

Rethinking the Post-Apartheid City: Tactics for Engagement

Phoebe Crisman
University of Virginia

The urban logic of contemporary South African cities physically manifests the legacy of apartheid. Segregated settlement patterns preclude an equitable and sustainable future for all citizens. A trans-disciplinary research initiative at the University of Virginia employed new engagement tactics to imagine sustainable development in the face of rapid urbanization, socio-economic upheaval, and technological change in South Africa. (1) We engaged in reflexive dialogue with collaborators at the US Embassy in Pretoria and the African Cities Network. This innovative exchange was achieved through the Diplomacy Lab structure that “enables the State Department to ‘course-source’ research and innovation related to foreign policy by harnessing the efforts of students and faculty at universities across the country.” (2) We began by examining four factors that perpetuate existing social, economic, and spatial patterns shaped by apartheid: “existing property markets and land use, unsustainable infrastructure networks and consumption patterns, continued segregated urban settlements, and unequal income levels and access to services.” (3) These factors generate several problematic physical conditions in South African cities. Affordable housing and public community spaces are in short supply. Fresh water, sanitation, and energy systems are underfunded and do not meet current demands. Most new jobs are located in urban centers and township dwellers must increasingly endure long and arduous commutes exacerbated by inadequate public transportation. In light of these challenges, the following research questions were developed with our collaborators. (6) How can South Africa achieve more sustainable development in the face of rapid urbanization and societal upheaval? How can we rethink these obstacles amidst the need to transform the economy to include all South Africans?

Twenty-eight students from a wide range of disciplines worked in teams to create seven distinct, yet intertwined proposals for affordable housing, community engagement, public space, environmental restoration, solar energy policy, small-scale farming, and informal trading. (4) Building on scholarly literature and case study research, we used a systems-based approach to investigate *what would happen if...* and propose what would be required to create a particular sustainable change. Our South African partners provided feedback via email and teleconference. We synthesized the research into the publication, *Rethinking Urbanization Challenges in South Africa*. (5) This forward-thinking, scenario-planning method empowered the research team to holistically address environmental, economic development, and social issues in South African cities. This essay provides an overview of the seven tactical proposals.

1. Resisting Gentrification with Affordable, Inclusive, and Community-Driven Housing

What happens when urban rejuvenation efforts lead to displacement of poorer residents? What are the distinct factors in post-apartheid South Africa and cities in the global south? Can successful strategies from cities around the world be translated to the South African context? “Both urban revitalization and affordable housing initiatives often prove problematic as a means of holistic community development due to their failures to include all local populations. Falling into one of two tropes, successful renewals of urban landscapes often displace the poor as their communities become gentrified. Conversely, affordable housing models can disintegrate into networks of entrenched, poverty-ridden projects due to limitations in public sector funding and ingrained societal biases. Integrating affordable housing as a means of revitalization within South African cities faces unique challenges due to the residual legacy of apartheid and a national population rapidly reaching 50% urbanization. (7) Drawing on successful case studies and theoretical arguments, we propose a holistic framework for affordable housing in South African city centers that directly engages collaborative stakeholder planning and community partnerships, stimulates financial transparency in leveraging private institutions and updated mortgage systems, integrates policy solutions to the economic and architectural elements of urban design, and implements community-driven design tactics in order to break down the legacies of apartheid within the contemporary urban landscape. In tackling the unique challenges of South African cities, traditional development approaches will not be contextually appropriate, nor will they foster long-term sustainability. The center city must be transformed in the South African imagination from a place of crime and segregation to one of inclusivity, culture, and opportunity. This shift will only be made possible if smart planning policies integrate innovative design thinking and forge grassroots alliances.” (8)

2. Achieving Affordable Township Housing Upgrades through Community Engagement

How does the legacy of townships and informal settlements affect the provision of affordable housing in South Africa? How can effective methods of community engagement counteract a history of limited citizen input in planning decisions? In response to these questions, we examined case studies, developed strategies, and demonstrated how they can be adapted to the particularities of the northern Johannesburg township of Diepsloot. “To combat the issues engendered by the legacy of apartheid

and rapid urbanization in South Africa, it is imperative to empower the residents of informal settlements and townships. This population must be given the opportunity to take an active role in the improvement of their living conditions. The South African Government could help accomplish this by embracing a multistep community engagement strategy and using an index of different in-situ incremental housing upgrades. These solutions include, but are not limited to, full construction of individual homes, phased structures like the Elemental project, micro-financing for resident self improvement of individual homes, and low interest loans for small scale add-in improvements such as locks, reinforced windows, and latrines. Each housing improvement initiative should be evaluated and applied based on specific criteria and demographics, to empower residents and improve efficiency of cost, construction, and maintenance. While barriers to incremental housing improvements exist, such as high crime rate, immigrant populations, and lack of land tenure, we believe that community engagement offers a process to overcome these barriers. Through acknowledgement of the needs of all stakeholder groups and increased willingness for all parties to participate, the most creative and efficient solutions will emerge.” (9)

3. Creating Public Space in Post-Apartheid Informal Settlements

Acknowledging the value of vital public spaces, we studied and proposed design tactics to enhance the social environment of informal settlements in Soweto and other townships. “Rigid apartheid planning policies forced black and coloured South Africans out of the urban center and into crowded townships and informal settlements that lacked public infrastructure. Due to the creation of these marginalized, purely residential areas, non-white South Africans were deprived of public space, thereby stifling the social and economic environment. We studied these palpable social inequities through problems of crime, public health, and the informal economy in Soweto. We examined how the creation of socially engaging and vibrant public community spaces can combat these issues and positively impact the social and economic trajectory in informal settlements. We developed nine recommendations for public spaces in Soweto: 1. Engage the community through participatory design methods. 2. Design a community gathering space that is welcoming to all groups. 3. Develop spaces that provide the ability to create expressive public art. 4. Balance opportunities for stasis while encouraging movement throughout the space. 5. Design an aesthetically appealing, welcoming space unimpeded by barriers. 6. Provide the opportunity for commerce and economic empowerment. 7. Establish a clear, physical intentionality regarding the ideology behind design and construction. 8. Connect with nature to educate and instill a sense of biophilia into the community. 9. Incorporate the rich history of the area into the spatial design. While these guidelines cannot wholly solve the complex array of problems plaguing townships, they do provide a framework for ensuring that public spaces are empowering for all citizens, thereby making strides to ameliorate issues of equity and access that have become so harmfully embedded in Soweto culture.” (10)

4. Planning for Environmental Conservation and Restoration

Johannesburg and its surrounding region “form the largest urban complex in South Africa and one of the largest on the African continent, with an urbanization rate of 97%.” (11) Environmental degradation results—ranging from deforestation and habitat destruction to air, water, and solid waste pollution. We propose proactive policies and physical interventions, specifically a green belt and incorporated riparian buffers, to reduce rampant urban sprawl and protect the vulnerable Johannesburg region. “A green belt forges a ring of protected open space around an area to serve as a growth boundary. A riparian buffer is a forested area along the banks of a river that protects the watercourse. Greening a city in these ways helps to curb urban sprawl and overdevelopment, while counteracting some of the negative environmental repercussions of rapid urbanization, providing services for the community, and making the city more livable for its citizens. Though previous urban growth containment attempts reached little success due to deficient top-down regulation of policy, a lack of municipality cooperation, and consistent pressure to expand, today a green belt boundary can help the Gauteng province renew its urban growth containment initiatives with enhanced potential. It is imperative to acknowledge that implementation is no small undertaking, requiring a high degree of proactive land use planning and potentially high fixed costs for land acquisition. Due to the prevalence of informal settlements, illegal mining, and other unsanctioned land use in South Africa, there must be a social and political commitment to protect green belt land from unauthorized use. If carefully planned and properly implemented, however, a green belt and associated riparian buffers can provide the sprawling, environmentally damaged Gauteng Province with the invaluable ecosystem services it desperately needs to sustainably flourish.” (12)

5. Incentivizing Solar Energy Generation

The South African climate is perfectly suited to small-scale solar electricity generation. Yet, why isn't it happening? Are municipal budget models blocking sustainable energy goals? What other issues are limiting positive change? We examined the national energy industry and proposed sustainable and inclusive solutions. “High rates of urbanization in South Africa have put significant stress on the energy sector, which reached a breaking point in 2008 with frequent and widespread blackouts. The primary

energy provider, state-owned Eskom, struggles to meet demand despite a renewed focus on both capacity-building and demand-based strategies. Today the energy system is dominated by coal. This has led to international scrutiny over the harmful effects of coal power plants on the environment. Though South Africa has great potential for renewable sources, solar and wind energy has failed to make a significant impact in the energy market and major supplementation is needed to accelerate their use. While struggling to compete with coal because of the high upfront cost of solar and the relatively low cost of abundant coal in South Africa, solar energy could produce significant social, political, and environmental benefits. We developed three recommendations to increase solar power implementation: establish tax incentives to encourage businesses and individuals to generate electricity on a small scale; create feed-in-tariffs to pay small-scale solar energy producers for energy fed back into the power grid; and use the “5P” model (13) for community lending to create growth across the entire energy value chain.” (14)

6. Growing the Green Economy through Small-Scale Farming

What are the urban implications as South Africa transitions to a “green economy” development model? Can the UN’s “Global Green New Deal” concept be applied? (15) What does an increased awareness of interdependent economic growth and natural ecosystems mean to the post-apartheid urban landscape? What role can small-scale farmers play? “Currently supermarkets and large-scale commercial farms dominate the South African food system. Small-scale farmers are often left out of the narrative and underserved by government programs. Incorporating small-scale farmers into the food supply chain promotes biodiversity, improves smallholder livelihood, increases food access in rural areas, and contributes to a green economy. International precedents and case studies offered key insights into strategies that can be used to promote South Africa’s small-scale farmers, including the development of cooperatives, the creation of inclusive supermarket procurement systems, and land reform policies. These changes could enable the agricultural sector to ensure food security on a sustainable basis and reduce the environmental and economic costs associated with agricultural practices.” (16)

7. Decreasing the Spatial Imbalance of Economic Opportunities

Can job creation efforts be shifted to the townships to reduce the need for commuting to urban centers? “Approximately half of the South African urban population lives in either townships or informal settlements. With 38% of working-age South African citizens, these areas also contain 60% of the county’s unemployed.” (17) Decreasing the spatial imbalance of economic opportunities is a priority in South Africa’s Integrated Urban Development Framework. This challenge led to a focus on urban street trading, one of the informal economy’s biggest industries in Johannesburg. “Government support for the positive effects of informal work can reduce the tension and conflicts associated with the informal economy as rapid urbanization continues. Beginning with a comprehensive analysis of implemented by-laws and policies and how they affect street trading, we analyzed the current issues faced by urban street vendors and how policy can better protect them. Informed by case studies from India, Indonesia, and Durban, we proposed specific tactics to support, regulate, and formalize street vending in South Africa. Informal trading is currently hampered by instability in enforcement and regulations, as well as a lack of baseline data. Our solution incentivizes the creation of physical public markets that allow for easier regulation while meeting public space and safety standards. A licensing system will offer a streamlined and accessible path to formalization. By providing monetary incentives towards licensing and rental fees, we anticipate a reduction in the tension and violence between vendors, urban planners, and local authorities.” (18) Everyone will benefit by including street vendors in the design of vending policies and physical market spaces—the public realm will be improved, township populations will be supported, and the informal economy will thrive.

Tactics for Engagement

Together, these seven focused, yet intertwined investigations proposed a rich array of tactics to achieve more sustainable development in the face of rapid urbanization and societal upheaval. While physically working in Charlottesville, the University of Virginia research group fully engaged on-the-ground challenges in South Africa. An ongoing reflexive dialogue with collaborators at the US Embassy in Pretoria and the African Cities Network supported both experimentation and pragmatic specificity. We examined constraints, imagined possibilities, and developed tactical solutions to achieve a more sustainable future for all citizens in post-apartheid South Africa.

Notes

- (1) This research was conducted during Fall 2016 in Prof. Phoebe Crisman's *Diplomacy Lab: Urbanization Challenges in South Africa* seminar, which was cross-listed as SARC 5559/GSVS 4559 in the School of Architecture and the College of Arts & Sciences.
- (2) See the US Department of State's Diplomacy Lab website for more information. <http://diplomacylab.org/>
- (3) The Ministry of Cooperative Governance and Traditional Affairs, *Integrated Urban Development Framework: A New Deal for South African Cities and Towns* (2016): 22-23.
- (4) The Diplomacy Lab included graduate and undergraduate students majoring in Global Environments and Sustainability, Architecture, Urban & Environmental Planning, Engineering, Environmental Science, Biology, Public Health, Environmental Thought & Practice, Economics, Statistics, Politics, Religious Studies, Anthropology, English, and Women, Gender and Sexuality Studies.
- (5) Phoebe Crisman, ed., *Rethinking Urbanization Challenges in South Africa*. University of Virginia (2017).
- (6) We partnered with several officers at the US Embassy in Pretoria: Rebecca White, Transportation, Information & Communications Technology Officer; Edward Winant, Trade & Investment Officer; and Hagen Maroney, Environment, Science & Technology Officer. We also collaborated with Dr. Geci Karuri-Sebina, Executive Director of Programs at the African Cities Network: <http://www.sacities.net>
- (7) Iain Low, "Imagining the Megacity: Toward Reconfigured Urban Orders in (South) Africa," *Cities in Transition. Power, Environment, Society*. Saskia Sassen, et.al., eds. Belgium: NAI 010 (2015): 326-345.
- (8) Student Team: Charlotte Carr, Elise Dixon, Kristen Lepe, Katherine Phillips.
- (9) Student Team: Christine Bauk, Sarah Littlefield, Marissa Sayers.
- (10) Student Team: Brianne Nueslein, Elizabeth Brown, Beki San Martin.
- (11) South Africa Department of Development Planning, Transportation and Environment, *State of the Environment Report*, Environmental, Planning and Management Unit, Johannesburg (2003): 30.
- (12) Student Team: Alec Paget, Susan Ryu, Aaron Weinstock.
- (13) '5P' refers to the 'pro-poor public-private partnership' model. See Damian Miller and Chris Hope, "Learning to Lend for Off-Grid Solar Power: Policy Lessons from World Bank Loans to India, Indonesia, and Sri Lanka," *Energy Policy* 28, no. 2 (February 2000): 98.
- (14) Student Team: Steven Agness, Spencer Long, Allison Owens, Caroline Herre.
- (15) Edward Barbier, *A Global Green New Deal*. Green Economy Initiative, United Nations Environment Programme (2009).
- (16) Student Team: Thomas Boswick, Nicole Duimstra, Olivia Lara-Gresty, Avery Moyler.
- (17) Sandeep Mahajan, *Economics of South African Townships: Special Focus on Diepsloot*, The World Bank (2014).
- (18) Student Team: Ashley Cappel, Emily Broghan Kelly, Suchita Chharia, Sanat Malhotra, Emily Soule.