Dialogues with the Informal City: Latin America and the Caribbean

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The symposium *Dialogues with the Informal City: Latin America and the Caribbean* was held at the University of Miami on November 8 and 9, 2012. It was the culmination of a year-long, interdisciplinary collaboration between the Center for Latin American Studies, directed by Dr. Ariel Armony, and Professors Adib Cure and Carie Penabad from the University of Miami School of Architecture. The symposium sought to connect a range of fundamental themes affecting the current conditions and future of Latin America's growing informal cities and, by extension, the rising global urban population.

Informal cities can be described as settlements frequently characterized by organic physical patterns built incrementally over time as the needs and circumstances of a community change. In Latin America, as in the rest of the world, they are largely viewed as undifferentiated pockets of misery, wracked by poverty, crime, and unsanitary conditions – in other words, an unfortunate but inevitable waste product of the uncontrolled urban growth that characterizes our time.

We felt this view was as unfortunate as it was misguided. While undeniably precarious in construction, informal cities exhibit underlying urban and architectural patterns of remarkable resilience; moreover, they reflect their inhabitants' enduring cultural values. While seriously affected by poverty and violence, they are often sites of dynamic informal economies that benefit not only the citizens of the community but the greater city in which they are situated. When seen from this vantage point, informal cities are testaments to the ingenuity and practical wisdom of their settlers – millions who do so much with so little.

In Latin America, the scale of informal activity is both massive and increasing. As of 2012, 111 million, or 24 percent of Latin America's urban population was estimated to be living in informal settlements (UN-Habitat), and this number has continued to rise steadily. Given this reality, it is vital that we deepen our understanding of this urban phenomenon and its multiple manifestations.

To this end, the symposium was organized around four cross-cutting themes capable of engaging a wide range of issues and differing disciplinary perspectives. These topics included *space, networks, wellbeing,* and *innovation,* and provided a broad framework to discuss both the challenges and often overlooked opportunities associated with these growing communities. Panel sessions included recognized scholars, practitioners, and activists in an effort to foster a dialogue that leads to a greater understanding of the complex realities of this ever-growing urban phenomenon.
ACKNOWLEDGEMENTS

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The wealth of knowledge of our symposium participants combined to generate an insightful and informative look at informal cities in the region. Thank you, Eduardo Cajide, Carmen Paz Castro Correa, Julio D. Dávila, Marcus Faustini, Jorge Francisco Liernur, Giancarlo Mazzanti, Alejandro Portes, Juan Pablo Sarmiento, Albina Ruiz, Débora Swistun, and George Yúdice, for your thoughtful contributions.

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The Center for Latin American Studies is proud to have a remarkable staff. Neither the symposium nor the current publication would have been possible without the diligence, patience, and creativity of María Gavier Olmedo, Jennifer Stimmel Dias, Belkys Torres, and Joselyn Garcia.

To everyone mentioned above, our sincerest thanks.

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Metrocables, or aerial cable cars, are rapidly gaining ground as a mode of transport in hilly areas of many urban centers of the global South. The Metrocables transpose ski-lift technology into an urban setting; in essence, a mode of transportation typically associated with leisure has now become a viable and effective form of public transportation for the urban poor. Though the Metrocables can be viewed as a public response to poverty and mobility within impoverished urban areas, there is concern with the sudden emergence of these transportation systems and their social and urban impact. This presentation questions and reflects on the intersection of informality and progress as directly associated with access to public transportation.

Medellín's first metro system opened in 1996, with various Metrocable lines instituted thereafter. Line K, in Santo Domingo, opened in 2004. It services the most deprived sector in the northeastern part of the city and travels through working class neighborhoods “Comunas” 1 and 2 (230,000 inhabitants) (Brand & Dávila, 2011). Rising up to 400 meters above the main river valley, Line K is 2 kilometers long and has 3 stations. The project was fully funded by the public sector, with the municipality covering fifty-five percent with the remainder funded by the publicly-owned metropolitan Metro Company. Line J, in San Javier, opened in 2008. It is 2.3 kilometers long and services Comunas 7 and 13 (295,000 residents), also with 3 stations. Funding was also entirely public. Both Lines K and J serve as primary modes of public transportation for some 30,000 passengers every day, as it offers integrated access to the aboveground metro system and Bus Rapid Transit System. Finally, Line L, opened in 2010, is principally a tourist attraction, traversing a beautiful river valley and park. It is also more expensive to use. The two first Metrocable routes have occasionally been criticized for being “quick fix toys,” and to date, they are not eligible for funding from the national government, as they are not considered to be mass transit systems.

As mentioned earlier, the Comunas are the most impoverished neighborhoods in the city, and, as previously described, two of the three Metrocable routes service these areas. Between 44-62 percent of Comuna residents are tenants. Any intervention made to accrue the value of the community will benefit the owners, rather than the people living there as renters. Thus, one must examine the social impact of investment and how it can positively affect not just the owners, but the tenants as well.
The implementation of the first of these cable cars was followed by a series of urban upgrading programs in informal settlements known as Proyectos Urbanos Integrales (PUI – “Integrated Urban Projects”). The first Metrocable line was built by Mayor Luis Perez. Mayor Sergio Fajardo furthered this idea and built the second line. From 2002-2010, there was a noticeable shift in the economic activity and public investment in and around Line K. Eight times the amount invested in the cable cars was subsequently spent on upgrading these informal settlements. This set of interventions came to be known as “social urbanism,” involving the creation of open spaces, parks, schools, and libraries in the Comunas. Seeing the examples of the impact that these Metrocables have had on local economic development, President Álvaro Uribe proposed a similar idea to be implemented in Soacha, a poor municipality adjacent to Bogotá with a population of 450,000 (Dávila, 2013). To date, this has not yet been built, though two systems are currently under construction in densely built-up low-income settlements in Bogotá.

Other cities throughout the global South have instituted this technology. Caracas (Venezuela), Rio de Janeiro (Brazil), La Paz (Bolivia), Constantine (Algeria), and other cities in Colombia, such as Cali and Bogotá, now also have Metrocables or are in the process of building them. Their implementation, however, has raised an interesting set of theoretical issues. Mobility is more than just transportation; it is a necessary component of contemporary urban life that carries important social implications. Now that there exist increasingly flexible forms of work and production, as well as growing individuality of daily routines and social relations, mobility is crucial. Simply put, one cannot live life in the modern world without mobility.

The opportunities available to varying social classes largely depend on mobility. To become educated, pursue meaningful work, or obtain financial independence or accumulative wealth, one must have access to transportation. Only the wealthy can enjoy the luxury of immobility; others will come to them. Especially for the poor, limited mobility constrains their participation in urban life and turns geographical marginalization into deeper social exclusion. If people are deprived of mobility, then they are deprived of the ability to better their social status. Transportation, therefore, is very closely tied to social exclusion.

Conclusively, there are several lessons to be learned from the implementation of Medellín’s original mode of transportation:

- There must be a consensus on the need to reduce violence and social exclusion. These can be built from negotiation and open debates over time.
- The use of technology in a creative manner requires both political imagination and boldness.
- Urban and physical interventions are at the core of these efforts, including transportation, public space, and civic architecture.
- These efforts are best supported through a number of public institutions. Empresas Públicas de Medellín (EPM), the municipally-owned utility company with assets worth over $10 billion in U.S. dollars, had its surplus of $1.4 billion transferred to the municipality in 2010-2012. The Metro Company is also central to these efforts and, like EPM, is highly respected by local residents.
- Poverty must be made visible. The first step to resolving the issue of poverty is to raise awareness and build a political consensus from voters and taxpayers about the importance of reducing it.
- Collective self-esteem and sense of inclusion can increase with more mobility.
- A clear urban project containing projects such as the Metrocables and the urban upgrading projects requires continuity between successive local administrations.


In the role of creating a plan for sustainable urban development in Buenos Aires around the Matanza-Riachuelo Basin, the University of Buenos Aires has become the primary consultant for the government. Approaches to development, however, need to understand the origins of the city and how the environment has affected – and continues to affect – the growth of the city.

The greater metropolitan area of Buenos Aires has a population of roughly 14 million inhabitants, and is increasing by approximately 1.5 million inhabitants every 10 years. Rich and poor areas are contrasted through the quality and character of the city’s infrastructure, parks, and buildings, or lack thereof. Urban development is heavily reliant on environmental factors, and as such, sections of the city that are riddled with environmental damage have high levels of poverty. The physical environment of the barrios is unsafe. Water in these areas is highly contaminated.

The city of Buenos Aires was founded along the Río de la Plata. Consequently, a triangle was formed around the Matanza River Basin, one of the basins that intersect the city. From the original settlement, the greater metropolitan area has grown into a megalopolis. This urban area contains high quality spaces with beautiful areas and incredible infrastructure. It also contains large and vibrant middle class districts with a population that is demanding of its public officials in the pursuit of a democratic way of life. This is sharply contrasted with the impoverished sections that are largely relegated to areas of environmental degradation.

From a satellite view, the city appears as a semicircle that is about 70 square miles in area. As mentioned earlier, the city is growing by 1.5 million inhabitants every 10 years. To put this number in perspective, this is roughly the size of the city of Córdoba. However, it is not the size of the population that is the problem, per se, but how the population is distributed. One important issue is where the poorest of society reside. The distribution of the population leads to problems in governance and a clash amongst the interests of differing social classes.

Satellite images again contrast the affluent areas of Buenos Aires with the overall fabric of the city and the barrios. The affluent areas of Buenos Aires have ample parks and important infrastructural elements. It is important to note that these areas lie at the mouth of the Río de la Plata. Here, structures are beautifully designed, and there is a rich and varied series of open spaces. The remaining fabric of the city and barrios employ a good use of space and are heavily defended by their inhabitants. This illustrates that Buenos Aires is a city that is flexible; it can be either compact or expansive. These high quality areas abruptly end at the so-called “poverty pockets,” which
are always where the environment has been heavily deteriorated.

This brings us to the example of the Matanza-Riachuelo Basin, which houses 4 million inhabitants, has a high population density, and comprises many informal settlements. Any project undertaken here needs to consider the “liquid” that runs through this so-called river. The area is in essence an open-air sewer, composed of the refuse run-off from the richest sectors of Buenos Aires. The irony lies in the fact that the upper echelons of society who seek to clean up this river are precisely the ones who are polluting it.

As such, several different planning instruments have been employed to address the plethora of issues that need to be reconciled with regard to the development of this region:

1. **Plan Estratégico Territorial (PET)**, at the national level, which integrates the input of each municipality and the use of public resources;
2. Sustainable development and social justice, which has been undertaken by the Minister of Federal Planning;
3. The urban plan for the metropolitan area of Buenos Aires Province (PUAM), which is a strategic plan for Buenos Aires that is more political in nature; and the
4. Environmental urban plan, which is now a law seeking to move certain decisions forward.

The Camino de Sirga project provides an example of the links between the University of Buenos Aires’ School of Architecture, Design, and Urban Development (FADU-UBA) and various public entities. AYSA is the corporation that supplies water, whereas FADU-UBA deals with the administration of the basin (in the city, province, and municipality). This project seeks to construct aeration stations along the banks of the river, transforming this corridor into an environmental park and improve the quality of the water. It is a multi-disciplinary project with collaboration between sociologists, engineers, and so on. In approaching this undertaking from a multi-disciplinary perspective, the project will improve not only the environmental conditions, but also the social connections along the river.

This area, which constitutes the central concentration of the impoverished population, is labeled “the south” of the city, even though it is actually located in the north. This label has been assigned by the rich population that resides in the corresponding “north.” The neighborhood is reminiscent of the “White Elephant” within the city; the “south,” which is actually in the northern part of Buenos Aires, has been given a label that designates it as an inferior neighborhood.

The project is concerned with preventing flooding and overflow. Originally vacant land, it is now the location of a large informal settlement, which is why the overflow of the river needs to be redirected elsewhere. Also included in the aeration centers will be civic centers, bridges, and other elements of infrastructure. This is a huge industrial plan and reflects the extent of the impact that the basin has on the city as a whole, affecting over four million inhabitants. The University is heavily involved with the restoration efforts.

The Camino de Sirga project, announced by the government, is moving forward quickly and will eventually provide an extension to the south of Puerto Madero. There is preliminary approval to include these areas within the current urban development plans. Sixty-five percent of the space will be assigned for public use, with the remaining thirty-five percent for private construction. This development illustrates that there are alternatives, and room for innovation. Highways and public transportation are necessary, but the opportunities are there to make the space serve more than just functional needs.

The collaborations on these projects are indicative of the new perceptions of the University in understanding the social realities of the city. Public universities are free to the students; those in attendance are able to grow and develop as young professionals. By working on projects to improve the space, the environment, and the surrounding community, the University fosters the philosophy of “giving back” in order to create a more prosperous society for all.

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1 *Elefante Blanco* is a 2012 film by Argentine director Pablo Trapero. Trapero depicts Villa Virgin, a neighborhood of Buenos Aires that had been designated to house a large hospital, but instead, due to neglect and abandon, became the city’s toughest shanty town.
Please note that this report is a summary of a presentation given by architect Giancarlo Mazzanti, and does not represent the personal views of Mr. Mazzanti.

El Equipo de Mazzanti believes that, in informal sectors, architecture plays both a socially instrumental role and has value as a specific professional practice. Architecture is not just what it is, but what it can produce.

In this respect, there are three contexts within which an architect works, according to architect Giancarlo Mazzanti:

1. The political context in which the architect acts,
2. The academic context in which the architect advances its art form, and
3. The social context in which architecture is a mechanism to generate social inclusion.

Equipo Mazzanti seeks to take advantage of architecture’s potential role in shaping the informal city, and is interested in a collective practice, rather than simply in the construction of buildings. By working with over 50 architectural firms, sociologists, and other professionals, Equipo Mazzanti has designed a horizontal approach and collaborative working method. This horizontal approach is now applied to 90% of the work that they do. Additionally, they believe that the bidding process in architecture is important; it is a democratic mechanism that allows for open discussion, creation, and research. Each bid is a new process that enables a new opportunity for learning.

Equipo Mazzanti seeks to create an approach to architecture that promotes genuine relationships, not authoritarian ones. For example, Mexican artist Pedro Reyes uses his art in building and generating relationships and communication. Equipo Mazzanti similarly feels that architecture can promote the physical conditions of relationships. Its value lies in its method of social inclusion.

The process of perpetuating social change gives rise to many questions for Mr. Mazzanti such as: How can we change the economy of a place? How can we transform relationships? How can we change what people think about a particular place? How can we build new relationships between culture and nature? How can we create other types of relationships? The España Library in Medellín, Colombia is one example from Equipo Mazzanti that attempts to answer these questions through architecture. The construction of this library contributed to the urban and social transformation of the city. Working with existing urban policies and social work within the community, it demonstrates how architecture can spearhead such initiatives and how design can promote what Medellín means to its inhabitants.
Additionally, Mr. Mazzanti depicted recent projects in Bogotá that work within the city's natural settings to achieve similar goals. Using topography, these architectural projects transfer the qualities of the city's mountainous landscape to assist in creating nests for birds in the region. The result has produced a park filled with peddlers and artists, combining the city's natural and cultural environments. Such examples illustrate how architecture in Colombia can assist in improving the physical and economic conditions of the region in the building of the periphery. The hope is that architecture can help transform the lives of its inhabitants, and that the resulting structures can become a source of pride for the communities they serve.

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Such projects have been coined Proyectos Urbanos Integrales, or PUIs. A PUI is an urban instrument of intervention that incorporates physical, social, and institutional dimensions to solve the specific problems of a defined territory, focusing all development tools simultaneously on a particular area of intervention. Three strategies are implemented in a PUI:

1. The development of infrastructure and transportation systems,
2. The generation of the largest number of public spaces to connect and link different areas of the city, and
3. The construction of public buildings.

The resultant goals seek to make visible the processes that lie behind urban development and internal infrastructure-building. In the end, the work of architecture is the physical manifestation of these efforts.

In Medellín, the Santo Domingo Savio Project is a prime example of a PUI. This project is located in the most stigmatized area of the city, where the infamous drug trafficker Pablo Escobar conducted countless illicit dealings during the 1980s and 90s. This area could not be penetrated by the country's institutions or by outsiders. The situation became so dire that individuals would not admit to living there. Given this context, the challenge became to construct a building that could assist in making visible transformations within the community. One goal of this transformational project was to produce not just a building, but an element of the landscape. This example demonstrates that architecture is not just one building or a series of buildings, but part of a macrosystem. Establishing a sense of belonging between a building and its geographic surroundings creates a metaphorical sense of belonging for the inhabitants and the community as a whole.

As previously mentioned, the España Library Park also accomplishes this. The building itself illuminates the geography of the city and the surrounding mountains, indicating its synthesis with the neighborhood and the city, yet it is still a recognizable figure. It is not just a library; it is also a cultural and training center. The youths use the library for its technology and internet resources. There is also an auditorium, classrooms, public meeting rooms, and even a gymnasium.

The research in the undertaking of this building interfuses with the work of local artists and what they are doing within the community. In effect, the library has produced many changes. Residents are now proud to say they live in this community. The economy of the place has improved; the area has now become a tourist destination, with the library serving as a new symbol for the city.

In Altos de Cazucá, a poor and disenfranchised community just outside of Bogotá, the Forest of Hope project is developing an open and adaptive system (in this case, a roof to cover an existing public space) composed of connected modules and patterns, and capable of adapting to numerous topographical, urban, or programmatic situations. This strategy creates buildings that can grow, change, and adapt according to the particular circumstances of the place. Modules can be added and adapted in accordance with the growth of the community and allowance of resources. In the end, this idea is rooted in the conception of space without a specific function, and demonstrates what El Equipo de Mazzanti strives to achieve: “applying architecture without borders.”
What is the difference between “poverty” and the “poor man”? Poverty is a socioeconomic condition, but the poor man is the character of this condition that is perceived by society. This analysis comes from a somewhat subjective perspective, perhaps lacking in traditional, rigorous methodology, but this does not discount its validity. After all, “the subjective” is what allows us to perceive life’s aesthetics; it is what forces us to seek different avenues by which we can navigate these perceptions.

In understanding the difference between “poverty” and the “poor man,” we must first revisit the paradigm through which we perceive Brazil. To understand this, we must analyze how the State relates to this paradigm. The informal city in Brazil is the favela, and what is at stake in the favela is life itself. The right to life is what is in dispute. The claim that individuals have the right to a point of view from which to think about the city, art, and action in the world is what is being contested. Thus, the paradigmatic assumptions about what is the “poor man” must be disaggregated.

Poverty is a socioeconomic condition. However, the poor man is an invention of the imagination. The poor man, throughout literature, film, and even the social sciences, has been painted time and again as the marginalized man, the worker, a pure but naïve person, someone to be taken care of, someone who is needy, or the “other,” somehow different from “us.” The *vidas secas* (“dry lives”) of these unfortunate individuals are construed in a popular fashion. And above all, the poor man is plagued by a *tabula rasa* condition— that is, s/he is someone who does not know how to produce anything, how to create; s/he is void of personal history, and so, s/he is reliant on outsiders for help.

Sociologists, artists, and volunteers of all sorts approach the favela in an attempt to bring culture to it, as if it were void of all life and content.
This attitude comes from a paradigm of control. This assumption needs to be changed.

Let me describe a personal example.

My grandfather came from northeastern Brazil, one of the poorest sectors of the country. He had 18 children, spread throughout the slums of Rio de Janeiro. However, even though they resided in the favelas, they were not dependent on handouts. They were an inventive and resourceful family, selling passion fruit juice and peanuts to make a living.

How, then, can art intervene in these areas, in the life and self-perception of favela residents? This question prompted me to create Agencia Redes para a Juventude (ARJ - “Agency for Youth Networks”) with the foundational concept of empowering the youth of the favelas. Once we strip away the preconception that the youth are lazy, we can see that they are actually curious and full of ideas. They come from all backgrounds - they are young funk-ies; they are young evangelicals; they come from drug-trafficking backgrounds - and in them lies the promise for innovation and solution, not the dangerous individual so typically depicted in film and literature.

I started organizing roundtables for young people, mainly between the ages of 14 and 16, to develop ideas to improve the lives of people living in the favelas. In these rodas, youths discuss and test ideas to see if they could work to assist the community. Here, they are not treated as students or children, which would denote a type of paternalistic relationship, but as collaborators, as equals in the field of innovation and creation. The youth often find solutions that have not been previously explored. Periodically, the most promising ideas are selected to receive bolsas (“grants”) so that they can further develop their ideas. ARJ runs about 40 of these projects at a time, with review panels held two to three times per year.

One project, Comunidade Fashion, was organized by two young women who now offer fashion workshops throughout the favela. Another notable project, also created by two young women, helps pregnant teenagers in the favelas. Typically, teenage pregnancy is viewed pessimistically. The teenagers who become pregnant are not happy about their pregnancy; they become stigmatized within the community. This project seeks to reverse their outlook from negative to positive. The young women, working from within the community, are able to visit, assist, and account for all pregnant teenagers within the Providencia community. Previous social programs, implemented from outside of the favela, had never been able to reach out to this population. As a
result, these young women can directly assist pregnant teenagers, creating offerings such as sex education classes and yoga classes. This is a prime example of how empowering youth within the favelas can bring solutions and foster change within these neighborhoods. These youth are entrepreneurial – they simply don’t have the networks, the scholarship, or the function to start these initiatives.

We should not dismiss these ideas as being “informal.” Instead, we should provide support so they can transform and grow into organized projects. We cannot arrive at the favela with the intention to “assist” people. Rather, we must support the ideas that come from within the favela.

_Funk_ is a prime example of the creation forces of the favela. When it was first invented, it was perceived as the cry of the marginalized. But _funk_ is more than just the sound of protest – it is art. It is now a genre of Brazilian music, just as bossa nova or samba. This was an invention of the youth who wanted to contribute to the city, but was only viewed from the outside as an informal, precarious entity. This again reconfirms the paradigm of control. Yet, the young person is the paradigm of potentiality; this is the perspective that must be adopted.

I argue that experimentation, unrestricted movement, and the opportunity to meet and interact with people from diverse social classes are all crucial for social mobility. Typically, residents of the favela are simply funneled into the labor market, where they are trained for low-skilled jobs and expected to work 12 hours per day. This leaves little room for social mobility, as time and energy is concentrated solely into this low-skilled sector. This format will never overcome poverty. The flow of individuals and ideas between social classes and different backgrounds should be the paradigm of the city. How can these individuals, the poor and the elite, meet to exchange such ideas and produce inventions? Resources are needed to foster this experimentation, art, and creation. This is where the State needs to invest not only in production, but also, and more importantly, in life.

Current State investments do not necessarily counter such social inequalities. In preparation for the upcoming 2016 Olympic games to be held in Rio de Janeiro, numerous investments are pouring into the city. Many have heard of the _Unidade de Polícia Pacificadora_ (UPP – “Pacifying Police Unit”) who enter the favelas in an attempt to eradicate crime and clean up the city. However, the UPP is not necessarily improving the lives of people living within the favelas. Yes, there is a need to eliminate weapons in the slums, but approaching the entire favela from such a unilateral perspective completely ignores the portion of the population that is merely a by-product of this culture – some 40% are youth. Similar “improvements” are being implemented in the favela of _Maré_, but they are not abolishing the social inequalities. Such solutions follow a prescriptive logic of bringing everything ready-made to the people. They serve touristic and fetishistic purposes. The trams of the _Alemão_ favela operate to transport tourists and showcase the favela as a tourist attraction, but do not serve the purpose of public transportation for favela residents. Here the favela works for the people living outside it, but not for those within it.

This again reiterates the idea that change needs to come from within – it cannot be implemented in a top-down, paternalistic fashion. One cannot arrive at the door of the favela ready to assist. The residents must be greeted as individuals with opinions to be heard and respected, not treated as “the assisted.” The _Bairro Luis de Lemos_ project in Nova Iguaçu gave voice to 3,500 youth from popular communities, who were brought together to tell the stories of their neighborhoods and their streets through a graffiti mural. This idea was initially received apathetically; people thought it would be boring for these youth to talk about their city. But once the youth told their stories and the public saw how they were told, the youth were able to spread their ideas to the internet cafes of the area. This partnership with the cafes consequently led to them becoming educational units within the communities. This example again demonstrates that when called upon to be participants and not “the assisted,” the youth will enthusiastically respond. They want to demonstrate a change in the methodological strategy to involve the poor people. This is my role as an artist – to forge a participatory environment that empowers youth to transform their own environment.

The city cannot only be conceived as a provider of capital. Rio de Janeiro is centered around three types of capital:

1. Infrastructural capital – as a maritime port,
2. Entertainment capital – as a popular city,

The poor are excluded from these types of capital. This situation can only be reversed through the implementation of effective social programs. The image of Rio as an entertainment capital is what is popularly sold. The case of the _Vila Autódromo_ is an example of this marketization, and how effective change can be instituted by those living within the favela. The government wanted to evict the residents that surrounded the _Autódromo_ in anticipation of the Olympic Games. In response, the community collaborated with the University and organized an alternative proposal that allowed them to stay. They proved that this alternative was more effective and cheaper than evicting the residents, thus reinventing the community. This reinvention is a very important concept; Rio cannot only be conceptualized as a harbinger of capital.

In conclusion, the image of Rio de Janeiro cannot merely be sold as an image of happiness. This image is highlighted in the entertainment and music of Rio. Yet, when a musician goes into the streets of the city to play, he is expelled. Rio is not a city for the poor, despite the fact that it is this image that is sold. The State partners with banks and profitable companies, but it must also rise to meet its social responsibility. The concept that favelas are needy and powerless must be abolished. This concept, as demonstrated, is false. Given the proper support from within, rather than imposing “assistance” from without, such social transformations can be sustainably implemented.
It is not possible to discuss wellbeing without discussing a range of variables that account for it. I had planned to review indices of wellbeing and happiness, but given time constraints, I need to reduce my comments to a minimum. Let me just note that it may worthwhile to look at some of the variables discussed in human development indices, in great part to consider what is missing as well as to understand that any assessment of favela life must be multidimensional, and not simply focused on poverty, crime and lack of social and cultural capital. According to The World Happiness Report, wellbeing is not determined solely by economic wealth and the amenities it provides.

The report states that the Millennium Development Goals:

- End Poverty & Hunger (by 2015)
- Universal Education
- Gender Equality
- Child Health
- Maternal Health
- Combat HIV/AIDS
- Environmental Sustainability
- Global Partnership (Affirmative action for developing countries; trade, debt, technology transfer, etc.)

should be followed by a new set of Sustainable Development Goals:

- End Extreme Poverty (by 2030)
- Environmental Sustainability
- Social Inclusion
- Good Governance

The OECD Social Indicators add a number of variables:

- General Context Indicators
  - Household income
  - Fertility
  - Migration
  - Family
  - Old age support rate
- Self-sufficiency Indicators
  - Employment
  - Unemployment
  - Student performance
  - Pensionable years
  - Education spending
- Equity Indicators
  - Income inequality
  - Poverty
  - Income difficulties
  - Leaving low income from benefits
  - Social spending
- Health Indicators
  - Life expectancy
  - Infant mortality
  - Positive and negative experiences
  - Water and air quality
  - Health spending
- Social Cohesion Indicators
  - Trust
  - Confidence in social institutions
  - Pro- and anti-social behaviour
  - Voting
  - Tolerance

Ed Diener, a social psychologist nicknamed “Dr. Happiness,” developed a “universal set of 45 values” across all cultures reflecting three universal requirements of human existence: meeting biological needs, coordinating social interaction, and the survival and welfare needs of groups. The 45 values are in turn organized into seven sets of similar values.

The sets of values and the variables are used to create a basic index for developing countries and an advanced index for developed countries.

We might ask, however, about other values, such as

- Confidence in oneself and neighbors
- Sense of Agency
- Creativity and Innovation

Diener stresses attending university as a requirement for intellectual autonomy. But we can argue that there are other practices that can foster such a value. I give examples from favela contexts below that are compelling in this regard. Moreover, does attending university enable one to develop qualities of wellbeing? Conversely, how
does one assess wellbeing in the favela communities of developing societies? The scale of happiness, when comparing developing and developed nations, should take into account that the assessment of wellbeing varies among communities.

How does one assess wellbeing in favela communities? No one here will deny that poverty and crime affect favela dwellers, although high profile reporting and sensationalist films like City of God and Tropa de Elite can make viewers think that favela life is worse than hell. But those are not the major features of favela life, if one is to take into consideration the kinds of solidarity and organization that Janice Perlman refers to in her book Favela: Four Decades of Living on the Edge in Rio de Janeiro, and the kinds of cultural activism that I have been following over two decades, culminating to a good degree in the kind of catalyzing work of Marcus Faustini and his networks of associates, both from inside and outside the favelas.

The films I referred to represent security as the most important issue in cities like Rio and São Paulo: I remember that when 111 prisoners were killed by the police in the São Paulo prison Carandiru, surveys conducted by the Folha de São Paulo and O Estado de São Paulo reported that between 33% and 44% of respondents repudiated the denunciation of police brutality by the OAS and Americas Watch ("OEA julga invasão") and defended the military police as the "moral reserve of São Paulo" ("Assembléia aprova CEI"), and condemned human rights activists as abettors of murderers and rapists (Yúdice, 2003, chapter 4). Little did it seem to matter then that police are often complicit with drug traffickers as numerous exposes have pointed and as dramatized in Tropa de Elite, especially the sequel.

But security also depends upon how society and its institutions react toward a community. If the community is portrayed as lacking, deficient, or as poor noble savages requiring assistance, in the best of cases, or as contagious, unhygienic and criminal that need to be exterminated, as in the case of Carandiru, in the worst of cases, then the solutions that the community itself may devise are less likely to succeed, for they butt up against ingrained barriers.

Eduard Delgado, a brilliant cultural policy architect, often spoke about the relation between culture and security. By yoking these two concepts he did not mean that a proper culture would transform the uncouth into well-behaved people. For him, on the contrary, a secure society is one in which all residents have a right to be heard and responded to and not simply a matter of getting access to information delivered by the media. That is, security inheres where there is a public sphere open to a diversity of languages and expressive modalities. Moreover, a secure society is one in which no one uses the cultural space of an individual, group or community without permission for the purposes of advertising, business, tourism, or some other kind of gain, such as capitalizing on the chicness of favelas, either as a filmmaker or as an academic, in such a way that the capital – economic, social or cultural - does not accrue to that individual, group or community. A secure society implies a public sphere permeable to all, one which includes everyone’s heritage. Only thus can quality of life be ensured for all (Delgado, 1998).

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The foregoing is a preface to the cultural activism in the periferia (periphery, a synonym for favela) below. I use the term periferia in the sense that Faustini invokes it in his book Affective Guide to the Periphery: an energy, force and approach to life that empowers a subject as he or she moves throughout the world. Being from the periferia does not mean being imprisoned in the favela as so many newspaper and television reports, mainstream films, and academic studies have represented it. A similar understanding of an energy moving out into the world is evident in From the Favela to the World, by José Júnior, the coordinator of the Grupo Cultural Afro Reggae, some of whose experiences I mention in connection with the intersection of urban culture and security.

As Faustini said in his talk, cultural activism is not about entering the favela to teach residents paternalistically to be civilized or cultured or creative. It is, rather, a matter of helping create conduits for their energy and creativity to bloom. In many cases it requires refashioning the institutions – such as the schools – that have failed to be of use in the favela. This is why Faustini founded the Escola Livre de Cinema (Free Cinema School) in Nova Iguacu and Júnior the Polícia e Juventude (Police and Youth) project in Vígário Geral. I will refer briefly to these experiences and make concluding remarks about space, networks, innovation, and well-being, all of which must be seen as part of an integral movement and not separately.

Having led an audiovisual workshop, Faustini was invited by the Secretariat of Education of Nova Iguacu to develop a program consistent with the innovative educational project Bairro Escola [schooling in the neighborhood]. Faustini created Reperiferia (Reflecting [on] the Periphery), a program integrated into the Barrio Escola (Schooling in the Neighborhood) initiative to transform the neighborhood itself into a learning environment. Students learn all aspects of audiovisual production, from screenplay writing to lighting, props, costume design, camera work, digital
The Escola Livre de Cinema is not a film school in a conventional sense; it is oriented toward a comprehensive understanding of the surrounding reality. According to the school's website, the aim of the school's audiovisual training is to "capture images from the territory that reveal [the community's] way of looking and its place in the world through the reception of stimuli of diverse techniques, engagement with visual arts, feuilletons written by writers from the popular classes, literature, photography, image, sound and light editing, and the entire universe of the spoken and written word. In this environment of discovery and experimentation, students construct their imaginaries and make use of digital technologies. They construct, transform and exhibit their universes."

To develop these audiovisual narratives, they explore the city: church halls, clubs, the fire department, etc. are transformed into locations for research, construction of knowledge, and audiovisual representation. In this way, they integrate the life of the city into their work, devising new audiovisual languages proper to these subjects. Over the six year life of this program, many students have already won awards at film and video festivals.

The Grupo Cultural Afro Reggae (GCAR) came into being in 1993 after the police massacred 21 innocent residents of the favela of Vigário Geral in retaliation for the killing of four police by the local narcotrafficking gang. The massacre in Vigário Geral provided Afro Reggae's coordinator, José Júnior, with a mission not to change youth culture but rather to use music and dance to attract them to a "new ethical and moral field"; rather than claim moral high ground, he sought to instill recognition and affirmation of these youths' 'beauty and positivity' (Roque 2000: 11). Júnior and Afro Reggae gained enormous legitimacy among favela dwellers as well as the external members of the networks that traversed Vigário Geral. Júnior was able to place Afro Reggae youth in professional bands and other venues, such as the Cirque de Soleil, as apprentices. When these youth returned to work in the Group they had acquired competencies that enabled Afro Reggae to record in 2000 a reasonably good-selling CD.

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2 See "Bastidores Iguaçu de Massinha," http://www.youtube.com/watch?v=1X0DeIvWfH.
3 http://escolalivredecinemani.com.br/v2/?page_id=2
CD with Universal Records, Nova Cara [new face, i.e., of the favela]. In 2005 they recorded their second CD, *Nenhum motivo explica a guerra* [Reason Against War]. They are now a very successful rock-pop-rap group in Brazil, but they devote a good amount of their resources and time to working with favela youth in various Rio communities.

Júnior and several Afro Reggae band members took their practice of collaboration in music-making to the Belo Horizonte police department to bridge the gap between the police and poor youth through cultural activities involving theater, music, percussion, graffiti and circus.

Teaching the police to play music was not simply about percussion but about getting into the body of the other, permeating the “body, home, street, city, the world” (Ramos, 2006). Within GCAR’s network they already had ties with then Secretary of Security of Rio de Janeiro, Luiz Eduardo Soares, and his research program on security at the Universidade Cândido Mendes, and together they devised a program – Projeto Juventude e Polícia – to work to reform the concept and practice of security.4

Among the distinctive aspects of the experience as compared to traditional ways of working with police forces (courses, meetings, and lectures on human rights), the following key elements are worth emphasizing: Afro Reggae workshop leaders appealed to “hearts, minds and specially bodies, through the workshops of music, theatre, graffiti and others”; rather than bombard the police with moral injunctions, they proposed “new and unique experiences both for the police and for the young people who are entering a Military Police barracks for the first time”; workshop leaders engaged the police in scenarios that enabled them to transcend the stereotypes of black favela youth generated by mainstream media: “All of this helped create a new ‘us/them’ and replace the old ‘we/they’” (Ramos, 2006a).

As Secretary of Security at both state and national levels, Luiz Eduardo Soares advocated the elimination of narcotrafficking gangs and the larger forces that support them. However, he also advocated policies that established links between the various sectors of society. His objective was to undo the divided city metaphor by mobilizing culture to promote the “symbolic relinking [religação] between everything that is divided and torn asunder” (Soares et al., 2005: 148).5 He recognized that music in Brazil was one of the means by which the events of everyday life, often unconnected, are brought together in music, like putting a jigsaw puzzle together. This symbolic connection is a major piece of his idea of security: “The subjective dimension is a relevant part of public security… interior experience, inseparable from culture, intrudes into the practical world and generates events in various different ways. This does not mean . . . that a good security policy can be reduced to dealing with people’s subjective concerns . . . that a security policy should be merely a communication policy. However, it does mean that a true security policy must include a communication policy.” Cultural and communicational action of this sort produces “stable expectations, positively and widely shared,” i.e., security (Soares et al., 2005: 185-86).

**Conclusion**

Soares, like Faustini, Júnior, the founders of CUFA and many other cultural activists are the creators of social networks whose participants seek to establish security in a very volatile social climate. And within those networks they seek to circulate their texts throughout the media; publications, film, TV, radio, and internet blogs. Their cultural work and the networks they have created may not eliminate the root causes of violence – such as the economic and political interests that enable the drug and arms traffic; indeed, this requires a sincere effort on the part of government to include politically favela dwellers via institutions, jobs, and a self-generated presence in the media. So while the initiatives explored here may not succeed on their own, they nevertheless maintain hope and plant the seeds that may blossom into action as they are nourished by the multiple actions of networks. “Networks help member groups to accomplish complex objectives under difficult circumstances by promoting specialization among members, linking like-minded groups, and allowing those that want to change political conditions in violent places to share risks in such a way that it is more difficult to stop efforts to promote change” (Arias 2004: 6).

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4 This is the same Luiz Eduardo Soares who wrote the preface to Faustini’s book and who authored the play that he will direct in 2014. He is also a co-author of the book *Cabeça de Porco* with record producer Celso Athayde and rapper MV Bill, the founders of Central Unica das Favelas, an Afro Reggae like organization. And he is also co-author of the book on which the film *Tropa de Elite* is based.

5 Soares points out that religação or relinking is the root of the word religión.
In implementing the development of industrial projects or industrial capitalism, there is a distinct need to carefully consider its potential environmental impact. *Villa Inflamable* (Flammable Village), a shanty town built on the edges of Buenos Aires, lies in a section of the Matanza-Riachuelo River Basin. It is bordered by the festering waters of the river and the petrochemical complex of Dock Sud, making it a prime example to analyze the impact of industrial development on the environment and consequently, the community. The analysis and investigation into this community was conducted as a four-year-long research project that combined both an academic and an activist perspective.

*Villa Inflamable* was named after an explosion of an oil barge in 1984 along this section of the Dock Sud canal. This background is demonstrative of the disregard for this area, both environmentally and socially. A petrochemical industrial complex was established here since 1930, along with the coinciding petrochemical refuse that is nonchalantly dumped into the backyards of nearby residents. There are seven companies – mostly multinational – working here, as well as eleven chemical plants with their respective chemical depositories. Alongside this industrial development are local residents that settled here prior to the establishment of the chemical plants. The establishment of such complex had a major environmental impact and altered the area. Over the years, this change has presented as the main, or sometimes sole, option for development.

Barrio Porst is the oldest part of what is known nowadays as *Villa Inflamable*. It has a history, which also impacts how one lives in this space. In the late 19th century, at the dawn of Argentina's immigration peak, the area was settled by Italian, German, and East European descendants who could not find space in *la Boca*, another nearby neighborhood in Buenos Aires city largely settled by Italian immigrants. Originally it was a rural neighborhood, where residents worked in the non-intensive agricultural industry. Grapes and vegetables were grown in this region, and it eventually became a major source of food supply for the city of Buenos Aires. In the 1960s, more petrochemical plants arrived, generating different relationships with the locals. People went to work for the plants, developing an economic dependency on their establishment, and at this point, there were no apprehensions about this situation or the resulting development of the area. The plants' engineers used to live in the compound and had close relationships to this community. During the subsequent decades, the harmful environmental effects and pollution from the plant, though high, were not a major concern for the residents living within close proximity. However, towards the end of the 1980s, after the oil ship explosion the engineers began to leave, triggering a concern amongst the residents...
as to their own wellbeing. This impacted work relations, as well as economic wellbeing. Since the socially contested settlement of papermill plants in Gualeguaychu river city during 2003, various activists throughout Argentina have raised the country's awareness of environmental problems. This includes the need to carefully consider the potential environmental impact of industrial projects and construction on those residing near them. Deliberation and participation will help to define more adequate environmental and social policies. Rather than providing a simple “yes” or “no” in response to development proposals, there needs to be a better planning mechanism to balance the desired results of development, the environment, and the community.

In 2004, I began to collaborate with Javier Auyero, an Argentinian sociologist living in the U.S., hence the crossover of academic and activist roles in this research project. We visited the site firsthand, and this is where our theoretical and practical perspectives converged. Despite the gravity of what was at stake and the fact that they were subject to such risky living conditions, the residents did not represent an organized group capable of demanding environmental justice. They had no consolidated front. This raised several questions: Why was it so difficult to organize the population? Why were there so many questions and so much confusion as to the degree of pollution? Were the health problems growing within the community related to the pollution, and if so, how should they express this claim?

In attempting to understand the answers to the aforementioned questions, it is necessary to understand the history of the community and its challenges. We, as researchers, attempted to examine how a concept, such as pollution or uncertainty, could be reflected from different points of view (cubist ethnography). The professional discourses on these subjects, namely those of the media, the State, and the oil companies, conform to the way that people relate to and perceive their space. The lives of the residents are shaped in profound and permanent ways by the confusion, longing, and resignation produced by these discourses. These platforms mold the way that people think about and understand the environmental problem that surrounds them.

In addition to understanding these discourses, researchers need to understand how different methodologies can mediate these mentalities, and to see how people can use these channels to reflect their own reality. As such, there needs to be a level of participation from the community before any interventions are done. Professionals such as engineers, architects, and public officials must listen to this population before intervening, instituting any relocation projects, or implementing any elements of social housing, construction, or design. This, of course, could lead to increased difficulty in finding common ground between the residential and the business spheres.

Additionally, in understanding the discourses that are presented to the community, one can understand what separates Villa Inflamable from other shanty towns and their connection to the land. The distinctive feature here is the fact that these petrochemical plants are part of the community, serving as both its savior and its demise. Rather than residing in a large city where the residents relate to or localize themselves around a school or town center, the local neighbors identify with the petro-plants. Their neighbors are multinational companies, and their presence creates a different reading of the environment. As such, the internal, organic relationships became the focal point of the research project.

The integration of the plants into the neighborhood also affects the community's perception of the environment. Rather than seeing trees or animals outside of their window, they see a factory. This is the norm, the visual regime we could say, which partly explains the difficulties the community faces when trying to extricate itself from the environmental degradation of the plants, a problem that affects everyone. This does not necessarily entail residential acceptance of the factories or the pollution to which they are continuously exposed, just acceptance of the fact that this is an integral part of their reality. The toxic waste produced by the plants has been there for so long that it has been solidified in their minds as “natural.” Residents do not see themselves living in the toxins that surround them. Furthermore, in lieu of government assistance or presence of the State, these petrol companies provide essential goods and services to the community, such as school supplies.

As such, plans for relocation have been nullified because external organizers see the space as homogeneous. However, these spaces are not homogeneous, nor are their inhabitants’ ways of thinking about the environment. This has to do with the various histories of the organic relationships. These histories can change from one family to the next, or sometimes even within an individual’s own lifespan, as changes over time depend on personal history.

Until 2006, their efforts were limited solely to the local government within Villa Inflamable, and their struggle had no projection beyond the limits of their community. With the initial establishment of the cleaning project for the Matanza-Riachuelo river basin, the residents petitioned the Supreme Court to dispute who had the rights to the land – the industry or the community.

The State wants to relocate this community, but most of the residents no longer want this. The government has presented a project to which the people are resistant. This raises the question as to why they have not been active in finding a solution. The answer lies in finding a consolidated alternative; residents have organized to fight the relocation project, but their different histories with the compound, doctors, media, state officials, engineers, lawyers and activists prevent them from finding a cohesive alternative solution. These chemical plants and actors have become embedded in the community over the years, and as such, have led to differing personal histories within the community as well as differing relations amongst the community. The community is conflicted; the plants pose a real danger to its collective wellbeing, yet they are an intrinsic part of it. This complex relationship, further aggravated by individual attitudes and personal intricacies, is one of the main factors that prohibits the residents of Villa Inflamable from developing a unified solution to their current problems.


Northern Chile has become the home of several informal and illegal settlements, particularly along its coastal regions. The precarious nature of these settlements, however, is further aggravated by both seasonal population patterns and environmental factors. The area’s physical landscape, coupled with the natural weather patterns, has led to land degradation and erosion, making it susceptible to flooding and avalanches even in minor weather conditions. This region’s vulnerabilities, due to its natural environment, are further complicated by its varied historical and contemporary populating trends, as well as each population’s cultural connection to the land.

Settlement in this region began in the mid-20th century. Between 1973-1991, individuals settled here in search of a place to live. However, since the 1990s, people have come to the region in search of a second home along the coast. This phenomenon is the result of a shift in cultural needs and wants. This cultural history makes it difficult to relocate people from this risky zone, where they have become used to the liberties of coastal living, in spite of its vulnerable position. People are nostalgic about their coastal properties, which connect them to the land. Thus, building this informal settlement, though illegal, has become a behavior that is accepted and even protected by authorities and society as a whole.

Puerto Viejo, located at the edge of the Atacama Desert, is one of these informal settlements (Fig. 1).

To understand the risk inherent in Puerto Viejo, there are two variables to consider. The first is the threat of socio-natural disaster. Landslides and falls, tsunamis, and earthquakes are quite common and pose repeated threats to the community. Secondly, there is social and economic vulnerability. The study of this variable is quite complex, as there are numerous socioeconomic vulnerabilities to be examined between the community’s permanent residents and its seasonal residents. In an attempt to scientifically analyze these vulnerabilities, several questions arise. What are the real indicators of these vulnerabilities? How do we measure them? What is the scale with which to measure them? In brief, our analysis has been localized. It changes from one place to the next, and, as a result, it is difficult to establish the parameters of social vulnerability. The importance lies in determining the impact that these vulnerabilities have on the individual. To accomplish this, we must consult with experts in other fields, such as social anthropology, medicine, and sociology.

Within the coast, there is a convergence of risk factors. First of all, there is the population that wants to settle in an attractive place, resulting in the collective denial of risk from a threat they choose to ignore. Second, there is a high floating population in Puerto Viejo. The permanent population of 100-120 residents expands to a population of 500 residents in high season. This population, suddenly four to five times that of the permanent one, becomes incredibly difficult to manage in the case of an emergency.

In terms of its location, the layout of Puerto Viejo is still very precarious and directly exposed to the threat of a tsunami. For example, the effects of the 2011 earthquake off the coast of Japan and its resulting tsunami impacted the Chilean coast (Fig. 2). This occurred in March, which is low season in Puerto Viejo, and, as a result, it was fairly easy to safely evacuate the region. This event led to the need to organize an emergency committee in the community living on the site and is now prepared to give the evacuation alert as the entire settlement is in tsunami hazard area. Notwithstanding the recent experience in the country and the town, it has now been possible to reach agreements that allow its relocation to the high terrace which surrounds the town.

Fig. 1. Puerto Viejo. a) View of the settlement and homes of light material b) Houses built on the edge of paleocliff in declining situation due to sheet erosion and its subsequent collapse c) Actions designed to consolidate the settlement: street names and numbering of houses d) commercial installations e) view of the bay, completely subject to the action of tsunamis.

Fig. 2. Images of destruction in Puerto Viejo by Japan’s tsunami of March 2011.
Moreover, this tsunami began on the opposite side of the Pacific Ocean, allowing plenty of time for early warnings. However, the threat of a similar earthquake and resulting tsunami from the Nazca Plate would provide only 10-20 minutes of warning.

To demonstrate the likelihood of such an event, one need only look at the history of natural disasters in the region. In 1819, a major earthquake measuring 8.3-8.5 on the Richter scale hit Chile, initiating a tsunami that reached Constitución. In 1922, a tsunami struck this same northern region of Chile. Aside from earthquakes and tsunamis, heavy concentrations of rain create landslides. Additionally, the soil composition here also varies, and there is a layer that does not easily mix with rain. This leads to flash flooding. All these factors demonstrate Puerto Viejo’s extreme vulnerability to socio-natural disasters.

Nearby, there is another settlement growing exponentially, with more than 3,000 residents. Originally composed of informal, wooden shacks, the current development contains prefabricated houses, a main street, restaurants, and town squares. As such, the region is becoming increasingly consolidated. The latest census considers this to be a recognized settlement, though it is not widely accepted as such. The emergency center sees this place as another population center, and has equipped it with an alarm center and radio communications.

This makes relocation increasingly difficult. In fact, authorities do not push for relocation, due to the cultural considerations of the region, despite the ongoing threat of natural disasters.

Post-disaster destruction shows the precariousness of these settlements, where everything was obliterated. However, the area quickly bounces back, improving the quality of housing in reconstruction. This resilience shows that simple relocation schemes are not enough. Rather, there must be a paradigm shift that seeks to work with the population. Participation from the community is critical.

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Municipal elections were recently held in this area, and the majority is embracing effective citizen participation. Citizens also need to understand the risk of settling in these sites, and with the support of the State, mobilize to relocate to safer areas. Until this can be realized, however, there must be an emphasis on security measures concerning risk prevention, early warning, training, and simulations in response to disasters. Such training is critical for the population to navigate from difficult situations to safer ones.
Though the developed world always claims to be the expert, it is now taking a lesson from the small island nation of Haiti. Looking at Haiti, one must consider the impact that environmental deterioration has on social vulnerability. These factors greatly affect the informal settlements that sprout up across neighborhoods. Examining these informal settlements takes on a very particular nature of study. These are peri-urban areas, existing on the perimeter of the city – the periphery of the periphery.

The exponential growth towards these peri-urban areas is characterized by occupation of land prone to floods and landslides, and dreadful environmental relationships with its surroundings. It contributes to environmental degradation and thus, increases the exposure of communities to hazards, compromising and deepening the existing socioeconomic vulnerability. What becomes critical therefore, are high disaster risk levels, which could compromise life, livelihoods, and the scarce development gains achieved in the last decades.

Within these settlements there is a strong concept of neighborhood; that concept is formed by the processes of identity that come from within to make each neighborhood unique. Each settlement has very specific characterizations that are hinged upon the processes of migration: customs, skills and livelihoods, social cohesion, and reason for the movement, among other factors, all of which affect the notion of permanent residency. These events have enormous consequences for the community. Migration, movement, settlement, and identity are ever-present and cannot be overlooked, particularly those related to cultural manifestations. In Brazil, for example, despite the existence of drugs and violence within the favelas that have been the target of debatable and sensationalized news, there have been unique cultural and artistic expressions that have contributed to the creation of a self-conscious community’s identity.

From the viewpoint of risk management, it is important to understand variations in risk exposure. In Haiti, peri-urban areas have been born out of a crisis situation generated by the 2010 earthquake. This has started to generate a model, a window of opportunity to access a tiny portion of land close to urban areas. These informal settlements face problems related to the lack of infrastructure, support from the State,
Some non-governmental organizations (NGOs) lead by Project Concern International, with the support of the international community–particularly USAID, picked up on this resilience and started programs to assist with the recovery of health centers, clearing leftover materials, and furthering these collective solutions. The strategy created was called “neighborhood approach” and transcended the classical assistance geared towards individuals, focusing on collective issues associated with four dimensions: (1) housing and settlement; (2) water and sanitation, (3) livelihoods and financial markets, and (4) disaster risk reduction interventions as cross cutting topics. Some non-governmental organizations (NGOs) lead by Project Concern International, with the support of the international community–particularly USAID, picked up on this resilience and started programs to assist with the recovery of health centers, clearing leftover materials, and furthering these collective solutions. The strategy created was called “neighborhood approach” and transcended the classical assistance geared towards individuals, focusing on collective issues associated with four dimensions: (1) housing and settlement; (2) water and sanitation, (3) livelihoods and financial markets, and (4) disaster risk reduction interventions as cross cutting topics.

These peri-urban areas in Haiti are on the periphery of the periphery; they are the epitome of informality. These areas were destroyed after the 2010 earthquake, and the people residing there lost everything. They were forced to leave their homes and go to campsites where they could hopefully be identified. If they were not identified, they were not eligible for help or public services. Despite their frustrations, the Haitian people continued with their activities–buying, selling, living, and so on. In spite of their difficulties, individuals returned home to their neighborhood to seek a normalcy and continuity of life that was not offered to them in the camps. They did so without aid from the State, relying on the collective spirit of the community to rid themselves of fallen materials and to provide social and basic services as a collective unit.

The case of Haiti offers possibilities to see these neighborhoods from a different perspective, and to approach reconstruction even when there is no presence of the State. The NGOs faced threats like the gangs that kidnapped its workers, workers that were residents from the same neighborhood. However, new problems arise even as peripheral regions create solutions and assist in post-disaster or risk exposed areas. As one neighborhood is revived, a rivalry is born from the neighboring community who rightly demand equal access to goods such as fruits and crackers in the street and begin to pursue an economic recovery. NGOs helped establish market chains, sustainability, and accessibility to promote recovery. The community was working together so the developments were accomplished collectively from within the community rather than from outside.

The World Bank is seeking to become involved in this method of development, but in order to scale this type of project, there is a need for a strong institutional commitment, which includes pacification efforts that must accompany peri-urban development interventions. This entails a multi-faceted understanding of approximation, collective knowledge, appropriation, and negotiation that will require time and effort to develop. Thus, though such a development approach can be expanded, it first requires political will, maturity, and investment.
The rise and continuity over time of a vast informal sector is perhaps the most glaring example of the characteristics peculiar to Latin America that make adoption of European and North American policy and scholarly models inappropriate. The analysis of these activities will not only produce a better understanding of the present character of Latin American societies, but also contribute to a better appreciation of how universal social principles may be applied in regionally specific settings.

There appears to be growing consensus among researchers that the proper scope of the term "informal sector" encompasses "those actions of economic agents that fail to adhere to the established institutional rules or are denied their protection." Or, alternatively, it includes "all income-earning activities that are not regulated by the state in social environments where similar activities are regulated." This definition does not advance an a priori judgment of whether such activities are good or bad, leaving the matter to empirical investigation.

However, even neutral definitions are hampered by the very breadth of the subject matter they try to encompass. A key distinction must be made between informal and illegal activities because each possesses distinct characteristics that sets them apart from the other. Illegal enterprise involves the production and commercialization of goods that are defined in a specific society as illicit, while informal enterprise deals, for the most part, with licit goods. The basic difference between formal and informal does not hinge on the character of the final product, but on the manner in which it is produced and/or exchanged.

Thus, articles of clothing, restaurant food, or computer chips— all perfectly licit goods— may have their origins in legally regulated production arrangements or in those that bypass official rules. By explicitly distinguishing between these three categories— formal, informal, and illegal activities—it is possible to explore their mutual relationships systematically, a task that becomes difficult when illegal and informal are confused.
succinctly: “Order creates disorder. The formal economy creates its own informality.”

For the best part of the last century, Latin America has found itself locked in this apparently inescapable pattern. Weak states are not entirely impotent and the dominant classes in these countries have a vested interest in the preservation of the rule of law and, hence, predictable contractual relations in certain spheres. This is why the reality on the ground in most Latin American countries features a limited, but diversified sphere of formal relationships – associated generally with interests and activities of the dominant classes – along with a vast informal economy where patterns and practices of avoidance of state regulation become the norm.

**The Functions of Informality**

From the definition of the phenomenon used in our analysis, it is clear that the elements composing the informal economy will vary across countries and over time. The relationship between the state and civil society defines the character of informality and that relationship is in constant flux. The changing geometry of formal/informal economic activities follows the contours delineated by past history and the character of state authority. There is, therefore, no great mystery in the diversity of formal/informal interactions reported in the literature. Hence, what is informal and persecuted in one setting may be perfectly legal in another and the same activity may shift its location across the formal/informal divide over time.

The research literature on the topic also illustrates the diverse functionality of informal activities for the actors involved. While a good portion of this literature, coming from economics, views the phenomenon as tax evasion, sociological and anthropological field studies take a more nuanced view. It is obvious that informal enterprise is “functional” for those so employed in terms of providing a minimum means of survival. It is equally obvious that the formal firms subcontract production and marketing to informal entrepreneurs.

There is no question that as a lubricating device—a form of massive social arbitrage— an informal economy is fine and may even be necessary. As just seen, informal activities may provide relief during downtimes in the modern economy and help subsidize both its firms and its workers through cheaper goods, services, and labor. However, this very functionality of informal activities contributes to the perpetuation of economic underdevelopment and political backwardness “locking in place” the conditions that make these countries peripheral. The “functions” of the Latin American informal sector only exist because of the continuing ineffectiveness of its states and stagnation of its economies.

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**The Costs of Informality**

Through these mechanisms, the informal economy contributes to the political stability and economic viability of poorer nations. These realities help explain why informal activities have been commonly tolerated by Latin American governments in direct contradiction to their manifest law-enforcement duties. The “frustration” of these states, described previously, stems not only from their inability to enforce their own rules, but also from their common dependence for survival on the very sector of economic activity that habitually violates these rules. Paradoxically, the perpetuation of weak states which overreach their limits relies on an informal economy that: a) provides means of subsistence for a large segment of the population; b) subsidizes the consumption and profits of actors in the formal economy.

A similar, albeit more limited situation obtained in developed economies governed by “liberal” states. A laissez faire stance toward the economic activities of private actors is commonly accompanied, in these cases, by a system of minimum compensation for the victims of the market – the unemployed and the unemployable. These classes are thus compelled to engage in underground activities for survival, be

that subcontract production and marketing to informal entrepreneurs or who hire workers off-the-books benefit from the higher flexibility and lower costs thus obtained. It is less evident, however, that the informal economy can also have positive consequences for the very actor whose existence and logic it challenges: the state.

This central paradox also adopts different forms depending on national context. In less developed countries, such as those of Latin America, informal enterprise has a double economic function. First, it employs and provides incomes to a large segment of the population that otherwise would be deprived on any means of subsistence. The “cushion” provided by a dynamic informal economy can make all the difference between relative tranquility and political instability in these nations. Second, the goods and services provided by informal producers lower the costs of consumption for formal workers and the costs of production and distribution for formal firms, contributing significantly to their viability. Thus the low wages received by formal sector employees in Third World nations are partially compensated by the greater acquisitive power of these wages through cheap informally-produced goods and services. In turn, large firms can compensate for costly tax and labor codes by restricting the size of their formally employed labor force and subcontracting the rest to informal entrepreneurs.
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Given a large informal or self-regulated economy, the capacity of the state to generate the resources needed to impose its authority remains limited. Within these limits, the state has little hope of providing the kinds of public incentives needed to create the conditions for modern capitalist development, generate more “good” jobs, and hence persuade those in the informal economy to “come into” the formal sector. In Hirschman’s terms, given the attraction or inevitability of an informal “exit,” the state has great difficulty building the required “loyalty.” The absence of such institutionalized assurances discourages investment in more productive and effective institutions.

Some neoclassical economists and public choice theorists propose that this “natural” economic order is an ideal to be achieved, not a problem to be solved. Unfortunately, in the absence of institutionalized rules, the economy runs into several significant obstacles. Transaction costs become very high when there is no reliable external enforcer of universalistic rules. The weakness or near absence of a functioning judicial system makes contracts impossible. Contracts are, of course, a prerequisite for the de-personalization of economic transactions that is so crucial to the development of the modern capitalist market. Transactions become limited in space and time and, outside of a limited elite sphere, they become much more costly as economic actors must search for their own unorthodox ways to enforce agreement.

Finally, the perpetuation of the informal economy also insures the continuation of vast social inequalities. A significant part of the economically active population laboring without protection and without the possibility of collective representation may represent a considerable comparative advantage for some industries, but it bodes ill for the possibility of reducing inequality and widespread poverty in these nations. In a sense, the functionality of the informal sector for the state and firms in the formal economy depends precisely on the continuing vulnerability and poverty of those laboring in underground activity. This inequality, in turn, further limits the chances for development of an effective state because those with resources to tax have the political weight to avoid such payments. The final picture is a familiar one to students of Latin America: A small, powerful elite, a state too weak to discipline this elite and create or extract the resources necessary for sustained development, and a dispossessed mass that survives by providing low-cost goods and services to the privileged few.
I was born in the Peruvian jungle. When I arrived in Lima to study Industrial Engineering, I suffered an incredible cultural shock. For the first time in my life I saw trash – mountains and mountains of it. Alarmed by this situation, I decided to write my thesis on the problem of waste and sanitary micro-enterprises. Furthermore, after seeing the limited training that engineers had regarding waste management, I complemented my studies of Industrial Engineering with a Masters in Ecology and Environmental Management and a Ph.D. in Chemical Engineering. Soon after graduating, I began an investigation that has evolved into an effort to eradicate garbage in Peru and in the rest of the world.

Twenty-six years have passed since I initially confronted the challenge of cleaning up Lima and ten years since I founded Ciudad Saludable ("Healthy City"), a project that incorporates solid waste management with the generation of employment opportunities. Today Ciudad Saludable is an international organization consisting of three groups: Ciudad Saludable is the head non-governmental organization (NGO), a non-profit institution based in Peru; Healthy City International is the foundation based in New York; and finally, the Peru Waste Innovation (PWI) is a social enterprise with Ciudad Saludable as the owner, and a 40% risk capital partner investor from Switzerland.

“Through garbage, changing minds and changing hearts” is Ciudad Saludable’s slogan. The organization seeks to promote change and progress in the private sector and a more active civil society. Dealing with waste management is a multi-pronged challenge. Although the obvious problems of pollution and disease prevention are important concerns in implementing effective strategies, there is also a layer of corruption in waste management. This social component is a primary target that Ciudad Saludable tries to combat, as changing this behavioral model is critical in effecting change.

The issue of garbage is critical not just in Latin America but in the developing regions of Africa and Asia. Vermin live in and feed off trash. People, including women and children, live in and work with garbage. Refuse burns in landfills all day long, contributing to air pollution. People who work in this environment deal with respiratory illnesses, skin conditions, gastrointestinal infections, and cuts. Workers work without gloves or masks and wear the same clothes all day long. When they go home and sleep in these same clothes, they spread disease to their children and other family members.

However, there are recyclable and valuable materials within these landfills, prompting people to live and work in this environment. Workers sell these materials to intermediaries, who then sell their products to manufacturing and exporting companies. The problem, however, lies in the intermediary and the informality of the transaction process. Intermediaries take advantage of the recyclers, effectively stealing from them, paying them in drugs or liquor, and often
underpaying the value of the goods. Manufacturing and exporting companies then buy the recyclables from the intermediary, who includes the relevant taxes on the invoice. When the companies go to process these invoices, they find that the taxes were never paid by the intermediary and that there are no fiscal credits for those materials, but by this time, the intermediary has disappeared. Therefore, there is no accountability within the system, and it is no surprise, then, that there is so much money laundering in this sector that is undetectable. In Peru, there are 108,000 families that live off this industry; 4 million families in Latin America and 15 million globally do the same.

Children represent the population most vulnerable to the health risks associated with this line of work. Social programs do not go into these territories because they do not know that there are people living there. Illness and disease are prevalent problems but are not formally reported. When the health sector enters to conduct surveys, respondents do not disclose their illnesses so that they do not risk losing their homes or work opportunities.

*Ciudad Saludable* seeks to break this cycle. By identifying useful methodologies to gather information, the organization has implemented a program called “Zero Waste.” It utilizes several methods to instill the mantra of trash reduction and waste management. The primary goal is to foster public education to produce less refuse and to properly dispose of dangerous waste. Batteries, hair dyes, and cleaning chemicals are extremely toxic and dangerous, and must be disposed of properly. Overall, the public should also foster a general awareness of the need to produce less waste. Awareness of these issues promotes socially and environmentally responsible consumers. In addition, producers and manufacturers must be educated so that they can work towards a product that will produce zero waste both during the production process and after use. *Ciudad Saludable* promotes the idea that it is better to reduce than to reuse; it is better to reuse than to recycle; and it is better to recycle than to do nothing at all.

In furthering this knowledge, *Ciudad Saludable* uses a simple strategy for social education. We recruit participants from universities and schools to go door-to-door and educate households firsthand about responsible trash disposal and recycling. We stress the importance of separating disposables into organic refuse, inorganic recyclables, and inorganic garbage. Drawing from the cosmetic catalogues used in door-to-door marketing, *Ciudad Saludable* educators show pictures and examples of the different types of disposables so that people know how to separate their refuse. At first, there was much resistance on behalf of the public. People did not want to put effort into separating their waste, and it took some convincing to solicit their participation. They were not convinced by the argument that doing so was good for the environment, nor were they convinced that, by separating their garbage, they could improve work and health conditions, thus creating more dignified jobs for sanitary workers. Ultimately, they were only motivated to do so when offered a monthly, economic incentive for separating their garbage.

One of the main reasons for this social education is to help a community recognize the importance of organic waste. Peru is an exporting country, but it needs to produce as well. The production of biogas can help remedy this economic need. Rather than contributing to already overflowing landfills, organic materials can be constructively used to produce biogas. Biogas is a renewable energy source, which results from the breakdown of organic waste. Organic materials can also produce fertilizers, and as such, should be sent to separate landfills in order to extract these materials. The re-production of organic material waste thus contributes to the method of “Zero Waste” as well as to positive economic production. It is therefore important that this strategy be better publicized.

Peru is divided into four types of cities depending on overall size. The smallest municipalities comprise 70% of the cities. In these municipalities, an adapted tricycle (“moto-car”) is sufficient to perform the trash collection and costs a mere $300 USD. However, many mayors in cities with at least 1,000 residents ask to buy large trash compactors, averaging around $120,000 USD, because they receive a 10% commission from these purchases. Thus, they will push for the large equipment that will be profitable to them, though unnecessary for the community, because they get no return from promoting the simpler technology. Though larger cities do require large landfills and machinery, in mid-sized or small communities, this is simply not necessary.

By law, municipalities are responsible for handling waste, but they cannot do so independently. They must work with the national government, and as such, there are general laws formulated to ensure proper waste management. In 2000, *Ciudad Saludable* successfully lobbied for the enactment of the General Law of Solid Waste, which included an article about properly training recyclers. In 2009, after lobbying for further justification of this article, Peru was the first country to pass Law 29419: The Law of Recyclers, which addressed the social inclusion of this population. In 2010, Brazil passed a similar law. *Ciudad Saludable* continues to work in other countries to promote this endeavor, and as such, Bolivia, Chile, Ecuador, and the Dominican Republic are currently reviewing similar laws.

*Through garbage, changing minds and changing hearts* is *Ciudad Saludable*’s slogan. The organization seeks to promote change and progress in the private sector and a more active civil society. Dealing with waste management is a multi-pronged challenge. Although the obvious problems of pollution and disease prevention are important concerns in implementing effective strategies, there is also a layer of corruption in waste management. This social component is a primary target that *Ciudad Saludable* tries to combat, as changing this behavioral model is critical in effecting change.'
Ciudad Saludable also works with educational entities and teachers to ensure proper training of waste management and relevant administration. Previously, there had only been one course on sanitation engineering, and anyone who took that single course was considered a "specialist." We have since established a graduate certificate program together with the Catholic University in Peru to provide proper sanitation training. This certificate program is online, and all teachers are affiliated with Ciudad Saludable. Working with other countries throughout Latin America, the program is available only in Spanish for the time being; however, the goal is to implement another program in English to expand its reach to the U.S. and Europe. The organization is also working on similar sanitation projects in Egypt and India where Ciudad Saludable attacks the issue of sanitation from a multi-disciplinary perspective, working alongside economists, sociologists, engineers, educators, and other professionals. Similarly, we work with neighborhoods, communities, local governments, federal governments, and international organizations to properly train recyclers. There is also a consistent effort to work alongside the media to frame the topic of waste management and sanitation in a positive light, encouraging people to adopt more responsible behavior.

One model project has been implemented in Carhuaz, a village in the Andean Mountains with 14,000 residents. For nearly 30 years, the garbage was collected and dumped directly into the Santa River. It was considered a dangerous area seldom entered by public officials, police officers, or members of the municipality. As expected, the neglected village was a poor community. Outsiders believed that the residents of Carhuaz were poor because they preferred to be poor; they liked living amidst the garbage and refuse. Ciudad Saludable argued that this was not the case, and sought to correct this prejudice. The organization promoted both education within and outside the community, and the development of micro-enterprises in waste management. Within Carhuaz, we have developed impromptu tools for trash compacting and implemented competitions amongst school-aged children to give them incentives to adopt environmentally responsible behavior (such as reusing a sturdy bag to collect the daily bread, rather than using and disposing of a plastic bag every day). They have also been encouraged to use organic materials to develop compost and grow crops.

The model developed in Carhuaz became so effective that it grew into the prototype to develop similar plans in other communities both inside and outside of Peru. This program includes formulation (in association with legal constituencies), prevention, training, and follow-up.

The training is broken down into modules:

1. Integrated solid waste management;
2. Safety, risk, and accident prevention;
3. Self-actualization; and

This is an efficient and simple way to generate employment and training. Recyclers receive a certificate and license. The follow-up includes proposed plans to ensure familial wellbeing. The graduate program with Catholic University promotes exchanges, visits to the cities, talks with mayors and communities, other micro-entrepreneurs, and educators. Leaders and public officials also make field visits to promote the need for the population to become invested in proper waste disposal. Ciudad Saludable works with these officials to impress upon this population that proper investment is simply a matter of priorities. Residents pay 3 soles for monthly trash pickup – roughly the cost of one beer. This is considerably lower than the cost of remediating sanitation-related diseases, which are both common and frequent.

In the informal market, recyclers earn $1.2/day (USD). Once this market becomes organized and is formalized, they earn $10-15/day. Workers have uniforms, masks, and necessary equipment that comply with sanitation and safety regulations. Their children can attend school, and have access to health care services. Furthermore, the trainings and subsequent certifications awarded to workers make them more distinguished within the community, as social perceptions of this profession become increasingly positive. These workers, with the backing of Ciudad Saludable obtain credit to begin micro-enterprises.

Such projects have been acknowledged at both the national and international levels. UN Habitat awarded Ciudad Saludable the Dubai International Award for Best Practices for promoting projects that improve quality of life for recyclers. Our organization has also received the Global Development Network Award as one of the most innovative projects in the world.

The work of Ciudad Saludable is not only acknowledged through major awards, but from the positive experiences that it provides. During one of the first recycler certification ceremonies, a 57-year old woman graduating from the program asked to speak. She proudly announced that this was the first certification that she had ever received. She also stated that she could neither read nor write. However, the technology utilized and the teaching methods implemented by the staff allowed her to receive this certification. Likewise, while implementing a similar program in India, a woman confided in me that it was her karma to live in garbage. The woman then presented her daughter to me. Not knowing how to convince her otherwise, I then suggested, "Perhaps this is your karma, but not your daughter's. Let us break the cycle of poverty."

This sentiment is the overarching goal of Ciudad Saludable. The detrimental conditions of those living and working in garbage are born out of cycles of poverty. The goal is to make waste management and sanitation a more dignified job and to generate employment. Once we change the system, it will do the rest. This is not just a question of environmentalism, but of social wellbeing. In promoting training sessions, education, and programs, Ciudad Saludable seeks to promote harmony amongst these factors.
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Is a recognized film director within the Brazilian movie and theater scene. Raised in one of the largest social housing compounds in Santa Cruz, Rio, he made his film debut in 2001 directing the musical “Gianfrancesco Guarnieri.” In 2004, he organized the seminar “Seminário Das Utopias ao Mercado” and was appointed artistic director for the theater in Cidade das Crianças, Santa Cruz, Rio. In that capacity, and as a filmmaker, he created the Escola Livre de Cinema in the municipality of Nova Iguacu in the state of Rio de Janeiro to train primary and high school students in all aspects of audiovisual work and more recently created the project Agência Redes para a Juventude, an incubator for innovation among the youth of favelas who, as in the audiovisual school, draw on their awareness of their urban environment to realize initiatives of significant social relevance. In 2009, he published his first book “Guia Afetivo da Periferia” where he narrates the life of a man living in one of Rio’s marginal neighborhoods.
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