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The Political Economy of Space:
Spatial Structure and Identity Politics

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Abstract: The purpose of this study is to highlight the role of urban planning decisions in conflict management in contested cities. Tensions between groups can become intertwined in urban planning choices (Sandercock 1998) as those decisions shape the spatial structure of the city and can foster or inhibit disruptive behavior. In this paper, we consider how spatial relations can contribute to (and ameliorate or exacerbate) formal national and local agreements over power, either by fostering or hindering intergroup dynamics and political compromise. We connect these spatial relations which are established through urban planning decisions and their outcomes to the motivating ideologies and institutional rationales underlying them. We posit that leaders make a choice in contested spaces between urban reconstruction on the one hand and stabilizing intergroup relations on the other and consider the typology of architectonics whereby spatial relations are established through the interplay between overarching structures and active human agency. We study spatial relations and decision-making in contested cities by utilizing architectural semiotics (Preziosi 1979) at the neighborhood scale. Our study of identity politics and spatial relations in contested spaces combines the perspectives of two disciplines – political science and urban planning. This approach allows us to apply the study of urban policy and political ideologies to physical environment related decisions and their specific territorial outcomes.

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"The appropriation and use of space are political acts. The kinds of spaces we have, don't have, or are denied access to can empower us or render us powerless. Spaces can enhance or restrict, nurture or impoverish" (Weisman, 1981: 7).

"Space is fundamental in any form of communal life; space is fundamental in any exercise of power" – Michel Foucault

1. Introduction

When groups feel physically or culturally threatened, either by the state or by other groups, uncertainty about the intentions of others can alter the pattern of competition and conflict can erupt. How groups interact in their physical environments can contribute to segregation, fragmentation, and exclusion. Questions of how the city is imagined and represented are relevant to the politics of recognition and manifestation of identity. The purpose of this study is to highlight the role of urban planning decisions in conflict management. Cities are often divided geographically by ethnicity, race, and income, and patterns of domination and subjugation can be expressed through physical and symbolic divisions (Goldsmith and Blakely 1992; Marcuse 1995; Massey and Denton 1993). Tensions between groups can become intertwined in urban planning choices (Sandercock 1998) as those decisions shape the spatial structure of the city and can foster or inhibit disruptive behavior. The physical environment limits the range of possible types of social behavior as the space defines the people in it. At the same time, the sociocultural component fills the space with meaning and the presence of individuals interacting with one another defines the space (Ardener, 1981). People order their space: they develop, build it up and build on it, divide it into varying shapes and sizes, and mark it as their own (Pellow 1988). This ordering of space shapes human behavior (Greenbie, 1981) as spatial cues encode social information, establishing the context and defining the situation (Rapoport 1982,57).

In this paper, we consider the complex webs of interaction between community-based, political party, and governmental interests in contested cities. We focus our analysis

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on contested cities where groups have competing claims to power and where these competing claims impact distributional questions at the municipal level. These cities are distinguished from others which, although divided socioeconomically, have recourse to accepted means of conflict management. In contested cities, policymakers not only manage and regulate urban services, but must also cope with ideological and religious expression and other features of intergroup tension and hostilities. The city thus reflects the playing out of broader imbalances of power. We study how spatial relations can contribute to (and ameliorate or exacerbate) formal national and local agreements over power, either by fostering or by hindering intergroup dynamics and political compromise. We connect these spatial relations that are established through urban planning decisions and their outcomes to the motivating ideologies and institutional rationales underlying them. Political party interests concerned with issues of sovereignty and political control intersect with neighborhood interests that focus on issues of urban need such as employment, housing, and physical conditions. Leaders thus make a choice in contested spaces between urban reconstruction on the one hand and stabilizing intergroup relations on the other. That is, some leaders who are invested in post-conflict peacebuilding and reconciliation may want to (re)design the city so as to make space for groups. Other leaders may want to stabilize but perhaps not change inter-group dynamics. What impact do the decisions made by leaders with regards to spatial relations have on national and regional political negotiations? Do policymakers use physical environment related decisions to incite/provoke/facilitate conflict? Could some policymakers perceive benefits from using spatial relations to reinforce and reify intergroup tensions and hostilities? Can establishing certain spatial relations in contested cities intentionally exacerbate intergroup divisions?

To address these questions, we utilize the typology of architectonics and center our analysis on the physical manifestations of division and the interplay between overarching structures and active human agency. Contested cities are examples of this interplay, where spatial structures can perpetuate social structures as active human agency alters those structures. We examine spatial relations and decision-making in contested cities by utilizing architectural semiotics (Preziosi 1979) at the neighborhood scale.

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Our study of identity politics and spatial relations in contested spaces combines the perspectives of two disciplines – political science and urban planning. This approach allows us to apply the study of urban policy and political ideologies to physical environment related decisions and their specific territorial outcomes. These outcomes have an impact on group identity and security and thus ultimately on the stability and likelihood of long-term peacebuilding. The paper proceeds as follows. We begin with an exploration of the dynamics of identity in the contested city. We then develop a typology of physical manifestations of group division that utilizes architectonics. We apply our analysis to the study of spatial politics of identity in the ethnically divided slum of Kibera in Nairobi, Kenya. This case study is particularly relevant for issues of global security and governance as Kibera was the site of some of the most serious interethnic violence following the 2007 Kenyan election. As the country prepared for the next round of presidential elections in March 2013, questions of how to organize space so as to promote peace became especially salient. The paper concludes with a consideration of the normative implications of our analysis for peacebuilding in contested spaces.

2. Identity in the Contested City

The focus of our analysis is the contested city where ethnic and nationalist groups interact and compete for the distribution of resources at the municipal level (Boal and Douglas 1982; Benveniti 1986). Contested cities can be located on the faultline between cultures – between modernizing societies and traditional cultures; between individual-based and community-based economies; between democracy and authoritarian regimes; and/or between old colonial governments and indigenous populations (Bollens 1999). Residents experience intensely the contradiction between neighborly relations and the divisions of cultural pluralism (Benvenisti 1986, 1995). Identities are created and recreated through everyday interaction in public spaces (Eriksen 1993). These public spaces can become sites of conflict if one group seeks autonomy or separation (Gurr 1993). Ethnic and nationalist groups can often fear assimilation into a dominant culture and therefore seek to preserve their autonomy. They can also be uncertain about their physical safety and

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may feel threatened – either overtly or subliminally – by neighboring groups. This insecurity coupled with fears of assimilation generates inter-group tensions that can lead to violence.

   In the aftermath of the Cold War, intrastate conflicts have become the most critical threat to domestic and international security (See Figure 1). Between 1989 and 2007, 94 percent of worldwide militarized conflicts were intrastate wars (Correlates of War Project; Harbom and Wallensteen 2005). Given the increase in internal wars, it becomes particularly important to understand the ways in which groups interact with each other in urban spaces of ethnic and nationalist diversity. Urban management of group competition has important implications at both the national and international levels as we seek to understand the impact of political, economic, and social organization of space on identity. The physical structures of cities do not cause conflict. Instead, because cities are places where groups encounter each other and where potentially belligerent peoples come together – either through intergroup competition over urban space or as the result of economic interdependencies inherent to urban living - cities are important channels through which the success of peacebuilding is either enhanced or lessened. The realities of urban interdependence may make it more difficult for ethnic groups to live in their own purified communities insulated by myths of sameness and communal solidarity (Sennett 1970). Cities may be the buffers against the strong incentives for organizing around ethnic and sectarian poles. In these cases, the possibility exists that urban-based ethnic arrangements and compromises may facilitate the management of conflict at larger geographic scales. On the other hand, policymakers may make urban planning decisions that exacerbate intergroup tensions. Space can be designed and allocated in such a way as to make groups feel more or less secure as they interact with others in their physical environments.

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Global Trends in Armed Conflict, 1946-2011

Source: Global Conflict Trends, October 2012

http://www.systemicpeace.org/conflict.htm

How secure groups feel in their physical environments depends on how public spaces are planned and how religious and cultural symbols are incorporated in zones of intergroup proximity. Several studies have focused on the effect that order in physical spaces can have on attitudes towards others. Signs of disorder such as broken windows, graffiti, and scattered litter increase antisocial behavior and can lead to stereotyping and discrimination (Keizer, Lindenberg, and Steg 2008). The perception of physical disorder can also spread crime as groups sense that no one will enforce rules or provide protection (Kelling and Wilson 1982; Keizer, Lindenberg, and Steg 2008). Disorder increases feelings of social distance, and in spaces of intergroup interaction, this disorder can make groups feel a heightened need to assert and protect their identities. Disorder can breed mistrust and mistrust can breed intergroup violence. Conversely, if physical spaces are ordered, groups may perceive a greater sense of safety and autonomy. Spatial design and architectural form

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can therefore have an influence of human behavior and intergroup dynamics.

We use space to communicate with each other and to convey attitudes of acceptance or discrimination. Chwe develops the idea of the effect of inward-facing circles on communication in physical space (1998). He considers the importance of eye contact as ritual and ceremonial space is designed in circles where everyone faces each other and can see what other members of the group are doing. If we can see and know what others in our community are doing and can observe their responses, we can perceive greater order and safety. Circular designs can also foster feelings of inclusivity and community. In his survey of the design of city halls in the US and Canada, Goodsell finds that curving rows feel "friendlier" than traditional parallel rows: they "help to create the impression that the occupants are bound together" (Goodsell 1988, 158). What Goodsell's study of the social meaning of civic space does not tell us, however, is whether the design of civic spaces represents a manipulative strategy on the part of political authorities or whether it instead reflects the realities of civic-government relations. That is, it is unclear whether the design of civic space is an act of political agency or whether it is the result of state-society interactions.

3. Political Economy of the Built Form

In this paper, we seek to better understand the impact of urban design on identity and intergroup dynamics. More specifically, we consider the built form as the product of a social process (McGuire and Schiffer 1983). We argue that built forms serve utilitarian ends as they mediate human relations with the natural environment. The built form can become a vehicle for the representation of intergroup differences. In contested spaces, the built form can be used to bring groups together or to drive them apart. In Japan, the modernization of urban apartment plans has distanced social relations (Mock 1988). In rural Portugal, suburban-style houses have reduced neighborhood interaction (Lawrence 1988). Not every change in the built form causes or is caused by a change in social behavior. Built forms, however, are expressions of culture and – more specifically – of identity. As such, they may be seen to play a communicative role embodying or conveying

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meaning between groups or individuals within groups. We consider how and why people manipulate the built environment to suit specific social needs and desires and how built form in turn exacerbates or inhibits the expression of intergroup tension. The built environment may also act to reaffirm the social, economic, political, and religious systems and can - through content and configuration - communicate information between groups about intent, capacity, and security (Lawrence and Low 1990). These forms become theaters in contested spaces where groups express their identity, compete for legitimacy, and negotiate relations of power. Urban housing and planning is a politically charged process manipulated by political actors for a variety of purposes in different situations. As symbols, built forms condense powerful meanings and values; they compromise key elements in a system of communication used to articulate social relations.

Consider, for example, residential segregation policies in Port Elizabeth, South Africa between 1923 and 1972. The spatial layout of the South African city was central to the state's strategy of ensuring domination of the blacks and their exclusion from political power – that is, urban planning was at the center of the Apartheid project. The imposition of spatial order became critical to the state's efforts to ensure domination and control (Robinson 1996). In *Discipline and Punish*: *The Birth of the Prison*, Foucault explores the relationship between space and power, but from the perspective of architecture as a political "technology" much like other disciplinary technologies that provide a new set of procedures for joining knowledge and power. The control of space through enclosure and the organization of individuals in space are ways that this occurs. For Foucault, architecture exists to insure a certain allocation of people in space, a *canalization* of their circulation. He illustrates how architecture as an institution contributes to the maintenance of power of one group over another and functions as a mechanism for coding their reciprocal relationships at a level that includes the movement of the body in space as well as its surveillance (Foucault 1975).

Following Foucault, we focus on the ordering of space through the built form as a way to understand the relationship between spatial relations, identity, and politics.

4. Identity manifestation and architectonics

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At the neighborhood level, manifestation of identity could be accomplished through different tools. Although physical disorder might be a sign of crime and mistrust, physical order on its own might not accomplish much if that order is not deciphered by the members of that community. The physical environment is formed as a system of communication within and among the generations in a culture (Becker, 1977; Norberg-Schulz, 1965; Rapoport, 1969; 1989). The signs and symbols of that communication system, which are accumulated and transferred over time, are implicitly known and coded as part of tradition (Struder, 1982). Power is communicated through home landscape, as has been exemplified in societies around the world (Oliver, 1969; 1977; 1987).

This communication system is an integral part of the identity of a community. Attributing meaning to physical entities as part of a communication system is a process (Rapoport, 1995; Harris and Brown, 1996) through which members of a community develop feelings of belonging, safety and pride, and thereby foster their home place identity (Hay, 1998). Home place identity has been studied through physical cues of attachment at the private dwelling scale and at the neighborhood scale (Harris and Brown, 1996).

In contested cities, identity manifestation tools are the signs and symbols of a communication system. Many of the signs and symbols are meaningful to members of the community they have learned to decipher these over time, maintaining the communication system for generations. These signs and symbols are embedded in the physical environments of neighborhoods and can contribute to the creation of conflicting home place identities.

Architectonics is the study of building elements as signs, and as such, it provides a useful scaffolding to decipher the signs and symbols in a contested city. According to architectonics, the elements of the physical environment form an abstract language to communicate meanings that are shared by members of a society (Preziosi, 1979). The built environment refers to any physical alteration of the natural environment through construction by humans (Lawrence and Low 1990, p. 454). It can include built forms such as homes, churches, temples, townhalls as well as areas that are defined and bounded but not necessarily enclosed, such as plazas, streets, or peace walls. Built forms can also reference elements of a structure such as walls, windows, or doors (Ibid). In particular,

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three elements of the built environment are considered at the neighborhood scale: formative components, level of separation, and symbolic motifs. Formative components are structural elements, like the shape and material of roofs and windows. The level of separation includes physical barriers that divide groups, such as the peace lines in Belfast. Symbolic motifs are decorations, such as wall murals.

5.   What Divides a Divided City: Evidence from Kibera

To develop the idea of the language and meaning of the built form and the impact on intergroup dynamics, we consider the contested city of Kibera in Nairobi, Kenya. Kibera's political geography is one of multi-sector segregation that both reflects and intensifies conflict. Kibera is representative of ethnic divisions across Kenya and is home to members of all Kenyan (African) ethnic groups (Makoloo, 2005). The settlement is divided into thirteen 'villages', each with its distinctive ethnic composition. Although most villages are comprised of people from all the major Kenyan ethnic groups, often one ethno-linguistic group is dominant.

Kibera is the largest informal settlement in Kenya, and the second largest in Africa. The slum has presented a challenge for the Kenya government who, from independence until the mid-1970s, attempted to eliminate Kibera and other slums throughout Nairobi by demolishing some and withholding basic municipal services from others (K'Akumu & Olima, 2007; Obudho & Aduwo, 1989; Syagga & Kiamba, 1992). Nairobi's population dramatically increased after independence and more and more Kenyans moved from rural areas into the city. Slums like Kibera became attractive places to settle, and these areas thus continued to grow despite government efforts to eradicate them. Landlords in Kibera refused to be moved from the land, and once the government realized it could not clear all of Nairobi's slums, it changed its approach from hostile to tacit acceptance (K'Akumu & Olima, 2007). The government offered official permits to build in Kibera and threatened to demolish any new, non-permitted constructions (Amis, 1988). Most of these permits were distributed to President Kenyatta's Kikuyu co-ethnics (Hardoy & Satterthwaite, 1989) in the form of political patronage, "paying back favours, consolidating potential

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clients, rewarding friends or fellow tribesmen by informally giving out free land for urban development" (Amis 1984: 90). The new homes that were built replaced multi-room residences or U-shaped Swahili homes and were primarily single-block rooms. These constructions were less expensive and thus were the most profitable (Amis, 1984). Even if a bribe were required to obtain a land permit, building a home in Kibera and renting it out was a very lucrative venture, one offered a return on investment in two years or less (Kunguru & Mwiraria, 1991). Kikuyus and Nubians dominate the rental industry, but much of the growing tenant population is from Luo and Luhya ethnic groups from western Kenya. Around 10% of Kibera residents own the structures and sublet them to the remaining 90% (UN-Habitat, 2003). The structures are "owned" by informal landlords who are recognized by the tenants, but who have no legal ownership rights since the Kenyan government actually owns the land in Kibera. Tenants pay a monthly micro-lease to the landlords.

The multi-ethnic nature of Kibera's population combined with the provision of goods along ethnic lines that pervades Kenyan politics has led to Kibera hosting several ethnic conflicts throughout its century-long history. Space in the slum is contested as groups compete for territorial control. Initially, Kikuyus were the majority population in Kibera. Over time, the Luo ethnic group has grown dominant (Figure 4). Homes remain under the control of landlords who are mainly Nubians and Kikuyus. The tensions between Kikuyu landlords and Luo tenants were exacerbated during the contested presidential election in 2007 and became a major faultline for post-election violence in the slum.

Figure 4: Population by Ethnic Group (Date Source: Umande Trust, 2007; CBO's in Kibera).
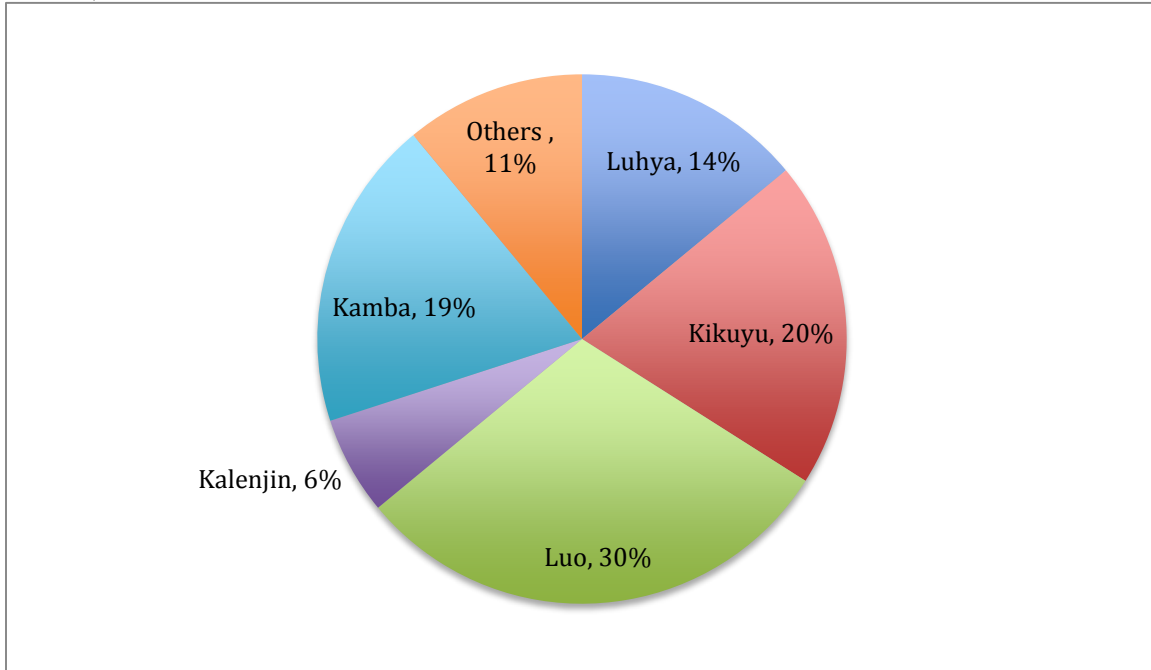
Today, Kibera covers an area of 2 square kilometers and, according to the 2009 Kenya Population and Housing Census, has an estimated population of 170,070 (contrary to previous estimates of one or two million people). The overcrowded urban area has a population density roughly 30 times that of Manhattan. The people of Kibera are primarily young migrant workers who are drawn to the city in search of work. Overpopulation and limited employment opportunities mean that 80% of the youth in Kibera remain unemployed. 90% of the population lives below the dollar-a-day poverty line. There are no residential buildings over a single floor. Homes are constructed of low-quality, temporary materials and almost all the buildings are built illegally, without permission and without following any building regulations. There are more than 30,000 structures in Kibera slums which are mud walled and thatched with corrugated iron sheets [Amnesty International, 2009]. The average home size in Kibera is 12ft by 12ft and costs almost US$15 per month. There are an average of five - seven people per dwelling. Basic infrastructure such as electricity, water or sanitation is minimal. There is no formal system for waste management. There is an average of one pit latrine for every 50 to 500 people. Drinking

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water is pumped through plastic pipes, alongside sewage trenches, to standpipes. These trenches carry refuse and human waste to the river at the base of the valley. The plastic pipes are brittle and exposed, often breaking, creating suitable habitat for water-borne diseases like cholera and typhoid. Efforts have been made to improve sanitation. Under the auspices of USAID, two-story sanitation centers have been built with showers and toilets on the bottom floor and meeting/community rooms on the top. There are no engineered roads, pavement or transport infrastructure. Electricity connection to houses is rare, and what power connections do exist are often tapped into illegal connections. Volatile food prices due to drought, floods, famine and political unrest caused Kibera to be declared in a state of prolonged food crisis in June 2009. Inter-ethnic tensions and poor policing contribute to insecurity and volatile community cohesion. There are high rates of drug and alcohol abuse. Child abuse is also common. Standards of health are low due to high incidences of water-borne and vector-borne diseases, and about 50% of people living in the area are either HIV positive or have AIDS. It is estimated that there are more than 50,000 AIDS orphans living in Kibera.

The Housing Ministry, in conjunction with UN-Habitat, has started a slum upgrading program aimed at building affordable housing units in Kibera. Residents moved into the first of these housing projects in 2009. President Kibaki recently announced the construction of 200,000 new housing units. The problem with the new housing developments is that residents of Kibera are not moving into the homes themselves. Instead, they are renting them out to others while they remain in the slums. Ultimately, as Huchzermeyer (2008) argues, "instead of improving the lives of slum dwellers by enabling access to adequate housing, poorly targeted slum upgrading improves the lives of the better-off and displaces the original residents into expanding or newly forming slums" (p. 25).

There are over 700 development organizations who currently work in Kibera but a lack of coordination and specific issues related to social and political mechanisms prevent their efforts from generating sustainable peace and development in the contested city. These specific mechanisms need to be analyzed and understood before developing any successful urban development project in Kibera.

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5.1 Identity Politics in Kibera

Within Nairobi, Kibera was a major site of death, injury, destruction of property, displacement, and sexual violence during the 2007 presidential election (*Commission of Inquiry*, 2008). While violent conflicts largely fell along ethnic and political lines, hostilities between Odinga and Kibaki supporters in Kibera were intensified by existing tensions between Luo tenants and Kikuyu landlords. Kikuyu residents were chased out of Kibera, and many of them did not return (*Commission of Inquiry*, 2008; de Smedt, 2009b). Both Human Rights Watch and Kenya's internal investigation assign responsibility for the post-election violence throughout the country to major political actors in both parties who mobilized citizens along ethnic lines before and after the election. In Kibera, the post-election violence reified cleavages within the community. While tensions between groups have always been present, identity became a more central issue as residents used physical space to communicate their social, economic, and political positions. We apply the typology of architectonics to consider how the built environment is used in Kibera to manifest identity politics. We also evaluate how new urban developments are being designed to ameliorate conflict and promote peacebuilding among the different ethnic groups in Kibera.

5. 2 Formative Components

Kibera is divided into thirteen official villages, each with its own village elder. These villages are settled according to specific ethnic affiliations creating divisions within the neighborhoods. To an outsider, Kibera can seem like a maze of nameless streets with few distinguishing markers. Yet, the residents of Kibera know which ethnic group dominates which particular neighborhoods. While there are no paved roads or sanitation in individual homes anywhere in the slums, there are significant income inequalities and distinctions which are apparent in the types of homes/structures. A variety of materials are used to

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construct the one-room houses, ranging from cement to wood to corrugated iron to a mixture of mud and dung packed together. The structures vary in size and quality and the belongings inside can be vastly different. Some homes have comfortable couches, plush mattresses, radios, and televisions; others have benches, straw mats, and empty shelves. The desirability of a particular neighborhood is determined by the level of security, the proximity to other parts of the city, and sanitation and basic services concerns. There are borders between the villages that consist of natural boundary markers such as walking paths, railroad tracks, and streams. Each village houses people from different ethnic and national backgrounds, although most villages have a dominant ethnic group (de Smedt, 2009b) and it is clear to locals which areas and which shops are controlled by which groups. Stores and shops may have names in the mother tongue of the shopkeepers. The language of the newspaper they read or the books they keep can also provide information about identity.

5.3 Level of Separation

Sectarian geography also distorts transportation and economic development efforts. Ethnic circumscription of space in Kibera disrupts the normal use of community facilities such as sanitation centers, community meeting places, health clinics, and churches. In an urban environment where perceived "neutral venues" are few and far between, one ethnic group will often not use the nearest community facility because of the perception that it is housed in the other group's territory.

One of Kibera's most distinctive features is the Kenya-Uganda Railway that cuts through the middle of the slum. Kibera has a railway station, but few residents actually use the train to commute to work downtown. Some hang onto the outside of trains to avoid paying the fare, but most residents choose to walk to work or ride one of the *matatu* or bus routes that service the slum via Kibera Drive and Mbagathi Road. Despite the fact that residents seldom use it, the railway line has become an iconic fixture in Kibera, especially following the recent post-election violence. During the protests in January 2008, Odinga supporters uprooted the railway tracks, temporarily rendering the line useless (Gettleman, 2008). In 2009, residents again tore up the railway line to express their anger over a land

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dispute between Uganda and Kenya (Kuria, 2009). In the aftermath of these events, the uprooted railway has become a symbol of the disorder and chaos the media often uses to characterize Kibera (Makeni, 2009).

There is an increased focus in the Housing Ministry on physical regeneration of neglected or abused urban areas as a means towards their economic and social revitalization. The government acknowledged the problem's severity and persistence and in 2002, it created the Kenya Slum Upgrading Program (KENSUP). The goal of this national office is to implement projects that are sustainable, inclusive, democratic, accountable, and transparent and that will provide communities with improved housing and access to basic services, secure tenure, and opportunities to generate income. The program has had mixed results and progress was hindered by the eruption of post-election violence in 2007.

5.4 Symbolic Motifs

The most politically expressive identifiers of sectarian space are the chalk and ink markings on houses. The markings are frequently in English and many make specific reference to a political position such as the pro-Odinga message "No Raila, No Peace. Keep the Peace." These political messages convey not only support for a particular candidate, but in many cases can communicate information about the inhabitant's ethnic group. In the aforementioned example, the pro-Odinga message may indicate that the residents are Luos. Because murals and wall markings can be powerful communicators of identity, they can often be used as instruments for peace, or is some cases, for inciting violence.

In Kibera, a project is now underway to utilize symbolic motifs as positive elements. The "Kibera Peace Walls" youth mural project used public art to encourage unity and cooperation between ethnic and political groups ahead of the presidential election in March 2013. The work brought together a group of 30 youth to study peacebuilding and symbolic motifs to create 5 wall murals in high-profile locations throughout Kibera. As elements of the built form, symbolic motifs are important not only for the messages and information they convey, but also for the process of preparing them. In the case of the Kibera Peace Walls project, local youth from different ethnic groups were brought together

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to learn about critical issues in their community and society and had the opportunity to contribute to their neighborhoods by creating uplifting works of art that educate their fellow residents and promote peace. The project was implemented with the goal of reducing the likelihood of violence in the immediate pre-election period, but it is hoped that the murals will have a long-lasting positive effect in the community.

6. Conclusion

Elements of the built form can be powerful forces of change and stability in a community. They can also be used by political leaders and cultural brokers to mobilize groups and incite violence. The experience of how space is designed and used in Kibera has important implications for our understanding of the built environment. As we apply architectonics to the study of space in Kibera, we see that formative components, the level of separation, and symbolic motifs communicate information about identity and intergroup relations. As Kibera prepared for presidential elections in March 2013, decisions were made with regards to the built environment to promote peace and stability and reduce the likelihood of violence. These decisions reflected an understanding of how group relations are manifested in spatial arrangements and the role that the city plays in formal national and local agreements over power. Aspects of the built environment such as mixed land use, moderate density, and connectivity have been shown to be related to enhanced social processes (Leyden 2003). The ideas developed in this paper suggest that the built environment may be a factor in group interaction and societal welfare. Buildings can become the focal point of and, in many cases, manifest personal and social identities in societies. By considering how intergroup relations are communicated through the built form, we can better understand the social and economic institutional forces that influence leaders and decision makers.

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