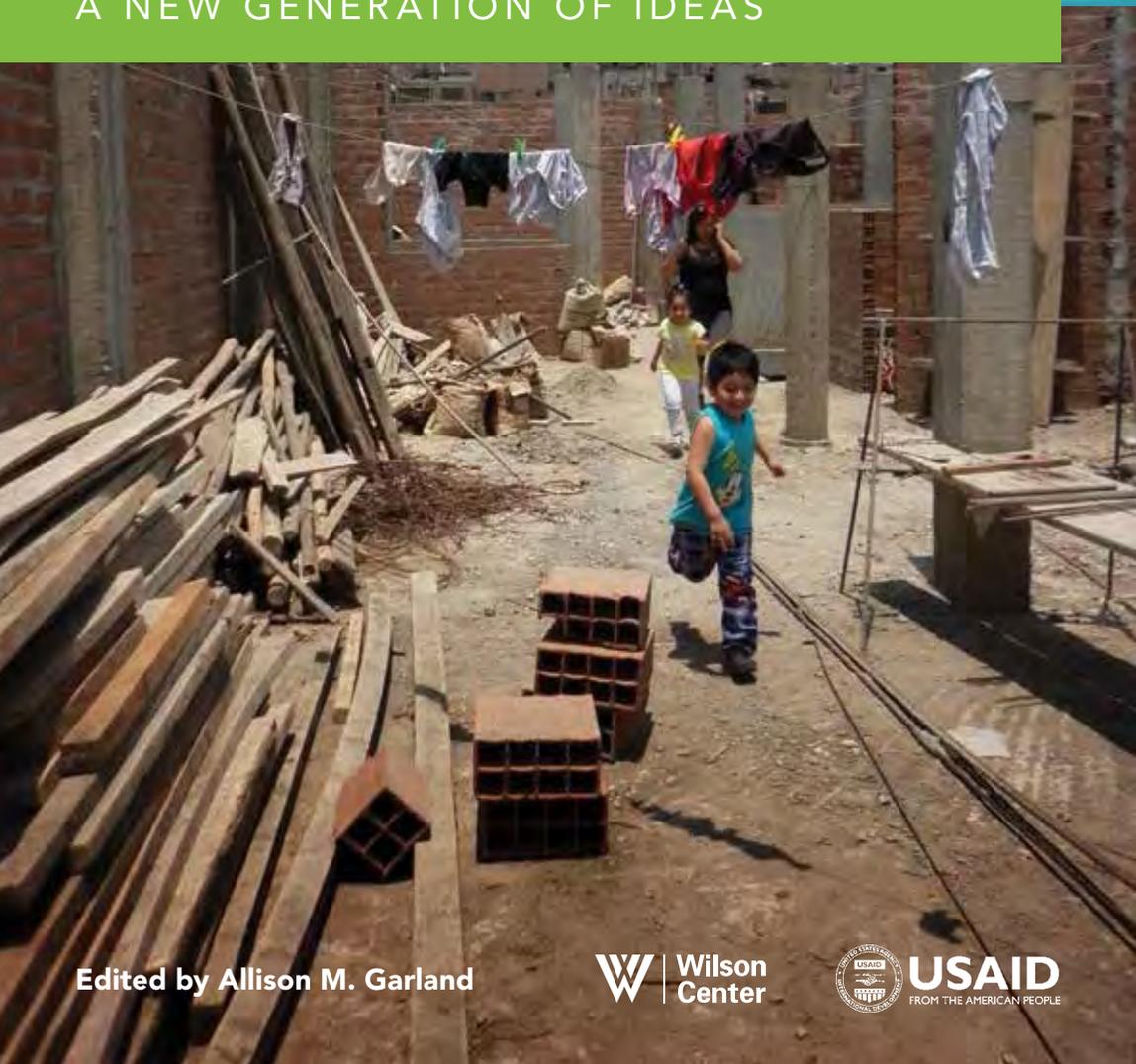


URBAN OPPORTUNITIES:

Perspectives on Climate Change,
Resilience, Inclusion, and
the Informal Economy

A NEW GENERATION OF IDEAS



Edited by Allison M. Garland

 Wilson
Center



USAID
FROM THE AMERICAN PEOPLE

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Cover Photo: Vertical growth for future generations in "los aires,"
Lima, Peru, courtesy of Olga Peek

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Introduction

URBAN OPPORTUNITIES

Urbanization is one of the most significant megatrends shaping the world in the 21st century. An estimated 180,000 people are moving into cities each day (USAID 2013) and by 2050, it is expected that 66% of the world's population will be living in urban areas (UN DESA 2014). With the recognition that sustainable and equitable cities are a crucial component of a livable future, policymakers must pursue the transformative potential of urbanization.

Sixty percent of the area expected to be urban in the next 15 years is not yet built (SCBD 2012), offering tremendous opportunity to shape the urban landscape with innovative solutions and a greater understanding of urban life. Two major processes currently underway present an important opening for international cooperation and national action to integrate urban approaches into the global development agenda. First, as the United Nations system defines a set of Sustainable Development Goals (SDGs) to follow the Millennium Development Goals and frame the post-2015 development agenda, support is growing for an urban goal to “make cities and human settlements inclusive, safe, resilient and sustainable” (UN OWG 2014). Second, the United Nations is preparing to convene Habitat III in 2016. The objective of this UN global summit, which occurs every 20 years, is to secure renewed political commitment to sustainable urbanization and to implement a “New Urban Agenda” that positions cities as drivers of sustainable development.

Urbanization must be framed as an opportunity to address the world's most pressing problems, which are perceptibly playing out in cities--poverty, exclusion, vulnerability, and environmental degradation. At the same time cities are engines for growth and innovation; accounting for 70% of the world's wealth, urban areas offer tremendous promise for economic development, job creation, and prosperity.

URBAN KNOWLEDGE

Urban research and expertise are the foundations upon which decisions about urban policies and priorities will be made to develop and build consensus around the “New Urban Agenda.” Similarly, data and evidence-based knowledge on urban development are critical for defining targets and indicators that could be used to measure and monitor the progress toward an urban SDG. The processes feeding into the formulation of global strategies must be inclusive, involving a wide range of stakeholders and perspectives. The input of voices often excluded from global and local decision making, such as the urban poor, women, and youth, to identify needs and priorities, and to determine the future of the cities where they live is vital to the success of a “New Urban Agenda.”

A NEW GENERATION OF IDEAS

To encourage a new generation of urban scholars, practitioners, and policymakers, and to disseminate their innovative ideas, the Wilson Center’s Urban Sustainability Laboratory, together with Cities Alliance, the International Housing Coalition, USAID, and the World Bank, sponsors an annual paper competition for advanced graduate students working on issues related to urban poverty. The competition is designed to promote the early career development of young urban researchers as well as to strengthen ties between urban policymaking and academia.

This publication marks the fifth year of the “Reducing Urban Poverty” competition and includes a range of perspectives on urban challenges and policy solutions. The 2014 competition called for papers linked to one of the following subtopics: cities and climate change; urban resiliency; inclusive cities; and the impacts of the informal economy. Each chapter in this volume critically examines existing urban policies and projects, offering original, solutions-oriented research and strategies.

To select the winning papers for publication, a panel of urban experts representing each of the sponsoring institutions reviewed 146 abstract submissions, from which 23 were invited to write a full length paper. Of these, eight papers were selected for this publication.

CHAPTER SUMMARIES

Cities and Climate Change

Cities are at the forefront of addressing the challenges of climate change. Urban areas account for 70-80% of greenhouse gas (GHG) emissions and will play a key role in global mitigation efforts. At the same time cities, especially in coastal areas, are facing increased exposure to hazards and risk. Forced to adapt to the realities of climate change, many urban areas are on the cutting edge of innovation through interventions in sectors such as urban planning and design, transportation, and storm water management.

In the first chapter of this volume, author Eric Chu offers a comparative analysis of climate change adaptation in the Indian cities of Bhubaneswar, Indore, and Surat. Chu examines how external incentives and mandates get translated into climate adaptation planning and implementation at the local level. He considers approaches to mainstreaming adaptation into urban development, examining stakeholder engagement and trade-offs to draw conclusions about the political and governance dimension of how cities frame and implement interventions that balance adaptation with urban development priorities.

Alisa Zomer also considers the influence of external processes and priorities on urban climate adaptation, drawing conclusions about the governance implications for adaptation decision making and policy implementation at the local level. Looking at the case of Metro Manila, Zomer argues that urban climate adaptation efforts are fragmented due to lack of coordination and sovereignty barriers. She concludes with a series of recommendations for advancing urban adaption planning and identifies future research topics to enhance urban climate knowledge.

Urban Resiliency

Recent urban disasters, such as the 2010 earthquake in Port-au-Prince, Haiti, or the typhoon that hit the coastal city of Tacloban in the Philippines, expose the unique challenges and opportunities of responding to natural and man-made disasters that occur in cities. Response and recovery from the destruction of housing, basic services, and public infrastructure is particularly challenging in urban settings, as is planning for disaster risk reduction.

In Chapter 3, Clifford Amoako explores the factors that influence vulnerability and resilience to flood hazards in two informal settlements located

along the banks of Korle Lagoon near the Central Business District (CBD) of Accra, Ghana. Amoako's work reveals that growth processes, land ownership structure, security of tenure, and state government institutions have played important roles in the exposure and vulnerability to perennial flood events in Accra. He calls for a reconsideration of the current structure and process of urban governance, state-community engagement, urban citizenship, and right to the city in these communities.

Ivette Arroyo examines how families affected by Typhoon Haiyan have been involved in housing reconstruction efforts in the Philippines. Arroyo offers a framework for reconstruction policy that builds back better by offering individuals the freedom to plan and design their housing, decide collectively, to self-build with technical assistance, and evaluate in real time. This "freedom to rebuild" approach enhances people's capabilities and leads to more resilient communities.

Inclusive Cities

With rapid global urbanization, cities are becoming spaces where increasingly diverse populations negotiate differences in race, class, ethnicity, nationality and gender. Inclusive pluralism is an essential aspect of sustainable urban development. The papers in this section of the volume assess policies intended to help marginalized populations more fully access urban economic activity and city space.

Signe Sørensen examines the capacity of the informal sector to absorb unemployed urban youth through self-employment in the informal micro-enterprise (IME) sector. Using Ghana as a case study, Sørensen finds that external constraints, such as financial and infrastructural concerns as well as increased competition and market saturation, limit the expansion of the IME sector. Moreover, the lack of formal education and relevant work experience are significant barriers to youth self-employment. Based on these findings, a more comprehensive approach to tackling the absorption capacity of the IME sector will need to address both macro- and microlevel constraints.

In Chapter 6, Olga Peek explores self-help as a housing strategy for low-income settlements in Lima, Peru. Through case studies conducted in the neighborhood of Pampas de San Juan, she examines the process of home consolidation over several decades across three generations of inhabitants to conclude that the self-help housing model has reached its social and spatial limit in Lima.

Impacts of the Informal Economy

While the economic power of cities is well documented, the impact of the informal economy in urban areas must be better understood. Informal settlements are full of entrepreneurial residents who earn livelihoods by providing urban service delivery such as water and transportation. Cities can take advantage of this potential by supporting local economic development, promoting the use of innovative technologies, and encouraging urban productivity.

In chapter 7, Oyebanke Oyelaran-Oyeyinka presents a case study of the Otigba information and communications technology cluster in Lagos, Nigeria to assess the impact of industrial clustering on the living standards of informal sector workers. While informal sector workers face different types and intensities of vulnerabilities, clustering raises their living standards compared to non-cluster based firms. Oyelaran-Oyeyinka also finds that informal institutions based on social and kinship ties fill the gap left in the absence of formal social protection institutions by providing employment and benefits that help improve the well-being of workers.

Through a pilot study in Livingston, Zambia, Laura Frederick examines the opportunities that mobile payment systems can offer microenterprises that face limited access to capital for growth and information technology for enhanced productivity. Frederick finds a substantive increase in net marginal profits for urban micro-entrepreneurs who use mobile money, suggesting that mobile money services have the power to transform the informal sector through greater financial and economic inclusion of micro-entrepreneurs.

REFERENCES

- Secretariat of the Convention on Biological Diversity (SCBD). 2012. *Cities and Biodiversity Outlook*. Montreal: SCBD.
- UN Department of Economic and Social Affairs (UN DESA), Population Division. 2014. *World Urbanization Prospects: The 2014 Revision, Highlights* (ST/ESA/SER.A/352). New York: United Nations.
- UN OWG. 2014. *Open Working Group Proposal for Sustainable Development Goals*. New York: United Nations.
- USAID. 2013. *Sustainable Service Delivery in an Increasingly Urbanized World*. USAID Policy. Washington, DC: USAID.

Living Between Desires and Possibilities: Revisiting and Re-envisioning the Self-Help House in the “Consolidated” Low-income Settlements of Lima, Peru

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ABSTRACT

This paper aims to contribute to the debate on inclusive cities by reflecting upon self-help as a housing strategy in metropolitan Lima and recent struggles for affordable accommodation of second- and third-generation inhabitants in low-income settlements. The evolution of the self-help house is explored through in-depth case studies carried out in the neighbourhood of Pampas de San Juan located in the south of Lima. The study articulates both social and spatial features of homes and looks beyond the three stages of home consolidation that John Turner presented in his model in 1968, showing that many more factors influence the process of home improvement than he originally envisioned.

SIXTY YEARS OF SELF-HELP HOUSING EXPERIENCE IN LIMA

To a certain extent self-help can be seen as an inclusive way of city making, in which the users and the constantly growing, transforming, and adapting homes are shaping the urban environment. However, several decades of lived experience in self-help settlements indicate that a seemingly physical improvement of the built environment goes hand in hand with social

Image 1: A consolidated self-help house in Pampas de San Juan. Photo: by the author.



Image 2: The process of home consolidation. Photo: by the author.



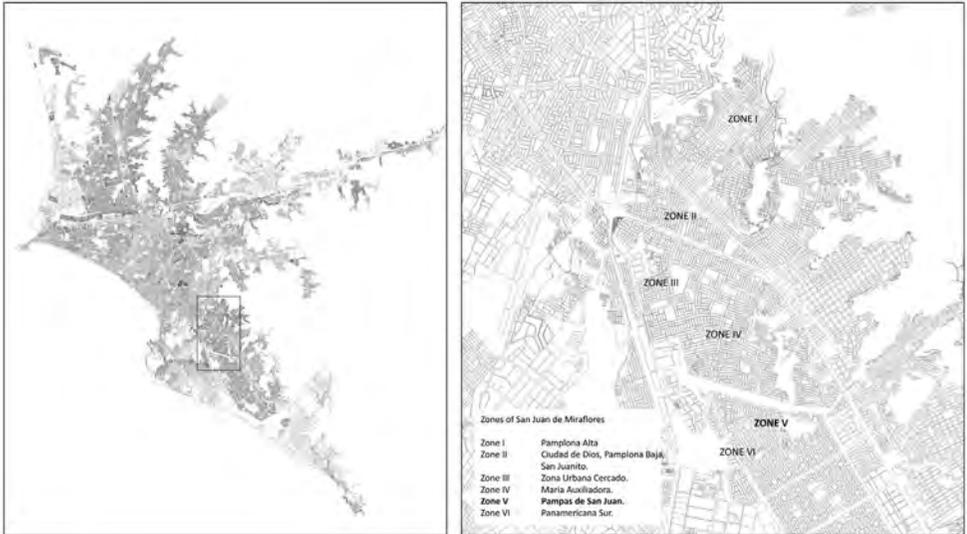
deterioration of the urban fabric wherein second and third generations are facing “new” struggles for affordable and decent accommodation (Ward et al. 2014a). Considering this trend, this paper examines self-help as a housing strategy in metropolitan Lima.

The self-help housing model that originated in the Peruvian context in which Pedro Beltrán promoted *la casa barata que crece*¹ (Gyger 2013; Hordijk 2010, 77; Bromley 2003, 284), and which was later theorized by John Turner (Turner 1968a), has proved a successful strategy in the past. Millions of migrants in search of accommodation in the city constructed their homes in one of Lima’s *barriadas*² and were able to become homeowners (Chambers 2005). However, Turner’s model was also heavily criticized because it allowed for a *laissez-faire* policy and was adopted by governments to segregate low-income groups from inner-city districts, letting people construct their homes without any support on land with low economic and productive value in the urban periphery (Burgess 1982; Ward 1982).

More than sixty years after the formation of the first *barriadas*³ radical urban changes occurred within the context of modernization and democratization in Lima (Matos Mar 1977; 2012). “Old” *barriadas* changed from rural squatter settlements to urban neighborhoods and single-family homes transformed into collective, multigenerational or rental homes (Sakay et al. 2011; Tokeshi et al. 2005). Yet Turner’s projection of how the self-managed process of home improvement would evolve over time was

-
- 1 In 1954 architect Belaúnde (who in 1963 was assigned president of Peru and in 1980 got re-elected after the military rule), sponsored by the conservative newspaper *La Prensa*, launched a design competition for low-cost housing. Editor of *La Prensa* Pedro Beltrán closely followed and documented the competition of *la casa barata*. Beltrán, who later became prime minister, founded the National Housing Institute where Turner was employed for a time in 1960. In his housing policies Beltrán promoted *la casa barata que crece* (the cheap house that grows), which was in fact the precursor of the sites-and-services schemes that Turner later advocated (Gyger 2013; Hordijk 2010; Bromley 2003).
 - 2 The term *barriada* was defined by Collier (1976, 18) as: “A residential community formed by low income families in which the houses are constructed in large measure by the residents themselves and which are generally but not exclusively formed illegally.”
 - 3 The first *barriadas* were formed after 1954, when the first massive land invasion took place in the southern “cone” of Lima, known as the invasion of *Ciudad de Dios*. This was described in detail by local anthropologist José Matos Mar (1977), who continued to document spatial, social, and political changes in Lima (Matos Mar 2012).

Image 3: Map of Lima and location of the district San Juan de Miraflores and neighborhood Pampas de San Juan.



envisioned in his three stages model, which stopped at the “completing stage” after twelve years of consolidation (Turner 1968a, 358).

Today more than two-thirds of the urban population live in peripheral low-income settlements and the vast majority of the *barriada*’s founding fathers continue to live in their self-built homes. Families have extended with a second and third generation and in some cases households have extended even further, with both kin and non-kin home sharers who moved in. The diversification process of households that share their home space⁴ often leads to creative solutions; it likewise results in conflicts about the use of space. People developed their own strategies to cope with “new” de-

4 The concept of home space was first developed by Andersen et al. (2012) and later adopted by Viviana d’Auria (2013). In this study the concept is used likewise, as it builds on Turner’s theory of seeing the house as a “process” instead of a finished object incorporating a social layer or “use value” (Turner 1968a). The house is equally seen as an entangled process in which both social and spatial aspects define the quality of the object.

mands for accommodation. As a consequence homes frequently have been subdivided, both horizontally and vertically, into multiple apartments constructed on the same plot.

As longitudinal studies by various scholars had highlighted earlier (Moser 2010; Perlman 2010), it is important to return to study areas in order to understand the changing dynamics of a place over time. Hence it is time to revisit the old *barriadas* to see how the consolidation process went on after more than thirty years of settlement and to get a better understanding of how complexities have evolved across different generations. This study questions to what extent new residential types that occur as a result of home transformations and subdivisions made by diversified households are examples of inclusive pluralism and whether the self-help house is still adjusting to the needs of current users. It is hypothesized that after several decades of dwelling experience the self-help housing model in metropolitan Lima has reached both its social as well as its spatial limits and homes are not always able to adapt to the changing social structures and characteristics of the extended family.

This paper will look at the main factors that influence the process of home consolidation using in-depth case studies in which both social and spatial aspects are articulated. This study aims to renew our knowledge on self-help housing theory and practice and inform policy makers and city planners in the creation of a new generation of housing policies.

METHODOLOGY

The empirical data on which this study is based were gathered during an intensive fieldwork session carried out in 2013 in the *asentamientos humanos*⁵ of Pampas de San Juan, which is part of the city district San Juan de Miraflores located in southern Lima. The site, one of the last vacant areas that remained in Lima, emerged from the late seventies onwards. For data collection, household surveys were conducted incorporating semistructured

5 There are different local terms for Lima's self-help settlements corresponding to how and when they were founded. The settlements, consisting of several *manzanas* or blocks, are defined as *asociaciones de vivienda*, settlements built by organized communities that bought unofficial titles from land speculators, and the later developed *asentamientos humanos*, which started off with squatters who invaded land.

Image 4: Location of in-depth case studies



interviews and closed-ended questionnaires held across three generations in the extended families.

Ten households were documented using in-depth case studies. The detailed study of home space provides for an exploration of multigenerational growth, diversification of households, and user's aspirations in connection with physical aspects of a changing built environment and home transformations. Ward et al. (2014b) described a method for intensive case studies that to a certain extent is comparable to methods used in my own research. Ward incorporates mixed methods and different scales of research, which are crucial in order to better understand and contextualize findings and allow for uncovering additional factors involved in the complex processes of self-help. In this research only in-depth studies were included from which detailed information could later be extrapolated to more general findings.

In order to evaluate spatial and social changes in the neighborhood, these “snapshots” of my own empirical study build upon the longitudinal study of Hordijk (2000) that was completed in the same area, Pampas de San Juan.

The ten cases were selected to present a relevant and representative range in respect to the neighborhood. Divergences, convergences, and a representation of the widest range of consolidation levels were criteria used to select the most viable and interesting material to further develop the analysis. In total thirty-eight residents were interviewed. The conversations took place in the case-study house itself and the majority of the cases are based upon various visits to the family. The data analysis used a visual ethnographic method as the main tool, in which drawings and photography are combined to illustrate the empirical data and evaluate the case study.

REVISITING THE SELF-HELP HOUSE

Revisiting projects and reflecting on original ideas and theories seem to have gained momentum in the discourse on human settlements (Pérez de Arce et al. 2010). Many researchers return to their study area to compare and document changes over time (Ward 2011; Moser 2010; Perlman 2010; Hordijk 2010). These revisits are crucial in order to “test” whether the original theories are still valid. Our understanding and conceptualization of urban life and social change requires constant revision, as transformation does not always turn out in the way the founders envisioned originally. Most significantly, different generations manifest different aspirations.

The first empirical study in Lima that studied the process of home consolidation across several generations was carried out by local scholars (Riofrío and Driant 1987). After fifteen years of settlement, instead of forming new neighbourhoods, the main housing strategy had shifted towards densification of existing homes, though this did not mean the end of land invasions (*ibid.*, 32). The investigation assumed that long-term problems did not affect only the original settlers, since families had already extended with a second and in some cases a third generation. Living in a *barriada* was therefore more than a temporary condition; for many urban dwellers it was becoming (or had become) a permanent lifestyle, which would influence Lima’s overall development.

In Riofrío and Driant’s study, an important issue that the extended family’s second generation confronted was the question of residential mobility. Staying, renting a place somewhere else, or invading new territories were investigated as possible options. The results of the surveys were quite divided.

The majority preferred to remain in the same area, although more than half of this group would favor a place for themselves. In numerous cases the respondents who “chose” to stay said this was because “there was no other solution” (ibid., 121). This already illustrates the gap between the people’s desires and their actual possibility of accessing the housing market.

From longitudinal studies carried out in Mexico, Ward (2011, 468) concludes that the current self-help house in the “innerburbs,” which he describes as part of “a heavily deteriorated fabric,” is no longer adjusted to the users’ priorities and homes are in urgent need of recovery. Furthermore, with growing population densities in consolidated self-help settlements, social problems also increase. In revisits since 2009 high “new” poverty levels were found as well as problems of social insecurity (Ward 2013). Birdsall et al. (2014) identify this group of “new urban poor” as “strugglers” who are not poor by official standards, neither do they belong to the middle class. Within the Latin American context, where absolute gaps between rich and poor grow, the strugglers are at great risk of falling into true poverty (Birdsall et al. 2014).

Hordijk’s earlier study from Lima agreed with Ward’s findings. Apart from the major transformations that Hordijk detected in the built environment, fundamental changes had taken place in society as well. The new generations grew up in a totally different environment than their parents, interest in collective action and community organization decreased, and consumption patterns had changed considerably. Although most children still shared a house with their parents, some of them did manage to procure a house of their own. Second-generation respondents indicated they preferred renting or buying a home to invading land,⁶ showing that housing aspirations of the children are different from those of the preceding generation; as Hordijk (2010, 372) argues, “the new generation aspires to solve through the market.”

6 That there is little interest in invading land can also be explained by radical changes in urban policy in which invasions are less tolerated, the scarcity of land, and the increasing amount of land trafficking and lack of transparency in transactions in which people have risked invading and paying to secure their land only to discover fraud.

FAMILY SIZE, CHANGING HOUSEHOLD COMPOSITIONS, AND HOME CONSOLIDATION

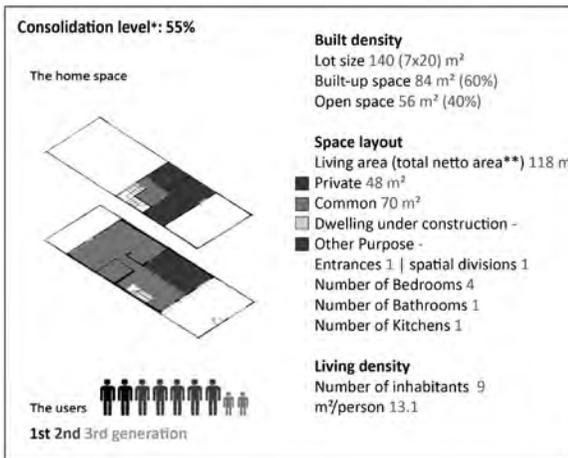
As Gilbert (1999) affirmed, in self-built environments “a home is forever.” There is indeed a common trend of low mobility among the original homeowners. Furthermore it is usual for grown-up children to continue to live in the house of their parents. As Turner (1968a, 358) had already anticipated, in response to family extension and a growing need for privacy of three generations of users, homes have often been subdivided either horizontally or vertically.

The plot may be split up, or individual apartments are constructed in *los aires* and made accessible by means of separate staircases. Turner expected homes to consolidate in line with the growth of the family: when more children were born additional rooms would be added. Williams’ (2005) findings in the low-income settlement Independencia in northern Lima, however, called Turner’s predictions into question, since the size of the family was not necessarily reflected in the development of the house. Large extended families did not always have a developed and improved home and vice-versa. Comparably, the ten in-depth cases in my study of Pampas de San Juan illustrate that in the home development process, a family’s reasoning for making home investments and enlarging the home space diverge, involving many more factors than Turner anticipated. Furthermore, new residential types that emerge as a result of diversification of families do not necessarily follow the aspirations of second and third generations and therefore do not always reflect a form of inclusive pluralism.

THREE FAMILIES, THREE HOMES

To illustrate the recent struggles of new generations for decent accommodation vis-à-vis the complex process of home transformation, several cases are comparatively reviewed below. The first three cases that are discussed (see image 5) all involve a large household that has undergone major changes over the past three decades and show striking differences in the way in which family size and changing household compositions influenced home consolidation.

Image 5: Three families, three homes

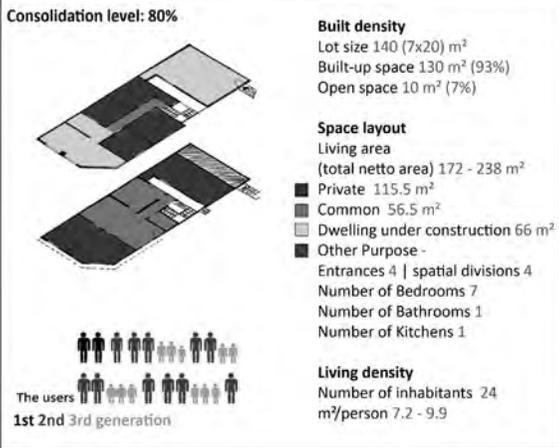


* **The consolidation level** refers to the physical condition and finishing of the house and was determined through the evaluation of different variables involved in the physical process home improvement (to name some: type of building materials used in construction; number of floors; level and type of interior and exterior finishing of walls, floors, ceilings; number of rooms and spaces under construction)

** **The netto area** is the actual utilizable area of all constructed floors in which voids and staircases are subtracted from the bruto constructed area (the netto area is the total of private, common and other purpose spaces plus the area under construction).

The Visionary House

The family extended but the house did not follow the same trajectory and remained practically unimproved, in terms of both level of consolidation and housing typology. The family is highly creative and imaginative in envisioning the construction of their house of the future. However little of their dreams is represented in the actual home improvement process. What is left behind is the small visionary house where the large family gathers together in improvised spaces while they keep dreaming about future possibilities.



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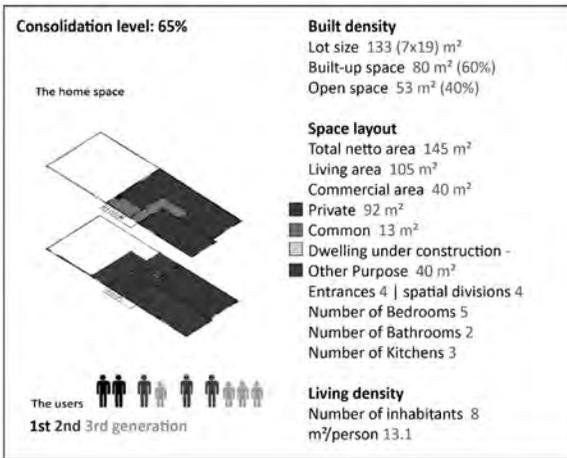
The Courageous House

The family extended and the house grew, transformed and adapted in synchrony with the growing family. The house was subdivided into four separate apartments and is highly consolidated in terms of building materials that are used in the construction and levels of finishing of interior spaces. The tremendous household size did not deter the family. With great determination and family cohesion they together built the courageous house. It is one of the most creative results of a full self-managed house in the neighbourhood of Pampas.

Image 5: Three families, three homes (continued)



* **The consolidation level** refers to the physical condition and finishing of the house and was determined through the evaluation of different variables involved in the physical process home improvement (to name some: type of building materials used in construction; number of floors; level and type of interior and exterior finishing of walls, floors, ceilings; number of rooms and spaces under construction)



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The Progressive House

The family extended with second and third generations, relatives and renters. The house has transformed progressively from a single family home to a multi-family dwelling and beyond comprising four individual entrances. The flexible home adapted to the various sharers and renters that came and lived with the homeowner. Nevertheless this did not result in a fundamental home improvement. The house remained small, is poorly constructed and has a low level of consolidation.

Comparing family trajectories and house trajectories⁷ of case 1 with case 2, we see that both families extended in a similar way. However, the house trajectory is dissimilar. More than thirty years after the parents invaded the desert lands of Pampas, both families extended with a second and a third generation, for a total of nineteen (case 1) and twenty-six household members (case 2). In case 1, only nine members of the extended family officially live in the house, but the children who recently moved out and some of the grandchildren visit their elders nearly every day. In case 2, only two of the ten children moved out; the other eight stayed to live in the parents' house, including grandchildren who were born in the meantime, together forming a twenty-four-member household. The two houses showed very different responses to family extension: while case 1 remained practically untouched, case 2 grew and adapted in synchrony with the family extension and transformed into a collective home. The contrast can be easily spotted from a distance: the two-storey house of case 2 is built of well-finished, durable materials covering the entire plot; case 1 consists of small home spaces made of provisional materials built on only a portion of the plot.

In case 8 (see image 5), the household characteristics changed even more drastically. The family extended not only with a second and third generation, but other kin and tenants joined the household as well, together amounting to nine inhabitants living in the house. The home is being transformed in line with the extension of the household. Although the house is adapting to accommodate newcomers, arranging individual spaces and new entrances to allow for more privacy, it is not substantially improving or consolidating in terms of its physical structure or its use value.

Therefore it can be concluded that family size and changing family composition do not essentially have a direct effect on home transformation. Furthermore, as case 8 and its family trajectories show, a house can adapt to changing household characteristics, but that does not necessarily mean that house transformation and adaptation entails home improvement.

7 The *house trajectory* refers to the process of home consolidation and the changing physical structure of the house over time; *family trajectory* is the evolution and diversification of the household and its settlement patterns.

RAPID CONSOLIDATION, SIMILAR FAMILIES, DISSIMILAR SPACES

The three cases discussed below all involve a rapid consolidation process, although the outcomes show that comparable consolidation processes can result in very different built structures. The households of case 2 (see image 5) and case 10 (see image 6) both extended with a second and third generation that remained living in their parents' house, counting, respectively, twenty-four and ten household members. The residents of case 5 (see image 6) who remain living in the house involve only first and second generations; the two children who started their own families moved out.

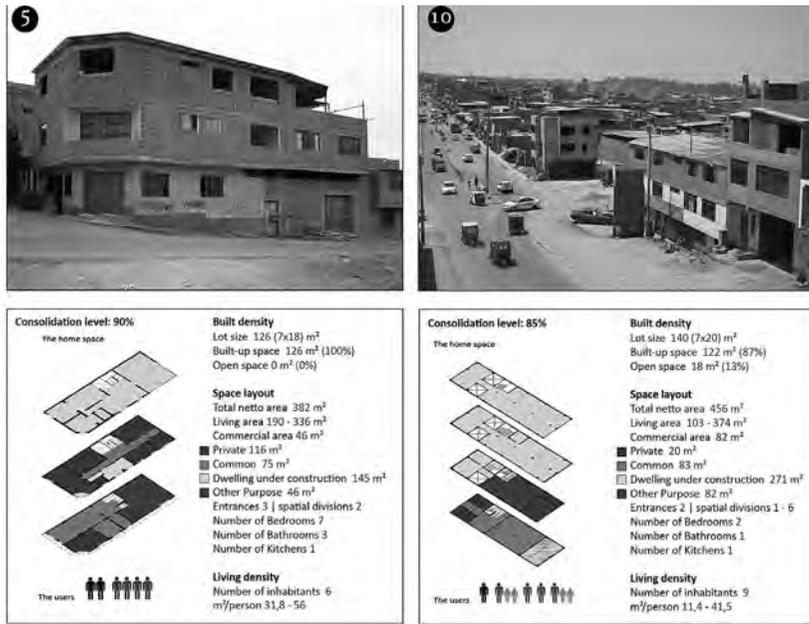
The spatial and physical outcomes of the consolidation process are diverse. Cases 5 and 10 extended similarly, both featuring vertical home enlargements, though one house remains a single-family home and the other is split up into individual apartments. Case 2 did not expand vertically, as have the others, although the spaces are more consolidated in terms of physical improvement and finishing and the house is being subdivided both horizontally and vertically.

In all three cases the majority of the children stayed to live with their parents. Comparing the life trajectories with the house trajectories it can be assumed that an increasing family size to a certain extent does affect house improvement, although other factors such as the commercial and productive values of the house and the future plans of the second generations are also highly influential. While the children in case 2 invested in the house with the intention of remaining to live there, the second generation in case 10 extended the house vertically, considering renting out spaces in *los aires* in the near future (see image 7).

“We are constructing four extra floors upstairs for us, the children, to live in in the future. This way we always have a place to stay here, but we are not sure if all of us will stay. If we leave we will rent out the upper floors to have additional income to pay for my education and to support my mum.” Maria (34)

Case 5 made home extensions without a direct need for more space for the grown-up children at the time of construction. Their additional motivation was to increase their property value before the prices of construction materials rose and to have more space for their workshop. These examples

Image 6: Rapid consolidation, similar families, dissimilar spaces



show that trajectories that homes follow towards improvement are the result of numerous factors in which families make home investments gradually and not always in accord with the extension of the family.

FINANCIAL RESOURCES AND HOME INVESTMENTS

In Turner's (1968a) model an upward trajectory of household incomes was expected after the first stage in which poor young families settled and started to build an incipient house. This would mean that in a self-managed process of home improvement people would automatically invest in and improve their home: if income levels rose, the home would develop in synchrony.

It is indeed true that, when household incomes increase, the development and improvement of the dwelling is likely to be accelerated, although Turner did not make the important distinction between available financial

Image 7: Home transformation and the construction of new apartments in 'los aires.' Photo: by the author.

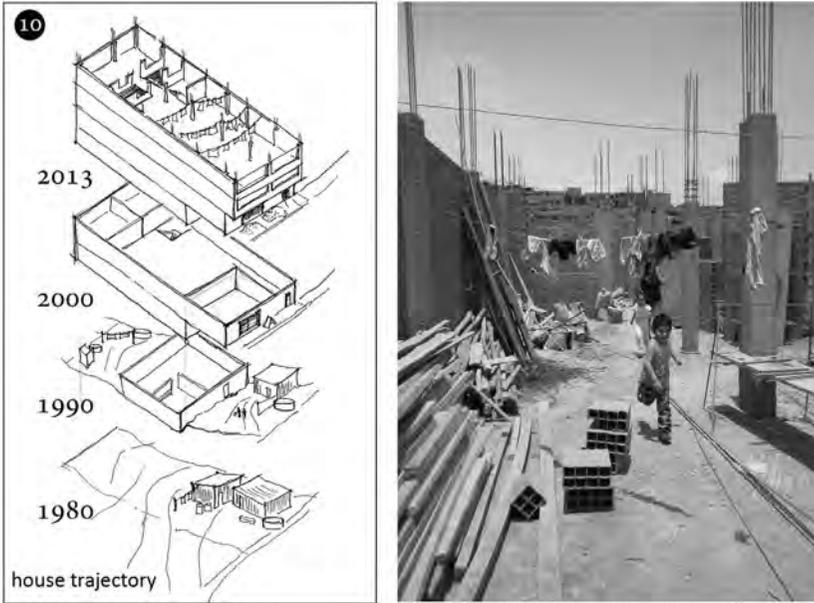


Image 8: Workshop in home space. Photo: by the author.



resources and the amount people are willing to invest; what Gilbert and Varley (1990, 93) called “the share of income people are prepared to dedicate to housing.”

In Guayaquil, Moser (2010, 198) observed major differences in the way in which parents and children invest in home improvement. While for the first generations the house is an important asset to ensure other assets, when second and third generations come into the picture, that is less the case. They are primarily concerned with finding jobs, getting an education, and marriage.

Limanean architect Juan Tokeshi (Tokeshi et al. 2005, 91) portrayed home construction as a progressive process made through the emotional commitment of a family. Homes consolidate and capital is invested gradually by the users. This sometimes occurs rapidly when there is suddenly money available and the will to invest, whereas on other occasions home improvements are long in coming.

In my analysis of the capital that is invested (looking at who is investing in the house, how, and why), a wide range of home investment patterns can be found. The resources range from personal earnings and savings to bank loans or additional income. In only one of the ten cases did the family receive financial support from a government program.

REMITTANCES⁸

Unlike what some other empirical studies have exposed,⁹ in Pampas de San Juan remittances were rarely used for home construction in the *asentamientos humanos*. In none of the ten in-depth case studies were remittances used, and among the neighborhood residents interviewed only a few knew anyone whose family members had migrated and sent money back home to improve the house.

Luisa is the daughter of neighborhood founders who have passed away; she now owns her parents' house. She lived and worked in Venezuela for

8 Remittances are amounts of money that are sent back 'home' earned by family members who migrated.

9 For example, in the study Williams (2005, 98) completed in Independencia, Lima, 30% of the cases used remittances sent home by second and third generations to make improvements in the house.

eight years. Nonetheless Luisa explained that the money she earned abroad was just enough to cover her expenses there. When she came back home to Lima, she had no savings left to invest in the house.

In Isabel's case, her sister bought a plot nearby in 1994 and used remittances in the home construction. They demolished the house of the previous owners and built a completely new one. The entire family moved to Spain in 2006. They rented out the house after they migrated. Isabel, who lives one block down the street, takes care of the house now and makes arrangements with the renters. With money her sister sends home from Spain, they improve the house little by little to make it suitable for renters.

“My sister did not invade, she bought the land. Before there was a family with a lot of problems living here. They left and put the lot up for sale. I told my sister and she bought it in 1994. In recent years we made some changes to the house, we finished the living spaces and put in a new kitchen, but we did not extend the house further after my sister left. . . . My sister asks 400 soles for the rent for the whole house; that's not much. We live in an area that is still, let's say, *peri-urbana*. In San Juan the rents are much higher; they charge you in dollars.” Isabel (53)

COMMERCIAL SPACES

It is common in Lima's low-income settlements for a house to have an added commercial or productive value used to generate additional income from small businesses, shops and workshops (see image 8), a primary school, community kitchens, et cetera. These spaces are of great significance for the user. As Tokeshi et al. (2005, 91) explain: “the potential for economic use of the property has an important added value for the family that makes it unlikely that they would want to sell the property or part of it.”

The possibility for economic activity that Turner also put forward as a great potential can therefore still be seen as one of the advantages of self-help housing.

RENTERS

The growing demand for rental accommodation was already included in Turner's three-stages model (1968a). In 1992 Gilbert and Gugler (1992, 128) spotted similar trends in Latin America: "While the richer families obviously contribute to the economy of the *barrio*, the poor may be an important source of income for the rich. For it is an undeniable fact that as settlements become older and consolidate, the proportions of renters increase; owners deliberately extend their houses to accommodate renters, thereby increasing their income."

Although the trend of renting out spaces can vary across different countries (Ward 2011) in Pampas de San Juan non-kin renters were not frequently included in surveyed households. In the case of Justina's progressive house (case 8, see image 5), the household was comprised of a combination of first, second, and third generations, other kin paying rent, as well as non-kin renters.

Furthermore homeowners were often not keen to rent out spaces to strangers, because they "did not want problems." Only three of the ten families considered the option of renting out spaces to unknown tenants in the near future. Families were more open when it came to taking in relatives. The majority expressed that if the opportunity arose, they would accommodate kin as tenants.

HOME INVESTMENTS: A SECOND GENERATION TAKING OVER

For most of Pampas' families the economic situation improved on account of additional household income from second generations, a common trend that was observed earlier by Hordijk (2010) and Tokeshi et al. (2005).¹⁰

In nine of the ten cases in my study, children of original homeowners made financial contributions to the household. Sometimes this money was used to make home improvements, either investing in the house directly or indirectly by paying rent that subsequently was invested in the house by

10 In the studies he completed in Villa El Salvador, Tokeshi et al. (2005) found that in most cases the children were the ones who extended their parents' house. In studies Hordijk (2010) completed in Pampas de San Juan, two-thirds of the children contributed to the household income.

their parents. In the other case the money was used for basic living expenses or material goods.

“I am really glad with the house as it is today, thanks to the children who supported my husband and me. They invested most in the house. With their money we were able to build the second floor and improve the kitchen and living room downstairs. Our lives have become much better in many ways. There were times when it was really hard to make ends meet, especially with ten children.” Marta (69)

“I am supporting my mum and dad in their daily living expenses by paying the electricity and water bills, and I bought them a washing machine and a refrigerator. My salary is not that big to contribute to improving the house. Apart from that, the kids come first.” Eva (30)

“Last year I started paying rent; before that I kept all my income for myself. I now see that in this way I can help my mother and sometimes I buy her things for the house, like that dining table I bought her for Christmas.” Diego (23)

HOME OWNERSHIP

Many first-generation residents in low-income settlements, who now own a house, lived before in rental accommodation often shared with other kin in Lima’s congested inner city (Turner 1968b). Gilbert and Gugler (1992) saw renting as a temporary stage prior to home ownership, since renters seemed to transition to homeowners over a period of time. The longing to become a homeowner, even if it meant invading land in the urban peripheries that lacked all kinds of services, mainly came out of a desire to obtain a property that parents could pass on to their children (Ward 2011; Riofrío and Driant 1987). Although things have changed for the new generation, their future housing career highly depends on the possibilities they have to improve, extend, and transform their parents’ house.

New problems arise along with the changing characteristics of households. Over the last three decades all homes in Pampas de San Juan have

obtained individual land titles, but internal home subdivisions are never reflected in official property rights. Furthermore, titles are registered in the name of first-generation owners. That means that actions undertaken by second or third generations, who frequently take over the home improvement from their parents, are based on a strong relationship of trust. Nevertheless, in many cases, not having clear ownership did not stop children from investing in the house (such as in cases 2 and 10).

FUTURE ASPIRATIONS AND SOCIAL CONSUMPTIONS NORMS: STAYING OR LEAVING?

The process of home consolidation is highly dependent on the aspirations of the second generation. Their plans and the priority they give to home improvement are the main factors that will eventually speed up or slow down the development of the house. Logically this also depends on the resources the children have and make available.

It is clear that if the children do not intend to stay in the house they are less willing to invest in it directly, although there were cases in which the children left, but did invest in the house. Therefore home investments are often not just related to a direct use value; the second generation also sees an exchange value in their parent's property, increasing the value of what will be their inheritance in the future. More importantly, this issue has to do with the fact that these children "decided" to stay; since there were no other solutions for them on the housing market, they would "make the best out of what they have." It is important to mention another important factor that made second generations not want to move to other parts of the city: their attachment to their neighborhood, the place where they grew up.

Of the twenty-two second-generation respondents, the majority were optimistic about their home situation, although many would prefer to have more space in the future, more privacy, and some would like to have a house for themselves. Almost all of the respondents consider a house for themselves as something impossible in Lima and many second generations had a clear understanding of their possibilities on the current housing market there. Hence it can be concluded that a new era has dawned in which cultural models are changing and the second-generation is settling for less. Whereas their parents' aspiration was to become homeowners, the second

generation seems to have gotten used to the idea of living in an apartment or even a room.

“Looking at my own housing situation, the best would be constructing my own house for me and my children, but if we are realistic that is just impossible in Lima these days. Invasions are now over, there is no land available anymore, and I would not want to live all the way up the hillsides. It is too far and too dangerous. The problem is that rents are really high. Lima has to grow vertically from now on.” Maria (34)

“It would be convenient to have a bit more space or a lot for my own family. Now we live with the five of us in a single room. But all the land has been taken; to buy a piece of land is just too expensive and invasions are just not very common anymore.” Amanda (37)

CONCLUSIONS

Reflections on the self-help house and its consolidation process over several decades and across three generations of inhabitants illustrate both divergent and convergent tendencies, with most users substantially transforming, extending, and improving their homes. The self-help house to a certain extent has a continued use value as well as a symbolic value for the second and third generations, who prefer to remain living in the neighborhood where they were born. Correspondingly, the houses have great potential to integrate productive and commercial spaces, which make an important contribution to household income and make it unlikely that the house will be sold. Nevertheless the process of home transformation is not always aligned with family extension trajectories and does not always follow the demands of all its users.

What Riofrío and Driant (1978) already showed in the early stages of what they described as “the reproduction of the *barriada*” is that the house could simply not adapt as fast as the family extended. More than twenty-five years later Tokeshi et al. (2005) showed that although the house extended and grew tremendously, every house and family differs greatly from

each other. A home could grow and extend while the number of inhabitants was in fact decreasing. In general, however, many houses now accommodating various generations lack space and face serious structural problems or will do so in the near future. The new generation is trapped in living situations that often are not real choices because other housing opportunities are beyond their reach. Furthermore the self-help house followed a model of a single-family rather than a multifamily house, meaning that processes of housing transformation undertaken by the new generations in order to create more privacy will entail extra costs.

This study questioned whether the self-help house can still be seen as an inclusive way of city making and a space where multiple generations can find decent accommodation according to their demands and necessities. From empirical findings of this research it became apparent that aspirations across different generations of low-income urban dwellers have changed considerably.

Along with changing modes of consumption, land prices have risen incredibly and land is usually too expensive and not accessible for the majority. The rental prices of apartments on the formal market have also risen and are not affordable.

What remains in their housing possibilities is rental accommodations on the informal market, but the second generation of Pampas' *asentamientos humanos* were in general not so keen on informal renting and sharing a home with strangers.

Although the aspiration to acquire a house of one's own is sometimes still there, the children of the original invaders have also started to realize that in contemporary Lima this is no longer a real option; hence, they settle for less, improvising a space in the house of mum and dad. Whereas the first generation bore the struggles of invasion and lack of services in order to obtain homeownership, now second-generation members are prepared to pay the price of living in multifamily houses or small rooms for the promise of one day being able to own (a share of) it.

It is crucial to renew empirical knowledge of consolidated low-income settlements in the innerurbs of Latin American cities, in what according to Ward et al. (2014a, 1) is now a "blind spot" in housing policy agendas. In the meantime, as a result of the many mismatches that are found in Lima's housing system, the new generations continue to live between their desires and the possibilities.

REFERENCES

- Andersen, Jørgen Eskemose et al. 2012. *Home Space: Built Environment Study*, report of research programme Home Space in African Cities, School of Architecture, Copenhagen, School of the Built Environment, Heriot-Watt University / Edinburgh School of Architecture and Landscape Architecture. <http://www.homespace.dk/>.
- Birdsall, Nancy, Nora Lustig, and Christian J. Meyer. 2014. "The Strugglers: The New Poor in Latin America?" *World Development* 60:132–46.
- Bromley, Ray. 2003. "Peru 1957–1977: How Time and Place Influenced John Turner's Ideas on Housing Policy." *Habitat International* 27(2): 271–92.
- Burgess, Rod. 1982. "Self-Help Housing Advocacy: A Curious Form of Radicalism. A Critique of the Work of John F.C. Turner." In *Self-Help Housing: A Critique*, edited by Peter M. Ward, 55–97. London, Mansell.
- Chambers, Bill. 2005. "The Barriadas of Lima: Slums of Hope or Despair? Problems or Solutions?" *Geography* 90 (3): 200–24.
- Collier, David. 1976. *Squatters and Oligarchs: Authoritarian Rule and Policy Change in Peru*. Baltimore: Johns Hopkins University Press.
- D'Auria, Viviana. 2013. Research Project: Building the City from Home Space. Faculty of Social and Behavioural Sciences, Governance and Inclusive Development, UvA, Amsterdam. <http://www.uva.nl/en/about-the-uva/organisation/staff-members/content/d/-v.d.auria/v.d.auria.html>.
- Gilbert, Alan. 1999. "A Home Is Forever? Residential Mobility and Homeownership in Self-Help Settlements." *Environment and Planning* 31:1073–91.
- Gilbert, Alan, and Josef Gugler. 1992. *Cities, Poverty and Development: Urbanization in the Third World*, 2d ed. Oxford; New York: Oxford University Press.
- Gilbert, Alan and Ann Varley. 1990. "Renting a Home in a Third World City: Choice or Constraint?" *International Journal of Urban and Regional Research* 14 (1): 89–108.
- Gyger, Helen. 2013. "The Informal as a Project: Self-Help Housing in Peru, 1954–1986." PhD dissertation, Graduate School of Arts and Sciences, Columbia University.
- Hordijk, Michaela. 2010. "Nuestra Realidad es Otra: Changing Realities in Lima's Peripheral Settlements: A Case Study from San Juan de Miraflores." In *The Production, Use and Dissemination of Urban Knowledge in Cities of the South*, edited by V. Brunfaut et al., pp. 361–74. Brussels: N-AERUS.
- Hordijk, Michaela. 2000. "Of Dreams and Deeds: The Role of Local Initiatives for Community-Based Environmental Management in Lima, Peru." PhD dissertation, University of Amsterdam.
- Matos Mar, José. 2012. *Perú: estado desbordado y sociedad nacional emergente*. Lima: Centro de Investigación Universidad Ricardo Palma.
- Matos Mar, José. 1977. *Las barriadas de Lima*: Lima: IEP.
- Moser, Caroline. 2010. *Ordinary Families, Extraordinary Lives: Assets and Poverty Reduction in Guayaquil, 1978–2004*. Washington, DC: Brookings Institution Press.
- Pérez de Arce, Rodrigo, Esther Jacobs, and Viviana D'Auria. 2010. "Dwelling Practices Informing Urbanism / Urbanism Informing Dwelling Practices." In *Human Settlements: Formulations and (re) Calibrations*, edited by Viviana D'Auria et al., 113–27. Amsterdam: SUN Academia.

- Perlman, Janice E. 2010. *Favela: Four Decades of Living on the Edge in Rio de Janeiro*. Oxford; New York: Oxford University Press.
- Riofrío, Gustavo, and Jean-Claude Driant. 1987. ¿Que vivienda han construido?: nuevos problemas en viejas barriadas. Lima: Centro de Investigación, Desarrollo y Asesoría Poblacional.
- Sakay, Claudia, Paola Sanoni, and Toshihiro Hanazato. 2011. "Rural to Urban Squatter Settlements: The Micro Model of Generational Self-Help Housing in Lima-Peru." *Procedia Engineering* 21:473–80.
- Tokeshi, Juan, Mario Zolezzi, and Carlos Noriega. 2005. *Densificación habitacional: Una propuesta de crecimiento para la ciudad popular*. Lima: Desco.
- Turner, John F. C. 1968a. "The Squatter Settlement: An Architecture That Works." Architectural Design, Architecture of Democracy. <http://www.communityplanning.net/JohnTurnerArchive/pdfs/ADAug1968SquatterSettlement.pdf>.
- Turner, John F. C. 1968b. "Housing Priorities, Settlement Patterns, and Urban Development in Modernizing Countries." In *Journal of the American Institute of Planners* 34 (6): 354–63.
- Ward, Peter M. 2013. *Housing Rehab for Consolidated Squatter Settlements in Latin America's 'First Suburbs': New Policy Approaches from LAHN in Preparation for UNHABITAT III 2016*. The Wilson Center Comparative Urban Studies Project, Washington D.C. www.lahn.utexas.org/meetings.
- Ward, Peter M. 2011. "Self-Help Housing Policies for Second Generation Inheritance and Succession of The House that Mum & Dad Built." *Habitat International* 35 (3): 467–85.
- Ward, Peter M. (ed.) 1982. *Self-Help Housing: A Critique*. London: Mansell.
- Ward, Peter M., Edith Jiménez Huerta, and María Mercedes DiVirgilio. 2014a. *Housing Policy in Latin American Cities: A New Generation of Strategies and Approaches for 2016 UN-HABITAT III*. London; New York: Routledge.
- Ward, Peter M., Edith Jiménez Huerta, and María Mercedes DiVirgilio. 2014b. "Intensive Case Study Methodology for the Analysis of Self-Help Housing Consolidation, Household Organization and Family Mobility." *Current Urban Studies* 2:88–104. Retrieved from <http://www.scirp.org/journal/cus>.
- Williams, Susana M. 2005. "Young Town Growing Up: Four Decades Later: Self-Help Housing and Upgrading Lessons from a Squatter Neighborhood in Lima." Masters thesis, Massachusetts Institute of Technology.

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