

# SECURITY IN THE CITY

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I was first introduced to the concept of human securities far from the ivory tower of academia. To be sure, I learned the United Nations Development Programme (UNDP) definitions of these concepts in a sustainability and archaeology class in 2012. But my real education had begun more than 10 years before, when I worked at a small soup kitchen in the Bronx. That's where I heard an explanation of human security that, to me, captures the spirit of the concept even better than the UN did.

"People can't get off the streets—they can't look for work or continue their education—if they don't have a place to stay and a meal in their bellies." If I'd heard Sister Mary Alice say it once, I'd heard her say it a thousand times—to her staff, to donors, to school groups coming to volunteer at our soup kitchen. It spoke of her decades of experience working with homeless and hungry people in the Bronx; it encapsulated her own motivation to keep it at it; and it also nicely summarized our organization's mission. Part of the Solution (POTS) is a soup kitchen, men's shelter, and social service agency providing a sense of security in the Bronx since the 1980s. In 2002, I was its newest staff member, in charge of both managing the kitchen and recruiting the volunteers who helped us serve lunches and dinners seven days a week, 365 days a year. For the people we served, human securities were concrete things: a place to grab a warm meal and use the facilities; a haircut and a change of clothes for a job interview; an address to receive mail. Their human experience, we hoped, was marginally improved by our offering these services; our open-door policy made us one place they could count on time and again.

Despite the positive feeling of being "part of the solution," my time spent with POTS, and with the Jesuit Volunteer Corp (JVC) who placed me there for a year, left me with more questions than answers. Why is unemployment so persistent? How can families go hungry in a city with food to spare? Why does poverty plague certain sectors of a city, while neighboring areas experience abundance? The answer provided by JVC was two-fold: not only are there too few servic-

es for those in need, there are also institutions that keep unjust systems in place. Only a systemic approach to social justice, paired with a charitable approach to social ills, would begin to address the root of the problem—sentiments that are echoed time and again in the UNDP's report on human securities.

But how can you change an unjust system if you don't understand it? This question above all others ultimately led me to seek a deeper understanding of social inequality and human security, inspiring me to pursue a Master's in Anthropology at CUNY Hunter College. More recently, it has led me to Arizona State University, where I joined the Urbanization through the Ages project to investigate social inequality in an urban setting. Led by a multidisciplinary team including archaeologists Michael E. Smith, Barbara Stark, and George Cowgill, political scientist Abigail York, geographer Christopher Boone, and sociologist Sharon Harlon, we've put together a pilot study that examines equity of access to important urban services in six premodern cities. The preliminary results were recently featured in an exhibit at ASU's Museum of Anthropology, where we invited visitors to ask themselves, "Who built your neighborhood?" Likewise, the project's major questions concern the role of elites in providing urban services: Do they provide them to non-elites? Do elites benefit from their own better access? This is no small problem, since the population density of urban settings creates unique challenges in meeting all aspects of human securities.

Food security encompasses both the production and distribution of food resources; it "requires that people have ready access to food—that they have an 'entitlement' to food, by growing it for themselves, by buying it or by taking advantage of a public food distribution system" (UNDP 1994:27). In an urban setting, obtaining food through any of these means can be difficult. Depending on the size and density of the city, household self-sufficiency may be nigh impossible for reasons of geography and geometry. Low-density cities, including Maya sites such as Tikal and Caracol, had room for large household gardens between residences. But in Teoti-

huacan, people lived in a vast network of walled apartment compounds with very little space between. Those unable to grow their own food would have to buy or trade for it, or obtain it through some kind of public food distribution system. Urban craft specialists would have needed a way to exchange craft goods for basic staples likely grown outside the city. Urban markets are almost ubiquitous in historical and ethnographic records and have been identified in archaeological cases (Cowgill 2008). Markets would have provided opportunities for people to transform their labor into food, thus contributing to their economic security, “an assured basic income” (UNDP 1994:25). Thus, in some cities at least, the threat of food insecurity may have been balanced by the promise of economic security. At the same time, restricted, periodic markets may have offered elites yet another chance to manage the flow of wealth in their community. Our project seeks to untangle the relationships among these variables by mapping the location and density of market facilities and by examining their distribution throughout neighborhoods and their proximity to the homes of elites and non-elites alike.

Neighborhoods themselves provide another venue for the tension between security and insecurity. An investigation of processes driving neighborhood creation (York et al. 2011) indicates that “bottom-up” processes such as ethnic self-segregation can strengthen ties between neighbors and give new migrants a secure foothold in a new city, a process described by the UNDP’s term “community security.” These ethnic, familial, or even “neighborly” ties may constitute a type of relational wealth unique to cities with stable, long-lived residential districts. Archaeologically, these relationships can be seen in differing patterns of ceramic creation, use, and discard between districts (Robertson 2001). The creation of this type of community security may, to some extent, counter food or economic insecurities that might have been ubiquitous in some situations. However, as the UNDP report rightly points out, “ethnic groups can come under direct attack—from each other” (1994:32). Examples of such intergroup violence within the same city are known from historical and contemporary cases, though archaeological evidence is lacking.

Urbanites would also have faced threats to their political security, defined by the UNDP in terms of the degree to which a society honors basic human rights. Thus, the community security of ethnic or socioeconomic enclaves could become threatened if the rest of the society, and particularly those in power, see neighborhood members as second-class citizens. Evidence of this process is startlingly clear from our historic cases. In the Nepalese city of Bhaktapur, members of

one of the ritually unpure Untouchable castes were forced to live outside the city gates. In the Islamic-dominated city of Lamu, Kenya, only the wealthiest members of society were allowed to construct stone houses in the northern ward, while foreigners and slaves weren’t allowed even to spend the night there. Our study is addressing these issues by charting the locations of religious and public gathering facilities throughout residential districts. Because these large-scale buildings and spaces might serve as important loci of integrative rituals for a large proportion of the city’s population, their distribution throughout a city might shed light on how well integrated various districts were.

The relative importance of these services and institutions varies, but one thing seems clear: once service facilities were placed in a certain area of the city, they shaped the placement of residences and neighborhoods for generations to come. Who decided on these locations? Who benefitted from locating a major temple in an elite district, or conversely, from locating elite residences near a major temple? What price did residents of far-flung peripheral neighborhoods have to pay in order to access these sites of important services?

To begin answering this question, we’ve created or obtained ArcGIS shapefiles for six cities, known archaeologically and/or historically. Two of the archaeological cases are Mesoamerican: the large Mayan city-state of Tikal in modern-day Guatemala and the huge Central Mexican site of Teotihuacan. The Greco-Roman colony of Empuries, Spain, crosses disciplinary boundaries: historical Roman-period writings supplement the efforts of archaeologists mapping the ruins. Our historical cases include the Nepalese city Bhaktapur; the Islamic city of Lamu in modern-day Kenya; and medieval Chester, England. Our small sample was designed in part to explore methods of spatial analysis across as many different settings as possible: large and small cities, dense and dispersed urban forms, colonies and capitals.

Our project focuses on three aspects of urban life ubiquitous in cities past and present: neighborhoods, services, and elites. For example, the residential zones in all known cities are divided into smaller social-spatial units called neighborhoods (Smith 2010; York et al. 2011). In a simple sense, such organization is the inevitable result of many individuals setting up permanent residences at the same location; in a deeper sense, neighborhoods play an important role in structuring the urban experience. Practically speaking, our use of neighborhoods as an analytical unit allows us to compare these disparate cases systematically. In the historic cases, we found and digitized city maps that delineated clear geographic and even social boundaries between groups of urban



Figure 1. A close-up of central Teotihuacan, showing an assembly facility (the Feathered Serpent Pyramid, shown in blue), flanked by two elite residences (dark blue). Across a formal public space facility (a portion of the Street of the Dead, shown in yellow), it faces a commercial facility, the Great Compound, shown in green; non-elite residences (red-orange) surround the area (redrawn from Millon et al. 1973:Map 1).

dwellers. For the archaeological cases, which lacked such maps, we used spatial statistics, artifact analyses, and analogy with similar cases to create analytical districts. This mix of methods, we hope, allowed us to map analytical districts that not only make sense spatially, but also reflect the social realities of those who inhabited them.

We also identified urban services, and digitized the locations where they were provided. A service is an activity performed by one social or economic unit for the benefit of another (Hill 1997:318), and an urban service is one provided to urban residents. Our study focused on religious, commercial, and open space services and their associated facilities. For example, religious services might include large-scale rituals involving or observed by a major segment of the popu-

lation; such services might be crucial to obtaining community or political security. For this same reason, open spaces are another important service, and they would also contribute to recreation or socializing. Finally, commercial or market services allow the exchange of produce or goods among households, a service vital to urban residents' successful obtainment of food and economic security.

For each city, we identified and digitized the facilities where the population accessed urban services. These facilities varied in form and size, and further work is needed to clarify the relationship between scale of service, size of served population, and whether the facility was public, private, or something in between. The map of Teotihuacan (Figure 1) shows,

in green, the Great Compound, which has been identified as a large marketplace; in purple, the Feathered Serpent Pyramid, a site of religious activity; and, separating the two, the Street of the Dead, shown in yellow, which was a type of assembly or formal public space (Millon et al. 1973). These large, unique structures and spaces would all be considered “higher order” or “top-tier” facilities, able to serve the greatest proportion of the population at a single time; smaller, more numerous facilities also existed in most cities and likely serviced smaller groups.

Once neighborhoods and urban services were mapped, we used ArcGIS tools to give each neighborhood polygon a centroid, from which we measured the straight-line Euclidean distance to its nearest service facility. In contemporary urban studies literature, such absolute distances between neighborhoods and facilities are the simplest way to determine service access, regardless of the frequency of facility use. In broad terms, our analysis found that neighborhoods in small cities had good access to service facilities, with a mean distance of 256 m—well below the low-end 400-m “walkability threshold” often used by urban planners today. In contrast, residents of far-flung neighborhoods in large cities like Tikal often had much greater distances to travel, with 44 percent of neighborhoods in that city more than 800 m distant from services.

We ranked each neighborhood according to its absolute distance to services using a figure we termed a Relative Access Score (RAS). The RAS is intended to capture each neighborhood’s level of access relative to its neighbors, and it allows us to compare cities of very different sizes. We also created composite RAS’s by averaging each neighborhood’s score across services. Outlying neighborhoods have relatively poor access, since services are often clustered in the central part of the city. This is especially true of the “high-end” or large-scale services that make such cities famous, such as the monumental pyramids of Teotihuacan.

Finally, our project also studied the location and distribution of urban elites. Only three of our cases—Teotihuacan, Tikal, and Bhaktapur—provided household-level data that allowed us to divide the population into “elite” and commoner social classes. For the historical case (Bhaktapur), we used written documentation of elites as well as caste-level maps to not only identify but also map the placement of elite households. For our archaeological cases (Teotihuacan and Tikal), we identified and mapped the largest, most elaborate residences to locate elite residences. While such a simple division of social class is problematic, it facilitates cross-city comparison and also allows us to ask whether social status was correlated with better access to services.

The household-level data enabled us to plot the locations of elites and commoners and thus calculate the average distance to services for each class of resident. Service access was measured using straight-line Euclidean distance to nearest service facility. This method avoided complications relating to street networks and vagaries of topography, but also created a somewhat simplified measure of spatial relationship. Perhaps unsurprisingly, elite households consistently had a lower distance to nearest service than non-elite households. But in every case there are exceptions: for example, at the low-density city of Tikal, several elite households were located in outlying neighborhoods and thus had quite poor access due to large absolute distance to services.

In these three cities, we also measured the number and percentage of elites in each neighborhood and examined correlations between neighborhood status and its RAS to see whether the presence of elites in some way explained a neighborhood’s access to services. One of the most interesting and somewhat unexpected results was the lack of a strong correlation between neighborhood status and RAS. To be sure, in many cases the neighborhoods with a greater percentage of elites had better (or even the best) access to services. In the case of Teotihuacan, those residences identified as high-status by surveyors are clustered in the central precinct, close to the monumental structures that we identified as relevant service facilities. However, not far from these neighborhoods, and sometimes directly adjacent to them, were neighborhoods with very low percentages of elites but similar RASs. It is these neighborhoods that contributed to the weak correlation between neighborhood “eliteness” and RAS. These neighborhoods might be analogous to today’s middle-class suburbs, where non-wealthy residents nevertheless occupied positions near important civil services.

Although our small pilot study cannot yet draw firm conclusions, it does provide enticing hints of larger patterns. For example, our finding that elites enjoyed favorable access to religious and assembly spaces suggests that these facilities were important venues for elite reproduction of social status, both ideologically and materially. It is also clear that residents of far-flung neighborhoods did not have equal access to centers of power and commerce, and thus may have had greater levels of economic insecurity. If these outer neighborhoods can also be shown to have a distinct ethnic identity, as posited for certain groups at Teotihuacan (Cowgill 2008), their greater distance to services may also point to higher political insecurity as well. As stated earlier, many neighborhoods lie beyond the 400-m “walkability” threshold known from urban studies to be an important predictor of neighborhood service access. On one hand, pedestrian trans-

port was much more important in premodern than modern cities, and thus a 400-m (or greater) walk may not have been as much of a hardship. Yet if journeying to a service facility required a significant commitment in terms of time, energy, and lost productivity, distance from these places would serve as another source of insecurity. Given the unpredictability of the premodern food supply, a future calculation of calories required to travel from outlying to central districts might underline the stark choices residents of distant neighborhoods had to make between journeying downtown and staying at home to take care of the household.

Central marketplaces provide another interesting pattern. In almost all of the cities examined, widespread, distributed market facilities were lacking. In the three historic cases, major commercial spaces are located around a single street or intersection, which often threaded through the center of town, while religious or gathering spaces are distributed more widely throughout the neighborhoods. In the archaeological cases, a large central marketplace can be found in all three, while smaller shops are identified at Empuries and probable marketplaces have been suggested at Teotihuacan. This concentration of markets suggests that the distance and time involved in journeying to a central marketplace was more worthwhile for residents of far-flung neighborhoods. Because these places of commerce may have allowed urban craft specialists to balance food insecurity against economic security, they may have exerted greater pull despite their higher travel cost.

Our project is just beginning its second phase, seeking answers to the questions posed by this pilot study. As I continue to investigate social inequality as an academic topic, I also try to remember its human face. I remember Michael, a guest at our soup kitchen who always bore a shy smile—except for the day his face bore bruises, cuts, and scrapes instead. As he ate his meal with downcast eyes, he spoke of a scuffle he was in while defending his spot to sleep in an abandoned lot—a space he referred to as “fighting ground.” Somewhat ironically, the lot in question was the soup kitchen’s previous location on Fordham road, which had

been vacated when the agency expanded and moved to a larger space on Webster Avenue. Thus, a place once dedicated to providing securities had been abandoned to become an arena of insecurity and conflict. To me, this juxtaposition epitomizes the failure of so many systems—civic, religious, non-profit, commercial—to provide even the most basic human securities to the most vulnerable members of our society. Michael’s struggles for simple security—and the struggles of so many like him—continue to motivate me in the search for answers to the mysterious persistence of systemic inequality.

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