH COMMUNITY WELL-BEING: THE ROLE OF DESIGN PROFESSIONALS WHO IDENTIFY AS ETHNIC MINORITIES

Abstract

The purpose of this study was to understand how design professionals (i.e., planners, building and landscape architects) who identify as ethnic minorities, perceive their role in facilitating access to public spaces. Specific attention is paid to perceptions of how planning and design are linked, if at all, to community well-being based on the exchanges that take place across the different dimensions of public spaces. Marginalized and minoritized communities have been prioritized in the goal of providing universal access to public spaces, given the historical barriers that have challenged the relationship between such groups and the respective locales they inhabit. Representation in design practices has been asserted to be key in shaping equity in the built environment yet the role played by minority professionals in facilitating access to public spaces has yet to be extensively examined. Barriers of access emanate from the exchanges across user communities, design professionals and physical features of public spaces. The study hence focuses on the described role minority design professionals (*i.e.,* planners, building and landscape architects) play in the exchanges that take place and the related community well-being outcomes, towards access. The conceptual framework adopted in this study comprised of an intersection between *Lefebvre's Tripartite framework* and *Bishop's Network Theory of Well-being*, which respectively theorize the exchanges in space

production and the well-being of groups. By drawing on interviews, 23 design professionals belonging to ethnic minority special interest-based groups were engaged to understand the role they play in facilitating access through the highlighted exchanges and outcomes. Study participants described the role they play as agents of the ethnic minority groups they belong to, in exchanges that facilitate access during planning and design practice. This role was described as informed by the *lived experiences* of minority groups in the built environment, which encompassed *community history* and *personal experiences*. Participants described their roles in exchanges as focal to positive outcomes linked to procedural, distributive, and interactional justice. Such roles encompassed *inclusive processes* (facilitating community agency and sense of ownership), the awareness of *contextual concerns* (comprising scarcity-based concerns and place-based meanings) and *feature considerations* (informed by needs awareness) respectively.

Key words: Access; Public spaces; Community well-being; Design professionals; Ethnic minorities

Introduction

Professionals who are trained to bear the responsibility of shaping the built environment are expected to be the foremost agents of environmental justice (Wilson et al., 2008). This is because such professionals (e.g., planners, building and landscape architects) are primarily tasked with equitable planning, design, and development of human-made surroundings. Public spaces in their idealization as publicly funded resources that are accessible for individual and communal use have been key to examining the environmental justice role played by the professionals in charge of shaping the built environment (Daniere & Douglass, 2008; Jian et al., 2020; Alessandro Rigolon & Németh, 2018). This role has been predominantly examined based on their adherence to normative principles of distributive justice (i.e., fair allocation of resources) especially for vulnerable populations, given the proven reliance of such communities on publicly funded resources (e.g., minority and low-income groups) (Talen, 2010). Professionals' adherence to principles of equity like proximity (i.e., nearness in space) and diversity (i.e., varying social and land-use characteristics) during the planning and designing of public spaces has been extensively investigated (Crompton & Wicks, 1988; Talen & Anselin, 1998; Talen, 2010). Several studies have examined how planners, building, and landscape architects facilitate access through minimum cost of travel to public spaces, time of travel, and distance of travel and the spatial coverage of resources (Nicholls & Shafer, 2001; Omer, 2006; Macedo & Haddad, 2016). However, for vulnerable populations, access to public spaces goes beyond these distributive justice factors.

Access has also been linked to procedural and interactional justice, respectively arising from the inclusion of the public in decision making processes and favorable

experiences within the environment that enable use (Low & Smith, 2013). In relation to

barriers to procedural justice, planning ordinances spearheaded by home owners

associations as well as parks and recreation boards with a lack of representation of

vulnerable populations, have fostered segregated spaces (Boone et al., 2009a). Similarly,

access is facilitated by prioritizing interactional justice through a consideration of ethno-

racial characteristics and cultural diversity in the development of public spaces (Byrne,

Wolch, & Zhang, 2009; Low, Taplin, & Scheld, 2009;Shi, Gou, & Chen, 2014; Sister,

Jennifer, Wolch, & Wilson, 2010). Consequently, access to public spaces has been

proven to culminate in distributive, procedural and interactional constructs of

environmental justice with proven linkages to community well-being ideals (Aiyer &

Zimmerman, 2015; Boone, 2008; Byrne, Wolch, & Zhang, 2009; Floyd, 2014; Low &

Iveson, 2016).

The relationship between the well-being of different communities and built-

environments continues to attract growing interest (Mouratidis, 2018b, 2018c)

Community well-being is a fairly nascent concept. It has emerged from the realization

that the well-being of a community transcends individual success to encompass

conditions that support the continous existence and flourishing of the collective (Lee,

2015). Community well-being is hence described as encompassing the social,

environmental, cultural, economic and political conditions perceived by individuals and

the groups they belong to, as critical to their collective existence and success (Wiseman

& Brasher, 2008). In investigating how these conditions translate into community well-

being for groups bounded by some shared location, studies focused on the built

environment have found positive associations between perceived quality of social life and

high density compact neighborhoods, shorter distances to the city centers and mixed land-use (Bramley, Dempdey, Power, Brown, & Watkins, 2009; Lee, Kurisu, An, & Hanaki, 2015; Mouratidis, 2018a).

In relation to distributive justice, access emanating from proximity to public spaces such as parks has been positively associated with quality of life, mental and physical health of communities (Li, Fisher, & Brownson, 2005; Stigsdotter et al., 2010). Similarly, satisfying procedural justice by including vulnerable populations which have been historically underrepresented in planning and design translates to access and promotes the realization of community well-being ideals such as agency and community satisfaction (Low & Iveson, 2016). The quality of interactions in public spaces that are planned and designed bearing in mind the need for cultural representation and safety, both of which are key concerns shared by vulnerable populations, support the realization of positive communal outcomes such as sense of belonging, safety and community pride (Giulietti & Assumpção, 2019; Nash & Christie, 2003; Rishbeth, 2001;Weiss et al., 2011). Professionals such as planners, building and landscape architects are pivotal to the relationship between community well-being among vunerable populations and access to public spaces, which culminates in distributive, procedural and interactional justice. However, the technical decisions made in built environmental planning and design are informed by competing social, political, cultural and economic interests which challenge an incorporated consideration of distributive, procedural and interactional justice in planning and designing public spaces for vulnerable populations (Innes & Booher, 2010).

Several professional movements have evolved out of the quest to ensure professionals are mindful of the intertwining aspects of access when planning and

designing public spaces to promote the well-being of vulnerable populations (e.g., Latinos in Planning)(Day, 2006). Such movements self-identify as members belonging to vulnerable populations which have suffered from a lack of representation in built environmental planning and design (Day, 2006; Irazábal, 2012). Special interest groups within professional planning and design associations are experts who are embedded in and influenced by social concerns. It is therefore important to study how professionals belonging to self-identified vulnerable groups, spearhead access to public spaces cognizant of fair allocation, inclusion in decision making and meaningful experiences, towards community well-being. This can be done by examining the role professionals play in space production and in championing community well-being. Accordingly, *the purpose of this study is to understand how professionals (i.e., planners, building and landscape architects) who identify as ethnic minorities, perceive their role in facilitating access to public spaces.* Specific attention is paid to perceptions of how planning and design are linked, if at all, to community well-being based on the exchanges that place across the different dimensions of public spaces.

The aforementioned purpose will be explored through an intersection between the *Tripartite Framework* (Lefebvre & Nicholson-Smith, 1991), which highlights the interacting dimensions of space production and the *Network Theory of Well-being* (Bishop, 2005), which conceptualizes community well-being as a product of successful interactions with environmental and social agents. According to the *Tripartite Framework* of space production (Lefebvre & Nicholson-Smith, 1991), built environments are a result of engagements among professionals/technical experts (e.g., planners, architects) and societal needs associated to a locale. Technical experts are primarily

responsible for planning and designing urban spaces (i.e., representations of space), such plans and designs materialize into the physical characteristics encountered (i.e., Spatial Practice), and these materializations either align or misalign with societal needs and expectations (i.e., Spaces of Representation). Bishop's (2005) network theory of well-being, theorizes that successful engagements among environmental and social factors such as physical environmental characteristics, experts and communities respectively, yield positive outcomes to support the continuous existence and sustenance of groups, which culminates in community well-being (Bishop, 2005). Technical experts must hence strive to spearhead plans, designs and processes that support the realization of community well-being (Barton, 2016; Kent & Thompson, 2014). Yet, the role professionals in self-identified interest groups play, in facilitating an integrated notion of access to public spaces towards community well-being, has been sparingly examined. Relatively little is known about how such professionals spearhead plans, designs and processes that facilitate access through a combination of all three constructs to promote community well-being.

To implement this study, semi-structured interviews are conducted with planners, building and landscape architects, belonging to special interest groups affiliated with ethnic minority groups. The proceeding section of this study highlights a review of the conceptual framework adopted to examine the role played by minority design professionals in planning and design to facilitate access to public spaces.

Conceptual Framework

Philosopher and sociologist, Lefebvre, , is attributed with foremostly conceptualizing space production as a social construct, defined and driven by societal priorities and values. According to Lefebvre & Nicholson-Smith, (1991), this construct has a tripartite structure made up of spatial practice, representations of space and spaces of representation. Spatial practice also known as perceived space, highlights the physical city, neo-capitalist and power-driven characteristics of urban redevelopment and spaces encountered through everyday routines. Representations of space encompass the technical conceptualizations of space depicted through models such as plans, layouts, maps, and zoning policies. Spaces of representation, also known as lived space, refers to spaces that extend beyond their perceived or administrative representations, highlighting cultural and or emotional connections and artistic interpretations of space. The interactions that take place amongst the three dimensions results in spaces that are either valued or unappreciated by society. Leary-Owhin, (2015) argues that though critical, urban planning and design practice seldom engages with the tripartite framework due to the nuances associated to the resulting spaces from dimensional interactions.

One source of the nuance in resulting spaces from tridimensional interactions, is the influence of localized insights held by professionals. Cultural connections with locales due to an embeddedness within specific social contexts (i.e., spaces of representation), have an influence on plans and designs (i.e., representations of space) and the physical characteristics (i.e., spatial practice) of built environments developed by experts (Brabec, 2004; Imrie & Street, 2014; Othengrafen & Reimer, 2013). Knowledge held by experts on expectations of a locale due to their embeddedness within certain contexts, is asserted

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to provide added insights on the realization of communal goals as relates to the built environment (Othengrafen & Reimer, 2013). However, in relation to public spaces, very little is known on how such insights inform technical conceptualizations and ensuing material characteristics that facilitate access for the populations represented by experts.

The linkages between the expectations of expert based on their socio-cultural connections, and the technical and material characteristics that emerge to facilitate access to public spaces towards community well-being, is yet to be examined. Such an examination can be done by studying how design professionals who identify as ethnic minorities perceive their role in the exchanges across the different tripartite dimensions, towards community well-being. The realization of community well-being from engagements among the dimensions of public spaces and linkages to access can be examined through an intersection between the tripartite framework and Bishop's, (2005) network theory of well-being.

Coined by Bishop (2005), the network theory of well-being conceptualizes how human and environmental interactions (this includes public spaces), can either result in the enhancement or the inhibition of well-being. The network theory asserts that the well-being of a group is a self-perpetuated cycle of engagements, which enhance the *attainment of positive states* (i.e., states that are valued by the individual as well as the entire community) t*hat trigger other positive states.* Positive states combine to form positive fragments which are the building blocks of Positive Causal Networks (PCNs). PCNs are self-perpetuating cycles of positive emotions, attitudes, traits, and successful engagements with the world which result in well-being. Conversely, engagements which trigger perceived *negative states* (i.e., states that are not valued by individuals and the

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community at large), lead to the formation of negative fragments which create Negative Cycle Networks (NCNs) *to hinder well-being*. While Bishop's, (2005) theorization of the network theory focuses predominantly on individual well-being, he argues that studying positive causal networks (PCNs) also provides a natural way of understanding the well-being of groups.

In positive psychology, group well-being studies focus on examining the contribution individuals or organizations make to unlock the latent potential and possibilities of other individuals for human and organizational welfare (Dutton et al., 2008). Making a case for network theory of well-being in positive psychology, Bishop, (2005) focuses predominantly on examining well-being in groups through the cause and effect relationships between individuals in group, who are in self-perpetuating positive states. Bishop's engagement with Spreitzer, Sutcliffe, Dutton, Sonenshein, & Grant's, (2005) examination of the relationship between social connectedness and thriving within an organization, allows for conceptualizing well-being in group as a function of the different resources produced during organizational interactions. Design professionals who identify as ethnic minorities have been highlighted as playing a key role in the development of equitable and representative built environments (Schindler, 2015; Zallio & Clarkson, 2021). However, the specific role they play in the facilitation of access to public spaces is yet to be extensively explored. Intersecting the network theory of well-being with the tripartite framework, hence sets the stage to understanding how design professionals in minority special interest groups perceive their role in facilitating access in the engagements among tripartite dimensions that consequently result in community well-being.

Literature Review

This section reviews the role of professionals in advocating for vulnerable populations in urban planning and design. It specifically focuses on the roles design professionals may play in facilitating access to public spaces for marginalized and minoritized groups. It specifically focuses on the multiple roles such professionals may play by virtue of their socio-cultural experiences, along with their expert role as design practitioners.

The Participatory Turn in Planning and Design

One of the primary factors which initially drove planning and designing built environments was the quest to establish order in the physical development of land (Triggs, 1911). Physical planning was informed by such goals and focused on the development of visually pleasing plans and designs (Israel, 1931). The need to promote cohesive regional development, bearing in mind multiple factors such as population density, public health, and transportation, gave way to expert-led rational planning regimes (Sharp, 1945; Kent, 1964; Brown, Sherrard, & Shaw, 1969; Faludi, 1979). Urban planning and design under such regimes, did not prioritize societal idealizations in decision making (Newton, 1971; Parker & Street, 2018; Trefry & Watson, 2013). Such expert dominated regimes received distressing critiques (Altshuler, 1965;Deming & Swaffield, 2011; Newton, 1971) and were disparaged for positioning professionals as all-knowing experts, who championed processes which did not always reflect ideals of society (Friedmann, 1971; Newton, 1971).

The proven relationship between the satisfaction of societal ideals and the development of more humane environments, emphasized the need for technical experts to

consider public perspectives and concerns during the planning and design of urban

spaces (Krivý & Kaminer, 2013). Participatory processes are employed to seek societal

perspectives and contributions through consensus building, to integrate the needs of

communities in planning and design (Innes & Booher, 2010). However, participation

does not automatically translate into technical recognition and integration of societal

ideals into urban planning. Arnstein's, (1969) revolutionary article, through the 'Ladder

of Participation', qualifies the levels of societal engagement with experts in positions of

power over planning. The engagement levels, highlighted on the ladder, lead to different

outcomes ranging from non-participation, tokenism, and citizen control. Citizen control

is the most ideal outcome that stems from participation, leading to different degrees of

societal influence on planning decisions (Arnstein, 1969). This level of influence is

facilitated by planners, landscape and building architects, who serve as social and

technical agents who seek and represent the needs of the vulnerable populations

(Eggertsen Teder, 2019; Manning, 1999; Thomas, 2013; Mansouri, Bagh, & Foroughi,

2018; Thomas, 2013).

Technical Agents in Planning and Design

Planners, landscape and building architects who identify with populations who have been

historically left out of planning and designing the built environment, play a critical role

(Zallio & Clarkson, 2021). The social and cultural experiences they have from their

embeddedness with vulnerable populations, inform an added depth to understanding the

needs of the communities they represent (Magallanes, 2020; Robinette, 1975;). Hence

there is an interplay between knowledge from their socio-cultural outlook and the training

they receive as technical agents (Caplan & Gilham, 2005; Rishbeth, 2001). This interplay between lived experiences and professional training has been asserted to yield more humane environments, cognizant of the societal needs and experiences towards community well-being (Anthony, 2002; Coles & Millman, 2013; De Graft-Johnson, Manley, & Greed, 2005; Sweet & Etienne, 2011).

Equity planning as an urban development approach, highlights a framework within which planners draw on their training, insights and experiences, to play an activist role (Davidoff, 1965). In this approach, planners are expected to play a key role in mobilizing underrepresented populations to facilitate access to resources (Metzger, 1996). However, the ideals of equity planning is yet to be realized owing to competing economic and political considerations which have resulted in cases of systematized segregation and gentrification (Zapata & Bates, 2015). The failures in centralizing the needs of groups who have historically suffered from environmental discrimination is not unique to planning as a practice. In multiple contexts, minority populations have suffered a predisposition to polluted, unmaintained and deteriorated environments under the watch of landscape and building architecture professionals (Bolin et al., 2005; Pulido, 2000c). Highlighted in the need to democratize landscape design and development is the representation of the interests of marginalized populations (Butler, 2014). One of the foremost ideals of landscape architecture which is to provide social value is realized when landscape architects are considerate of the needs of vulnerable populations (I. Thompson, 2000). Similarly, in architectural practice, an awareness and integration of the needs of vulnerable populations has been associated to equitable design (Stickells, 2011). Including populations that have historically been left out of the design of built

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environments in decision making provides critical information for the development of humane environments that are sensitive of the cultural aspirations of such groups (Wheeler, 2004).

However, in both landscape and building architectural practice, several gaps remain in centralizing the needs of vulnerable populations. In planning and designing the built environment, while, public views are sought in practice, decisions are largely driven by trained professionals (Conrad et al., 2011; Bloemers, Daniels, Fairclough, & Pedroli, 2010). Therefore, the role of technical experts as agents of environmental justice cannot be overemphasized (Makhzoumi, Egoz, & Pungetti, 2011) This realization has fueled the call for diversity within planning and design practice, to ensure a representation of cultural and historical ideals, alongside specific concerns characteristic of minority groups (Anthony, 2001; Caplan & Gilham, 2005; De Graft-Johnson, Manley, & Greed, 2005; Rishbeth, 2001).

Given that public spaces are key resources in built environments which have proven linkages with community well-being ideals such as civic living, quality of life and communal satisfaction, the role of planners, landscape and building architects as advocates for vulnerable populations towards access, has been emphasized (Boone et al., 2009a). Yet to be extensively examined however, is the role played by trained professionals who self-identify with minority groups in facilitating access when planning and designing public spaces. The need for technical agents to facilitate access to public spaces towards the realization of ideals which culminate in community well-being, has long been asserted in seminal works of Jacobs, (1961) and Whyte (1980). Personal connections shared with communities they represent, places professionals who identify

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with minority groups in a position to express the idealizations of public spaces as social agents and integrate such ideals in planning and design. As relates to public space planning and design, culturally adept, safe and readily available public spaces are key to facilitating access and promoting community and civic life (Zapata & Bates, 2015). Yet the role played by professionals who self-identify as belonging to groups who have had challenges with access, is yet to be extensively examined (Zapata & Bates, 2015). There is the need to examine the role played by professionals in charge of planning and designing public spaces, who identify as representatives of the needs of minority populations. Such examination can be framed through an intersection between concepts that theorize the production of environmental resources as a social construct and the connections to community well-being.

Methodology

The proceeding sections highlight the methodology for this study. It foremostly justifies the selection of interviews as an approach. It then describes how the questions asked were guided by the conceptual framing adopted in this study. The study sample is described and data collection tools and data analysis procedures are highlighted.

Interviews

Interviews were used as an approach to collect data on how design professionals who identify as ethnic minorities perceive their role in facilitating access to public spaces. Interviews were selected as a data collection approach, because they allow for an in-depth examination of the subject of inquiry (Turner, 2010). More specifically semi-structured interviews were conducted, because they inherently permit asking predetermined

questions, while allowing further probes to prompt additional details (Kahn & Cannell, 1957). Drawing on the intersection between Lefebvre & Nicholson-Smith's (1991) *Tripartite Framework* and Bishop's (2005) *Network Theory of Well-being*, Figure 6 highlights structured questions, centered on how participants describe tripartite engagements and the linkages to positive states and access. Responses to the questions were recorded and transcribed.
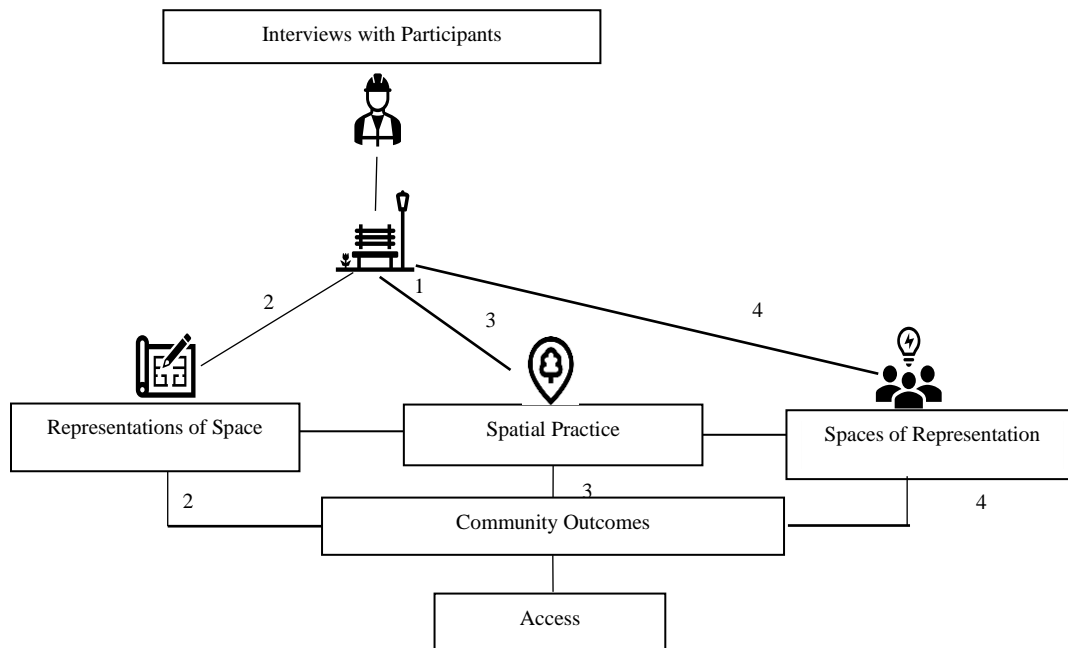
Figure 6 Structured Questions Informed by the Conceptual Intersection

The following questions were asked:

In your work or the work of others who identify as belonging to minority groups:

1. Please describe how your identity as a member of a minority group has influenced your outlook on public spaces?

Question 1 sought insights on the how professionals perceive the connections between their identities as ethnic minorities and their outlook on public spaces.

2. Please describe how your community has been engaged in planning and design processes during public space planning and design and the related community outcomes.

Question 2 highlighted insights on the perceived linkages between identifying as ethnic minorities and locational considerations that should be contemplated during planning and design. The follow-up question focused on how such considerations facilitate positive community outcomes or otherwise. Such considerations are focal to distributive justice. The locational characteristics associated to public spaces are conceptualized as Spatial Practice and the related plans and designs are theorized as Representations of Space in the *Tripartite Framework* (Lefebvre & Nicholson-Smith, 1991).

3. Please describe how locational characteristics in the contexts inhabited by your community, has informed planning and design and related community outcomes.

Question 3 highlighted insights on the perceived linkages between identifying as ethnic minorities and planning and design processes. The follow-up question focused on how such processes facilitate positive community outcomes or otherwise. Such processes are focal to procedural justice. Community connections and expectations of public spaces are conceptualized as Spaces of Representation and the related plans and designs are theorized as Representations of Space in the *Tripartite Framework* (Lefebvre & Nicholson-Smith, 1991).

4. Please describe how user interaction insights are integrated into planning and design public space features and the related community outcomes.

Question 4 highlighted insights on the perceived linkages between identifying as ethnic

minorities and integrating features that are meaningful to the community in planning and

design. The follow-up question focused on how such considerations facilitate positive

community outcomes or otherwise. Such processes are focal to interactional justice. The

features of public spaces considered in planning and design and community connections

and expectations of such features are theorized as Spatial Practice and Representations of

Space respectively in the *Tripartite Framework* (Lefebvre & Nicholson-Smith, 1991).

Study Sample

Participants for this study were recruited by identifying design professional associations

in the United States, through an internet search. The largest associations existent in

planning, landscape architecture and building architecture were highlighted in this search.

Such associations included the American Association of Planners (APA), American

Society of Landscape Architects (ASLA) and the American Institution of Architects

(AIA). Special interest groups dedicated to professionals who identify as ethnic

minorities, listed under or recognized by the aforementioned associations were

highlighted. A call for research participation was sent out via email to the listed addresses

of all such identified groups. This call yielded responses from personnel at the leadership

level in seven special interest groups namely, Planners of Color Interest Group (POCIG),

Planning and the Black Community Division (PBCD), National Association of Minority

Landscape Architects (NAMLA), Chinese Society of Landscape Architects (CHSLA),

Black Landscape Architect Network (BlackLAN), National Coalition for Asian Pacific

American Community Development and the National Organization of Minority

Architects (NOMA). Personnel who initially responded to the call for participation were engaged in the first set of interviews. Thereafter, snowball sampling was applied to engage with other planners, landscape and building architects. Snowball sampling is a technique which allows an interviewer to connect to other interviewees through recommendations from key informants (Kadushin, 1968). A formal method for snowball sampling was applied. This entailed curating a preliminary list of possible interviewees and asking informants to add to that list till a point of saturation (Bernard, Wutich & Ryan, 2016). In all, 23 design professionals who belonged to the aforementioned interest groups participated in the interviews. The professionals interviewed were located across 6 states namely, California, Illinois, Arizona, Utah, Washington, and Michigan. Participants comprised 12 females and 11 males. All participants had over 5 years working experience in design practice. Figure 7 showcases the distribution of participants across different ethnic minority groups and design professions.
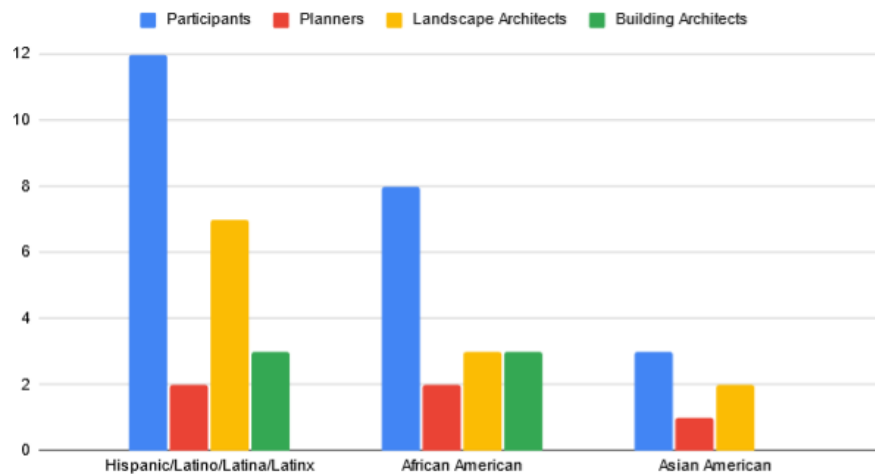
Figure 7 Participants Distributed Across Minority Groups and Profession Type

Data Collection Tools

Participants in this study were engaged through zoom, which is a remote meeting platform. The decision to use a virtual platform for engagement was informed by the fact that participants were located across different states, justifying the option to use a remote channel to connect. Each interview was recorded unto a secure cloud storage and manually transcribed.

Data Analysis

The transcribed texts from interviews were coded using MAXQDA software. The data was analyzed qualitatively. Responses were inductively coded to identify thematic codes within the transcribed text. Thematic codes reference portions in the text where identified themes can be found (Bernard, Amber & Ryan, 2017). The emergent themes were compared across the respondents to determine the occurrence of patterns to inform the creation of a codebook (Boyatzis, 1998). The codebook was utilized to identify codes in the transcribed texts. The codes were iteratively compared for intercoder reliability till codes across the two coders were consistent (Bernard, Amber & Ryan, 2017). A point of saturation was observed when coding responses of the 19th participant. This is a point in qualitative analysis, where no new codes are added that could inform the emergence of another theme (Given, 2015).

Positionality Statement

Spatial planning and its implementation have economic and political constraints linked closely to social structures in a particular area (Lozano-Pérez, 1990). Common characteristics associated to places where spatial planning strategies have failed are conflicts over land use, ineffective representation of marginalized groups and lack of transparency in spatial planning processes (Innes & Booher, 2010). This is especially true in decolonized and minoritized contexts, where power struggles exist between social expectations on planning and design and political, technical and economic ideals (Alvarez, 2018). I grew up as a young girl in Ghana, in a decolonized context where communal and self-organized social systems historically played a key role in environmental management. There continues to be power struggles between social, technical, and political systems in Ghana, due to the misaligned ideals and gaps in communication as relates to land tenure systems(Arko-Adjei, 2011). This lived experience has been instrumental in my research as a spatial scientist. My identity and lived experiences have informed the adaptation of interpretivism as a research lens, by focusing on society and the meanings assigned to space and its management. Interpretivism is a useful lens in urban sociology because it rejects the existence of a universal truth and upholds the position that truth is a function of interpretation (Williams, 2000). This a relevant lens through which to conduct this study due to the focus on the interpretation's participants, assign to engagements that take place in space production and the related community outcomes that ensue. My background fuels my interest in understanding the perceived role played by professionals with similar experiences, in the planning and design practice.

Findings

The four questions asked pertaining to tripartite engagements and associated community outcomes informed four main themes. The main themes, highlighted in Table 3, encompassed (1) *Lived Experiences* which comprised sub-themes *Community History* and *Personal Experiences*; (2) *Inclusive Processes* which was informed by sub-themes *Facilitating Community Agency* and *Facilitating a Sense of Ownership (3) Contextual Considerations* which included sub-themes *Scarcity-Based Concerns* and *Community Concerns*; and (4) *Feature Considerations* which entailed *Need Satisfaction* and *Situational Considerations*.

Table 3 Main Thematic Areas and Sub-themes from Inductive Coding

Research Questions			
In your work or the work of others who identify as belonging to minority groups, please describe:	**Main Thematic Categories**	**Sub-Categories: Beneficial Outcomes**	**Description**
1. Please describe how your identity as a member of a minority group has influenced your outlook on public spaces?	**Lived Experiences**	Community History	Past occurrences experienced at a community scale that have informed an outlook on public spaces.
		Personal Experiences	An individual's account of incidents that have informed perceptions about public spaces.
2. Reflecting on your community, please describe how ethnic minority groups have been engaged in public space planning and design and related community outcomes.	**Inclusive Processes**	Facilitating Community Agency	Supporting processes that highlight the ability of the community to influence decision making.
		Facilitating a Sense of Ownership	Supporting processes that encourage community to take ownership of public spaces that result from inclusive engagements.
3. Please describe how locational characteristics in the contexts inhabited by your community, have informed planning and design and related community outcomes.	**Contextual Concerns**	Scarcity-based Concerns	Contemplating locational decisions based on a lack of resources within a geo-political spatial context.
		Place-based Meanings	Contemplating locational decisions based on meanings associated with space
4. Please describe how user interaction insights are integrated into planning and design public space features and the related community outcomes.	**Feature Considerations**	Needs Satisfaction	The inclusion of specific public space features in plans and designs to meet social and cultural needs in a given context.

Lived Experiences

When responding to the question on how identifying as a minority influenced their outlook on public spaces, all participants referred to historical and current accounts of the experiences of minority groups and personal encounters pertaining to public spaces. *Lived Experiences* emerged as a main theme comprising of two sub-themes namely: *Community History* and *Personal Experiences*. These sub-themes are further elucidated in the sections below.

Community History

In describing their outlook on public spaces, interviewees referred to the historical accounts of the experiences of minority groups as relates to resources in the built environment. Such accounts largely emphasized the injustices minority communities suffered and how such occurrences have influenced the way public spaces are viewed in the present context:

> In the 20s my great grandfather left Alabama and moved to this part of the great migration, in a country that was very quickly shutting down with Jim Crow and a lot of repressive policies at the time. So, I deeply appreciate the struggles, I think that, especially Black Americans have gone through a lot in trying to get to a point of having civil rights and equal rights, and you know, access to wealth access to public resources, like public spaces, and the trauma and paranoia that come with it. [Participant #1]

I view public spaces with the clear understanding that racism is a legitimate issue you, shouldn't talk around race you shouldn't be dismissive of race, you shouldn't be raised neutral, you should actually take into account history, how history has led to certain segments of being affected, and you can have an adult conversation about planning memories as a feeling that this is some tough subject that one shouldn't approach. I've been very intentional in terms of my own work, bearing in mind communities, having untenable conditions in housing, land use of structure and sanitation. So that's what our environmental injustice is about, it's not just pollution is also the clear incidences of poor quality of life in the context of the built environment. [Participant #4]

Given our history, every version of public space to me, is an opportunity for place-based trauma that's just how it feels. I feel like a black body out in the open, is exposure to policing, vigilantism, and white supremacy hands down. [Participant #8]

White people, wealthy people, people who are politically active, they have no problem with picking up the phone and calling their council person to say lights are out on my street, parks need maintenance, I voted for you, I raised money for you, my trees are dying you know. They get responses, they have no issue with calling up city council. In Arizona at the time SB 1070 was passed (bill that was discriminatory against Hispanics /Mexicans), I mean it was really, a cruel bill. So, the community is still very much afraid of government workers [design professionals who work in public space inclusive]. Because they are afraid of getting reported. [Participant #10]

Some responses also highlighted the historical use and design of public spaces in minority contexts and the unique relationship such groups had with such locales:

The history of my community influences the way I see public spaces. I grew up in a predominantly black neighborhood and my parents grew up in Harlem and I grew up knowing how it was a supportive nurturing environment. The houses had steps that led up to the front door which they called stoops and anybody who grew up in the east coast is probably familiar with that, mostly blacks. So, the stoops were part of the African American culture. They were used for gathering outside of the house, designed for us to have a prayer, for people to congregate typically the parents, so you can watch over the children play. It was a chance for parents to be connected with the children and engaging with their community. But one of the things that happened over the years was when blacks were moving to the city and the government and related entities started designing housing for multifamily housing specifically for people of color in high rise. If the designer was designing for the culture, they will know that it's important as a parent you can see a kid from the 20th floor. Since that was not the case, the connection was lost. With designing, one of the things I know, because of this history is, if I'm going to design a place, gathering is a big part of African American culture getting together. So, there must be areas they can get together and hang out. [Participant #14]

Chinatown as a neighborhood has been practicing sustainable and urban design principles for 100 years. No space goes unused or wasted. Like rooftops where for the longest time used for gathering. With all these examples of like you know using rooftop spaces or things that are close together, to encourage more you know walkability. I know we're not coming up with this stuff for the first time, like look no further. [Participant #21]

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The references made to the history of experiences of different minority groups in the built environment and how that shapes the outlook on public spaces is attributable to the sample. Across respondents who identified with the different minority groups represented, the history of their communities and experiences in the built environment that were deemed as either positive or negative, were consistently referred to in describing how public spaces were viewed.

Personal Experiences

All interviewees made references to individual encounters related to public spaces over the course of their lives, when describing their outlook on public spaces. In such descriptions, participants constantly described how experiences with public spaces in their formative years, informed the way they have viewed and sought to design public spaces:

> The way I grew up has influenced in some capacity, how I view public space. I feel like I grew up in, a small rural town, where public spaces seemed to be a very free and accessible areas to everyone. There didn't really seem to be barriers, where I grew up was relatively small, so you could get around relatively easy. Even if you didn't have a car, you could bike wherever you wanted to go. I didn't really feel like there were like access issues to public space. But I think, as I grew, and went to school I realized that there was a lot of access issues that people like me experience when it comes to public space.
>
> [Participant #3]

I grew up in Lansing Michigan, which was the capital city. Growing up there, there were instances where at certain public spaces you didn't feel as if you [a black child] were allowed to be here. It was a situation where you felt, you know that's not for us, we don't get to do that. Certain spaces were laid out in a way that you know, you didn't feel comfortable going to. Even on the playground in school there were times when you got pushed aside. [Participant #5]

My culture and lived experiences have definitely influenced how I view these types of spaces. Just growing up in a culture where there's lots of informal spaces and stuff like that which have multiple uses. Looking at the Mexico City at the Capitol there's just a lot of large plazas where different things happen; festivals, political events, you name it. I consider how that tie into the communities that I live in and serve which tend to be you know predominantly Latino Latina Latinx communities and the informal spaces in the same community. [Participant #6]

I grew up on the South side of Chicago… up in a neighborhood where I always had to have a heightened sense of my surroundings, in my personal security. So, I would definitely say that it's shaped the way that I view public space. When I'm in a space or thinking about a space, I think, safety. It always comes to mind first. Is there enough lighting? Are the corners going to block people from hiding? [Participant #7]

I have fond memories of public space, there was a park, well, it was the school that we would walk to from my Nana and Papa's house and I remember like it was so much fun. It was like that park which was super special to my sisters and my cousins and my family. We would go there with my Nana and Papa, they

would host thanksgiving and Christmas and all the Hispanic celebrations, so

after we would eat, we would all go to the park and just play and I have lots of

good memories of my cousins and I just experiencing that public space together

[Participant #11]

I am from the country, so I am used to very down to earth places that feel

inviting, so I like a place where you're going to feel like you're wanted there you

know, like a place, you can always enter and you're welcome. So that's just how

I grew up. Whenever I'm working on public space projects, I see them as a place

to gather, that I can share with my family and my friends. [Participant #18]

In describing their outlook on public spaces based on their experiences, interviewees also

made references to the limitations within their professional training and practice, which

restrict public space conceptualization and design:

In my practice, it has been a struggle to move past the broader systems of

injustice. Even though you can be afforded all these accolades all these awards,

they are still seen by some as less than. In the same way this lens is tied to

public spaces. It's as if, if spaces, don't celebrate this Western European

aesthetic and I'm talking Northern European aesthetic, then it's seen as inferior

[Participant #2]

I have lived experience of a black person in the United States, which in many

cases, and certainly in my case, means that I've experienced all types, many

types of land use discrimination or environmental racism. Because of how we've

culturally adapted to racism and discrimination in this country, the public realm

or public spaces that black folks have taken ownership of or feel at home in, are

often places that I would describe as safe sacred gathering spaces, and I think

how I define and maybe even how other people in my community or network

defined public space and its relationship to black folks often times does not align with how that space is being designed in a city plan or an article or some kind of formal publication. They may call it a park and we call it something else [Participant #8].

Growing up in Puerto Rico what is like public and private is a very blurry. In terms of like public space anytime there was some you know some sort of abandonment on a lot of places, people would use that to do community things. Like for community gardens or just take over a building to do a community theatre. So that is pretty normal in you know Latin American countries. I'll just say that it is very blurry and in terms of laws and regulations they're also very relaxed. I think you know a lot of people use spaces for selling things in the sidewalk or just hanging out on the sidewalk which might be considered as loitering or inappropriate in the States. A lot of people, from such contexts who are in more urban dense areas in the States don't have a lot of space and are restricted in the use of the little public space afforded them. [Participant #15].

In Puerto Rico where I grew up, there was always the balcony where you could stand and look over to the street where kids would be playing. It felt more of a community. When I came here to study from there, I found that there is a very specific kind of either aesthetic or design sensitivities that you needed to have to move forward in school and your company, so you kind of like have to let go of your opinion and yourself in a way. [Participant #17]

Notably, the personal experiences denoting to public spaces and the described linkages between such encounters and the outlook on public spaces, was consistently referenced. It is interesting to observe that such descriptions were consistent across participants across

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the different minority groups and design professions which were represented in the sample. The responses show the commonalities in encounters participants had growing up as minorities, the influences such experiences have had on the way they perceive public spaces, alongside the restrictions and limitations they face in their professional training and work.

Inclusive Processes

The responses that participants gave when asked about planning and design engagement, provided key insights on how design professionals who identify as minorities, engage their community members in decision making processes. Such insights informed the emergence of *Inclusive Processes* as a main theme which comprised sub-themes of *Facilitating Community Agency* and *Facilitating a Sense of Ownership*. The sub-themes are further expounded in the proceeding sections.

Facilitating Community Agency

Participants provided insights on the perceived role design professionals play in ensuring the opinions and perceptions of community members are recognized and impactful in engagement processes. An overwhelming majority of participants referred to the importance of 'listening' to community members in planning and design practice, when describing community engagement processes. Such references highlighted the importance of centralizing and prioritizing community voices in meetings and how that enhanced community agency:

It is often the fact that people parachute into a community, and they give them a bunch of ideas in terms of what's been applied and other places, but they don't take the time to really carefully listen in terms of what it is that residents want. So, our job is black planners, and as black built environment professionals was to give the fact we understood the trends and what the problems were was to be good listeners, and to say, well, what is it that you want And we will translate what it is to want it into something that local governments then can act upon because we're translating your desires into you know planning. [Participant #4]

There is a way that you can design people out of space. First of all, when someone else comes from outside of the community we're already skeptical right we're already like wait a minute, what are you doing, but then, as the design process moves forward if the people in that community aren't part of that process, if you haven't taken their needs into consideration, problems arise. So, I find that a key piece of this is about listening in a meaningful way. Listening to understand not listening to respond is very important. [Participant #5]

Sometimes users of a particular demographic are just exposed to certain sports like in their own communities so we must cater to that. You know if they're going to really use something you have to listen to your user. [Participant #7]

I just really try to listen and I know that sometimes like we already have an idea in our heads about what a space should be or what a design should be, and I think just giving each voice the opportunity to be heard and really try to bring that in through the design I think that's what I personally try to do, just give everybody an equal voice and really try to meet everyone's needs. [Participant #11]

It's [engagement with the community] is really fulfilling in that aspect because

I'm hearing from the neighborhood, I'm listening to what they do. I know

through engagement, such communities have, as we all have something to say if

we let them have a say. I just don't go in there and say what we we're going to

put this here. [Participant #18]

Interviewees also described the nature of engagement processes which facilitate

community agency. In sharing such insights, respondents referred to the preparatory work

which need to be done prior to community engagement. Additionally, references were

made to the structure and form such engagements take. Participants largely emphasized

the need to take into account considerations such as meeting structure, language and time

schedules in order to enhance broader participation:

I worked with a community that had been segregated not by choice. They were

majority black but because property values were increasing there was this great

opportunity [through a project] for black folks to actually get wealth through

their property… to really be able to uplift communities through this work,

there's a whole bunch of legwork you have to do before a project arrives or

before funding arrives. I am always interested in what can be done to address the

structural issues that would prevent community from participating. I think I

bring a lot of that kind of thinking to a project. [Participant #1]

We've gone into planning programs and design programs where you going to do

this park and, pardon me for this but the park planner in the park director happen

to look like this (points to a white surface) and they're saying, these are the

things we want in the park. These are the amenities, here's our checklist and

because let's say it's in a predominantly black community, we have to have

hoops we have to have this. So, there is this 'othering' and you don't really get to deep dive into what it is that the community really wants. So that dynamic must change and then we must really understand that the parks department may be paying you, but your client really is the community that you're serving [Participant #2]

A couple of times I have been a Spanish translator. I mean it just allows for a level of comfortability or accessibility. I offer that skill to my community. Such engagement allows the community to communicate what they like, so people can see if it's a good fit. It definitely makes them feel more comfortable because they can start to explain things on a less technical basis. When you have someone that speaks the language fluently and doesn't necessarily speak it so rigidly or professionally its easier to get to people. A lot of times, people are intimidated by the professional persona that we turn on when we're in a room of suits. I think it's really important, just to be personable and down to earth with everyone at an engagement. [Participant #7]

One of the biggest things that I've seen and try to always take into account, is that not a lot of people have the time or the means to attend community meetings and events. We need to take into account the schedule. People and communities with lower access to certain stuff they also tend to have two jobs so certain times are not available to them. Also taking a look at the population of the community, and maybe having people who could speak other languages as well, is important, because meetings are not for us to come in just to show what we're doing. If we're not able to communicate with the biggest part of the community, what is the point of going there? [Participant #13]

> The focus of my work is centered on a comprehensive package for reparations
> through urbanization, so I'm only willing to look at the projects that our clients
> bring us through the lens of, how does this repair harm for the legacy of slavery
> and racism, as it relates to land use. I really see places as being more flexible in
> terms of their utility than our naming system for them, and so I often use tools
> and planning tactics and create processes, where the residents themselves can
> self- determine what space means to them and how they would like to see that
> space evolve or stay. [Participant #8]

The excerpts evidence a recognition of the need to centralize community voices in planning and design and the important role design professionals who identify as minorities, are perceived to play in engagement processes which facilitate agency.

Facilitating a Sense of Ownership

Study participants also highlighted how engagement with community could facilitate a sense of ownership over resulting spaces. Most respondents described their role in facilitating engagement processes which allowed community to recognize and accept the outputs which emerge from meetings. Terms such as 'feeling at home', 'sense of pride', 'connection to a place' were used to describe the realization of ownership as an outcome of effective processes:

> Knowing that neighborhood parks often aren't as resourced, like a big downtown
> park, we needed the stewardship of the people to led programming. We knew
> the city was not going to come in and be like now we're going to offer baseball
> and jump rope clubs and whatever, it was just going to be a park. So, we asked,
> how do we help support a culture of a park in a place where there isn't one such
> that once we leave it doesn't just die or like sit there. So, we were really
> conscious from the get go of trying to cultivate ownership and stewardship of

this place in an authentic way, so that people wanted to use it and needed it. [Participant #1]

I think for me it's much more about being able to really immerse myself in the experience. It is really personal and I always try to connect it to something that I can empathize with and I really like to call attention to the bias I bring to the process because it helps me be vulnerable with the community and helps me to help someone understand that I don't know it all, that I'm not here to be the expert, that I'm just really curious I really want to learn about what's beautiful and what feels like home to them. [Participant #8]

In one of the projects I worked on, the water department had these abandoned well sites and they wanted to make them into public spaces. That was the first project and so the community was really concerned about this. They didn't want benches in there, they didn't want people smoking in open spaces. They just wanted a place people could pass through, they wanted good artwork and they wanted it secure, and green. And the community loved the output, they loved that it increased the value of their property, that's just on the top of the list. They loved that they had a space that has trees and plants in it that brought in butterflies and birds. [Participant #9]

Having communities involved really makes them feel included, and like part of the community and then they develop a sense of pride and ownership for the place. When they are involved in the process, it makes them invested in it. [Participant #11]

It became very clear when I spoke to the community that they wanted me to try

to maintain as much of the culture of that gymnasium as possible. So, what we

did was we kept as much of the original floor as possible. We took the center of

the floor and we put that in, so anybody who went to school, could feel a

connection to it. This is an example of keeping the design abreast what was

important to the community. So, the great memories growing up, the dances,

basketball games, was represented. The community connected to the space

because it had everything that reflects the African American culture. [Participant

#14]

The emphasis placed on the need for community agency and ownership of spaces which

result from engagement, highlighted the perceived role design professionals play in

engagement processes. The recognition of the inherent challenges in existing processes

and the need to adapt engagement to the target demographics, highlighted the recognized

role the study participants play as facilitators of successful engagement outcomes.

Contextual Concerns

Responses to the third question provided insights on how locational characteristics in

minority communities, informed planning and design, and the related community

outcomes of such considerations. Interviewees consistently referred to concerns related to

the context where a public space was to be located. Such concerns collectively informed

the emergence of *Contextual Concerns* as the main category, which encompassed two

sub-themes namely *Scarcity-based Concerns* and *Community Concerns*. These sub-

themes are further elucidated in the sections below.

Scarcity-based Considerations

In describing how locational characteristics inform planning and design of public spaces, respondents consistently referred to the lack of resources in the locales inhabited by minority groups. Such descriptions highlighted the broader challenges of reach and systemic biases of development in the built environment, amidst public space planning and design:

> In bypass communities access definitely looks different and when it comes to, I mean even specific modes of transit there, there are still major bus routes in certain areas, but there are less train stops in some areas and the train does not continue throughout the south-western portion of Chicago, so it is harder to get to particular spaces. There are people in communities which are definitely in a transit desert. So, there is definitely access issues in the south side of Chicago. The south side is different majority non-white. It's Latino and Black predominant, its predominantly non-white [Participant #3]

> There are areas that have been red lined throughout the years and have been underserved by you know years and years, not being able to attain mortgages to maintain properties, and put in substandard housing with no infrastructure improvements over many years. So, you know there is disinvestment and displacement… So all these factors come to bear, like the environmental economy, the politics of the neighborhood and social aspects of the neighborhood. So, I look at a lot of these different things within the context of where we're working. You know understanding that you know, some areas have an abundance of what they call vacant land. I've decided to start calling that open space because you know vacancy tends to form a negative connotation around abandonment. But once we started looking at things a little bit differently

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with communities, you notice there are different opportunities. Folks start to

take on that, you know, well yeah it's a vacant lot but you know it's ours and we

can do something with that and this could be where we have our pocket park

[Participant #5]

One of the things that I take into account in relation to location is public

transportation. Usually, I don't think a lot of public spaces provide a lot of

parking and I think that's why location and transport, public transportation is

important. In Mexico the public spaces are tied to like the government and the

church building, and always everything is kind of nearby. That's always at the

back of my mind when I am designing. [Participant #13]

You look at the number of residents that live in Chinatown, which is about

15,000 people. Then you look at the square footage of public open space that

Chinatown has, and you compare that to any other neighborhood in San

Francisco. I mean I would say, by a fraction of like 5 to 10, Chinatown has the

least amount of open space per capita than any neighborhood by you know by at

least five to 10 times. [Participant #20]

The predominant references made to the challenges of disinvestment in minority

dominant contexts, highlighted the awareness participants had of the locational

considerations which should inform the planning and design of public spaces. As

highlighted in the excerpts above, this awareness was described as a key factor that

guided the role design professionals play in the planning and design.

Place-based Meanings

In describing the locational considerations that come to bear in planning and designing public spaces in minority contexts, participants also highlighted how place-based meanings pertaining to certain spatial characteristics informed decision making. Such concerns they described as emanating from experiences encountered at a site linked to communal trauma or discomfort:

> In a project I worked on, a couple of locations were suggested for a park and we asked the community what do you guys think of this? There were sort of like some real hesitation around one of them, where people were kind of like maybe not there. That location seemed totally innocuous like it was just a street corner. In having more small and deeper conversations with people we learned that there had been a shooting that happened on that corner, and there'd been a young girl who'd been found murdered on the lot at the back of it. There was just a lot of association of that particular place with this really, really negative event for the black community, where that had happened, years ago. There was nothing visible on the site and without having that deeper conversation with the community, there was no reason to suspect that it would have that kind of effect. So we relocated the park to somewhere that doesn't come with grief. Not that you don't want to talk about grief, but like to make sure you don't cross over that, or you know put a band aid on it. I wanted this to be something that people feel positive about using as a public space. I thought if an association with that event is too painful for the community let's pick a different location that people feel more positively about. [Participant #1]

There was a time I was designing a basketball court, and the young people in that context came up to me and said, you can't put the basketball courts there and I responded well it's flat, you know there's a tree, you can go over to get shade. They said no, you can't do that. So, I asked why? They said you know what happens is because cars pull up and people in the cars talk trash to the people on the court and that's when bad things happen. So, we moved the basketball court to the center and then we built a small mound a hill where the kids the little kids could run up and down and play and from sitting in your car your point of view was now disrupted by this mound so people could not see the basketball courts. [Participant #5]

I do recall encountering a group that had experienced a destruction of the landscape in an eminent domain which had several decades of history. It got torn out, to build a golf course. The impacts of that have made it so that the city can't even go near the site. The golf course was never built so it's still brownfield, but the city can't even go near it without residents having like an emotional reaction to planning happening in that area, folks would have a really strong reaction to you going over there, because of you know, the erased landscapes decades ago. It would take a lot to get to the point where that area can be developed. [Participant #8]

Additionally, respondents described community concerns about locational characteristics as rooted in cultural values which informed perceptions about the appropriacy of specific locations as public space sites. Such values were described as key to design practice and participants highlighted the need for sensitivity to such values in making locational decisions:

In working with tribes, I learned that it's important to be very sensitive, especially anywhere you're building any kind of infrastructure, that's near resources like a river, because there have been settlements, for you know hundreds and hundreds of thousands of years along such resources. So, archaeology is very important when you're planning such sites. [Participant #10]

In an Asian community I worked in, there was a hospital site that, you know got torn down, but you know, the community said don't build on that site because that's where people went to die …so yeah, I mean you understanding, a lot of these different situations you know cultural kind of things, also really helps. [Participant #12]

I think the issue we deal more frequently with has to do with preferences of minority groups that have locational implications. For example, there was a project where we had a lot of refugees and immigrant residents, living down the site and there's a big religious community served by a park which preferred not to have dogs in public space, because this is kind of a taboo. So, we had to kind of take those into account because of the location of the park. [Participant #16]

As much as we revere and really honor our ancestors as people, and we still have a deep connection to them and it's lived out in these traditions, at the same time, I think, culturally there are superstitions in the neighborhood and so, for instance, you know, I was talking about a park, where everybody goes to. But there is another park a few blocks up from there which was redesigned about 20 years ago and as much as the community needs public space, very few people go to the park. It's because there used to be a funeral parlor there before it was torn down and turned into a park, and you know I mean from a technical planning

perspective, it makes all the sense to put a park in there, but from just something

as simple as the fact that it used to be a funeral parlor, it made that park

completely you know not used. You know and it's just sad right the community

needs parks but it's just falling into disrepair, it's just really a tough situation.

[Participant #20]

 The references participants made to scarcity of resources and the need to consider the

locational concerns of the community, highlighted an awareness of the implications of

disinvestment and a sensitivity towards community values and perceptions about spatial

features. This awareness and sensitivity were referenced by participants across all the

groups represented. Respondents also highlighted how locational considerations could be

linked to community outcomes and subsequently use of the resulting space.

Feature Considerations

Responses to the fourth question provided insights on how user perceptions among

minority groups, pertaining to features within public spaces, are integrated into planning

and design. Respondents made consistent references to factors which informed the

addition of specific public space features in planning and design. These references

informed the emergence of *Feature Considerations* as the main theme, which

encompassed two sub-themes namely, *Needs Satisfaction* and *Situational Considerations*.

The two sub-themes are further elucidated in the sections below.

<u>*Needs Consideration*</u>

Participants highlighted how the needs of the community, informed the inclusion of

particular features in planning and design. Study respondents emphasized the importance

of considering public space features that met the needs of the community bearing in mind the utility idealizations of its users and the related outcomes thereof:

> In a project I worked in, the number one requested activity we were hearing from people was basketball. You go through this neighborhood, there are basketball hoops up on the street and it was creating a bunch of conflict because, someone will complain, the police will come take it down the kids get upset, it was just creating all this turmoil and there was clearly a need for basketball. So, we worked on a full-size basketball court because there was a clear need for people who lived there, especially teenage boys. But in a meeting with the city department in charge, we soon realized they didn't really like to do basketball courts. I asked why, the whole subtext was the wrong kinds of people play basketball, and bad people play basketball. I was like teenage boys and young men deserve a place in their neighborhood that they want to be in and that is non-negotiable, and I will fight to the death for this. 95% of the neighborhood is Black. You really can't say people don't belong in their neighborhood like I'm not having it. Now, that basketball court is super well used it's awesome. There are no incidents at the basketball court. [Participant #1]

> There was a disconnect between this housing and open space which could be a physical and psychological reliever of the everyday confines of this tiny kind of section eight housing. So, we took down some of the barriers and had an expansion of open space. We actually lifted part of the park about 12 feet and created this bump. Most of these kids, had never been off the ground. South mountain was right there, and they may have never seen it so their sphere of influence in their community was probably within the five to six block radii of their home. So, we installed the stand. It was amazing just like getting on a

stool, or a ladder. Getting up you could just turn around and have a different

plane of perspective. It changed their whole outlook. [Participant #2]

Latino communities predominantly live in smaller spaces in Los Angeles. Often,

they want to gather and get together they want to make food. So, you want to go

to these parks where you have like a grill, and you can do these birthday parties.

You can stake out your grill and your spot and you put your balloons up and

that's your party, you know. This is a way, a real way that people here engage

with space, either at the beach or at parks. There's not enough of that. Most of

those are in nicer neighborhoods. So, there's a lot of competition and then on top

of it, we have a real issue with homelessness in parks and we're in a crisis which

we need to address. [Participant #19]

In a project we worked on in a Latino context, we wanted to know how we

could make the parks accessible to more Latinos? From the workshops a lot of it

came down to you know, having barbecue stands and you know tables and

having more open space and trees. We found out that they were actually afraid

of trees, because they obstructed the line of sight, and they were fearful of

untoward activities around them. You know different types of geographies have

different needs so it's important to be aware of that. [Participant #20]

Public spaces provide a space where people feel like they belong and that they

are connected to each other, it allows them to thrive from a health perspective.

Particularly living in such dense quarters for them to socially engage with other

people on a daily basis and to practice their exercises together for multiple

generations to come together. The Chinese community is very generational so

grandparents often either live with the family or they take care of the kids during

the day while the parents work, so these public spaces are important for that

intergenerational bonding and building that's critical. It's a space utilized by

working families that can't afford day care, so their grandparents spend time at

these spaces all day long after school. It allows for the community to continue to

thrive and to persevere and to feel like they belong in this country, quite frankly.

So, they must be designed for the range needs at play. [Participant #21]

The description of how study participants included features in planning and design based on identified needs of user communities, highlighted a recognition of their role in ensuring that the necessities of communities they identify or empathize with, are served. Notably the above highlighted excerpts describe the connections between features that serve the needs of the community and positive community outcomes and consequently the success of the resulting spaces in relation to use.

In describing the needs that are contemplated upon in feature consideration, participants also described how cultural values and activities that are characteristic of the user community under consideration, are key. Regular references were made to the recognized role design professional play in showing 'cultural sensitivity' to the activities that take place within some minority groups and how that informs the inclusion of public space features in planning and design:

The people who were responsible for the Jasper project understood the setting,

and the need to balance the goals of economic and cultural development. They

understood one thing for certain they didn't want those cultural assets for the

African American community to be compromised. So, they took the initiative to

come up with interesting ways to celebrate what you have a lot of people now

talk about as creative place-making. This example is a precursor to the current

concept of creative place-making. The jazz district is a very clear example of

that in practice. A space that is welcoming towards African Americans that is really relevant to their culture. Because it basically, is a clear example of cultural sensitivity. They did not approach it in a manner that was bureaucratically neutral, a color neutral manner, or a race neutral manner. Instead, they said this place has merit, it has value, and we should basically focus on protecting what is here rather than only appealing to the interests of others who don't even live here. [Participant #4]

In the design of such spaces, a diverse working group contributes to a more holistic design. When you have people that are kind of coming from all over the world, they've seen different things they've experienced different cultures, it contributes to design. Working with people with diverse backgrounds allows for an understanding of how other cultures do things. [Participant #7]

In my experience with the Latino community, people come to public spaces to build community right there, to get together and this is true, particularly of parks. That's where we have like our Quinceañera or other events. So, they build community and bring people together. They are venues for cultural practices like playing soccer, for instance, a lot of people in the community use them to engage. It's important to recognize that in planning and design. [Participant #15]

I ask myself what I can offer best to planning and design? What is my greatest asset? It is probably not my school training, but you know my traditional practice and my cultural background and how I grew up. How I grew up thinking about space using space and the influences of my family and culture, because I feel like it's very rich. Growing up in and around a place like China town, I feel like it's a place which has some of the best examples of public space

and how we should design public spaces. A lot of that was not done by planners

that came in to design these spaces, but how generations of residents and

families, use the space and shaped it over you know over 100 years. [Participant

#21]

Respondents consistently referred to feature characteristics such as color, orientation and

symbols that were significant to values espoused by different groups:

On one project we worked on which served a predominantly Hispanic,

Latino/Latina/Latinx community, we emphasized the use of color because that's

like a cultural context where it's very normal to have very bright vibrant colors.

So, we created kind of a palette that paid homage to that. The community liked

the vibrancy of it and how it kind of stood out and tied to their cultural roots.

[Participant #6]

I know, specific colors may be significant to some groups. For example, red.

Not just any red, but a particular kind of red. There was a project, where two

Asian groups were engaged for a public art design for a series of items that are

located between the two communities. Initially, the columns was supposed to be

painted red and then one community got very upset because they saw it as a

symbol of the other group. Eventually there was a compromise, so they painted

the columns with both red and yellow, representing both groups and people were

much more comfortable. So even with color you need to be very specific about

it and be very sensitive to it as well. [Participant #16]

Different communities engage with different color symbolism in relationship to

land. We worked with a consultant, which was a local artist that helped us get

into those sensitivities and you know, we needed to work with patterns and

images that were specific to this community. We needed to pay attention to be

able to adequately represent them. [Participant #17]

In working with different cultures, you need to realize that every group is

different. With some cultures, it's all about the placement of the building on the

site, because the sun comes up in the East and sets in the West certain time of

day. In some cases, you know it's going to shine through this little opening as

the moves. Everything has a purpose and none of it is by accident. There is a

reason for all of these things, and you have to respect them, because it's an honor

to be able to represent culture. [Participant #18]

The references made to the socio-cultural needs, activities and values of the community

which come under consideration, when planning and designing public spaces, highlights

the understanding participants have of the part they play in ensuring key features are

represented in the resulting public spaces. The features included based on the above

highlighted factors, were described as enhancing community needs and values that

facilitate positive community outcomes and consequently how the ability of the

community to benefit from the resulting space.

Discussion

Participant interviews elucidated the role played by design professionals, who identify as minorities, in facilitating access to public spaces. Participants highlighted the dual role participants play as representatives of vulnerable populations, along with their work as design professionals. The insights shared explicated how the overall outlook participants had on public spaces, based on lived experiences, informed the part they played in community engagement, locational and feature considerations during planning and design. Amin's (2008) post humanist account of public spaces highlights the interplay between human and non-human (socio-spatial) elements, which result in a pre-cognitive template for public space development. Participants belonging to different minority groups shared similar insights on the dual role they play in the socio-spatial exchanges that take place in planning and design, towards community well-being. These exchanges are conceptualized in Lefebvre's (1991) *Tripartite Framework*. Participants described their role in such exchanges as linked to the realization of positive community outcomes which is an aspect theorized in Bishop's (2005) *Network Theory of Well-being*. As illustrated in Figure 8, the described role participants played in public space related exchanges towards community well-being highlighted focal connections to access as relates to key environmental justice constructs.
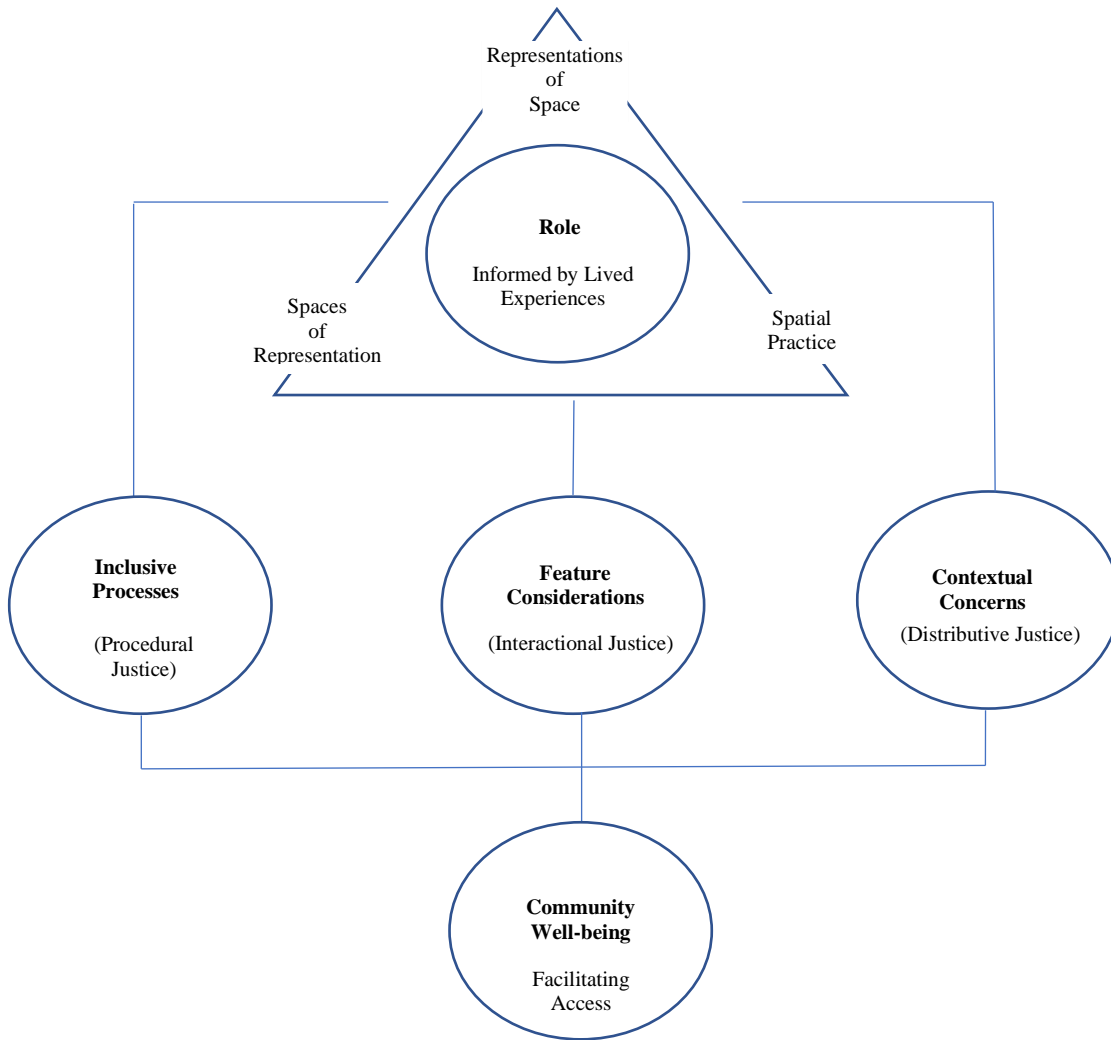
Figure 8 Role Played by Design Professionals in Facilitating Access

The proceeding sections further expand on key insights gleaned from the role design

professionals, who identify as minorities, play in facilitating access through public space

production exchanges and associated community outcomes.

Role in Facilitating Access: Lived Experience

The insights shared on the role played by minority design professionals as representatives

of their community, alongside their practice in planning and design, is consistent with

existing literature which asserts the importance of diversity and inclusion in design

practice (Schindler, 2015; Zallio & Clarkson, 2021). The lack of representation in design

professions such as planning, landscape, and building architecture has been highlighted

as one of the challenges of place-making in the built environment (Benson & Jackson,

2013; McGaw, Pieris, & Potter, 2011). Studies have emphasized how deficiencies in the

representation of Indigenous and racialized groups in design fields creates barriers to

shaping the public realm so as to increase its shared value (*i.e.,* place-making)(Dupre,

2019). Such barriers to place-making result in the emergence of unrelatable and under-

utilized spaces, owing to the lack of consideration of cultural and societal values (Benson

& Jackson, 2013; McGaw et al., 2011). Hence, the curation of accessible public spaces

has been linked to diversity in design practice, through the asserted awareness diverse

professionals have of social and cultural values which are critical to place-making (Low,

2013; 2016).

The mentions made to the history of injustice faced by minority groups in the

built environment and the wrongs minority design professionals have personally

encountered is consistent with existing literature, which has highlighted the challenges

Indigenous and racialized communities face in the built environment (Bartlett, 2020;

Cutter, Boruff, & Shirley, 2012). Challenges such as the disproportionate exposure to

hazardous environments and the dearth of resources in contexts predominantly inhabited

by minority groups has been critically examined as detrimental to the well-being of

vulnerable populations (Bullard, 2018; Cutter et al., 2012). Similarly, the references made

by participants to the dismissal of design preferences of minority groups overtime is

consistent with studies that have highlighted the struggle to sustain the cultural integrity

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of built environments historically inhabited by minority communities (Low, 1996; Low, Taplin, & Scheld, 2009). The references study participants made to lived experiences related to public spaces, informed by the history of marginalized groups and their personal encounters, where described as leading to unideal outcomes for their communities. This provides key insights on the described linkages between lived experiences of minority groups and community outcomes related to public spaces. Such insights resonate with the growing built-environmental research focused on the linkages between built environments and well-being (Mouratidis, 2018a, 2018b). Furthermore, the current study highlights how the lived experiences of minority groups positions such professionals to contribute to the curation of accessible locales, based on the encounters they and their communities have had.

Role in Procedural Justice: Inclusive Processes

The inclusion of user communities in design and planning processes so as to ensure public space access has been extensively explored. Several studies highlight how the inclusion of minority groups is critical to creating landscape designs perceived as either welcoming or exclusionary (Low, 2016; Rishbeth, 2001). Similarly, other studies have showcased the importance of inclusion in site design of public spaces and the related outcomes such as community ownership of thriving locales that serve religious (Gale & Naylor, 2002), cultural (Peters, 2010), and recreational purposes (Jay et al., 2012). The linkages between inclusion and the related outcomes, goes beyond the mere participation of marginalized communities in planning and design processes. The role played by design professionals who identify as minorities, in facilitating access to public spaces in

such processes is yet to be extensively explored. The current study addresses this gap in literature through its findings pertaining to how participants described their engagement with minority groups in design practice.

Respondents highlighted their role in integrating the expectations minority groups have of public spaces *(i.e., Spaces of Representation)* into plans and designs *(i.e., Representations of Space)*. This highlighted role informed the emergence of *inclusive processes* as a broad theme. Even though the time constraints and related challenges of community participation are well documented in design literature along with the barriers (Arnstein, 1969; Brabham, 2009; Innes & Booher, 2000), participants in the current study still emphasized the importance of inclusive process that prioritize the involvement of communities so as to fulfill community outcomes. The description of such processes as captured in the sub-theme of *facilitating a sense of agency*, emphasized the need to effectively capture the voices of communities that have been historically left out of planning and design processes. Similarly, the references made to the role participants play in *facilitating a sense of ownership* over public spaces highlighted a need to prioritize involving communities in order to ensure community buy-in and sustainability of locales. The described linkages between engagement processes and the need to foster agency and a sense of ownership for marginalized communities highlights the nature of the part participants play in enacting their respective roles as design practitioners whilst concurrently making room for the voices of the community. This realization is key to planning practices because the ability to effectively engage with minority communities extends beyond representation in the planning process. Several studies have highlighted the need to reshape public processes and institutional frameworks to effectively capture

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the needs and concerns of marginalized communities (Hou & Rios, 2003; Sweeney, 2005). Hence, the awareness demonstrated by respondents on linkages between positive community outcomes and engagement process towards access can indeed inform broader structures and strategies of engagement.

Role in Distributive Justice: Contextual Concerns

There is yet to be a specific focus on the role design professionals, who identify as minorities, play in locational considerations aimed at facilitating access to public spaces. The current study fills this gap, through the insights it garners from the references participants made to the *contextual concerns* that inform locational decisions related to public spaces. Such insights were highlighted in the description of the part respondents play in decision-making as relates to locational characteristics *(i.e., Spatial Practice)* during planning and design *(i.e., Representations of Space).* The references made to *scarcity-based concerns,* which emerged as a subtheme under *contextual concerns*, were consistent with existing studies which have highlighted the key role design professionals play in advancing access to public spaces through the allocation of resources (Talen, 2010) Several studies have examined the allocation of public spaces across varying socio-economic contexts based on normative principles of distribution such as proximity (*i.e.,* closeness to a public space), diversity (*i.e.,* ideal variety in surrounding land-use) and social need (*i.e.,* equitable allocation)(Talen, 2010). The *scarcity-based concerns* minority design professionals make when contemplating locational decisions, were described as informed by the awareness of the deficits in the built environments predominantly inhabited by minority groups and the related negative outcomes. The

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sensitivity showcased by participants highlighted how access related locational decisions were informed by the need to inspire positive community outcomes. This awareness is consistent with studies which have found that allocation decisions informed by the need to facilitate access through proximity, diversity and/or social need, translate to improved quality of life, mental and physical outcomes (Kuo & Faber Taylor, 2004; Roman & Chalfin, 2008). This current study hence highlights the linkages between locational considerations, access to public spaces, and well-being, through the *scarcity-based considerations* minority design professionals make when contemplating locational decisions.

The other emergent sub-theme related to *contextual considerations* made when contemplating location related decisions was *place-based meanings,* which comprised codes that highlighted the sensitivity towards community values and concerns as pertains to particular locations. The role played by the interviewed design professionals in facilitating access is emphasized in the normative principles of distribution they apply through the *scarcity-based considerations* as well as the *place-based meanings* they consider in location related decision making. This finding provides key insights on the specialized role design professionals who identify as minorities offer to locational considerations based on their recognition of the different meanings communities assign to varying locales. The emphasis put on the related community outcomes linked to place-based meanings provides further insights on how interviewees prioritize the well-being of communities in decision making to facilitate access. The aforementioned insights are crucial to design practice, given the conflicts that arise from competing economic and political interests (Low et al., 2009). Such conflicts have been described as emerging

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from the economic and political idealizations of development borne from the power

linkages between private sector ideals of neo-capitalist urban characteristics and design

practice (Lefebvre, 1991). The description of how place-based meanings can be

considered in decision making, highlights how cultural and social factors can be

considered alongside competing interests. This can inform broader policies on equity,

diversity and inclusivity which have been highlighted in planning and design practice

(Zallio & Clarkson, 2021) .

Role in Interactional Justice: Feature Considerations

The importance of planning and design in the advancement of public spaces that result in

experiences that are valued and desired by communities has been long established and

extensively addressed in the literature (Jacobs, 1961;Whyte, 1980). This line of research

cautions that the emergence of neglected spaces, which are often characteristic of areas

predominantly occupied by marginalized communities, cannot be separated from design

practice (Carmona, 2021). Several studies have highlighted how minoritized groups can

be designed out of public spaces due to layout characteristics and the absence of facilities

and amenities that support the expectations of use (Alwah, Li, Alwah, & Shahrah, 2021;

Wendel, Zarger, & Mihelcic, 2012). However, the role played by design professionals,

who identify as members of such marginalized communities, in planning and design of

spaces that are sensitive to the experiences of minority groups has yet to be extensively

examined. This gap is addressed in this study. In fact, a key contribution of this research

is the emergence of *feature considerations* as a main theme that showcases the role

interviewees played in integrating community expectations of space (i.e., *Spaces of*

Representation) when contemplating the material characteristics of public spaces (*i.e.,*

Spatial Practice).

The emergence of *needs consideration* as a sub-theme was informed by the

highlighted awareness informants displayed to the needs of marginalized communities

and the systematic barriers that exist in meeting such necessities. Such barriers have been

determined to be rooted in the characteristics of public spaces in vulnerable contexts

(Leary-Owhin, 2013) . For example, some studies have found that while in some contexts

vulnerable communities are closer to parks, there are nonetheless significant differences

in the quality of such locales, in comparison to spaces in higher income and

predominantly white neighborhoods (Cutts et al., 2009). The references made regarding

the need to consider positive community outcomes, particularly as relates to features that

meet cultural, social and individual needs, is indeed consistent with studies which assert

that the incorporation of features that correspond to the values of the marginalized

communities generally improve satisfaction with living conditions (Madanipour, 2004).

The role participants play in the realization of socio-cultural needs of marginalized

communities, despite the competing technical and economic barriers at play, showcases

the multiple identities they need to negotiate. The abovementioned insights highlight the

need for adaptative approaches to design practice as pertains to amenities, facilities, and

programming in different socio-economic contexts, to ensure that the resources provided

meets the array of needs to facilitate access.

Conclusion

The purpose of this study was to understand how professionals (i.e., planners, building and landscape architects) who identify as ethnic minorities, perceive of their role of facilitating access to public spaces. A specific focus was given to the perceived role they play in the exchanges that take place across the dimensions of public space production which are connected to varying outcomes linked to community well-being. The conceptual framework adopted in this study comprised of an intersection between the *Tripartite framework* and Bishop's (2005) *Network Theory of Well-being*, which respectively theorize the exchanges in space production and the well-being of groups. The intersection between the two theoretical frameworks, as asserted by Godwyll & Buzinde (2022), can be applied to examine access as emerging from public space related exchanges across users, design professionals and physical characteristics, that are linked to positive community outcomes. Design professionals belonging to special interest groups, comprising of members who self-identify as ethnic minorities *(e.g., Planners of Color, National Association of Minority Landscape Architects, National Organization of Minority Architects),* were interviewed to understand the role they to play in facilitating access through the abovementioned exchanges and outcomes.

The main contribution of this paper is its description of the role minority design professionals play in the exchanges that take place in the production of public spaces and the associated community outcomes that facilitate access. Study participants shared insights on how their outlook on public spaces, based on their lived experiences as minority members, informed the part they played in community engagement, locational and feature considerations during planning and design processes. In describing their role

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in exchanges between the expectations of the community of users (*i.e.,* spaces of representation) and design professionals responsible for planning and design (*i.e.,* representations of space), informants highlighted how they curated inclusive processes which were focal to procedural justice. Such processes were described as comprising engagements that were key to *facilitating community agency* and a *sense of ownership*, which enabled access to the resulting public spaces. The locational decisions related to spatial characteristics of public spaces *(i.e.,* spatial practice*)* during planning and design (*i.e.,* representations of space), were described by participants as informed by their awareness of *contextual concerns* which were critical to distributive justice. The contextual concerns encompassed *scarcity-based concerns* pertaining to the lack of resources in geo-political contexts inhabited by minority groups and *place-based concerns* which arise from meanings ascribed to space, critical to access. Lastly, informants described their role in integrating community expectations of public spaces *(i.e.,* spaces of representation*)* into the resulting material characteristics *(i.e.,* spatial practice*)*, as encapsulating *feature considerations,* which are key to interactional justice. Such considerations which were informed by *needs awareness* highlighted the consciousness of the need for features that support social activities and cultural values in a given context, to facilitate access.

The described role participants played in public space related exchanges towards community well-being highlighted focal connections to access as relates to key environmental justice constructs. The existing literature focused on the linkages between the built environment and the well-being of communities is fairly nascent (Mouratidis, 2018b). Hence the dual role design professionals highlighted to play as agents of the

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communities they identify with along with their planning and design practice, provides added insights on how technical agents perceive and contribute to the aforementioned linkages. The insights shared regarding this dual role in facilitating access is critical to informing policy and institutional frameworks pertaining to engagement processes, locational and feature related decisions, in minority dominant contexts.

The described role design professionals played in public space related exchanges and associated community outcomes sets the stage for future studies to further examine the perceived facilitation of access through a quantitative study that tests the strength of the relationship between specific positive ideals realized during public space exchanges and perceived access to the resulting spaces. Given the emphasis on vulnerable populations in the facilitation of universal access to public spaces (UNESCO, 2017), further understanding the role played by minority design professionals will provide added insights on the realization of this goal.

REFERENCES

Amin, A. (2008). Collective culture and urban public space. *City*, *12*(1), 5–24. https://doi.org/10.1080/13604810801933495

Aiyer, S., & Zimmerman, M. (2015). From broken windows to busy streets: A community empowerment perspective. *Health Education & Behaviour*, *42*(2), 137–147. Retrieved from https://journals.sagepub.com/doi/abs/10.1177/1090198114558590?casa_token=1R9zKW uY6PYAAAAA:2Wk4SjWD9-uTqtI6nDSW20rABNMJCQdpH03Rods9fnegDMXDX2DzETlYmRFI7nPkl9sM-IER-6EL-U8

Altshuler, A. (1965). The Goals Of Comprehensive Planning. *Journal of the American Institute of Planners*, *31*(3), 186–195. https://doi.org/10.1080/01944366508978165

Alvaredo, F., Chancel, L., Piketty, T., Saez, E., & Zucman, G. (2018). *World inequality report 2018*. Retrieved from https://books.google.com/books?hl=en&lr=&id=uNqSDwAAQBAJ&oi=fnd&pg=PP1&d q=Rising+inequality+in+the+world+Thomas+Piketty.&ots=qickIBRgdz&sig=U4IBVX2 QI4Pdb1GDxcXfgzXXZRM

Alvarez, L. (2018). Decolonizing Environmental Justice Studies: A Latin American Perspective. *Taylor & Francis*, *31*(2), 50–69. https://doi.org/10.1080/10455752.2018.1558272

Amin, A. (2008). Collective culture and urban public space. *City*, *12*(1), 5–24. https://doi.org/10.1080/13604810801933495

Anthony, K. (2001). Designing for diversity: Gender, race, and ethnicity in the architectural profession. *University of Illinois Press.*

Anthony, K. H. (2002). Designing for diversity: Implications for architectural education in the twenty-first century. *Journal of Architectural Education*. Routledge. https://doi.org/10.1162/104648802753657969

Arko-Adjei, A. (2011). Adapting land administration to the institutional framework of customary tenure: the case of peri-urban Ghana. Retrieved from https://www.narcis.nl/publication/RecordID/oai:tudelft.nl:uuid%3A7964a2d2-11c1-46d9-96e2-054ba633a07c

Arnstein, S. (1969). A ladder of citizen participation. *AIP Journal*. Retrieved from http://geog.sdsu.edu/People/Pages/jankowski/public_html/web780/Arnstein_ladder_1969 .pdf

Bartlett, T. (2020). *What is "race" doing in a nice field like the Built Environment?* Retrieved from https://discovery.ucl.ac.uk/id/eprint/10110416/1/race_and_space_pdf_final-3.pdf

Barton, H. (2016). *City of well-being: A radical guide to planning*. Retrieved from https://books.google.com/books?hl=en&lr=&id=TCklDwAAQBAJ&oi=fnd&pg=PP1&dq=Planning+for+well-being&ots=NpfSbfeSd0&sig=5sdom3EIScUF5AlXnv5B0ZbZaBY

Benson, M., & Jackson, E. (2013). Place-making and Place Maintenance: Performativity, Place and Belonging among the Middle Classes. *Sociology*, *47*(4), 793–809. https://doi.org/10.1177/0038038512454350

Bernard, H., Wutich, A., & Ryan, G. (2016). *Analyzing qualitative data: Systematic approaches*. Retrieved from https://books.google.com/books?hl=en&lr=&id=yAi1DAAAQBAJ&oi=fnd&pg=PP1&dq=Analyzing+qualitative+data+bernard&ots=SynyREIRBi&sig=8G9xe6OdibiFvUigYSO2lpgu89Y

Bishop, M. A. (2005). *The good life : unifying the philosophy and psychology of well-being*.

Bloemers, T., Daniels, S., Fairclough, G., & Pedroli, B. (2010). *Landscape in a Changing World*. Retrieved from www.esf.org

Bolin, B., Grineski, S., & Collins, T. (2005). The Geography of Despair : Environmental Racism and the Making of South Phoenix , Arizona , USA Environmental Racism : Conceptual Issues. *Human Ecology Review*, *12*(2), 156–168.

Boone, C. G. (2008). Environmental Justice as Process and New Avenues for Research. *Environmental Justice*, *1*(3), 149–154. https://doi.org/10.1089/env.2008.0530

Bowen, W. M., & Wells, M. V. (2002). The politics and reality of environmental justice: A history and considerations for public administrators and policy makers. *Public Administration Review*, *62*(6), 688–698. https://doi.org/10.1111/1540-6210.00251

Boyatzis, R. (1998). *Transforming qualitative information: Thematic analysis and code development*. Retrieved from https://books.google.com/books?hl=en&lr=&id=_rfClWRhIKAC&oi=fnd&pg=PR6&dq=Boyatzis+(1998),+&ots=EBnNzkao_h&sig=o2wLl3yDOKNO49fZStISwM46DKY

Brabec, E. (2004). Multiple Landscape: Merging Past and Present in Landscape Planning, (June). Retrieved from https://scholarworks.umass.edu/cgi/viewcontent.cgi?article=1003&context=larp_faculty_pubs

Brabham, D. C. (2009). Crowdsourcing the public participation process for planning projects. *Planning Theory*, *8*(3), 242–262. https://doi.org/10.1177/1473095209104824

Bramley, G., Dempdey, N., Power, S., Brown, C., & Watkins, D. (2009). Social sustainability and urban form: Evidence from five British cities. *Environment and Planning A*. https://doi.org/10.1068/a4184

Bramnick, L. (2021). The Future of the Villa de Paz Golf Course Remains Uncertain - Law Office of Laura B.

Brown, A. J., Sherrard, H. M., & Shaw, J. H. (1969). introduction to town and country planning. Angus and Robertson. Retrieved from http://agris.fao.org/agris-search/search.do?recordID=US201300456505

Bullard, R. D. (2018). *Dumping in dixie: Race, class, and environmental quality, third edition*. *Dumping in Dixie: Race, Class, and Environmental Quality, Third Edition*. Taylor and Francis. https://doi.org/10.4324/9780429495274

Burningham, K., Barnett, J., & Thrush, D. (2006). The limitations of the NIMBY concept for understanding public engagement with renewable energy technologies: a literature review. Retrieved from http://opus.bath.ac.uk/37144/

Butler, A. (2014). *Developing Theory of Public Involvement in Landscape Planning*.

Byrne, J., Wolch, J., & Zhang, J. (2009). Planning for environmental justice in an urban national park. *Journal of Environmental Planning and Management*, *52*(3), 365–392. https://doi.org/10.1080/09640560802703256

Caplan, A. S., & Gilham, J. (2005). Included against the odds: Failure and success among minority ethnic built-environment professionals in Britain. *Construction Management and Economics*, *23*(10), 1007–1015. https://doi.org/10.1080/01446190500310700

Carmona, M. (2021). *Public places urban spaces: The dimensions of urban design*. *Public Places Urban Spaces: The Dimensions of Urban Design*. Taylor and Francis. https://doi.org/10.4324/9781315158457

Carr, Stephen. (1992). *Public space*. Cambridge University Press.

Cohen, D. A., Han, B., Derose, K. P., Williamson, S., Marsh, T., Raaen, L., & McKenzie, T. L. (2016). The Paradox of Parks in Low-Income Areas: Park Use and Perceived Threats. *Environment and Behavior*, *48*(1), 230–245. https://doi.org/10.1177/0013916515614366

Coles, R., & Millman, Z. (2013). *Landscape, well-being and environment*. Retrieved from
https://books.google.com/books?hl=en&lr=&id=4fUJAgAAQBAJ&oi=fnd&pg=PP1&dq=The+need+for+diversity+in+landscape+design+profession+&ots=psYPoVMqXP&sig=ouORZya13wwPtOE0_qH9EVLpb0M

Conrad, E., Cassar, L. F., Jones, M., Eiter, S., Izaovičová, Z., Barankova, Z., … Izaovič Ova, Z. (2011). Mike Christie & Ioan Fazey (2011) Rhetoric and Reporting of Public Participation in Landscape Policy. *Journal of Environmental Policy & Planning*, *13*(1), 23–47. https://doi.org/10.1080/1523908X.2011.560449

Crompton, J., & Wicks, B. (1988). Implementing a Preferred Equity Model for the Delivery of Leisure Services in the US. Context. *Leisure Studies*, *7*, 287–403.

Cutter, S. ., Boruff, B. ., & Shirley, W. . (2012). *Social Vulnerability to Environmental Hazards n*. https://doi.org/10.1111/1540-6237.8402002

Cutts, B., Darby, K., Boone, C., & Brewis, A. (2009). City structure, obesity, and environmental justice: an integrated analysis of physical and social barriers to walkable streets and park access. *Social Science & Medicine*. Retrieved from
https://www.sciencedirect.com/science/article/pii/S0277953609005395?casa_token=E22BaXP_b1kAAAAA:guSlcxV4NGqxAsv2gN9VdtRAH5ALum1Q62mNadEuVcHKgsQ39v_CbzwkuG1vSuEEmc1u9urVxBzU

Daniere, A., & Douglass, M. (2008). *The politics of civic space in Asia: Building urban communities*. Retrieved from
https://books.google.com/books?hl=en&lr=&id=jXV8AgAAQBAJ&oi=fnd&pg=PP1&dq=Public+participation+in+planning+in+Asia&ots=GRm_ZvOaEt&sig=0rEhqBOjMzqXXDm2T87fM-vedjY

Davidoff, P. (1965). ADVOCACY AND PLURALISM IN PLANNING. *Journal of the American Institute of Planners*, *31*(4), 331–338.
https://doi.org/10.1080/01944366508978187

Day, K. (2006). Active living and social justice: Planning for physical activity in low-income, Black, and Latino communities. *Journal of the American Planning Association*.
https://doi.org/10.1080/01944360608976726

De Graft-Johnson, A., Manley, S., & Greed, C. (2005). Diversity or the lack of it in the architectural profession. *Construction Management and Economics*, *23*(10), 1035–1043.

Deming, M., & Swaffield, S. (2011). *Landscape architectural research: Inquiry, strategy, design*. Retrieved from
https://books.google.com/books?hl=en&lr=&id=dYCFDwAAQBAJ&oi=fnd&pg=PR11&dq=Landscape+Architectural+Research+Inquiry,+Strategy,+Design&ots=kaAI6-hEhq&sig=bENOj1485cG1yVJ7BYmuwhwG2D0

Dupre, K. (2019). Trends and gaps in place-making in the context of urban development and tourism: 25 years of literature review. *Journal of Place Management and Development*. Emerald Group Holdings Ltd. https://doi.org/10.1108/JPMD-07-2017-0072

Dutton, J. E., Glynn, M. A., & Spreitzer, G. (2008). Positive organizational scholarship. *The SAGE Handbook of Organizational Behavior*, *1*, 693-712. Retrieved from http://webuser.bus.umich.edu/janedut/POS/Dutton-GlynnPOS.pdf

Eggertsen Teder, M. (2019). Placemaking as co-creation–professional roles and attitudes in practice. *CoDesign*, *15*(4), 289–307. https://doi.org/10.1080/15710882.2018.1472284

Faludi, A. (1979). Towards a combined paradigm of planning theory? *Planning Outlook*, *22*(2), 77–80. https://doi.org/10.1080/00320717908711583

Floyd, M. F. (2014). Social Justice as an Integrating Force for Leisure Research. *Leisure Sciences*, *36*(4), 379–387. https://doi.org/10.1080/01490400.2014.917002

Friedmann, J. (1971). *The Future of Comprehensive Urban Planning: A Critique*. *Source: Public Administration Review* (Vol. 31).

Gale, R., & Naylor, S. (2002). Religion, planning and the city. *Ethnicities*, *2*(3), 387–409. https://doi.org/10.1177/14687968020020030601

Giulietti, & Assumpção. (2019). The Production of Urban Public Space:A Lefebvrian Analysis of Castlefield, Manchester. *Journal of Chemical Information and Modeling*, *53*(9), 1689–1699. https://doi.org/10.1017/CBO9781107415324.004

Given, L. (2015). *100 questions (and answers) about qualitative research*. Retrieved from https://books.google.com/books?hl=en&lr=&id=dfeRBgAAQBAJ&oi=fnd&pg=PP1&ots=pti9BoTjz6&sig=HSz_ZJQlQ_PSeYG1Yxb38_ksZZY

Godwyll, J. M., & Buzinde, C. N. (2022). Conceptualizing linkages between community well-being and access to public space : an environmental justice perspective, 1–23.

Gould, K., & Lewis, T. (2016). *Green gentrification: Urban sustainability and the struggle for environmental justice*. Retrieved from https://books.google.com/books?hl=en&lr=&id=raOuDAAAQBAJ&oi=fnd&pg=PP1&ots=D_WmhCr-Ok&sig=2_adVOqTAl8PvNE09VOGIg1ultg

Gu, X., Tao, S., & Dai, U. (2017). Spatial accessibility of country parks in Shanghai, China. *Urban Forestry & Urban Greening*. Retrieved from https://www.sciencedirect.com/science/article/pii/S1618866716305556?casa_token=NvT dQzKjLdQAAAAA:F200kaWt24r43UzVkhHvlSS2fDS-GFENPY1i8N4n6gi9iReIdSc6oltFNPMoyplsYG8eZO2m4unY

Hou, J., & Rios, M. (2003). Community-driven place making: The social practice of participatory design in the making of Union Point Park. *Journal of Architectural Education*. https://doi.org/10.1162/104648803322336557

Imrie, R., & Street, E. (2014). Autonomy and the socialisation of architects. *The Journal of Architecture*, *19*(5), 723–739. https://doi.org/10.1080/13602365.2014.967271

Innes, J., & Booher, D. (2000). Public participation in planning: new strategies for the 21st century. Retrieved from https://escholarship.org/uc/item/3r34r38h

Innes, J., & Booher, D. (2010). *Planning with complexity: An introduction to collaborative rationality for public policy*. Retrieved from https://www.taylorfrancis.com/books/9781135194277
Israel, H. (1931). Town_and_Country_Planning..pdf.

Irazábal, C. (2012). Journal of Urbanism: International Research on Placemaking and Urban Sustainability Beyond "Latino New Urbanism": advocating ethnurbanisms. *Journal of Urbanism: International Research on Placemaking and Urban Sustainability*, *5*(3), 241–268. https://doi.org/10.1080/17549175.2012.701817

Jacobs, J. (1961). The Death and Life of Great American Cities. *Modern Library Ed*. Retrieved from https://scholar.google.com/scholar?hl=en&as_sdt=0%2C3&q=Jacobs%2C+J.+1961.+The +Death+and+Life+of+Great+American+Cities.+New+York%3A+Random+House.&btn G=

Jay, M., Peters, K., Buijs, A. E., Gentin, S., Kloek, M. E., & O'Brien, L. (2012). Towards access for all? Policy and research on access of ethnic minority groups to natural areas in four European countries. *Forest Policy and Economics*, *19*, 4–11. https://doi.org/10.1016/j.forpol.2011.12.008

Jian, I. Y., Luo, J., & Chan, E. H. W. (2020). Spatial justice in public open space planning: Accessibility and inclusivity. *Habitat International*, *97*(February), 102122. https://doi.org/10.1016/j.habitatint.2020.102122

Kabisch, N., & Haase, D. (2014). Green justice or just green? Provision of urban green spaces in Berlin, Germany. *Landscape and Urban Planning*, *122*, 129–139. https://doi.org/10.1016/j.landurbplan.2013.11.016

Kadushin, C. (1968). Power, influence and social circles: A new methodology for studying opinion makers. *American Sociological Review*. Retrieved from https://www.jstor.org/stable/2092880?casa_token=lQnXsi8d8N4AAAAA:04GCyfxJ1ln XfsgNYmmFHNOT6Obb2fsTk3_0qxl_R0_6IwshCE6kbBRmQUAovU_jJxUpzKP0S_i6 HvS_1QzaUUtHAq4mvIsWFv2jAVAov93u2z2AvkMp

Kahn, R., & Cannell, C. (1957). The dynamics of interviewing; theory, technique, and cases. Retrieved from https://psycnet.apa.org/record/1957-07878-000

Kent, T. (1964). urban general plan. Retrieved from http://agris.fao.org/agris-search/search.do?recordID=US201300597575
Kent, J. L., & Thompson, S. (2014). The Three Domains of Urban Planning for Health and Well-being. *Journal of Planning Literature*, *29*(3), 239–256. https://doi.org/10.1177/0885412214520712

Kim, J., & Nicholls, S. (2018). Access for all? Beach access and equity in the Detroit metropolitan area. *Journal of Environmental Planning and Management*, *61*(7), 1137–1161. https://doi.org/10.1080/09640568.2017.1335187

Knox. (1980). Measures of Accessibility as Social Indicators.

Krivý, M., & Kaminer, T. (2013). Introduction : The Participatory Turn in Urbanism, 1–6.

Kuo, F. E., & Faber T. A. (2004). A potential natural treatment for attention-deficit/hyperactivity disorder: Evidence from a national study. *American Journal of Public Health*, *94*(9), 1580–1586. https://doi.org/10.2105/AJPH.94.9.1580

Kuta, A., Odumosu, J., & Ajayi, O. (2014). Using a GIS-based network analysis to determine urban greenspace accessibility for different socio-economic groups, specifically related to deprivation in. *Pdfs.Semanticscholar.Org*. Retrieved from https://pdfs.semanticscholar.org/48e1/17740aab018c31cf58fd78fb6921e1b739aa.pdf

Leary-Owhin, M. E. (2015). A Fresh Look at Lefebvre's Spatial Triad and Differential Space: A Central Place in Planning Theory? *2nd Planning Theory Conference University of the West of England*, 1–8.

Leary-Owhin, M. E. (2013). A Lefebvrian analysis of the production of glorious, gruesome public space in Manchester. *Progress in Planning*, *85*, 1–52. https://doi.org/10.1016/j.progress.2012.12.002

Ledwith, M. (2020). *Community development: A critical approach*. Retrieved from https://books.google.com/books?hl=en&lr=&id=8yjJDwAAQBAJ&oi=fnd&pg=PR8&dq =community+development+ledwith&ots=qriEP3jkze&sig=P81kJhgCFNveJws5yUa3YN rv0AE

Lee, S. J. (2015). Well-Being and Community Development Conceptions and Applications. https://doi.org/10.1007/978-3-319-12421-6

Lefebvre, H., & Nicholson-Smith, D. (1991). *The production of space*. Retrieved from https://books.google.com/books?hl=en&lr=&id=b9WWAwAAQBAJ&oi=fnd&pg=PA289&dq=social+production+of+space+lefebvre&ots=KV1rDJnnD9&sig=4m7Hdcqp22dyhdokcr4NV6NgyZI

Li, F., Fisher, K., & Brownson, R. (2005). Multilevel modelling of built environment characteristics related to neighbourhood walking activity in older adults. *Journal of Epidemiology & Community Health*, *59*(7), 558–564. Retrieved from https://jech.bmj.com/content/59/7/558.short

Lindsay, J. M. (2006). *Techniques in Human Geography*. Retrieved from https://books.google.com/books?hl=en&lr=&id=_9iEAgAAQBAJ&oi=fnd&pg=PP1&dq=interpretivism+and+human+geography&ots=i4xAi-cazN&sig=OhCGPb121OB4RKFL2AHewLy2Qak

Low, S. (1996). Spatializing culture: the social production and social construction of public space in Costa Rica. *American Ethnologist*. Retrieved from https://anthrosource.onlinelibrary.wiley.com/doi/abs/10.1525/ae.1996.23.4.02a00100?casa_token=sTb7GzxhvlEAAAAA:UKM_Gt3d8g5f9RlKg6OLT5QeN3LHG001rKQrvUgWHrop8vj3LpfsQIEoTn7dbR_XQuyA5_EEMoNWvslW

Low, S. (2013). *Public space and diversity: Distributive, procedural and interactional justice for parks*. *m.gc.cuny.edu*. Retrieved from https://m.gc.cuny.edu/CUNY_GC/media/CUNY-Graduate-Center/PDF/Programs/Anthropology/Faculty/Public-Space-and-Diversity.pdf

Low, S, & Smith, N. (2013). *The politics of public space*. Retrieved from https://books.google.com/books?hl=en&lr=&id=x8T7qheiI2oC&oi=fnd&pg=PR1&dq=public+spaces&ots=RNobH0r5qD&sig=wsxlhKvLzCRj4b35I1aUmSeP3-g

Low, S, Taplin, D., & Scheld, S. (2009). *Rethinking urban parks: Public space and cultural diversity*. Retrieved from https://books.google.com/books?hl=en&lr=&id=cUhYBCSAYIEC&oi=fnd&pg=PR5&dq=Park+amenities+as+indicators+of+differential+space&ots=NvXqIm0XCs&sig=XAg9TcWL6t5EoDmpsh1QscY2HjY

Low, S. (2016). Public space and diversity: Distributive, procedural and interactional justice for parks. In *The Ashgate Research Companion to Planning and Culture* (pp. 295–309). Taylor and Francis. https://doi.org/10.4324/9781315613390-33

Low, S., & Iveson, K. (2016). Propositions for more just urban public spaces. *City*, *20*(1), 10–31. https://doi.org/10.1080/13604813.2015.1128679

Low, S.M, Taplin, D., & Scheld, S. (2009). *Rethinking urban parks: Public space and cultural diversity*. Retrieved from https://books.google.com/books?hl=en&lr=&id=cUhYBCSAYIEC&oi=fnd&pg=PR5&dq=how+historical+cultural+values+have+been+lost+in+built+design+&ots=NwTpLm-VBs&sig=e2VIVHevAyLxAyz0C5YbbxwqA2o

Lozano-Pérez, T. (1990). Spatial Planning: A Configuration Space Approach. In *Autonomous Robot Vehicles* (pp. 259–271). Springer New York. https://doi.org/10.1007/978-1-4613-8997-2_20

Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin*, *131*(6), 803–855. https://doi.org/10.1037/0033-2909.131.6.803

Macedo, J., & Haddad, M. A. (2016). Equitable distribution of open space: Using spatial analysis to evaluate urban parks in Curitiba, Brazil. *Environment and Planning B: Planning and Design*, *43*(6), 1096–1117. https://doi.org/10.1177/0265813515603369

Madanipour, A. (2004). Marginal public spaces in European cities. *Journal of Urban Design*, *9*(3), 267–286. https://doi.org/10.1080/1357480042000283869

Magallanes, F. (2020). 100 Years Of Deep Time : Cela 2020. In *For Whites Only: A Timely Commentary about Latino Culture and Landscape Architecture* (p. 240).

Makhzoumi, J., Egoz, S., & Pungetti, G. (2011). *The right to landscape: contesting landscape and human rights*. Retrieved from https://books.google.com/books?hl=en&lr=&id=3mWkxPJJ2o4C&oi=fnd&pg=PR9&dq=Egoz,+S.,+Makhzoumi,+J.+%26+Pungetti,+G.+(eds.)+(2011)+The+right+to+landscape:+contesting+landscape+and+human+rights,+Farnham:+Ashgate+Publishing+Limited&ots=T7GHqLQ2pH&sig=sAx4E7S-0_obDYWBCdN2GdA0iDY

Manning T. (1999). The minority-race planner in the quest for a just city, *7*(3), 227–247. https://doi.org/10.1177/1473095208094822

Mansouri, S., Bagh, E., & Foroughi, M. (2018). The Concept of Participation in Landscape Design. *The Monthly Scientific Journal of Bagh-E Nazar*, *15*(62), 17–24. Retrieved from http://www.bagh-sj.com/m/&url=http://www.bagh-sj.com/article_66282.html?lang=en

McGaw, J., Pieris, A., & Potter, E. (2011). Indigenous place-making in the city: Dispossessions, occupations and implications for cultural architecture. *Architectural Theory Review*. https://doi.org/10.1080/13264826.2011.621544

Metzger, J. T. (1996). The Theory and Practice of Equity Planning: An Annotated Bibliography. *Journal of Planning Literature*, *11*(1), 112–126. https://doi.org/10.1177/088541229601100106

Mills, J., Clark, M. S., Ford, T. E., & Johnson, M. (2004). Measurement of communal strength. *Personal Relationships*, *11*(2), 213–230. https://doi.org/10.1111/j.1475-6811.2004.00079.x

Mishchuk, H., Samoliuk, N., Bilan, Y., & Streimikiene, D. (2018). Income Inequality and its Consequences within the Framework of Social Justice. Retrieved April 2, 2021, from http://yadda.icm.edu.pl/yadda/element/bwmeta1.element.baztech-578044de-f1cd-4db3-81c0-3a8b07dd3384

Mitchell, D. (2003). *The right to the city: Social justice and the fight for public space*. Retrieved from https://books.google.com/books?hl=en&lr=&id=2NKoBQAAQBAJ&oi=fnd&pg=PP1&dq=Forms+indicative+of+public+spaces&ots=jZcBeSpE15&sig=l6AgxDq6oNFrSprKpOCjvQkuJrw

Mohai, P., Pellow, D., & Roberts, J. (2009). Environmental justice. *Annual Review of Environment and Resources*, *34*, 405–430. https://doi.org/10.1146/annurev-environ-082508-094348

Morello-Frosch, R., Pastor, M., Porras, C., & Sadd, J. (2002). Environmental justice and regional inequality in Southern California: Implications for furture research. *Environmental Health Perspectives*, *110*(SUPPL. 2), 149–154. https://doi.org/10.1289/ehp.02110s2149

Mouratidis, K. (2018a). Built environment and social well-being: How does urban form affect social life and personal relationships? *Cities*, *74*(June 2017), 7–20. https://doi.org/10.1016/j.cities.2017.10.020

Mullenbach, L., & Baker, L. (2020). Environmental Justice, Gentrification, and Leisure: A Systematic Review and Opportunities for the Future. *Leisure Sciences*, *42*(5–6), 430–447. https://doi.org/10.1080/01490400.2018.1458261

Murray, M. (2010). Private Management of Public Spaces: Nonprofit Organizations and Urban Parks. *Harvard Environmental Law Review*, *34*. Retrieved from https://heinonline.org/HOL/Page?handle=hein.journals/helr34&id=181&div=&collection=

Nash, V., & Christie, I. (2003). *Making sense of community*. Retrieved from
http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.467.2295&rep=rep1&type=pdf

Newton, N. (1971). *Design on the land: The development of landscape architecture*.
Retrieved from
https://books.google.com/books?hl=en&lr=&id=wbg9FQdNTAYC&oi=fnd&pg=PR21&
dq=lack+of+inclusion+of+public+in+landscape+architecture&ots=XjUxF1_tME&sig=D
amFuj57bnIyG5XGElewAg3a0IU

Nicholls, S., & Shafer, C. (2001). Measuring Accessibility and Equity in a Local Park
System: The Utility of Geospatial Technologies to Park and Recreation Professionals.
Journal of Park & Recreation, *19*(4). Retrieved from
http://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authtype
=crawler&jrnl=07351968&AN=31728465&h=eHcwHRE%2Fv7rqI%2Fyy9NLsX9f4ef
WQaC%2Bmg7jnSghUIiSYrTXBmkpljlgF38o5mrpEaOoNAhf0BWhky2RKp0oxZg%3
D%3D&crl=c

Nussbaum, M., & Sen, A. (1993). *The quality of life*. Retrieved from
https://books.google.com/books?hl=en&lr=&id=QurkDwAAQBAJ&oi=fnd&pg=PP1&ot
s=1zylSWOzna&sig=5SR3jmoLceSKKZ025s1xzzdHTnk

OECD. (2008). 2008 OECD Household Survey on Environmental Attitudes and
Behaviour : Data Corroboration.

Omer, I. (2006). Evaluating accessibility using house-level data: A spatial equity
perspective. *Computers Environment and Urban Systems*, *30*(3), 254–274. Retrieved
from
https://www.sciencedirect.com/science/article/pii/S0198971505000530?casa_token=aMo
FyJcv6GQAAAAA:QHjwTT6T3iHR9HMwzD_PEkOeA1IFr1oI-
ayY2dCCOkfAWU_5fdFcoMfzRSagKd5a29OMQNws2ZjI

Othengrafen, F., & Reimer, M. (2013). The embeddedness of planning in cultural
contexts: Theoretical foundations for the analysis of dynamic planning cultures.
Environment and Planning A, *45*(6), 1269–1284. https://doi.org/10.1068/a45131

Parker, G., & Street, E. (2018). Advocacy planning: *Enabling Participatory Planning*,
43–60. https://doi.org/10.2307/j.ctt22h6qbk.9

Peters, K. (2010). Leisure Sciences Being Together in Urban Parks: Connecting Public
Space, Leisure, and Diversity. *Taylor & Francis*, *32*(5), 418–433.
https://doi.org/10.1080/01490400.2010.510987

Pulido, L. (2000). Rethinking Environmental Racism: White Privilege and Urban
Development in Southern California. *Annals of the Association of American
Geographers*, *90*(1), 12–40. https://doi.org/10.1111/0004-5608.00182

Rigolon, A, Fernandez, M., Harris, B., & Stewart, W. (2019). An Ecological Model of Environmental Justice for Recreation. *Leisure Sciences*, *0400*. https://doi.org/10.1080/01490400.2019.1655686

Rishbeth, C. (2001). Ethnic minority groups and the design of public open scape: An inclusive landscape? *Landscape Research*, *26*(4), 351–366. https://doi.org/10.1080/01426390120090148

Robinette, G. (1975). Landscape Architecture - a Profession Designed for Minorities.pdf.

Roman, C., & Chalfin, A. (2008). Fear of walking outdoors: A multilevel ecologic analysis of crime and disorder. *American Journal of Preventive Medicine*. Retrieved from https://www.sciencedirect.com/science/article/pii/S074937970800069X?casa_token=aiCs 7fWWmdAAAAAA:lroEMftkVJNCkKvSzo1ePJwqtkUHzRtZwB287zIQ6-K-Y7zWeQbqeSH-BdqAN6acUjon-m9p3iE

Schindler, S. (2015). Architectural Exclusion: Discrimination and Segregation Through Physical Design of the Built Environment on JSTOR. Retrieved March 1, 2022, from https://www.jstor.org/stable/43617074?casa_token=71R6fGqK5pcAAAAA%3A3-4QD0AZ-GeX3K8ikoB01efLuTBb0rhYuEIfsyPXwcBEmvIfxaLqUw3C_8y6Vu4uWK_HYyzAXc H5BrscYY1W3LjOnCb53sG47ZB-Ehxqls68qwGx_5PF&seq=1#metadata_info_tab_contents

Sharp, T. (1945). Town planning. Penguin books.

Shi, S., Gou, Z., & Chen, L. (2014). How does enclosure influence environmental preferences? A cognitive study on urban public open spaces in Hong Kong. *Sustainable Cities and Society*. Retrieved from https://www.researchgate.net/profile/Shulin_Shi/publication/262641864_How_does_encl osure_influence_environmental_preferences_A_cognitive_study_on_urban_public_open _spaces_in_Hong_Kong/links/59d9a904a6fdcc2aad0d97f5/How-does-enclosure-influence-environment

Sister, C., Wolch, J., & Wilson, J. (2010). Got green? addressing environmental justice in park provision. *GeoJournal*. https://doi.org/10.1007/s10708-009-9303-8

Spreitzer, G., Sutcliffe, K., Dutton, J., Sonenshein, S., & Grant, A. (2005, September). A socially embedded model of thriving at work. *Organization Science*. https://doi.org/10.1287/orsc.1050.0153

Stanley, B. W., Stark, B. L., Johnston, K. L., & Smith, M. E. (2012). Urban Open Spaces in Historical Perspective: A Transdisciplinary Typology and Analysis. *Urban Geography*, *33*(8), 1089–1117. https://doi.org/10.2747/0272-3638.33.8.1089

Stickells, L. (2011). The right to the city: rethinking architecture's social significance.

Stigsdotter, U. K., Randrup, T. B., Ekholm, O., Schipperijn, J., Toftager, M., & Kamper-Jørgensen, F. (2010). Health promoting outdoor environments - Associations between green space, and health, health-related quality of life and stress based on a Danish national representative survey. *Scandinavian Journal of Public Health*, *38*(4), 411–417. https://doi.org/10.1177/1403494810367468

Sweeney, M. (2005). Planning for public spaces in multiethnic contexts: A case study of Mountain Sights, Montreal. *ProQuest Dissertations and Theses*, *D*, 457. Retrieved from https://search.proquest.com/dissertations-theses/planning-public-spaces-multiethnic-contexts-case/docview/305378528/se-2?accountid=41849

Sweet, E., & Etienne, H. (2011). Commentary: Diversity in urban planning education and practice. *Journal of Planning Education and Research*, *31*(3), 332–339. https://doi.org/10.1177/0739456X11414715

Talen, E. (2010). The spatial logic of parks. *Journal of Urban Design*, *15*(4), 473–491. https://doi.org/10.1080/13574809.2010.502335

Thomas, J. (2013). *Redevelopment and race: Planning a finer city in postwar Detroit*. Retrieved from https://books.google.com/books?hl=en&lr=&id=PpCWAgAAQBAJ&oi=fnd&pg=PR1&dq=Planners+who+are+part+of+minority+races+&ots=BAj5Gf1lQ_&sig=RA12Bv4IRBbs85vIGGx0CaUF5GU

Thompson, I. (2000). Aesthetic, social and ecological values in landscape architecture: A discourse analysis. *Ethics, Place and Environment*, *3*(3), 269–287. https://doi.org/10.1080/713665903

Tinnevelt, R., & Geenens, R. (2008). *Does truth matter?: Democracy and public space*. Retrieved from https://link.springer.com/content/pdf/10.1007/978-1-4020-8849-0.pdf

Trefry, J., & Watson, L. (2013). The silenced voices of architectural discourse: promoting inclusion through qualitative research. *Enquiry The ARCC Journal for Architecture*. Retrieved from https://185.52.151.100/index.php/arccjournal/article/view/867030026

Triggs, H. (1911). Town planning, past, present and possible. Retrieved from https://scholar.google.com/scholar?hl=en&as_sdt=0%2C3&q=Triggs+H+I+%281909%29+Town+Planning+Past+Present+and+Future+London+%3A+Methuen&btnG=

Turner, D. (2010). *Qualitative Interview Design: A Practical Guide for Novice Investigators*. *The   Qualitative Report* (Vol. 15). Retrieved from http://www.nova.edu/ssss/QR/QR15-3/qid.pdf

UNESCO. (2017). Inclusion Through Access to Public Space. Retrieved April 3, 2021, from http://www.unesco.org/new/en/social-and-human-sciences/themes/urban-development/migrants-inclusion-in-cities/good-practices/inclusion-through-access-to-public-space/

Weiss, C. C., Purciel, M., Bader, M., Quinn, J. W., Lovasi, G., Neckerman, K. M., & Rundle, A. G. (2011). Reconsidering access: Park facilities and neighborhood disamenities in New York City. *Journal of Urban Health*, *88*(2), 297–310. https://doi.org/10.1007/s11524-011-9551-z

Wendel, H., Zarger, R., & Mihelcic, J. (2012). Accessibility and usability: Green space preferences, perceptions, and barriers in a rapidly urbanizing city in Latin America. *Landscape and Urban Planning*. Retrieved from https://www.sciencedirect.com/science/article/pii/S0169204612001892?casa_token=9Gg 6zASC4AsAAAAA:xIo98A6ZBMhoskdoG4uK-TLgIFkKO_S5hcBBNdry_VJ-hpVkBKWp4MoEsbJq3m46MPcJLJabkL4

Werlen, B. (1993). *Society action and space: an alternative human geography*. Retrieved from https://books.google.com/books?hl=en&lr=&id=72HvR3XttU4C&oi=fnd&pg=PP1&dq= reconstitution+of+human+geography+as+spatial+science+positivist+&ots=t6KnM7Opd3 &sig=qZ4QlMdQ95d2KC7YA908C09SkCk

Wheeler, S. M. (2004). *Planning for sustainability: Creating livable, equitable and ecological communities*. *Planning for Sustainability: Creating Livable, Equitable and Ecological Communities* (Vol. 9780203300). https://doi.org/10.4324/9780203300565

Whitlock, J. (2007). The role of adults, public space, and power in adolescent community connectedness. *Journal of Community Psychology*. Retrieved from https://onlinelibrary.wiley.com/doi/abs/10.1002/jcop.20161?casa_token=enDFbd1ZBakA AAAAA:PVRSAu0T1y_Gq26WzTIr4b5hGuy5MDsfz_55AijpOSOmkF00_p906wP5C7yo VifA_5GGc6qNeVd9liHe

Whyte, WH. (1980). The social life of small urban spaces. Retrieved from https://trid.trb.org/view/521122

Whyte, William. (1980). The Social Life of Small Urban Spaces City : Rediscovering the Center. *Washington: The Conservation Foundation, D.C.*, *VIII*(1).

Williams, M. (2000). Interpretivism and generalisation. *Sociology*, *34*(2), 209–224. https://doi.org/10.1177/s0038038500000146

Wilson, S., Hutson, M., & Mujahid, M. (2008). How planning and zoning contribute to inequitable development, neighborhood health, and environmental injustice.

Environmental Justice, 1(4), 211–216. Retrieved from
https://www.liebertpub.com/doi/abs/10.1089/env.2008.0506

Wiseman, J., & Brasher, K. (2008). Community wellbeing in an unwell world: Trends, challenges, and possibilities. *Journal of Public Health Policy*.
https://doi.org/10.1057/jphp.2008.16

Witten, K., & Ivory, V. (2018). Urban public spaces, social inclusion and health. In *Routledge Handbook of Health Geography* (pp. 259–266). Taylor and Francis.
https://doi.org/10.4324/9781315104584-37

Wolch, J., Wilson, J. P., & Fehrenbach, J. (2005). Urban Geography Parks and Park Funding in Los Angeles: An Equity-Mapping Analysis. *Urban Geography*, *26*(1), 4–35.
https://doi.org/10.2747/0272-3638.26.1.4

Worpole, K., & Knox, K. (2007). *The social value of public spaces*.

Zallio, M., & Clarkson, P. J. (2021). Inclusion, diversity, equity and accessibility in the built environment: A study of architectural design practice. *Building and Environment*, *206*, 108352. https://doi.org/10.1016/j.buildenv.2021.108352

Zapata, M. A., & Bates, L. K. (2015). Symposium: Equity Planning Revisited Equity Planning Revisited. *Journal of Planning Education and Research*, *35*(3), 245–248.
https://doi.org/10.1177/0739456X15589967

APPENDIX A

IRB APPROVAL

EXEMPTION GRANTED

On 5/18/2021 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	ACCESS TO PUBLIC SPACE: EXAMINING ENVIRONMENTAL JUSTICE THROUGH SPATIAL, TECHNICAL AND USER COMMUNITY INTERACTIONS, AND THEIR PERCEIVED IMPLICATIONS ON COMMUNITY WELL-BEING
Investigator:	Christine Buzinde
IRB ID:	STUDY00013993
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• IRB_Protocol, Category: IRB Protocol; • Participatory Mapping, Focus Group and Interview Questions.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • Recruitment Script_Neighbor_Associations.pdf, Category: Recruitment Materials; • recruitmentformtechnicalexperts.pdf, Category: Recruitment Materials; •Updated_Consent_Template_Neighborhood Associations.pdf, Category: Consent Form; • Updated_Consent_Template_Techical experts.pdf, Category: Consent Form;

The IRB determined that the protocol is considered exempt pursuant to Federal

Regulations 45CFR46 (2) Tests, surveys, interviews, or observation on 5/18/2021.

In conducting this protocol you are required to follow the requirements listed in the

INVESTIGATOR MANUAL (HRP-103).

If any changes are made to the study, the IRB must be notified at

research.integrity@asu.edu to determine if additional reviews/approvals are required.

Changes may include but not limited to revisions to data collection, survey and/or

interview questions, and vulnerable populations, etc.

Sincerely,

IRB Administrator

cc: Josephine Godwyll

 Christine Buzinde