“A Patrimony for the Children”: Low income homeownership and housing (im)mobility in Latin American cities.

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ABSTRACT.

In 2007 a restudy was conducted of some 300 low-income self-builder owner households across eight settlements in Bogotá and Mexico City all of which were first interviewed in the late 1970s as part of a major housing study (Gilbert and Ward, 1985). The aim was to ascertain the level of turnover in the families during a thirty year period; identify the current housing arrangements of households in dwellings and lots; and to evaluate the expectancies of ownership and inheritance of (now) adult children and grandchildren. The findings show that there has been minimal land use change and more than 80 percent of the original families remain on the lot, (even though the original owner may have died). Lot densities have increased significantly, as has the average number of households per lot. In Mexico sharing a lot is almost exclusively with close kin (adult children); while in Bogotá they are kin as well as renter households. Self estimates and tax office assessments show that the value of dwelling in these consolidated settlements is quite considerable, with median values approaching $90,000 and $25,000 in Mexico City and Bogotá respectively. Residential mobility is highly constrained, therefore, partly because the lack of formal financing support these property values make it virtually impossible to sell out and move elsewhere; and also because the use value for second and third generation households who now live on the lots have little incentive (or option) to leave. The social, judicial (tenure and inheritance), and housing policy implications and challenges are outlined

Introduction: Choice and constraint in intra-urban mobility and housing market performance

Few people are unconstrained in making their residential choices in urban housing markets and most intra-urban mobility is fettered by individual capacity to afford particular types of home, location, quality of amenity, and so on. But within segments of the housing market some level of choice and tradeoffs do appear to bear on mobility decisions – stage in the life cycle and marital status, place of employment, tenure, amenity and location, ethnicity, educational opportunities and a number of other variables come into play. Thus some choice is exercised, and while effective choices may be quite limited, selections are made about types and costs of rental accommodation, housing location, household structure, and where the market allows, people do make tradeoffs between ownership and rental.

In developed countries such intra-urban mobility, while also often heavily constrained is the norm, and classic studies emphasized that stage in the life cycle explains the majority of moves (Rossi 1955). Many other variables also enter the equation, of course, and over the years our appreciation of the rationale of these choices and constraints has become more nuanced. Residential movement -- “churn” in current
marketing parlance – is commonplace: today everyone is a migrant, even if they do not move very far from their original neighborhood. In Latin America, too, there is widespread residential mobility, albeit less systematically researched. Even the very poor who have minimal disposable income are seen to make tradeoffs (Turner 1968a): of tenure (i.e. whether to rent in a tenement or shackyard, or to aspire to homeownership by squatting and self-building); of location, such as proximity to downtown informal jobs or in the distant periphery where land is cheap; and of “amenity” – whether to have access to a modicum of services and utilities, or to endure the social costs of becoming home “owners” in the un-serviced land areas on the periphery of the city. It may be perverse to view these as choices, given that effective decision making is highly constrained by low income, but here too “churn” is largely explained by the functioning of the housing market (Gilbert and Ward 1982).

Indeed, whether in developed or undeveloped countries, studying residential mobility patterns for particular economic bands of society will tell us much about market efficiency and the fluidity with which residential choices can be mobilized. “Blockages” in the housing market, whether due to undersupply, mortgage and financial constraints, bureaucratic practices and allocation procedures, tenure legality, ethnic prejudice or racism, and so on, can all lead to market dysfunction. Policymaking tries to reduce blockages, and by opening up the marketplace seeks to make it easier to exercise choice, and encourage intra-urban movement. In Latin America in particular, so-called “regularization” policies associated with illegal land occupations have long since been associated with making the overall low-income housing markets work more effectively, whether by providing basic services to enhance access to serviced land and thereby reducing prices (Linn 1983); or by providing de jure tenure to illegal land occupants (Turner 1968b; de Soto 2000, but cf. Varley 1987, 2002), or by a combination of these policies. Thus improving housing market operation has become a key element in increasing a person’s capacity to exercise housing choice and to mitigate constraints, thereby enhancing people’s physical mobility.

However, understanding housing market performance is not the focus of this particular paper, except insofar as it may help explain mobility patterns and the exercise of choice among long term low-income residents in two major Latin American cities – Mexico City and Bogotá. Instead, the primary aim is to examine housing and household residential arrangements and mobility patterns as these have evolved over the past thirty to forty years, comparing residential trajectories and outcomes made by first generation
settlers of irregular (self-build) settlement, with those of their (now) adult children and grandchildren (i.e. the second and third generations). Although many of these original settlers were migrants born outside of the two cities studied here, their children are mostly city born, and many have lived their whole life in the neighborhood.  

The Study Aims and Hypotheses

Housing has both a **use value** (i.e. its capacity to prove an adequate environment in which to live, raise a family, etc.), and an **exchange value** which is usually understood as the value that the dwelling has in the market place were one to sell it or use it to acquire income (through renting or selling the rights to rent [Burgess 1982]). Being able to liberate the exchange value of one’s dwelling is important in a number of ways: for the smooth functioning of the housing market, facilitating property transfers and inheritance, creating wealth and mobilizing assets; and providing for economic security. Understanding these two dimensions of housing value helps guide the following analysis and three principal hypotheses. First, given the aforementioned commentary about “churn” being commonplace, this paper will examine the counterintuitive notion that residential mobility among first generation (low-income) squatter consolidator owner households in Latin American cities is actually very low (Varley, 2002: 457). In short, once acquired, for many “a home is forever” (Gilbert 1999). Second, that the realization of the asset (exchange) value of self-built homes is highly constrained, and the low-income market is in large part blocked, notwithstanding the continuing high demand from poorer sectors. The third hypothesis is more of a proposition, and suggests that these mobility constraints arise due to a paradox in the nature of housing demand: a) the high realization of demand and housing needs through in-situ accommodation of adult children and grandchildren who continue to live on the same lot as their parents (high use values); and b), the low ability to meet housing demand due to the fact that most would-be purchasers are unable to afford the now relatively high house prices in valorized and consolidated self settlements.

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1 This the first phase of major comparative study of a number of Latin American cities in Argentina, Brazil, Chile, Colombia, Guatemala, Mexico and Peru, and which explores the contemporary social and housing dynamics in the first generation of irregular settlements that, for the most part formed in the 1960s-early 1980s, i.e. some twenty or thirty years. Comprising different research groups and Principal Investigators (PIs), the study is being coordinated by the author at the University of Texas at Austin, LBJ School of Public Affairs.
This paper will examine several of these ideas. Although methodologically it is not strictly speaking a longitudinal analysis following a family over a protracted period of time, the data presented here derive from a major restudy of first generation low-income homeowners who acquired land illegally and self-build their homes in Mexico City and Bogotá during the 1960s and 1970s. Specifically, the data derive from re-interviewing a number of households that were first interviewed by the author either as part of his doctoral dissertation fieldwork in 1973, or as part of a major study undertaken 1978-79 (reported in Gilbert and Ward, 1985). The idea of going back and restudying populations twenty or thirty years later is relatively rare, although there are notable exceptions in anthropology such as Oscar Lewis’ 1951 restudy Tepotzlán first studied by Robert Redfield (Lewis’ mentor) in the 1930s, and more recently in political science where Janice Perlman returned to the favelas (squatter settlements) of Rio de Janeiro which she first studied in the late 1960s (Perlman, 1976 and 2004). And while it is not uncommon for social scientists to return to study locations after a short time has elapsed (two to five years), very few go back and restudy environments or communities in which they worked many (20-30) years earlier. This is probably because our ideas evolve, we move on theoretically; and we become engaged in other research and teaching priorities. But looking backwards can be salutary, since it makes us more aware of how paradigms have shifted (and we with them), and also makes us think again (i.e. retrospectively) about change, the dynamics of change, and about the adequacy of our earlier analyses and interpretations (Ward 2005; see also Shefner, 2008). As teachers this experience can be an important part of our pedagogy.

<Figures 1a-1d About Here>

The Backdrop to Housing Mobility in Latin American Irregular Settlements

In Latin America, as in many other less developed regions of the world, rapid urbanization has been marked by the growth of low income irregular settlements, be they squatter invasions or illegally developed subdivisions (Gilbert and Ward 1985). As the phenomenon of irregular settlement became widespread from the 1950s and 1960s

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2 Alan Gilbert also returned to two of the settlements surveyed in Bogotá in 1979 as part of his 1999 paper, but he took a new random sample of lots rather than following up on the original interviewees. In 2008, also as part of the broader study of which these findings form part (see the previous footnote), Bryan Roberts at the University of Texas is returning to two settlements in Guatemala where he first interviewed households in the mid 1960s – forty years ago in this case (Roberts 1973).
onwards, and as informal or illegal land development outpaced formal urbanization, so by the 1980s self-build settlements made up anything between 10-60 percent of the built up area in many cities (Gilbert, 1996: 74). Up until that time growth was fuelled largely by industrialization predicated upon a low-paid labor force, but afterwards as neo-liberalism unfolded, formal sector employment opportunities began to decline relatively, and the informal increasingly took up the slack. Prior to the 1980s government policy either turned a blind eye to such settlements, but increasingly thereafter policy interventions sought to “regularize” these illegal settlements, gradually providing essential infrastructure (water, electricity, drainage, street paving, schools, and so on) in an attempt to upgrade their physical status and ensure that they were more fully integrated into the city as working-class neighborhoods. The illegal nature of land capture was also addressed more systematically by policymaking, and in many countries an integral part of upgrading policy has entailed the transfer of title to de facto owners who had either squatted upon land or had purchased it illegally, un-serviced, and therefore at low cost. This process of informal urbanization and housing development gradually became widely understood (Ward 1982), and by the 1980s regularization policies were widely accepted and promoted alike by multi-lateral agencies and by governments (Gilbert and Ward, 1985).

Moreover, the decentralization of government, administrative modernization and improved local governance from the 1990s has meant that the effectiveness of housing interventions and regularization have increased, and have also brought low-income communities into the formal planning and taxation structure of cities, as public officials have sought to reduce housing and public utility subsidies to the poor, and to create a more sustainable basis for city development (Ward 2005). However these more effective governance and planning controls have dramatically slowed the pace of new informal settlement formation, and although some new irregular settlements still form at the urban periphery (or beyond), there has been a significant tightening of the land market. Access to new self-build settlements has become much more difficult over time. Formal housing in the form of large-scale uniform “cookie-cutter” laid-out housing has been promoted quite successfully in Mexico (especially) and elsewhere since 2000, but these housing developments do not provide an effective alternative, being located in the distant periphery or peri-urban locations of cities, and tend to target the better-off (formally employed) working classes and lower-middle income groups, rather than the poor and very poor. Among the latter, many of whom are the adult children and
grandchildren of the successful consolidator families of the 1970s, the demand for housing remains extremely high, and this paper will focus upon the housing prospects of these second and third generation households, many of whom were raised in the same neighborhood.

The housing “consolidation” process would often have extended over much of the adult lives of these children as their parents self-built their homes gradually replacing a provisional shack with brick-built rooms, until after fifteen or to twenty years these homes usually comprised several rooms, often on two or more stories (Figures 1a-d). The house “grew” as the family grew, and as household extension embraced parents and other kin. Thus informal self-build consolidation was an effective form of housing alternative since it gave considerable flexibility to these households, allowing the addition of new rooms to accommodate new members (usually children at a pace and level of building construction that the family could afford). By using their own “sweat equity” (labor) and mobilizing social capital of kin and neighbors, self-help settlements became a residential process that allowed poor households to raise a family (i.e. mobilize the use value of their dwelling), and it also gave them a foothold in the housing market, and offered a modest opportunity to build an asset and create some wealth. Moreover, as the city continued to grow, these original peripheral locations became part of the consolidated intermediate ring or “old surburbs” – today’s “innerburbs” in Latin America.³

As already mentioned, compared with their middle- and upper-income counterparts, intra-urban mobility patterns among low-income households were of necessity very different. This is because the better-off are able to adjust their socio-economic status and stage in the life cycle by moving through the housing market, searching out new neighborhoods, matching housing types to their amenity and life style needs, upsizing or downsizing, and so on. Lower-income self-help consolidators on the other hand have little effective mobility since their socio-economic and income earning profiles are relatively “flat”, and do not improve significantly with age, job experience and seniority. For them, the most effective way of adding income traditionally was to add workers – the spouse, adult children, adult siblings – and/or to mobilize the resources of poverty through reciprocal exchange relationships, household extension, shared living

³ Katz (2005) and his colleagues at Brookings have recently begun to analyze the “first” suburbs in the USA, and the project described in footnote #1 etc., does the same for Latin America, although unlike the Katz et al project, it focuses upon the first ring of irregular settlement formation.
expenses and child minding with kin living on the same lot, and so on (Lomnitz, 1976; González de la Rocha 1994). Thus for the first generation of self-builders at least, physical immobility, tied to home improvement and family expansion, offered some degree of in-situ upward socio-economic mobility, even while the household remained poor. Globalization and neo-liberal economic strategies have thrown an ever increasing number of workers into the informal sector (Portes and Hoffman, 2003), and the capacity to mobilize the resources of poverty has declined, creating new rounds of “marginality” and a “new urban poor” (González de la Rocha 2000; LARR 2004).

This is not to suggest that there is no physical mobility whatsoever among these households. Indeed, a large proportion of the original consolidator families would originally have been migrants to the city, and as young singleton adults they would have spent a number of years living in rental tenements, before starting a family and chancing their arm by squatting or buying an un-serviced lot on the margins of the city (Gilbert and Ward 1982). For them, acquiring a lot and self-building was often the culmination of many moves. Furthermore, as settlements consolidate over time, new rental opportunities are developed either in purpose-built tenements by entrepreneurial self-builders (especially the case in Mexico City), or by renting out rooms on a petty landlord-tenant relationship (especially the case in Bogotá). The increase in rental opportunities affords widespread mobility and “churn” as renters move around in search of the best deal.

Similarly, there are a number of options for adult second generation households that also embrace mobility. Some do become owners in their own right, and one study in Mexico conducted in the early 1990s in Puebla and Guadalajara found as many as 40-50 percent of exiting adult children from owner lots in consolidated were described as being “owners” in their new homes. This suggests that a significant number of second generation sons and daughters may have experienced upward socio-economic mobility that has allowed them to afford purchasing a home. Exactly how many are buying into formal housing or informal settlements elsewhere must wait upon the survey data of more detailed residential trajectories that will be analyzed in further work (see also Di Virgilio, 2007). However, in our experience in the present decade relatively few appear willing to emulate their parents by striking out to the new periphery as self-builders, in part because these opportunities are in sharp decline, but also because they are now

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4 See Gilbert and Varley 1991, and Gilbert et al, 1993
5 Varley, personal communication. See also Varley, 1994.
invariably located far in the periphery. Few appear to be willing to make such sacrifices, and a more popular option is to rent or share locally. Others leave to migrate abroad, or to seek job opportunities in other parts of the country, and may ultimately return either to the parent’s lot, or to separate accommodation elsewhere and often nearby. Thus there is considerable population turnover, although as we shall discuss below, this rarely involves the original homeowners moving out, or the actual sale of the family home.

*Prima facie* there are good reasons that help to explain such inertia. One reason is the low level of upward job mobility that is often associated with residential relocation. Second, there are limited housing alternatives provided by public or private sector social interest housing, which for many families remain unaffordable. A third reason is that the original rationale for irregular settlement and for undergoing the struggles of self-build and life in an un-serviced settlement was to create a “patrimonio para los hijos” (an inheritance and homeplace for the children [see also Varley 1987]). So much so, that in the early 1970s my interviews with self-builders in Mexico City often elicited an “Are you crazy!?—type response when I asked whether they had ever considered selling out. They were quick to tell me about their (and their family’s) struggles and sufferings in getting to where they now were; such that there was no way that they would leave (see also Varley 2002: 457). And although it is quite common to see “for sale” notices and evidence of some market turnover and exchange in informal settlements, this is much more usual in the early days of settlement upgrading and consolidation, when dwellings are little more than shacks, and lots are still relatively cheap, having few or no services. For some, too, the unanticipated hardship of squatting or living without essential services encourages them to quit and sell-out, taking a modest “windfall” cash gain; but once established most households are in for the long haul.

<Figures 2a & 2b About Here>

**Study Methodology and Data Collection.**

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6 In the same Puebla and Guadalajara study reported by Varley (personal communication), around 15 per cent of adult children exited to rent; with a further 25-35 percent sharing (either on the same lot or exiting and sharing elsewhere).

7 Here I would like express my thanks and debt to my former colleague Alan Gilbert at University College London for allowing me to use our jointly collected dataset relating to irregular settlements in Bogotá and Mexico City. I am also grateful to Ann Varley for her comments on an earlier version of this paper and for sharing with me some of her unpublished data for settlements she researched in the early 1990s. I would also like to acknowledge the following University of Texas graduate students who, as research assistants, participated in the data harvesting,
This paper forms an initial part of major multi-site research project about the housing and social policy in the older low-income suburbs of many Latin American cities, equivalent to what some researchers in the US now call the “innerburbs” or the “first suburbs” (Katz, 2005; Puentes and Warren 2006). While the study examines several cities, it was decided to begin with a preliminary phase that would entail a restudy of several settlement populations in Bogotá and Mexico City where data had been collected some thirty years earlier. Today these two cities constitute major metropolitan areas: Mexico City with over 20 million people split almost equally between two major federal entities (the Federal District and the State of Mexico); and Bogotá metropolitan area with almost 8 million people, most of whom are resident in Santa Fé de Bogotá itself, with some largely working-class populations also living in neighboring municipalities such as Soacha (one of the areas included in this study; see also Figures 2a-b). Although the physical configuration of both cities is different, it was relatively easy to identify the old, formerly peripheral, suburbs which are today often located in the intermediate ring of the city, and showed common characteristics of age, considerable relative poverty, high densities, mixed and often somewhat deteriorated self-built buildings, and usually have paved streets and all basic infrastructure installed.

Several settlements in each city were surveyed in the 1970s as part of a major 1978-79 database of housing and household characteristics (“Public Intervention, Housing and Land Use in Latin American Cities” [PIHLU]). That study by Gilbert and Ward (1985) gathered household data for six self-build settlements in Mexico City and five in Bogotá (Figures 2a-b). In addition, two of the Mexico City settlements formed part of a previous 1973 study by the author (Ward 1976). Most the settlements surveyed in the 1970s were in the “early to mid-consolidating” phase of their physical development trajectory, and the following comparative analysis derives from settlements that were between 3-5 years old (Santo Domingo and Liberales in Mexico City), and between 8-15 years for most other settlements included in the 1978-9 PIHLU study (see Gilbert and Ward 1985: 271-82 for summary data and contemporary descriptions of the settlements).

The baseline (1979) survey comprised a random sample of households and therefore included both de facto “owners” (although still without legal titles), as well as a minority of renter households who fell into the lot-based sample. However, in the 2007 fieldwork, and data analysis: Lissette Aliaga, María García, Erika Grajeda, Alejandra Ramírez Cuesta. Dr. Edith Jiménez (director of the Guadalajara study [see footnote 1] and Cristina Saborío from the Universidad de Guadalajara, also collaborated with fieldwork in Mexico City.
restudy only (original) owners were included since the central hypothesis related to what
was expected to be a lack of mobility among low-income owners, whereas renters change
residence quite regularly (Gilbert and Varley 1991; Gilbert 1999). In this case we wanted
to explore the notion of immobility, and the idea that for low income owners at least, in
effect, “a home is forever” (Gilbert 1999). Therefore an integral element in the restudy was
to ensure that we returned to the exact same lots and dwelling units contained in the
original 1973 and 1978-79 databases which became the starting point for the analysis
described here. However, although the original data had been analyzed electronically all
that the research group had in 2007 was hardcopy output of the raw data from 1978-79,
and the actual questionnaires for two settlements surveyed in 1973 (Santo Domingo and
Isidro Fabela). Graduate student members of the research team “harvested” the datasets
for basic information about a number of variables: tenure (to exclude renters and non
owners), household size and structure, number of households per lot, the (calculated)
current age of the head of household (if still alive), as well as their names and addresses,
migrant status and state of provenance, etc. These latter variables were used largely in
our quest to identify the exact homes in which interviews had been conducted in the
1970s.

Once harvested, this dataset provided the basis for the second stage of the
research project, that of identifying on the ground in 2007 the lots and dwellings that had
been surveyed previously. This was far from easy, not least because the settlements had
been at an early stage of their physical development with incipient (unmade) streets and a
provisional dwelling unit numbering system (see Figures 1a-d). Some streets and blocks
had disappeared entirely being replaced by utilities such as schools and covered markets,
and street names and numbering systems invariably had changed or been amended,
sometimes several times over. Fortunately we had our original street maps from the
earlier period, and we had also harvested the names and addresses and provenance
(where migrants) of the original householder. Comparing our maps with contemporary

8 Although Gilbert and Varley (1991) make the point that there is greater turnover among renters,
they also express some surprise that it is not greater than they anticipated. If correct, this
suggests that there may also be constraints upon mobility among renters, for whom use value
and social relations with the landlord are an important criterion, reducing “churn”.

9 Confidentiality of the addresses had always been maintained. Indeed, Often only the first name
of the respondent had been recorded (or just Sr. or Sra.), so we planned on using the
approximate age and the state of origin (where the family had been a migrant) in order to
enhance our ability to trace the original family. However, today such data records would be
subject to much greater scrutiny from Human Subjects Review Boards and, if anonymity was not
city street maps and with Earth Google™ data, we were able to get some initial idea of the settlement layout (streets and blocks), and where applicable to figure out the new street names relative to previous ones. The author then made a preliminary reconnoiter of each settlement in order to assess whether tracking lot numbers to present street addresses was feasible. Two or three settlements were excluded at this stage, usually because it was thought that matching original address to the contemporary layout would be extremely difficult.

This left a total of eight settlements (five in Mexico City and three in Bogotá). A questionnaire survey was prepared and pre-coded, and in July and August the author led two teams to conduct the follow-up survey. In each settlement prior to embarking on interviews team members walked each street and made a preliminary assessment of their level of confidence that they had identified correctly the dwellings and lots to be interviewed. This was helped by the fact that sometimes the previous numbering system was still apparent (albeit painted over), and this helped in trying to crack the code by counting lots/dwellings (odds and evens). In Mexico, too, occasionally the original family name appeared on the outside of the residence, and this also helped us to make a prima facie assessment about our level of confidence that we had been able to trace the original site. Later, after the interview, we were able to confirm whether or not we had actually found the original dwelling (even if the original owners had moved away, in which case the later arrival owner was interviewed). This fixing of the original lot was essential if we were to accurately assess turnover, and not base it upon spurious data of lots which were incorrectly identified as having been interviewed in the original survey.  

Thus, while harvesting the data was relatively straightforward, checking and cross-checking locations proved to be the most difficult and time consuming elements of the survey. The actual survey itself was relatively short, and could usually be completed in less than ten minutes. Applied to the current owner, or to an adult member of the household, it recorded inter alia: the current land use and tenure of lot; whether or not the original family members (from 1970s) were still living on lot, and if so, the current whereabouts of those resident in 1978-99; whether either of the original owners were still alive; whose names had been placed on the original property at the time of the

to be guaranteed because possible follow-up was a requirement, then maximum protection of confidentiality would need to be assured.

10 This is why some of the tables analyzed below only relate to data where we had a high level of confidence that we were, in effect, interviewing on exactly the same dwelling site as thirty years earlier.
regularization, etc. Where it was not the original family, then the questionnaire gathered data about from whom the new owner had purchased the lot/dwelling, the year, and the cost, etc. Then all interviewees on owner-held lots were questioned about the household structure, residential living arrangements (# of households and relations with each other), names on property titles, and whether titles had changed, their knowledge of out-movers (neighbors), and self-estimates of the current value of the dwelling or of recent property sales in the settlement. Once the survey had been completed in each city, we gathered property value assessments for each address where we had interviewed from the appropriate offices. This was straightforward in Bogotá but proved extremely difficult in Mexico City. The datasets were coded and cleaned and then analyzed using SPSS.

Findings: Indeed, it appears that “A Home is Forever…”

Minimal Turnover and Mobility Among Home Owners

The first major finding of the restudy has been to highlight the very high use value associated with self-build consolidated settlements in the innerburbs of Latin America. In both study cities more than 80 percent of cases we found that the same family was still living on the same lot, and that often one or both of the original spouses were still in residence. (However, given their advanced age, the interview was often conducted with a resident adult son or daughter.) Similarly, almost all lots remained residential land use (Table 1), usually for ownership, although in Bogotá a significant variation was for lots and dwellings to have been turned over to renting – either a series of rooms or small apartments with the original owner or family now living elsewhere, but continuing to own the lot and dwellings from which s/he collected rents. There was minimal evidence of lot conversion to commercial or other land uses, although it was relatively common to find that the residence also contained a small store or workshop. However, our sample was guided by the original database: had we selected more lots along the principal thoroughfares, then we undoubtedly would have found greater turnover, more buyouts, and land-use change, points to which we return later.

But taken overall on a sample of original owners, population turnover appears to have been modest at best. Even those owners who had bought out the original family had often been living in the settlement for many years, and considered themselves part of the original settlers. Yet this does not mean that there is minimal population turnover in these old suburbs. If one takes a sample from among all the families living in
consolidated settlements, then renters comprise a large minority of households, and for them there is a high level of turnover and churn (Gilbert 1999). Also, members of the household come and go, as sons and daughters marry (the latter by custom usually going to their in-laws), or move into rental. In addition, between one quarter and one third of interviewees in Mexico City and Bogotá respectively reported that a near neighbor had moved away in the previous 12 months, although it was unclear whether these were all “owners”, or just other families that they know had moved elsewhere. Whatever the case, it is suggestive of significant turnover and movement, and in our survey some settlements reported higher rates of turnover than others, although it is not immediately clear what causes this high mobility.

Use value -- Household Structure, Organization and Flexibility

Self-building to provide a home in which to raise a family and to ensure that one has something to leave as an inheritance for the children is widely mentioned as the principal reason for acquiring a lot in an irregular settlement. Another frequent reason offered is to: “vivir más tranquilo”, which figuratively usually meant the chance to be more secure with one’s family, and be free of hassle from other of renters and other neighbors. These attributes are clearly important elements embedded in the meanings associated with use value accorded to their (often rudimentary) shelters, especially in the initial early consolidating phase of settlement.

Table 2 provides some before and after comparisons of demographic and household organization characteristics. At the time of the original survey the majority of the households would have been nuclear families, with some modest vertical expansion to grandparents, or sideways inclusion of a sibling, or the nephew/niece of one spouse. Thus it might be expected that the average or median household size would be larger in 1979 (except maybe in recently formed settlements such as Santo Domingo where in 1974 the usual scenario was a young couple with one or two babes in arms). Indeed, average household size of the owner today has almost halved in Bogotá (6.3 to 3.65); and by one person on average in Mexico (5.5 to 4.5 [Table 2]). In part this is because family size has declined generally, but it also reflects the fact that these are often vestige households (namely the elderly parents whose children have left the home), or are young adult children sharing the lot but living apart as small nuclear families. A common scenario is for them to set up their own household unit in another part of the parental
living or lot. What used to be “their room” as adolescents becomes the primary room of the newly married household, perhaps with a small kitchen or stove added, and sharing the w.c./bathrooms or the full and kitchen with their parents and other siblings. This family internal lot division is evident in the sharp increase in the number of separate households now sharing the lot (up from 1.58 to 2.31 and 1.6 to 2.7 in Mexico City and Bogotá respectively). Those children who do leave the lot usually do not go far: most remain in the same neighborhood or an adjoining one.

This rising density corresponds with an increase in lot population densities. In Mexico and Bogotá the average number of persons living on a lot is 9+. Some settlements show exceptionally high lot average numbers, usually reflecting their age as well as the modal size of lot: for obvious reasons smaller lots have greater restrictions in their potential for subdivision, although the relationship is not linear since on smaller lots families build additional stories at an earlier stage. Also it must be remembered that these data do not include specific lots dedicated exclusively to rental accommodation where average lot numbers would be much higher since five or six families with 2-4 members each is commonplace. Such densification in low income settlements is both an ongoing ecological process tied to family building, as well as one that is policy-induced as planners seek to encourage more efficient land use with targeted infilling, and increased land tax and consumption charges.

<Table3 About here>

Living in an extended household or in some sort of “compound” arrangement with kin on the same lot is very common. As noted above, in both cities in the 1970s the majority of on-lot household structures were nuclear families comprising a young couple and their children sometimes with an extension to their own parents (grandparents). At that time this arrangement accounted for three-quarters of households in Mexico City, while over one-half of households lived in a similar structure in Bogotá, but with a greater variety of household arrangements that also included renters. Today these patterns have settled-out quite markedly (Table 3): the compound arrangements of several close kin related households sharing a lot is especially predominant in Mexico where 61 percent comprise a mix of parents/in laws and adult children (sometimes with their own children (grandkids), while a further fifteen percent are adult brothers and sisters (or in-laws) sharing, and a further 15 percent are the original parents and other kin.

11 These “compound” arrangements – akin to those in tropical Africa – comprise several (close) kin related families living in a single compound or residentially enclosed space (Lomnitz 1976).
Renter households living on the same lot as the landlord in a petty-landlord tenant relationship with the owner are rare in Mexico City, but they form an important component of lot and dwelling sharing in Bogotá, where over one-half of the lots include renter households, usually in combination with the owner parents and/or their adult children (Table 3). In Bogotá the nature of irregular land market development in the so-called “pirate” barrios was always a more secure process (also making it somewhat more expensive), and from the outset many self-builders first built one or two rooms for their own family, and then an additional room to rent out: something we noted and commented upon in the original study (Gilbert and Ward, 1985: 99-100). In Mexico City where the land capture process was less secure, placing a rental household in one’s own lot before establishing a strong claim of ownership would be inviting trouble and possible dispossession of at least a part of the lot. In Bogotá over the years the process has evolved further, as more dwellings accommodate renters, often alongside adult child households. In Gilbert’s 1997 survey of self-help settlements in Bogotá (including two of those considered here [Atenas and Casablanca]), more than half of the lots that were interviewed contained renters, whereas in formal housing projects (with less dwelling and lot space) a much smaller proportion included renters (11 percent, Gilbert 1999: 1084). In Mexico City, where rental tenements have emerged in the older suburbs of self-help settlements (as they have), these comprise both purpose-built and exclusively rental arrangements in which landlords live off site, as well as petty-landlord tenant renting (Gilbert and Varley 1991; see also Table 1).

Use Value, Patrimony and Inheritance

In both cities if planning on having a patrimony for the children after one’s own demise was an important goal, it appears to have been fast-forwarded as adult children continue to live on the lot (as future owners) but with parents or parent still extant. This is probably due to two principal factors: first the fact of longer life expectancies of the parents, so that kids are not inheriting as early; and second is the reduction in home ownership opportunities for (now) married adult children, along with their apparent reluctance to make the same self-help sacrifices as did their parents, and move out to the current periphery. There are also other good reasons to stick around: inertia, and the fact that most local rental housing is unlikely to be much better than that of the room and shared space with parents, and will cost much more. Also, living with one’s immediate kin is often better than living with strangers, and there is considerable social capital embedded
within compound and extended household arrangements including child minding, shared food costs, shared housing expenses, and so on.

Another reason to stay is to try to make sure that one remains an active stakeholder in anticipated (future) shared lot ownership with one’s siblings. Most low income owners die intestate but informally have invariably made it clearly understood how they expect their property to be divided among the children. However, given the high lot densities and the lot sharing alluded to earlier, it seems likely that those children actually living on the lot will be able to exercise an more effective claim – on the basis of need. Even though legally they will often have an equal claim those already living off site are less likely to directly benefit from those informal instructions, and if they do decide to make a formal challenge, then this is likely to entail expensive litigation, which few are likely to be able to afford (Grajeda 2008).\textsuperscript{12} For aged parents, too, there are clear advantages in the informal arrangement, since as long as they have adult children who depend upon them, and have future expectancies of part ownership, so they are likely to be better looked after in their old age (Varley and Blasco 2000, 2003). Therefore, few parents transfer the property to their children before death for fear of being booted out of their own home, and the very few who do make a formal Will, quite sensibly ensure that they retain a life interest in the home.

To date it appears that most inheritance decisions are managed informally by parents and by children, or in the event of dispute it is left to the local codes that govern an intestate death, although these are generally inaccurately or poorly understood, and are unlikely to be invoked unless challenged formally by a disgruntled claimant (Grajeda 2008). Although intestate succession usually guarantees the rights of the surviving spouse and children, it does so in ways that vary nationally, as well as by local state or department, and sometimes by gender (Diana Deere 2008; Varley 2008). An additional complication arises in the cases of claims of children from other relationships and/or from previous marriages, from other kin members, nephews/nieces and grandchildren, particularly where these have been important care givers to the aged parent owners.

In both cities only a small proportion of properties had changed title from the original ownership assigned in the 1970s and 1980s when titles were regularized by the

\textsuperscript{12} Varley (personal correspondence) suggests that there is often quite a lot of negotiation between absent and on lot beneficiaries in order to ensure “fair shares” among all the children. This informal negotiation and conflict resolution will form an important dimension of analysis in our subsequent work.
government (Table 4), and most of the changes observed were new owners buying out earlier residents, transferring the title to their own names. In the majority of cases titles tend to be in the male spouse’s name (62%), with approximately one-quarter in the name of the female spouse, and 13 percent in their joint names. (In Mexico there was a campaign to this effect in the 1970s and 1980s to try to protect the female partner, although the data do not reflect this, and actually show somewhat higher levels of female or joint ownership in Bogotá [48% cf. 31%].) Calculating from our sample of original lot owners from the 1970s who are still living on the lot, some 33 percent of men are now aged over 72, and 82 percent over 60. Given the fact that the life expectancy of men is less than women, and yet the high level of titles remain in men’s names, it seems likely that anything between 30 and 60 percent of those original property titles are no longer formally held in the name of a surviving owner. Apparently for most families this is not a major issue since they respect the informal designations of their parents, and show little apparent incentive to press for a change in the name of the title (Table 4). But this may become more problematic (and messy) in the future, once the surviving parent dies, or in the event of wishing to sell the property without (now) having clean title.

<Table5 About here>

The Home as an Asset: Exchange Values and Immobility

In this paper the focus of attention has been upon the use values of low-income property ownership, and we have observed quite clearly how this use value is already being exercised trans-generationally, and how this imposes a constraint upon intra-urban mobility by effectively tying families to home sites, seemingly in perpetuity. But these dwellings have also accumulated substantial exchange value over the years through a process of general neighborhood upgrading, through self-build and “sweat equity” initiatives and investments by the families themselves, and through general valorization of property values locally. In theory, therefore, having a real asset to trade up or to trade sideways could be expected to offer greater opportunities for intra-urban mobility, not less. Former irregular housing that has been valorized, provided with full legal title now enters the formal property market and should enhance people’s ability to exercise housing choice by selling-out and moving elsewhere. Indeed, this is the principal argument of de Soto (2000) and his followers who argue that legalization of property titles anchors property relations, creates assets and wealth, and enables access to credit and market mobility.
Setting aside the rather dubious merit of such arguments that have been amply addressed elsewhere (Varley 1987, 2002; Gilbert 2000; Ward et al, 2004), it ought to be apparent that the trans-generational expectancies and rights of children and grandchildren makes difficult any attempt to convert housing assets for cash. Moreover, there are other equally important reasons why exchange values inhibit immobility: specifically the very limited effective market for these consolidated properties. Who will, or who can afford to buy out a consolidated home in the innerburbs? The data contained in Table 5 will come as a surprise to many, even to those familiar with low income housing and poverty in Latin American cities. The last column in the Table provides the bottom line, showing as it does, the self-estimated property values among some of those interviewed, and/or the rumored sale prices of recently sold properties in the same street. The median value is almost $91,000 (US dollars) in the survey settlements in Mexico City, and a much lower median value of $23,000 in Bogotá. Median values vary by settlements, although with the exception of one settlement (Chalma Guadalupe in Mexico City) where it is considerably lower, the range is not great.

Of course, several immediate issues arise in interpreting these data. They comprise self (owner)-estimates and/or rumored sales prices so they are likely to be inflated. The cell size is small, since most people professed to having no idea what their property was worth, or at least were unwilling to discuss the matter in a short survey. Moreover, the Mexico City values are especially high as to invite disbelief. Therefore we sought to cross check these alleged values by comparing them to the property tax assessment records for each settlement in both cities – with varying degrees of success (see the notes to Table 5). Interviewers had occasionally seen the boleta predial (the property tax bills sent to each household) for several residents in both cities, so these amounts were known not to be wildly out of line with the market rates. And indeed when we later received the property tax data, they confirmed that while the self-estimated market values were somewhat higher than the tax office assessments, they were within the same ballpark area. (In the USA, also, property assessments usually come in a little lower than the market value, if only to minimize challenges and review.)

Surprising though these data may be at first sight, they are central to the question of mobility. Unless there is an active market for the purchase of these consolidated homes in working class settlements, then there will be minimal mobility. These prices are unaffordable to would-be low income home owners, most of whom
have no access to formal financing. Thus only those who have a better-paid job, some savings, have received a cash windfall, or who can engage informally with kin in order to parse sufficient resources, will be able to buy-out an existing home owner. Sensitive policy making to make available financing could do much to make the market work more effectively (see Ward et al, 2004), but that is not the issue here. Rather it seems likely that only a few settlements, and within them specific lots, will attract potential buyers. In Mexico City, for example, Chalma Guadalupe settlement is less attractive relative to the others because it is rather inaccessible (in the far north of the Federal District), situated on steep slopes the upper levels of which are difficult to get to, and it is located adjacent to one of the city’s major prisons (the Reclusorio Norte). Santo Domingo and Isidro Fabela, on the other hand, have excellent locations in the south, and the latter in particular has been subject to some buy outs – on selected lots. Those owners lucky or astute enough to have acquired lots on the main street or alongside the motorway access road do have the possibility of being bought-out by a commercial land use, or by a “gentrifier”. But the number of prime lots is very limited, with the result that there is little effective demand for the majority of lots.

Nor is this uniquely a problem of urban areas in middle developing countries in Latin America. Similar constraints were observed among low-income settlements (colonias) in the border region of south Texas, where after twenty years of residence and self-help improvements owners’ properties averaged around $30-$35,000. Even though they had full title, they were effectively barred from they marketplace since because formal financing (even federally assisted) was not available no-one looking for a home in these colonias could afford to buy out an existing owner. This should not be particular intractable problem to fix through sensitive public policy, but until it is corrected and the local colonia housing market is reinvigorated, this structure sustains and accentuates segmentation between social classes, because property values tend to increase more rapidly, and to a greater overall extent, in middle and upper-income residential areas than in low income housing markets (Ward et al 2004). Although they also share in the American Dream, housing assets accrue value more slowly to working class families than to better off segments of society, perversely increasing the social and economic wealth divide (Wilson, 1999). From a sociological point of view, market dysfunction and residential immobility actually intensifies those stratification patterns: between working and middle class population; as well as between low income renters and owners. The
same is true in cities like Bogotá and Mexico City, albeit on a much greater scale given the more unequal income distribution in poorer countries.

**Explaining Immobility: The Constraints on Exchange Values or Continuing Informal Use Values?**

The data discussed in this paper suggest that the low mobility patterns observed derive from both the inability to activate exchange values (even if people wished to do so), and from the continuing and trans-generation use values that self-build housing offers for so many low-income residents in Latin American cities. The high ongoing demand for access to informal housing, and the dynamics of household formation and sharing among immediate children, in combination with the low incomes and limited employment and alternative housing opportunities, makes long-term residence with kinsmen a highly rationale housing strategy.

These findings have important implications for theory and for future policy formulation and practice. Sociologically, the data suggest that while the first generation of spontaneous settlement played an important role in housing workers between the 1950s and early 1980s during the period of industrialization and urbanization, today those same settlements continue to provide much of the housing supply, albeit now for the second and third generations of low income workers. The “lost decade” of the 1980s and neo-liberal restructuring from the 1990s onwards has recast the labor markets in major Latin American cities, throwing more people back on informal sector and into self-employment (Portes and Hoffman, 2003). Today there is little cause for optimism that job opportunities will significantly improve, or that there will be a ratcheting-up of incomes to make formal housing and financing more affordable. Therefore, just as in the 1980s when household extension was an important mechanism through which the poor survived (González de la Rocha 1994; Chant 1991), so also are current and future generations intensifying those intra-dwelling and intra-lot arrangements on a more or less permanent basis. The future of many of the children and grandchildren of the original self builders in irregular settlements lies in their remaining living close-up with their parents, and in being future stakeholders in an inherited property market.

We need to know much more about the processes already entrained and will answers to the following questions: how do those second and third generations view their housing prospects, and what determines property inheritance, and the spatial and household organization among adult children as their parents die? To what extent is the
accommodation of adult third generation (i.e. the grandchildren) feasible, given that lot and dwelling space are already seriously stretched; and how will those intra-familial social relations fare, and be negotiated, between different generations and stakeholders? We anticipate being able to address some of these questions in later phases of the research already underway by intensive study of a relatively small number of cases using techniques of participant observation, multiple interviewing of household members, focus groups, and by charting and matching over time the physical configuration of dwelling extension and space usage to household organization. Tied to this research will be a better understanding of people’s mobility patterns – their exit and reentry strategies to the homeplace -- as they seek work opportunities elsewhere, and as they embark on their own family building trajectories. A side bar here is that of remittances, which research already suggests has become an important factor in upgrading and home improvement of the parental (read family) home. But here, too, those that have regularly remitted money home are likely to retain a stakeholder interest in the family home, even though they may be distant and absentee family members.

Another important issue is the extent to which these social arrangements and informal contracts will continue to provide a buffer that will allow for the absorption of the “new poor” in the future: immediate second generation family members may be accommodated, but will third generation (i.e. the grandkids) have a share in the patrimony provided by their grandparents? It seems doubtful. And how will the supply of one-room rental opportunities be affected by these rising densities? In Bogotá some petty-landlord renting alongside shared accommodation with kin has always been an important feature, but we have no clear sense of how such rent seeking opportunities will fare in the future.

There are also important policy questions that need to be addressed. First and foremost these dwellings need to be reconfigured so as to bring them into line with the current needs and household structures. These homes were largely self-built in an ad hoc manner, at lower densities, and with technology, piping, and wiring that are thirty years later old and inadequate, and sometimes even hazardous. Housing renovation and retro-fitting of utilities is crucial to improving the physical fabric of these dwelling structures that are now permanently shared family homes. Working with the families themselves, this will require both sensitive research and design about in-situ remodeling, as well as the development of some informal and formal mediation service capacity to resolve intra-household conflicts as and when these arise. In addition new credit and
financing mechanisms will be required to support in-situ remodeling, and that is probably
the first step in moving forward with a new housing strategy for retrofitting consolidated
settlements.

Secondly, and also in a normative vein, the resolution of property title will almost
certainly become an important issue – as it was in the past. From the 1970s and ‘80s
onwards legal titles were provided to de facto owners in irregular settlement, many of
whom as we have seen in this paper are now dying intestate with considerable dwelling
assets. And while it appears that informal succession arrangements are in place, we do
not know whether these are working well now or in the future, or whether conflicts
between claimants will require a new round of regularization and title transfer, perhaps
predicated upon more flexible stakeholder succession guarantees, “family
condominium”, or other arrangements. Far from being definitively resolved, property title
regularization may now have morphed into something new and potentially even more
complex (Ward 2007). Moreover, where juridical conflicts over ownership exist, this is
likely to stymie any possibility of home renovation outlined above. It will also further
inhibit mobility, reducing the opportunities for those stakeholders who wish to exit and
move elsewhere.

Title impediments will also impede property transfers – for those wishing and
able to consider cashing-in their assets. Title transfer from one owner to another is not
complicated, although it may be relatively costly. But when one owner buys out another
without “clean” title, for example if the vendor’s title is in the name of a deceased spouse
or parent, then the sale price is significantly reduced, leaving it to the purchaser to
undertake the title change (which s/he usually does). Unclear title further depresses
market prices or it can be a deal breaker, preventing transfer and intra-urban mobility.

These broader sociological and normative issues form part-and-parcel of the
larger comparative study of the innerburbs in Latin American cities of which this paper
forms a preliminary phase. The restudy of settlement data gathered in the 1970s has
allowed us – perhaps for the first time – to build a cross generational snapshot of a
housing process that was previously imagined to culminate in a single consolidated
home, albeit of markedly differing degrees and heterogeneity in any single settlement
(Ward 1982). However, as outlined here, such housing is no longer just a route to
ownership and family raising for the original household, but today forms part of the
residential calculus for second and third generations of low-income urban residents. This
makes necessary a recasting of the contemporary and future dwelling arrangements to
fit the new needs. Mobility is highly constrained, and there are greater incentives and rationalities for adult children and grandchildren to stay close, and even to remain on the family lot. And for those who have and will continue to experience mobility, exploring labor markets in other urban centers and abroad, remittances and maybe their ultimate return is also likely to strengthen their stakeholder commitment to the patrimony that their parents originally created. Policy making needs to focus both on making the market work more effectively so that those wishing to mobilize their hard fought-for housing assets may do so, and move out. But innovative and creative policy solutions are also needed to recast the housing environment and to secure the stakeholder interests of those families for whom a home is, indeed, likely to be forever.

References
_____ “Security of land tenure revised: the case of CRRU in Recife and Porto Alegre, Brazil.” Habitat International. 28, 2. 231-44.


Lomnitz, Larissa (1976), ¿Como sobreviven los marginados?, Siglo XXI, México.


______. 2003. “Older women’s living arrangements and family relationships in urban Mexico.” *Women’s Studies International Forum*, 26, 6, 525-39


Table 1. Turnover in Ownership and Land Use between the Original Survey (1970s) and 2007. Mexico City and Bogotá.

<table>
<thead>
<tr>
<th>Changes of Ownership and Land Use</th>
<th>Mexico City</th>
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<th>Bogotá</th>
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<td>#</td>
<td>%</td>
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<tr>
<td>Confirmed that it was the same family</td>
<td>125</td>
<td>82.8%</td>
<td>83</td>
<td>80.6%</td>
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<tr>
<td>A different family now living on lot</td>
<td>26</td>
<td>17.2%</td>
<td>20</td>
<td>19.4%</td>
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<tr>
<td>Total</td>
<td>151</td>
<td>100%</td>
<td>103</td>
<td>100%</td>
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<thead>
<tr>
<th>Land Use Changes</th>
<th>Mexico City</th>
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<th>Bogotá</th>
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<tbody>
<tr>
<td>No change – still residential (owner)</td>
<td>160</td>
<td>89.4%</td>
<td>78</td>
<td>76.5%</td>
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<tr>
<td>Still residential but now rental housing</td>
<td>13</td>
<td>7.3%</td>
<td>20</td>
<td>19.6%</td>
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<tr>
<td>Vacant lot</td>
<td>3</td>
<td>1.7%</td>
<td>2</td>
<td>2.0%</td>
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<tr>
<td>Public land use</td>
<td>2</td>
<td>1.1%</td>
<td>0</td>
<td>0.0%</td>
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<tr>
<td>Industrial</td>
<td>0</td>
<td>0.0%</td>
<td>1</td>
<td>1.0%</td>
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<tr>
<td>Transportation / warehousing</td>
<td>0</td>
<td>0.0%</td>
<td>1</td>
<td>1.0%</td>
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<tr>
<td>Other</td>
<td>1</td>
<td>0.6%</td>
<td>0</td>
<td>0.0%</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>179</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>102</strong></td>
<td><strong>100.0%</strong></td>
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Source: Author's Longitudinal Survey, 2007. Data for only those lots where there was a high degree of certainty that the original site had been located.
Table 2. Demographic Characteristics of Households and Lot Composition, Mexico City and Bogotá Barrios Compared, 1970s and 2007

<table>
<thead>
<tr>
<th>Colonia/Barrio</th>
<th>Mexico City</th>
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<td>Size of household</td>
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<tr>
<td>Median household size</td>
<td>6</td>
<td>4</td>
<td>5</td>
<td>4.50</td>
<td>6.5</td>
<td>3.5</td>
<td>6</td>
<td>4</td>
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<td>Households per lot</td>
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<tr>
<td>Average # of households per lot</td>
<td>2.29</td>
<td>2.96</td>
<td>1.24</td>
<td>1.75</td>
<td>1.39</td>
<td>2.5</td>
<td>1.4</td>
<td>2.11</td>
<td>1.94</td>
<td>2.27</td>
<td>1.58</td>
<td>2.31</td>
<td>1.65</td>
<td>2.24</td>
<td>1.26</td>
<td>2.91</td>
<td>1.76</td>
<td>2.71</td>
<td>1.6</td>
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<td>Persons per lot</td>
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<tr>
<td>Average # of persons on each lot</td>
<td>10.86</td>
<td>6.91</td>
<td>9.94</td>
<td>8.56</td>
<td>8.14</td>
<td>9.16</td>
<td>8.64</td>
<td>9.5</td>
<td>9.86</td>
<td>9.7</td>
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<tr>
<td>Median # of persons per lot</td>
<td>9.0</td>
<td>5.5</td>
<td>8.00</td>
<td>7.0</td>
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Table 3. Household composition in Mexico City and Bogotá, 2007

| Household Composition | Mexico City | | Bogotá | |
|-----------------------|-------------|-----|-------|
| Me and my spouse      | 4           | 4.0%| 3     | 4.5%|
| Me and my siblings (or inlaws) | 15   | 15.2%| 8     | 12.1%|
| A mix of parents/inlaws and siblings (children of the parents) | 60   | 60.6%| 15   | 22.7%|
| Parents and other kin | 15          | 15.2%| 3     | 4.5%|
| A mixture with nephews or nieces | 0   | 0.0%| 2     | 3.0%|
| A mixture of parents/children & with (unrelated) renters | 3   | 3.0%| 18   | 27.2%|
| Mixture of kinsmen and renters | 0   | 0.0%| 15   | 22.7%|
| Others (unclassified) | 2           | 2.0%| 2     | 3.0%|
| **TOTAL**             | **99**      | **100.0%**| **66** | **100.0%**|

Source: Author's Longitudinal Survey, 2007

Table 4. Percent of cases where a change of title has occurred since the original property title was issued (as part of the regularization), Mexico City and Bogotá

| Change of Title | Mexico City | | Bogotá | |
|-----------------|-------------|-----|-------|
| **Title change** | 21          | 10.8%| 21   | 28%|
| **No title change** | 93           | 83.8%| 52  | 70.3%|
| In process of changing the title | 3           | 2.7%| 1    | 1.4%|
| Not know how to go about making make a change in the title | 3           | 2.7%| 0    | 0|
| **TOTAL**       | **111**     | **100%**| **74** | **100%**|

Source: Author's Longitudinal Survey, 2007
Table 5. Property Values for Consolidated Low Income Settlements. Self estimated values and property tax assessments compared, Mexico City and Bogotá, US $ of August 2007.

<table>
<thead>
<tr>
<th>City &amp; Barrio</th>
<th>Modal lot size m²</th>
<th>Catrastal land values (and in m²)</th>
<th>With 100m² of construction (= total incl. land)</th>
<th>With 200m² of construction (= total incl. land)</th>
<th>With 300m² of construction (= total incl. land)</th>
<th>US $ = median value [N]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Construction values for the 4 DF settlements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mexico City</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isidro Fabela (D.F.)</td>
<td>250</td>
<td>32,400</td>
<td>56,352</td>
<td>80,307</td>
<td>104,260</td>
<td>109,091 [12]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(= $129.6m²)</td>
<td>(46,815)</td>
<td>(nd)</td>
<td>(nd)</td>
<td></td>
</tr>
<tr>
<td>Santo Domingo (D.F.)</td>
<td>200</td>
<td>16,080</td>
<td>40,031</td>
<td>63,984</td>
<td>87,938</td>
<td>100,000 [8]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(= $80.4m²)</td>
<td>(41,498)</td>
<td>(51,911)</td>
<td>(89,887)</td>
<td></td>
</tr>
<tr>
<td>El Sol (Netza.)</td>
<td>120</td>
<td>11,412</td>
<td>35,376</td>
<td>59,329</td>
<td>83,283</td>
<td>72,727 [7]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(= $95.1m²)</td>
<td>(30,629)</td>
<td>(42,117)</td>
<td>(nd)</td>
<td></td>
</tr>
<tr>
<td>Liberales (D.F.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>81,818 [3]</td>
</tr>
<tr>
<td>Chalma Guadalupe (D.F.)</td>
<td>250</td>
<td>15,175</td>
<td>39,135</td>
<td>63,089</td>
<td>87,042</td>
<td>45,455 [2]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(= $60.7m²)</td>
<td>(28,067)</td>
<td>(51,330)</td>
<td>(69,801)</td>
<td></td>
</tr>
<tr>
<td><strong>Mexico C. median value (brackets = average)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>$90,909 [n=32]</strong> ($113,780)</td>
</tr>
<tr>
<td><strong>Bogotá</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Antonio (Soacha)</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>$26,243 [14]</td>
</tr>
<tr>
<td>Aténas</td>
<td>150</td>
<td>$18,085 [28]</td>
<td></td>
<td></td>
<td></td>
<td>$20,995 [17]</td>
</tr>
<tr>
<td>Casablanca</td>
<td>113</td>
<td>$22,334 [38]</td>
<td></td>
<td></td>
<td></td>
<td>$32,044 [14]</td>
</tr>
<tr>
<td><strong>Bogotá median value (average in brackets)</strong></td>
<td>128</td>
<td>$21,852 [66]</td>
<td></td>
<td></td>
<td></td>
<td><strong>$23,204 [45]</strong> (29,370)</td>
</tr>
</tbody>
</table>

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13 In Mexico City these calculations are based upon the formula for assessment given to us by the Oficina del Catastro for construction areas and land values per square meter, for each of the four D.F. settlements. They are calculated on the modal lot size for each settlement.

14 In Mexico City for privacy reasons we were unable to get individual property tax values for our surveyed lots, but we were furnished with a small random sample of lots in each settlement, although we have no clear sense of the accuracy or typicality of the selected lots and data given to us, hence our decision to show these data in brackets. But they are not greatly out of line with our calculations. When assessing property values, some reduction is made to allow for age of construction of the property and this probably helps to explain the general lower provided by the Of. del Catastro. All construction areas are self reported, so they also probably underestimate the actual market value. In Bogotá we were provided with the actual property assessments for the lots on which we interviewed, so one can be more confident about the comparability with the self-estimated property values.

15 Flat rate on land charged in El Sol, Nezahualcóyotl, Edo de México. There is no assessment on construction.
**Immobility Paper**

**Figure 1a-1d.**

1a top left = 1973 B&W photo of Isidro Fabela looking north towards 3 story dwelling)

1b) bottom left = 1973 color photo, different street in Isidro Fabela looking towards the same dwelling. In 2007, former corner store is now a small restaurant.

1d) top right = 2007, 3 story dwelling in close up.

1e) bottom right = 2007. Isidro Fabela. Lots divided (between 2 kin related families [note double electricity meters]; and part of next door’s lot has been sold off as a separate dwelling (garage door with rooms above).

**Figures 2a & b**

2a (left) Mexico City and 2b (right) Bogotá. Location of the 1978 study settlements (taken from Gilbert and Ward, 1985). Note that the built up area, today, extends beyond the limits shown in this slide.