The Multiple Limas: Urban Design at the Periphery

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Standing at the site of La Chira surrounded by a seemingly deserted landscape, the city of Lima looms in the distance. A couple of guards whose day was interrupted by our arrival, moved from their station and indicated to us the limit of our journey. Looking at La Chira with large sewage pipes laid on the dry ground next to the pacific waves splashing on the rocks, I could not help but wonder how this landscape of waste completes the experience of the city of Lima along with the good food, historical buildings, busy industries, bustling street life and entertaining nights. If Lima Centro (the historical part of Lima) is the quintessential space of visibility that represents the city to tourists and newcomers, La Chira is the non-space of Lima, tucked away from visibility except from the workers directly involved in the sewage treatment plant and the trash that surrounds it. La Chira is also the place in which “sociology” and “ecology” are visually manifested. Next to the sewage treatment plant and the garbage dump aligned with the pipe laid on the ground, the Surco canal is finally released into the Pacific. This historic water canal travels from the Rimac river east of Lima Centro and traverses Lima’s multiple neighborhoods, mostly underground, greening its dry open spaces and collecting some of its waste.

The image of La Chira is incidental to me as a casual visitor to the site; and to most Lima denizens for that matter! To the middle-aged woman mining the trash next to where I was standing and the residents on the hills nearby, La Chira is the landscape of their daily life. The space of La Chira is the wasteland that our cities create, to which I want to raise the question: how important is this peripheral landscape to the development of strategies for urban regeneration in the city of Lima? In this essay, I want to propose that contemporary urban design discourse should shift its focus towards such urban periphery in order to produce a sustainable urban environment for the city as a whole. Before I discuss opportunities for urban design interventions at the periphery of Lima, I will briefly discuss the pattern of urbanization of the city as considered through its multiple peripheral centers.
The Multiple Limas of the Periphery

Historically, urban design focused on cities as unified objects with a center (usually historical but not always), or sometimes few centers (financial, governmental...etc.) with a periphery that is produced as an extension of that center/s. This model is becoming obsolete as cities in the twenty-first century are occupying vast territories while in some cases their growth is triggered by spatial practices at the peripheries (Fawaz, 2015). It is evident that regeneration projects for peripheral regions are not capable of rapidly transforming the image of the city in order to accumulate immediate political or financial gains; such as the reinvigoration of the historical fabric of Lima Centro in the 1990s (Gandolfo, 2009; Leonard, 2000; Struach el al, 2015). But with a visit to the peripheries of Lima, one can understand the immediate need to develop equity in distribution of resources and conditions of livability (Loris, 2012) across the metropolitan region of Lima. These peripheral areas indicate spatial dynamics that are hard to identify when one analyzes the city as one unit that starts from the historical center and geographically expands to a periphery. Indeed, Lima’s urbanization in the last five decades was a process of geographic bridging of multiple formal (Miraflores, Chorrillos, Magdelena del Mar, Barranco) and informal (Comas, Independencia, Villa el Salvador) centers. Situating the periphery at the center of urban design strategies shifts the vision of the city to a network of centers, which if respectively targeted, could provide equal distribution of urban opportunity.

Like many cities around the world, Lima’s urbanization is a hybrid of formal and informal patterns of expansion. Early on, Lima brought informality to the attention of scholars and professionals through the work of academics such as José Matos Mar who has been documenting informality in Lima and Peru since the 1950s (Matos Mar, 2012) and John Turner, who developed his theories on “Housing by People” by observing the evolution of Lima’s Barriadas (Bromley, 2003; Turner, 1976). Urbanization in Lima in the last six decades can be considered a choreography between popular settlement patterns, mainly through land invasions, and government initiatives through infrastructure expansion, affordable housing provisions and (mostly incomplete) master plans. This dialectic relationship between popular movements and government urban initiatives manifest the spatial dialectics of Henri Lefebvre (1991) where the space of Lima is produced through the daily actions of individuals acting within and outside urban regulations and the provision of services and urban projects that government initiates played against Lima’s arid and highly dramatic geography. As the city grew to the south and southwest in the mid twentieth century, formally engulfing different town centers, new informal centers were settled in different regions around the city accommodating waves of rural migration to the economic hub of the country.
While the distinction between the formal and informal urbanization may have always been blurred in Lima, in recent decades the urbanization in the city has shifted from the formal sector containing the informal expansion towards the informal spatial practices leading the formal expansion of the city. Indeed, from the 1960s to 1980s, the government initiated multiple urban housing experiments in order to control the vast migration of lower-income communities to the city. In that sense, Lima was at the forefront of creating different forms of public housing that triggered international attention (Burga et al, 1988; Kahatt, 2012; Land, 2015). In addition to affordable housing blocks, such as the multiple communities that align the Colonial and Venezuela avenues, and the professionally celebrated PREVI project, Villa El Salvador is possibly the most ambitious of these projects. Villa el Salvador, which started as an informal settlement, was soon contained by a government initiative to guide the settlement through a site-and-services project. A vast “self-governed” neighborhood was created that provided land subdivisions and infrastructure while allotting building activity for incremental developments by the families that inhabited the neighborhood (Burga et al, 1988). Lima’s urbanization since then has been physically connecting the formal urban centers to the informal ones at the peripheries. With the neoliberalization of city services in the 1990’s following the end of the Sendero Luminoso conflict period, Lima’s informal urbanization has been leading the formal sector (Riforio, 2003): an expression of the strength of popular agency on one hand and a government delegation of its traditional responsibilities on the other. The exponential growth towards the north of the Rimac river in the last quarter of the twentieth century connected the city to a number of informal settlements that were already formed on the slopes to the East of Panamericana highway, which were recently linked through a highly efficient Metropolitano bus system. On a local scale, several informal settlements have been formalized through the gradual extension of services, such as piped water supply, paved roads, electricity and property legalization. In that sense, these peripheral urban centers have been shaping the extension of the city territory and increasing the pressure over its infrastructure.

Urban Design at the Periphery

Instead of analyzing Lima’s urbanization as a dialectics between formal and informal actions, I propose to analyze Lima from multiple perspectives. From a government perspective, Lima (and Callao) is a unified city that is understood through a network of infrastructure and services. From a resident perspective, Lima represents a network of opportunities to navigate in order to make a living. This vision is fractured from their respective social and geographic location to different parts of the city that connect them to their respective nodes of opportunities (Lefebvre, 2009). This is a shift from a center-peripheries vision (mainly of governments) to periphery as center (of individuals and communities). For three years, I have been working with
my students in the urban design program at Iowa State University to explore urban regeneration possibilities in Lima adopting this position of the periphery as center. The periphery that we have focused on are Lima’s rivers and the urbanization that grew around these highly marginalized regions that contains Lima’s major source of water. I will conclude this essay by highlighting four themes that emerged from our studies on urban regeneration at the periphery of Lima. While they were investigated within the conditions of Lima, these themes exemplify contemporary conditions of global urbanization that are important to consider for the future urban design practice.

*Developing Knowledge for contemporary green informal urbanization.* As it is evident from numerous studies (Leonard, 2000; Matos Mar, 2012; Sakay et al, 2011), informal settlements in Lima have a long history of social and spatial organization. The growth of informal settlements, locally known as Barriadas or Pueblos Jóvenes, did not only provide autonomy for rural migrants and the urban lower-income communities but reduced the responsibility of the central government to provide services at the quality and speed expected in the formal housing sector. What is more important is that the urban conditions of the Barriadas have become common to all lower-income neighborhoods in Lima including the formal ones, such as the northern part of San Martín de Porres. These geographies of *multiple scarcities* (Loris, 2012) are generated because these communities have developed the knowledge of physical settlement but expected infrastructural resources such as water, electricity and waste management to be provided by the central government. Lima and other cities around the world show that informality is an integral part of contemporary urbanization. This requires more serious engagement from urban designers to address its infrastructural short falls. Hence, regardless if neighborhoods were initiated by invasions, squatters or the purchase of land, lower-income communities can elevate their quality of life by developing knowledge of constructing inexpensive environmentally-conscious urban infrastructure that they can control. Such “green infrastructure” is based on creating resource out of waste by generating methods of water and waste filtration as well as composting techniques (Eisenberg et al, 2014) that could be applied to multiple topographic and environmental conditions in Lima. Such an infrastructure is inherently spatial, which requires the creation of a new typology of urban space that integrates the built environments with agricultural fields, water-retention ponds and filtration beds. Urban design should develop new knowledge of spatial dependencies that could be locally managed to provide further autonomy for low-income communities in controlling their quality of life by maintaining an infrastructure which is local, affordable and less wasteful. This would further legitimize incremental and informal mode of urbanization in contemporary cities without resulting in wasteful and deprived landscapes.
Breaking the spatial isolation of communities. Carmen de la Legua Reynoso is a neighborhood along the Rimac river that grew on the margins of Lima-Callao historical corridor. Along with adjacent neighborhoods, Carmen del la Legua stretches around nine kilometers between Avenida Nestor Gambetta and Avenida Alfonso Ugarte. These neighborhoods are currently completely detached from other neighborhoods to the north by the Rimac river and to the south by the railway corridor and a buffer of industrial building blocks that stretch along its whole length. Even though the neighborhood is in the geographic center of contemporary metropolitan Lima, the residents are completely detached from its social fabric due to its spatial isolation in the city. Vehicular traffic crosses the neighborhood only at major roads that cross the Rimac, namely, Universitaria, Faucett and Nicolas Dueñas. Sandwiched between a highly polluted Rimac river to the north and a strip of large walled industries and the train tracks to the south, the neighborhood has the stigma of being an unsafe region for the rest of the city. With the exception of policies of evacuation or relocation, the neighborhood gains little attention from the Lima government as a result of its condition of seclusion. Indeed, recently the controversial Línea Amarilla or Vía Parque Rimac projected a road that bypasses the neighborhood to connect the Lima Centro to Callao and airport (Strauch et al., 2015). With the flyover road that aligns with the Rimac river, this project increases the isolation of this neighborhood from the city. Within this condition of spatial and social isolation, Minka Mall, one of many malls in the city provides an opportunity of social integration. The Mall which is to the western end of the industrial strip has two entrances, one on Avenida Argentina that engages the city traffic between Lima and Callao and opens to the housing projects to the South of the avenue. The northern entrance of Minka Mall opens to the railway corridor and engages the pedestrians and vehicular activity of the Carmen de la Legua neighborhood. The vacating of multiple sites in the zone that separates the neighborhood from the rest of the city to the south due to industry relocation is opening the opportunity to develop social/spatial conduits, similar to what Minka Mall does, that connect Carmen de la Legua to the neighborhoods to the south and hence connect it to city life and amenities. The periphery includes multiple secluded pockets whose conditions should be addressed in order to organically connect them to the opportunities that the city provides. These pockets are further marginalized when their presence is only perceived as an abstracted constraining zone against the developments that are projected from the center such as the Via Parque Rimac project.

Watershed Urbanization. The region around the Chillon river valley is one of the fastest areas of growth in recent years. When compared to Rimac river urbanization, it is evident that the Chillon river is following the same trend where urbanization patterns pay little spatial consideration for the river ecology. Currently, the region includes communities that have been developing since the 1940s, such as Comas, and others that have recently developed, such as
the northern part of San Martín de Porres district. Other than the densification that is happening on both sides of the river, the valley includes active industrial zones, a commercial strip, Lima’s major power plant and substantial number of agricultural fields. This diversity of usages allows the opportunity to envision an integrated urbanization process that develops synergies between the geomorphic and ecological characteristics of the river watershed and settlement and densification patterns. The Chillon watershed is a new center in the future of Lima that is expanding northward toward Ventanilla and Ancon. This expansion, however, is transforming some of agricultural fields into housing developments that may threaten the possibility of developing green forms of infrastructure (Eisenberg et al, 2014) and further marginalize the Chillon river as an important urban resource in an arid region. In short, this is an important time to envision the future of urbanization for the Chillon watershed that can prevent the environmental and social problems of the Rimac watershed. Targeting the Chillon river valley for urban intervention and regeneration also pushes towards increasing opportunities of employment by increasing social and economic diversity in the region. As cities are globally growing at an unprecedented rate, the city as a unit of analysis is becoming more obsolete and the need to integrate urban and ecological systems is becoming more pressing. Considering the watershed as a unit of urban analysis directs urbanization strategies towards configurations that are synergetic with ecological systems and help long-term preservation of natural resources in cities and hence promotes their long-term sustainability.

Addressing Urban Fragmentation at the Periphery. Similar to the urban conditions in the Chillon river valley, city peripheries constitute a series of unrelated developments that evolved out of their relationship to the city center and not necessarily to each other. The southern part of Lima between Chorrillos and Pachacamac archeological site contains a series of autonomous developments that range from a high-end golf club to the landscape of waste management of the La Chira mentioned above. For example, the large development of Villa el Salvador that is connected with avenues and a metro line to central Lima to the north is separated by topographic drops, Panamericana Highway and an industrial zone from the beach nearby to its west. The only region that provide Villa el Salvador easy access to the coast along Avenida el Sol is occupied with heavy industries, which clearly halts any organic growth towards the pacific coast. the coast on the other hand is aligned with separate developments linked through the highway to the city in the north. The path of the Surco canal generates another infrastructural separation zone that culminates in the La Chira coastal site. This condition of urban fragmentation features enclaves with a drastic difference in levels of income across these infrastructural urban corridors. While there might be important dependencies that can be generated because of these proximities, it is also important to consider possible conflicts or inequities that these conditions may produce. Similar to the Costa Verde project that connects
major historical Lima neighborhoods between Chorrillos and San Miguel districts with a green coastal park system, the southern coast of Lima between Chorrillos and Lurin and its hinterland could be considered another coastal system for urban regeneration that cultivates relationships among its dissociated parts.

The above four urban design themes target Lima’s multiple geographies that also represent urban conditions on the periphery in different cities I have been working on such as Beirut, Cairo, and Kigali. It is becoming more evident in these multiple cities that the production of future sustainable urban environments does not only rely on urban regeneration strategies at the periphery but also on strategies that learn from the spatial practices of the periphery. Thus, the periphery is an important region to study in order to create the urban spaces of the future.

References
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