

# Entrepreneurial Ethnographies

**Jennifer Lane**

Oklahoma State University

**Nathan L. Richardson**

Oklahoma State University

The shadow of Apartheid still persists in the form of black townships in many areas of South Africa. These under-served townships have evolved organically as residents assemble what materials they can find as they fashion shacks to offer the most primitive need for shelter. Beyond minimal protection from the elements, these communities offer a host of opportunities as many still lack access to such basic human needs as water, sanitation, and safe forms of cooking. Moreover, inhabitants carry the burden of discrimination, violence and inequality. Furthermore, education, health, and climate change are prevailing issues with consequences that fall disproportionately on those living in slum conditions. While a solution for housing is no panacea for South African townships, the condition of housing plays a critical role in the broad range of issues facing these residents. This research identified nine key priorities for developing an effective solution for housing within this context: clean water, safe cooking, secure sleeping, thermal comfort, occupant participation, cultural sensitivity, fire protection, affordability, effective community, transportability, rapid construction and adaptability. Students in architecture, entrepreneurship, and real estate development courses developed prototypes for small scale housing development in South African townships. These prototypes will be tested for physical feasibility in rural Texas, as they are likewise tested for commercial viability and implementation in South Africa. Long-term the prototypes are intended for adoption by local entrepreneurs within South African townships to symbiotically support economic and community development.

These housing prototypes don't simply represent design proposals for a better community once constructed. Rather, they represent an opportunity for economic development within the process of building better communities of some form. Properly administered, this housing solution represents an opportunity for latent and local entrepreneurs to become active participants in material sales and distribution, housing construction and maintenance, and continual improvement of community services and amenities. The design solutions are incremental in that they build on the modest construction skills and forms of housing represented by current development patterns. However, key improvements in community organization, essential services access, and the durability of housing materials form an essential part of this proposal. By properly allocating community space and services, health, sanitation, and security issues could improve remarkably. The placement of homes constructed of fireproof materials will increase the long-term viability of the housing patterns and community they support. In adopting a hybrid strategy for combining local skills and materials with regionally, nationally, and internationally sourced products, housing is more physically and financially viable. Improving the living conditions in the slum environment of South African townships is more than an architectural problem. Architecture is simply one opportunity to address a broader range of issues in an entrepreneurial way. Such a confluence of architecture, entrepreneurship, and ethnography represent the very nature of opportunity in this present age.

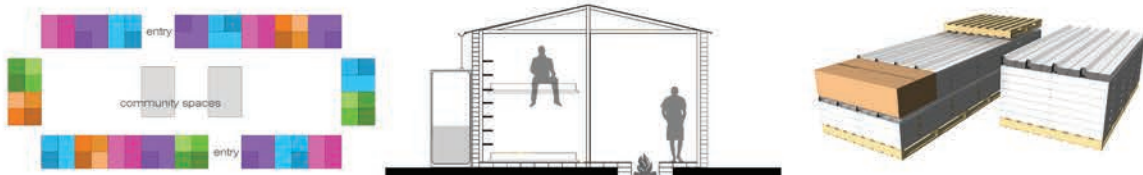
# ENTREPRENEURIAL ETHNOGRAPHIES

AN INTER-DISCIPLINARY SEARCH FOR SOLUTIONS TO HOUSING IN THE TOWNSHIPS OF SOUTH AFRICA



## THE OPPORTUNITY

The shadow of Apartheid still persists in the form of black townships in many areas of South Africa. These under-served townships have evolved organically as residents assemble what materials they can find as they fashion shacks to offer the most primitive need for shelter. Beyond minimal protection from the elements, these communities offer a host of opportunities as many still lack access to such basic human needs as water, sanitation, and safe forms of cooking. Moreover, inhabitants carry the burden of discrimination, violence and inequality. Furthermore, education, health, and climate change are prevailing issues with consequences that fall disproportionately on those living in slum conditions. While a solution for housing is no panacea for South African townships, the condition of housing plays a critical role in the broad range of issues facing these residents. This research identified nine key priorities for developing an effective solution for housing within this context: clean water, safe cooking, secure sleeping, thermal comfort, occupant participation, cultural sensitivity, fire protection, affordability, effective community, transportability, rapid construction and adaptability. Students in architecture, entrepreneurship, and real estate development courses developed prototypes for small scale housing development in South African townships. These prototypes will be tested for physical feasibility in rural Texas, as they are likewise tested for commercial viability and implementation in South Africa. Long-term the prototypes are intended for adoption by local entrepreneurs within South African townships to symbiotically support economic and community development.



## COMMUNITY

Townships offer density without community and shelter without security. According to a 2007 UN-HABITAT Global Report on Human Settlements, two-thirds of South African residents stated they "feel unsafe walking home at night." Those that live in the poverty, disorganization, and unsanitary conditions of South African townships are sure to be fearful, if not frequent victims of crime. This housing proposal offers a range of housing units organized around open, centralized, visibly secure community space, with near immediate and public access to common amenities such as water and sanitation. The variety of housing unit configurations and proximity to services and community amenities is intended to accommodate long-term growth.

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## MATERIALS

Over 70% of Sub-Saharan Africa's population is living in slum conditions, defined by housing durability, sufficient living area, access to water and sanitation, and secure tenure in the UN-HABITAT State of the World's Cities report. Most existing shacks are informally constructed out of found materials and erected on a dirt floor with minimal insulation. The shacks are not adequate to protect from occupants from weather and climatic conditions such as rain, heat, cold, and humidity on an extended basis. This housing proposal incorporates compressed earth block for affordable and fire-resistant construction, dimensional lumber for ease of construction, and a roof system capable of harnessing rainwater for basic living functions.

## PREFABRICATION

The current form of housing is often a product of materials that are found locally and adapted to the needs of providing shelter. While resourceful, such an approach remains insufficient to provide adequate and durable housing to the great number of people that need it. This housing strategy makes use of regionally, nationally, and internationally sourced building material to provide what isn't available in the local context. In order to ensure affordability and efficiency, building materials are flat-packed and delivered to the townships to build communities when used in combination with local materials and methods of construction. Such a strategy works limits exposure to fluctuation in the local availability of materials and offers a potential solution for distribution to other places in South Africa and beyond.