Multi-step Transition in Housing Provision and Progressive Development of Urban Settlements: Case of Davao city, Philippines

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Thesis submitted for the Degree of Doctor of Philosophy in Architecture

in the

School of Architecture and Built Environment

The University of Adelaide

July 2017

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ABSTRACT

In 2015, the United Nations published World Urbanization Prospects declaring that 54% of the world's population now lives in urban areas while it is estimated that this figure will reach 66% by 2050 with nearly 90% of this increase located in Asia and Africa (United Nations 2015). In this context of unprecedented urbanisation coupled with widespread urban poverty, squatter settlements are often the only means of affordable shelter for the urban poor. In Asia and Africa (and elsewhere), governments are committed to providing shelter for the low income sector of their respective nations as a basic human right. However, housing policy and programmes in developing countries, like the Philippines, are often based on models (applied with varying degrees of success) which originate in high-income countries. Known, alternatively, as a 'one-step regularisation model'; 'instant development'; or, a 'product approach', this model is intended to relocate the urban poor from a squatter settlement to a regular housing market in a single step. Despite the diffusion of this model, this approach has often resulted in more problems rather than offering effective solutions.

Given these alarming statistics and the housing implications, this research examines the phenomenon of a 'multi-step transition' process to evaluate housing for the urban poor and incremental or 'progressive development' within settlements in developing countries. The research comprises a case study which examined 74 low income households in 11 urban settlements in Davao City, Philippines; a country which is classified as a lower-middle income country (United Nations 2015). Based on detailed site analysis, and comprehensive interviews with policy makers, NGOs and householders, the shelters were classified into five different types ranging from informal to formal housing types. The data revealed how the urban poor had become legal owners of formal housing units in due course. Formal housing status was achieved in one of three ways. Firstly, through a multi-step transition process whereby informal housing units were gradually upgraded to formal status. Secondly, through the provision of low cost housing units with assistance from the government for land development and security of tenure, and participation by NGOs to construct the housing. Thirdly, through the conventional provision of housing units by the government or the private sector; a one-step regularisation model.

This research focuses on the role of citizen participation in housing provision. To do so, the multi-step transition process is examined with reference to interdisciplinary literature on the topic as well as the politics of citizen participation specific to the Philippines. This process tended to happen in two ways. Either, an inhabitant moved from one housing type to another in a different location, or, an informal housing unit was upgraded to become a formal housing unit in the same location. In the latter case, pro-poor housing policies, sites and services programmes and community mortgage programmes coupled with self-help housing initiatives and NGO assistance led to secure tenure, the physical development of the settlements, and finally the refurbishment of individual houses according to the building code. This multi-step transition process offers valuable lessons about effective and sustainable housing interventions which can enhance the status and well-being of the urban poor in developing countries. Moreover, the findings have the potential to inform housing policy in this sector.

DECLARATION

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Acknowledgements

LIST OF ABBREVIATIONS

ADAP	Association of Differently Abled Persons
BLISS	*Bagong Lipunan* Improvement of Sites and Services
BMK	*Baan Mankong*
CMP	Community Mortgage Programme
CODI	Community Organisations Development Institute
DBB	Dasmariñas Bagong Bayan
EO	Executive Order
GK	*Gawad Kalinga*
HDMF	Home Development and Mutual Fund
HPFP	Homeless People's Federation Philippines
HREC	Human Research Ethics Committee
HUDCC	Housing and Urban Development Coordinating Council
HURA	Housing and Urban Renewal Authority Inc.
IMF	International Monetary Fund
KIP	Kampong Improvement Programme
LGC	Local Government Code
LGU	Local Government Unit
LTAP	Land Tenure Assistance Programme
MDG	Millennium Development Goal
MHS	Ministry of Human Settlements
MMC	Metro Manila Commission
NHMFC	National Home Mortgage Finance Corporation
NGO	Non-Government Organisation
NHA	National Housing Authority
NSO	National Statistics Office
NUDHF	National Urban Development and Housing Framework
PACSII	Philippine Action for Community-led Shelter Initiatives, Inc.
PCUP	Presidential Commission for the Urban Poor
PD	Presidential Decree
PSA	Philippine Statistics Authority
SIR	Slum Improvement and Resettlement
UDHA	Urban Development and Housing Act
UK	United Nations Conference on the Environment and Development
UN	United Nations
UNCED	United Nations Conference on the Environment and Development

UNCHS	United Nations Centre for Human Settlements
UNFPA	United Nations Population Fund
UN-HABITAT	United Nations Human Settlement Programme
USA	United States of America
ZIP	Zonal Improvement Programme

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Malaque III, I 2013, 'From informal to pirate urban settlement: a case in Davao City, Philippines', in O Ural, E Pizzi & S Croce (eds), 39th IAHS World Congress on Housing Science - Changing Needs, Adaptive Buildings, Smart Cities, PoliScript, Milan, pp. 1181-1188.

Malaque III, I, Bartsch, K & Scriver, P 2014, 'Typology of urban households and their transition from informal to formal status', in A Tadeu, O Ural, D Ural & V Abrantes (eds), 40th IAHS World Congress on Housing: Sustainable Housing Construction, ITeCons, Funchal, Madeira.

Malaque III, I, Bartsch, K & Scriver, P 2015, 'Learning from informal settlements: provision and incremental construction of housing for the urban poor in Davao City, Philippines', in RH Crawford & A Stephan (eds), Living and Learning: Research for a Better Built Environment: 49th International Conference of the Architectural Science Association, Melbourne. (Awarded as Runner-up for the Best Student Presentation Award)

Malaque III, I, Bartsch, K & Scriver, P 2016, 'Modelling the evolution of housing and socio-spatial processes in low income settlements: case of Davao City, Philippines', in J Zuo, L Daniel & V Soebarto (eds), Fifty years later: Revisiting the Role of Architectural Science in Design and Practice: 50th International Conference of the Architectural Science Association, Adelaide, pp. 89-98.

Malaque III, I, Bartsch, K & Scriver, P 2017, 'Thriving in the slums: progressive development and empowerment of the urban poor to achieve secure tenure in the Philippines', in L Brotas, S Roaf & F Nicol (eds), Passive Low Energy Architecture 2017 Edinburgh Conference: Design to Thrive, Edinburgh. (Awarded as one of the four CIBSE Prizes for the Best Papers, and acknowledged for being technically one of the best papers which summed up the theme and spirit of the conference)

Chapter 1:   Introduction

1.1   Background to the study

Half of the world's population lives in urban areas. In 2015, the United Nations Department of Economic and Social Affairs, Population Division, published World Urbanization Prospects declaring that 54% of the world's 7.3 billion people now live in urban areas. While it is estimated that this figure will reach 66% by 2050, nearly 90% of this increase will be in Asia and Africa (United Nations 2015). This current urban scenario is critical in the developing world which is characterised by a low living standard and evident in cities in Asia, Africa and Latin America. In this context of unprecedented urbanisation coupled with widespread urban poverty, squatter settlements are often the only means of affordable shelter for the urban poor. Furthermore, the present trend of globalisation plays a major impact on the process of urbanisation in developing economies. The urbanisation of poverty as a physical expression of this global trend is evident in sprawling slums and squatter settlements. UN-HABITAT (2003, p. 4) claims that from the point of view of the urban poor, formal planning is far from the reality, instead, their existence and their precarious informal settlements are almost ignored. There are initiatives in urban development and shelter strategies which aim to accommodate the needs of the urban poor, however, their positive impact fails to keep pace with rapid urban growth. Despite the condition of poverty, the urban poor play an important role in a developing economy. They supply cheap and transient labour constituting an invaluable human resource. Thus, their basic need for shelter in a convenient location where they can access their livelihood is vital to create a sustainable urban environment in social, environmental and economic terms.

Rapid urban growth and widespread urban poverty are inevitable in developing countries. However, according to Mayo, Malpezzi and Gross (1986, p. 183),[1] the governments of these countries often misunderstood how the urban economy worked and failed to implement appropriate housing policies and programmes. For example, if there was a perceived shortage of shelter, the government built new houses (Mayo, Malpezzi and Gross 1986, p. 184).[2] In Asia and Africa (and elsewhere), governments continue to be committed to providing shelter for the low income sector of their respective nations as a basic human right.[3] However, housing policies

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[1] The contribution by Mayo, Malpezzi and Gross (1986) to recent discussions of housing policy in developing countries is acknowledged in the recent work of Buckley and Kalarickal (2005).

[2] Complete enumerations, by Mayo, Malpezzi and Gross (1986), of common housing problems in developing countries and solutions that their governments implement, are further discussed in Chapter 3, Section 2.1.

[3] Among others, the right to housing is protected in Article 25 of the Universal Declaration of Human Rights, see, http://www.un.org/en/documents/udhr/index.shtml; and, Article 11 of the International Convention on Economic, Social and Cultural Rights, see, http://www.ohchr.org/EN/ProfessionalInterest/Pages/CESCR.aspx.

and programmes in developing countries, like the Philippines, continue to derive from models (applied with varying degrees of success) which originate in high-income countries, like the United States and the United Kingdom. Lim (1987), argued, specifically, that several housing policies and programmes applied to developing countries shared underlying norms with those originating in developed countries, including 'unique occupancy, minimum physical standards, and one-step regularisation' (Lim 1987, p. 176). One-step regularisation, in particular, whereby householders are transferred from an informal settlement into a regular or formal settlement in a single step, in keeping with models of social housing in Europe or public housing in the US, continues in the Philippines. However, such approaches have often resulted in more problems rather than offering effective solutions as Habitat for Humanity Philippines, among others, argue.[4] While the diffusion of policies, ideas and practices from advanced economies to developing nations is incontrovertible, Lim's identification of such trends continues to receive scholarly recognition.[5] In a developing country like the Philippines, where norms originating in developed countries have been applied – as Lim argued – there needs to be an assessment of their varying degrees of success and failure with respect to the needs and aspirations of the urban poor.

Figure 1-1. Urban landscape of Metro Manila, Philippines[6]

Due to the lack of adequate provision of low-cost housing, the urban poor house themselves in the urban area and insist on living in informal settlements. The ingenuity of the urban poor can be seen in the way they provide shelter for themselves in a location where they can also access their livelihood. Because these informal settlements are unplanned, this organic kind of

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[4] 'Affordable Housing is a Priority in the Philippines' The Report: The Philippines 2015 Oxford Business Group, https://www.oxfordbusinessgroup.com/philippines-2015; see also, Michael Wootton, 'Housing for All', Manila Times, February 2, 2016, http://www.manilatimes.net/housing-for-all/242770/; Richard Allan Aquino 'The Philippines needs more affordable houses…5 million more', Property Report, February 29, 2016, http://www.property-report.com/cost-and-effect/

[5] Lim's (1987) paper is continuously cited in the recent publications of Njoh (1998); Chan, Zhao and Yao (2003); and Alananga, Lucian and Kusiluka (2015), among others.

[6] Source: http://mrcheapjustice.wordpress.com/2011/03/14/the-day-after-ground-zero-manila/

development is most commonly viewed negatively at least from the perspective of policy and planning. As a consequence, formal planning methods often fail to recognise the different housing submarkets that exist in urban informal settlements, the transition that the urban poor undergo within these submarkets, and the incremental construction process. Recognising these organic tendencies, Madanipour (1996; 2006) who proposes the paradigm of socio-spatial processes, thereby relating the formation of the built environment, with political, economic and cultural factors (Madanipour 1996); and, with the activities of their respective agencies (Madanipour 2006). It is assumed, then, that the spontaneous growth of urban poor settlements is related to socio-spatial processes that, although it is not obvious at present, may be capable of emerging and may be nurtured in a positive way in the formation of the urban landscape.

There are numerous public housing programmes by the government but gaps in the delivery of this basic need are inevitable. In a study of the assessment of shelter provision for the lower income sector in the cities of Davao, Samal and Panabo and the municipality of Sta. Cruz (Malaque III et al. 2005, 2006), it was found that access to land through lot acquisition was mostly assisted by both local government units and national government agencies. The physical housing stock was primarily provided by the urban poor beneficiaries themselves. This self-help initiative and the ingenuity of the urban poor is supported by non-government organisations, and the provision of sites and services was done in phases as a result of the lobbying by the organised homeowners' association for limited assistance from the government. Although there are studies that produce substantial results about the socio-economic and socio-political points of view in the provision of local shelter, there is still a need to explore the different housing submarkets or housing types, from the disciplinary perspective of architecture, which focus on the transition that the urban poor undergo from living in informal settlements to owning a more legal housing unit, and the incremental construction process of their dwelling units and settlements. The aim of this research project is to generate a better understanding about this transitional process and to assist in the formulation of new housing policies that will be more appropriate for developing countries.

1.2   The problem

The world's population is becoming urban. UN-HABITAT (2006, p. 6) projected that the year 2007 would be a milestone in human history as the world's urban population will likely equal its rural counterpart for the first time. In 2008, the estimated urban population was 3.3 billion (UN-HABITAT 2008). On the other hand, UNFPA (2007 in UN-HABITAT 2008, p. 11) asserts that urbanisation levels will rise dramatically to 70 per cent by 2050. Given these alarming statistics,

relating to the demographic trends, the implications for housing in either urbanising or urbanised cities is critical. The rapidly increasing urban population as a worldwide phenomenon impacts on the housing and urban environment in cities of developing countries. UN-HABITAT (2002) claims that the urbanisation of poverty as a global trend can be observed in sprawling slum and squatter settlements. The UN Population Division (1999 in UN-HABITAT 2002, p. 2) estimated that at the start of the third millennium, the world's urban population was 47 per cent. It is projected to increase to 56 per cent in the next two decades, of which 98 per cent of this increase is in developing countries. In connection with the reported demographic trend, the United Nations' projection as reviewed by the US National Academy of Sciences Panel on Urban Growth Dynamics (National Research Council 2003 in UN-HABITAT 2004, p. 24) confirms the world's urban population will grow from 2.86 billion in 2000 to 4.98 billion by 2030 and 5.3 billion in 2050.

Figure 1-2. Squatter settlement along the railroad in Metro Manila, Philippines[7]

UN-HABITAT (2008) claims that slightly more than two people are added to the world's urban population every second. However, this phenomenon is not evenly distributed in all regions. The rate of increase in the urban population in developing countries is different from the trend in developed countries. While a developing country is defined as a nation characterised by low living standards and undeveloped industries, a developed country on the other hand is one with a highly-developed economy and advanced infrastructure and services.[8] In the developing world, the total increase in the urban population per month is five million. This is ten times the total increase of the urban population in the developed world. This means that 'while very high urban growth rates characterise urban change in developing nations, moderate growth and decline are the norm in developed nations' (UN-HABITAT 2008, p. 11). Hence, it is expected

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[7] Source: https://au.pinterest.com/pin/22236591880519906/
[8] Refer to Section 8 of this Chapter for further definition of 'developing countries' in contrast to 'developed countries'.

that problems related to the process of rapid urbanisation are inevitable in developing countries, where the service sector is poor relative to developed countries.

This increasing urban population and the urbanisation of poverty threatens the sustainability of the environment in urbanising cities. Marcotullio (2003) claims that globalisation is the strongest factor that is influencing the urban form and environmental conditions of cities in the Asia-Pacific region in the early twenty-first century. But, as Drakakis-Smith (1997) emphasised, housing, among other factors, has been identified as a basic need and human right for considerably longer. Contributing almost two decades ago to the then new discussion of urban sustainability in developing countries, he acknowledged the fact 'that urban housing problems are still both widespread and severe throughout the Third World' (p. 798), and the contrast in urban living conditions is visible in the location of chaotic squatter settlements in the shadow of high-rise buildings (p. 799). Moreover, the urban poor were recognised to be especially vulnerable to environmental problems. This was evident in the case of endemic seasonal flooding in low-lying areas where informal settlements are often concentrated, and in the more extreme cases of earthquakes and other natural disasters that have struck subsequently, tragically, including the Indian Ocean tsunami of 2004 which had a deadly impact on squatter settlements in Sri Lanka, India and Indonesia and elsewhere in the region, and Typhoon Haiyan in the Philippines in 2013. However, consideration of the rights and entitlements of the poor in the discussion of sustainable urbanism remains a key issue. Moreover, in the context of the dramatic structural changes in the global economic system since the late twentieth century which have tended, if anything, to diminish faith in the capacity of government service sectors to make effective and affordable interventions in social welfare generally, it is all the more difficult for the governments of less developed countries today to set the provision of adequate shelter for the poor as a priority.

For at least half a century debate about the housing challenges of the developing world, and the failure of governments to provide adequate shelter for the urban poor, has revolved around the question of whether or not the housing policies and programmes of developed countries are, in fact, transferable to developing countries. As Mayo, Malpezzi and Gross (1986) observed, housing problems may have appeared simple and solutions easily emulated. However, superficial initiatives by many governments often complicated the problems as they relied on heavy subsidies to implement a high standard of social housing. Lim (1987) observed, significantly, that efforts to provide shelter for the urban poor in developing countries were based on a 'one-step regularization model' (Figure 1-3). This is a norm that means to transfer

households from the informal settlement into the regular or formal settlement in a single step. Even earlier this had been referred to critically as 'instant development' based on modern minimum standards (Turner 1967), and more recently as a 'product approach' of industrialised countries where housing is delivered complete to the homeowners through a sophisticated system in the housing market (Ferguson & Navarrete 2003). This type of approach towards a feasible delivery of housing may be successful in industrialised countries, but may not necessarily be a good fit in countries with developing economies.
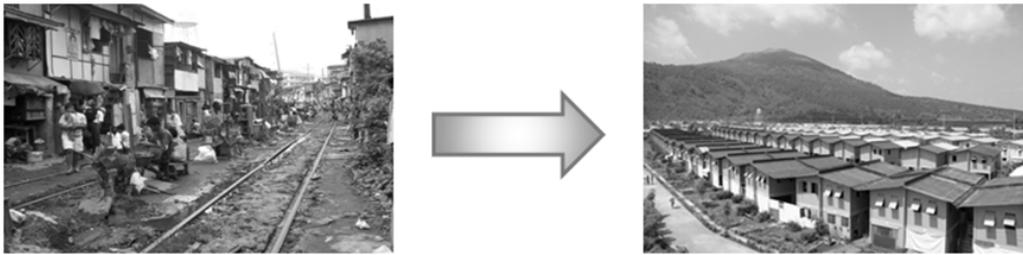
Figure 1-3. Interpretation of a 'one-step regularisation model'[9]

Failures in the implementation of housing policy and programmes defined in the previous paragraph are found in Southeast Asian countries. In the case of Thailand, the government focused exclusively on building public housing and implementing slum clearance in order to solve housing shortages from the 1950s to the 1970s. The Thai government could only allocate funds when there was a need to assist evicted slum dwellers or those who faced eviction. Moreover, it could not keep pace with the rapid growth of the slum population (Giles 2003; Yap & Wandeler 2010). In the case of Indonesia, the Kampong Improvement Programme widely celebrated (Tunas & Peresthu 2010) as an example, only focused on limited components of housing. Other components such as security of tenure were not included (World Bank 2003 in Tunas & Peresthu 2010, p. 318). In the case of Vietnam, there was a total renovation in the urban areas in order to transform them into business and commercial zones. In the process of slum clearance, the urban poor were uprooted and relocated to undesirable, remote areas of major cities. As a consequence, squatter settlements continue to grow anywhere where the poor can manage to find a place for themselves and build a shack (Coit 1998). In the Philippines, major resettlement projects were implemented under the Martial Law regime of President Marcos such as the one reported by Abueg (1986) in Dasmariñas, which is located many kilometres away from the city and was implemented by the National Housing Authority in 1975.

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[9] Image sources:
    https://au.pinterest.com/pin/22236591880519906/
    http://businessmirror.com.ph/home/properties/29060-sun-life-financial-abs-cbn-turn-over-legacy-of-light/

The beneficiaries were forced to leave their squatter settlements in Metro Manila and ended up finding it difficult to pay for their new housing, despite heavy subsidies and easy payment schemes.

The inadequate provision of housing for the urban poor in developing countries is intimately tied to the rapidly growing urban population. In addition to poor economic conditions, where governments are perennially short of funds for basic services, failures in the provision of shelter for the urban poor are inevitable. Time and again over the past several decades, experience has indicated that norms originating in developed countries, such as the 'one-step regularisation model' or its equivalent, often tend to create more problems than solutions when applied in developing countries. There is an evident need, therefore, to formulate alternative housing provision strategies that may offer a better fit with the particular needs and propensities of individual developing countries.

This research project seeks to define and examine one such alternative strategy as possible ways and means to provide feasible and affordable shelter as one of the basic human needs of the urban poor in developing countries. If the end goal for the homeless urban poor, in the context of increasingly intensive urban development, is to gain basic legal tenure, there is a need for policy aimed to support affordable housing in locations where the urban poor can access their livelihood opportunities, more secure tenure to protect them from eviction, and flexible yet enabling strategies to achieve legal settlement status in due course.

1.3   The hypothesis

Traditional housing policy mostly emanated from a paradigm that sees housing purely as an object. Oftentimes, it fails to cope with the dynamism and complexity of spontaneous urban environments evident in cities in developing countries. For instance, if there is a perceived shortage of housing, or poor quality housing, the government builds completed housing units for the urban poor living in squatter settlements. This traditional approach, which, as already noted, has been criticised as a 'one-step regularisation model' (Lim, 1987), is a norm which originated in developed countries. An alternative to this norm, as Lim (1987) has proposed, is the 'multi-step transition model' (Figure 1-4). It is argued that the urban poor normally have to undergo a multi-step transition through different housing submarkets from living in a squatter settlement to becoming a home-owner in a legal settlement, progressively improving their standards of living and shelter in the process. On the issue of tenure security, Payne (2001) claims that there are contiguous tenure categories that range in different levels of security from

being a pavement dweller to becoming a freehold owner as the ultimate legal tenure category (Figure 1-5). Burgess (1985), on the other hand, in his classification of urban settlements, illustrates that a squatter settlement will eventually develop into a pirate settlement which will later end up as a legal settlement after all legal requirements are met. The synthesis of these theories presented in this paragraph is used as the basis for the hypothesis for this research.

Figure 1-4. The 'multi-step transition model' (Adopted from Lim 1987)

Figure 1-5. Distribution of urban tenure categories by legal status (Adopted from Payne 2001)

It is hypothesised that the ineffectiveness of housing policy and programmes in developing countries following the norms that are adopted from developed countries is due to a misunderstanding of dynamic urban phenomena evident in a developing economy. This means that governments in developing countries fail to recognise that in the process of improving their economic status, the urban poor will undergo a series of transitions in improving their own shelter until they achieve a legal one. Formal urban planning paradigms do not recognise the urban poor's contribution to shelter provision and the importance of their precarious informal settlements in urban development. However, it is assumed that the urban poor have the ingenuity to provide their own shelter and have the ability to move from one housing submarket[10]

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[10] 'Housing submarket' is preliminarily used referring to the publication of Lim (1987), however, this is also referred to as 'housing type' in the conduct of this housing research.

(or housing type) to another until they achieve legal housing and settlement status in due course. The urban poor play an important role in a developing economy as a valuable human resource for development. They strive to survive the difficult conditions while living in the city. Thus, it is further hypothesised that their survival coping mechanism, when understood from a socio-ecological point of view, can be the basis in the formulation of models and strategies towards urban sustainability in developing countries, specifically in housing provision.

1.4   Research questions

This research – which has been undertaken in the discipline of architecture with particular respect to the material and spatial structure of housing – will seek to examine how the urban poor undergo a series of transitions in different housing submarkets (or housing types), and how they provide their own shelter through incremental construction of their dwellings and progressive development of their settlements. The issues identified in this context raise a number of questions which underpin this research project:

- What are the different housing submarkets (or housing types) that the urban poor live in, in the case of developing countries, in general, and in the Philippines, in particular?
- How does the urban poor move from one housing type to another, or move from informal housing into more formal housing units?
- What are the basic living spaces provided by the urban poor for themselves?
- With or without assistance, do they achieve formal housing status?
- What are the socio-political factors which influence the transition from informal to formal housing status for the urban poor in the case of developing countries?

1.5   Aims and method

The aim of this research project is to recommend a more appropriate approach to policy and to sustainable urban development in developing countries, in general, and in the Philippines, in particular. Accordingly, this relates to the provision of shelter for the urban poor following the socio-ecological principles for sustainable development, which is legal with flexible strategies for the general well-being of its inhabitants. In order to achieve this goal, this research project sought to explore the phenomenon of a multi-step transition in low-income housing and progressive development of urban settlements in a case of a developing country situated in Davao City, Philippines.

Specifically, this research seeks to:

- Explore the various low-income urban settlements and their dwelling units covering a range from informal to formal housing status;
- Classify the various low-income urban households into different types based on the legality of land tenure and housing construction;
- Investigate the movement of low-income households from one housing type to another;
- Identify the basic living spaces provided for/by the urban poor initially and their additions in the course of development;
- Document low-income housing structures significantly representing the different housing types;
- Explore the incremental construction process of urban poor housing units in the course of development;
- Explain the various social and political factors influencing the mode of housing provision in the low-income sector; and,
- Discuss the socio-spatial processes related to the multi-step transition of urban poor housing and progressive form of settlements.

1.6   Significance of the research project

The critical urban scenario addressed in this thesis, which affects the housing conditions of the urban poor and vulnerable urban environments in cities across the developing world, needs immediate attention. This study seeks, therefore, to provide deeper insight into the variously observed transition that the urban poor appears to undergo, from living in informal settlements to owning formal housing in due course. This process, and associated research issues, have been identified by a number of housing scholars over the past five decades, most notably: Turner (1967, 1968b) as progressive development in squatter settlements; Lim (1987) as multi-step transition through housing submarkets; Payne (2001) as a range of continuum tenure categories; and, Payne, Greene and Rojas (2008) as the incremental construction of low income housing, among others.[11] Building on past and recent scholarship on the provision of urban poor housing, this thesis explores the same phenomenon in Davao City, Philippines,[12] as a particular case study. From the perspective of architecture, the housing phenomenon is related to various socio-spatial processes in low income settlements. Thus, housing, and the formation of urban

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[11] A detailed review and discussion of scholarship on provision of housing for low income sector is found in the succeeding Chapters.
[12] Davao City, as the case study area is introduced in Chapter 6, Section 3.

settlements in developing countries, in relation to various political, economic and cultural factors is discussed across disciplines of urban planning, governance and policy making, among others. Despite the fact that similar low income housing issues can be identified all over the world, generally, in Asia, Africa and Latin America, there is a need to conduct a study in a specific city in the Philippines. This thesis seeks to explore the uniqueness of low income housing in Davao City, in relation to the housing and urban policies (both national and local) that govern it,[13] economic conditions, and the agency of the people acting largely as self-builders in proactive response to these political and economic factors. Thus, it is hoped to provide a clearer understanding of low income housing, in order to formulate an enabling policy framework in the particular case of the Philippines, which may then be compared with cases in other developing contexts.

1.7   Scope and limitations

This thesis generally covers low income housing ranging from urban poor housing in squatter settlements to completed socialised housing projects,[14] in Davao City, Philippines. In order to achieve the main aim, the study was conducted based on detailed *in-situ* analysis of urban households and settlements, which were recipients of housing and tenure assistance from the government and NGOs, including self-help housing initiatives by the urban poor themselves in progressive settlements. However, when it came to the selection of household and settlement cases, this study was limited to those which were accessible during the fieldwork from February to April 2014, recommended by both government housing agencies and NGOs who also coordinated access to the study areas.[15] Primarily, there remains an ambiguity in the definition of informal housing and settlements. Considering the absence of complete and reliable census material focusing on this type of housing, statistical sampling of housing and settlement cases was not made feasible, thus, sample cases were selected through convenient sampling. Furthermore, analyses, results and discussions of this thesis are based on the data collected, which is representative of housing and settlement cases in Davao City, Philippines.

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[13] The then Davao City Mayor, and now newly installed Philippine President Rodrigo Duterte, reiterated his plan to prohibit demolition of informal settlers without relocation site (Sabillo 2016).
[14] Standards for development of socialised housing in the Philippines is found in *Batas Pambansa* (BP) 220. See, http://www.chanrobles.com/bataspambansa/bataspambansablg220.html#.V5MD9Lh97IU.
[15] For details of fieldwork and selected urban settlement and household cases, see, Chapter 6, Sections 4 and 5.

1.8   Definition of terms

Developed countries

These include countries 'with a lot of industrial activity and where people generally have high incomes',[16] particularly, the United States, the United Kingdom, and Australia, for example.[17]

Developing countries

These include countries 'with little industrial and economic activity and where people generally have low incomes'.[18] Further qualifications of these countries covered in this thesis, particularly, the Philippines, were based on the list from Australian Government, Department of Foreign Affairs and Trade.[19] Moreover, the use of 'developing countries' is synonymous to the terms: 'modernising countries' used by Turner (1967, 1968a); 'Third World countries' used by Davis (2006b); and, 'Global South' used by Bredenoord, van Lindert and Smets (2014).

Informal housing

This refers to housing structures that are not built in accordance with the building code, generally, located in informal settlements.

Informal settlement

This refers to housing settlement with illegal land tenure, and to sites that are not developed in accordance with government standards. This term is oftentimes used interchangeably with slum and squatter settlement, however, the use of 'informal settlement' places emphasis on the legality/illegality of tenure and site development.

Formal housing

This refers to a housing structure which complies with the building code, generally, located in completed housing development projects, and in formalised urban settlements.

Formal settlement

This refers to housing settlements with legal land tenure and developed in accordance with government standards. Generally, it includes completed housing development projects and urban settlements that are designed and planned by the relevant authority.

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[16] Source: Cambridge Dictionary, http://dictionary.cambridge.org/dictionary/english/developed-country.

[17] For further reference on country classifications and difference in the definition between developed and developing countries or economies, see, United Nations (2015), World Economic Situation and Prospects 2015, http://www.un.org/en/development/desa/policy/wesp/wesp_archive/2015wesp_full_en.pdf

[18] Source: Cambridge Dictionary, http://dictionary.cambridge.org/dictionary/english/developing-country.

[19] See, https://dfat.gov.au/about-us/publications/Documents/list-developing-countries.pdf

Urban poor

Generally, this term, refers to the low-income population who settled in informal settlements and who qualified to access government and NGO housing assistance, which is used interchangeably with 'squatters'.[20] In the Philippines, for example, urban poor associations are required to have certification from the Philippine Commission for the Urban Poor office to define the legitimacy of their status and to qualify housing programmes.

Slum

This refers to an urban district with housing units which have deteriorated over time and which do not meet the minimum legal standards in terms of their construction as well as their perceived negative physical characteristics. This term is oftentimes used interchangeably with informal and squatter settlements, however, the use of 'slum' emphasises the desperate deterioration of buildings and site.

Squatter settlement

This refers to housing settlement invaded and illegally occupied by informal settlers, generally, with housing structures, mostly, in the form of simple shacks, or made of recycled materials. This term is oftentimes used interchangeably with slum and informal settlement, however, the use of 'squatter settlement' places emphasis on the extreme nature of illegal occupation of informal settlers and the precarious condition of housing and settlement.[21]

1.9   Structure of the thesis

This chapter has introduced the background to the study, the research questions, aims and method, the significance of this research project, and an overview of the methodology. This section outlines the two parts of the thesis. Part A includes Chapters 2, 3, 4, and 5. This part comprises a comprehensive review of literature related to informal housing in terms of phenomenon, policy, and citizen participation, and the theoretical framework. Part B includes Chapters 6, 7, 8, 9, and 10, and refers to the detailed analysis, presentation of findings, discussion, summary of findings, conclusions, and recommendations of the case study in the context of the body of knowledge developed in part A.

Chapters 2, 3, and 4 present the literature review and provide the theoretical framework for the case study. Chapter 2 discusses the historical and theoretical context of housing and squatter

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[20] See, Berner, E 1996, 'Legalizing squatters, excluding the poorest: urban land transfer programs in the Philippines', http://nbn-resolving.de/urn:nbn:de:0168-ssoar-423461

[21] More detailed definitions of slum, informal and squatter settlements are presented in Chapter 2, Section 3.2.

settlements focusing on the works of John Turner as the point of departure. Furthermore, the chapter discusses the theoretical significance of informal housing in the context of the developing urban environment, and the context of squatter settlement in terms of the theory of vernacular architecture. Finally, the chapter discusses urban poor housing and squatter settlement in the context of urban planning focusing on the process of urbanisation in developing countries.

Chapter 3 discusses housing policies and programmes in the international context and the experiences in the developing countries of Asia, Africa, and Latin America. The chapter focuses on the Philippines in terms of its historical and political development in relation to housing and urban governance. The chapter concludes with a discussion on the shifting paradigms in policy making in the Philippines in relation to international trends and ideologies. The discussion implies an emerging approach in the twenty-first century characterised by decentralised housing policies, localised implementation of housing programmes, and the critical importance of citizen participation in the search for sustainable urban development.

Chapter 4 discusses the concept of citizen participation in theory and practice in the disciplines of urban planning and architecture. The chapter focuses on the development of citizen participation in the provision of low-income housing in the Philippines in relation to the political development of the country and in relation to aspects of Filipino culture in the study area. Furthermore, the chapter discusses citizen participation with the widening role of NGOs to mobilise civil society, and presents the institution of Philippine-born NGOs as examples. Finally, the chapter ends with critical reflection on the emerging role of architects as facilitators in the provision of housing by the communities themselves, in the post-modern way of thinking.

Chapter 5 presents the theoretical framework developed for this thesis. Primarily, the chapter highlights the key concepts discussed in Chapters 2, 3, and 4 and presented in the following manner: from the ideology of Turner in the 1960s to emerging housing initiatives in the twenty first century; the relationship of urban poor housing with the theory of vernacular architecture and the emergence of a human ecological perspective; and, the shifting paradigms in housing policy from traditional to participatory in nature. These key concepts are evaluated and discussed to identify the gaps in the existing body of knowledge. Finally, based on the critique of a positivist approach, the postmodernist approach of 'social constructionism' is set as the theoretical perspective which frames this housing research.

Chapter 6 presents the research methodology. In detail, this chapter explains the research paradigm, the qualitative research strategy, the case study approach, and the research framework. This chapter also explains the process of obtaining research ethics approval from The University of Adelaide Research Ethics Committee wherein detailed research methods as the basis for the fieldwork is explained further. Finally, the chapter ends with an explanation of the limitations and the process of selecting the housing and urban settlement cases for the study, and presents their respective profiles.

Chapter 7 presents the results on the classification of urban households and their transition from informal to formal status. In detail, this chapter presents the process of classification and description of the different types of households identified in the study. Furthermore, this chapter presents the movement of urban inhabitants from one household type to another. Finally, this chapter ends with the discussion on how an informal household or housing type transforms from informal to formal status in the course of development, and how householders who initially lived in informal housing can own formal housing in due course.

Chapter 8 presents the results on the provision and incremental construction of housing in the low-income sector. In detail, this chapter presents the self-help provision of living spaces, the incremental construction of housing units, the sample housing structure representing the different housing types, and the descriptive housing preference of urban inhabitants. Finally, this chapter ends with the discussion on the theoretical evolution of urban poor housing and the manner of their incremental construction to become formal housing in the form of permanent architecture in the course of development.

Chapter 9 discusses the socio-spatial processes in urban settlements in the case of cities in developing countries. Based on the theoretical framework developed in Chapter 5, in detail, this chapter discusses the research results in the relation to the phenomena of the multi-step transition of housing from informal to formal status, the incremental construction of housing in progressive urban settlements, the hypothetical evolution of informal housing to become part of the permanent urban landscape, and the progressive form of urban settlements. Furthermore, this chapter discusses various factors (social, political, economic, and cultural) influencing the provision of housing in a developing country.

Chapter 10, as the final chapter, synthesises the entire thesis. This presents the summary and conclusion, and recommendations for policy and future research.

PART A: Informal Housing: Phenomenon, Policy, and Citizen Participation

Chapter 2: Informal Housing and Urbanisation in Developing Countries

2.1 Introduction

Squatter settlements in many developing countries have grown enormously due to the lack of affordable housing in the city centre. The failure to keep pace in the provision of affordable housing is coupled with rapid urban migration, over-population in areas with proximity to work, and urban poverty. Consequently, the development of informal housing and settlements provides a solution to the shelter needs of the urban poor who migrated to the city in search of a better livelihood. However, from the perspective of a modern planning paradigm, squatter settlements are often seen as indicators of sickness in a healthy city[1] because of their perceived negative impact on the urban environment. In the case of Montego Bay, Jamaica for example, the environmental costs of informal settlements comprise, but are not limited to, the poor quality of infrastructure, including paved roads, piped water, sanitation, and garbage disposal (Ferguson 1996). In comparison with similar cases in other developing countries, these infrastructure problems threaten the community's health, and the main economic base, such as the tourist trade in the case of Montego Bay.

The deleterious relationship between urban poverty and the poor quality of the urban environment has prompted a number of governments to implement policy interventions. Recently, the most important breakthrough in urban anti-poverty programmes in developing countries is the rejection of 'the myth that poor men and women are relegated to the economic, political and social fringes of their societies' (Leonard & Petesch 1990, p. 37). These programmes place more importance on the role of the urban poor in informal urbanisation. Furthermore, the role is seen as a positive one and it is argued that the government should invest less on housing, but more on public services, because the poor can find ways to build their own home. Despite the informal character, continuous household income prompts the urban poor to improve their houses incrementally by replacing inferior products with better materials, and adding rooms and other living spaces. Parallel to this case, Pugh (2000, p. 325) argues, if well done, squatter settlements can present a catalyst for sustainable improvement and state-assisted regeneration leading to sustainability in social, economic, financial, and

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[1] The mushrooming of slums and squatter settlements is directly related to poor urban sanitation, high crime rates, and degradation of urban districts.

environmental terms. Building on this concept of 'enablement',[2] which emerged in the late 1980s, Rahman (2011) places emphasis on spontaneous building and sees this as a productive process that could be exploited to bring a viable solution to the housing crisis. In this process the respective government's role can to shift away from being the 'provider', 'such enablement can bring together technical know-how, a broad inclusive participatory approach among residents from all strata, capacity of development agencies, use available resources, and recognise and define responsibilities of all stakeholders' (Rahman 2011, p. 151). More recently, informal settlements have been viewed as 'slum of hope', the prevalent view of UN-HABITAT (2006, 2008), in contrast to a 'slum of despair' perceived in areas which were once well-developed urban districts. From this shifting perspective, the emergence of informal housing and settlements in many cities in developing countries can be viewed as a progressive social and economic environment, which has been a key part in the formation of cities. To view this as a potential solution to the escalating housing shortage in the developing world, this chapter discusses the phenomenon of informal housing in developing countries in the disciplinary context of architecture and urban planning.

2.2   Historical and theoretical context of housing and squatter settlements

Informal housing has always been present in the formation of cities and civilisations, and it has escalated since the industrial revolution. It is not surprising that slum and squatter settlements are not being absorbed into the formal economies. In the case of Brazil and India, for example, many slum dwellers are second-generation residents, and not recent immigrants from rural areas in search for better livelihoods in the city (Buckley and Kalarickal 2005). In the case of Western Europe for example, industrialisation in the late eighteenth and early nineteenth centuries resulted in the 'migration of thousands of people into cities, the creation of slums with their appalling housing conditions', hence, 'the social question' emerged (McNelis 2014, p. 1). At the start of the twentieth century, social housing then emerged in European countries as a 'politically acceptable solution' to the housing problem (McNelis 2014, p. 1). However, later in the twentieth century, the recognition of self-help housing in informal environments has its roots in the 1960s evident in the early work of Abrams (1964)[3] and the seminal work of Turner

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[2] The idea of 'enablement' in the housing sector is well-explained in the publication of Pugh (1994), and its emergence with respect to the trends in housing policy is also found in Pugh's later publications (1997, 2000, 2001).

[3] Abrams' (1964) seminal 'Man's Struggle for Shelter in an Urbanising World', is acknowledged in the publication of AlSayyad (2004) as one of the first books to deal with Third World cities. Citing Abrams's training in Chicago School techniques, it caused Abrams 'to assume the existence of a particular rural-urban continuum and a particular mode by which rural folks were transformed into urbanites'; and, 'argued that the new urban migrants

(1968b).[4] Turner's theories, which derived from his involvement in the squatter settlements of Lima, Peru, were influential world-wide. For example, the 'sites and services' tactic for supporting and managing self-build housing, and the new policy of *in-situ* slum upgrading was advocated by the World Bank in the 1970s (Pugh 2000). With the changing attitudes toward squatter settlements, Ward (1976a; 1976b), explores the issue of squatter settlements, in Mexico City, as a slum or housing solution. In Brazil, Perlman (1976), with her involvement in the favelas in Rio de Janiero, produced the book 'The Myth of Marginality' with a picture of squatter settlement on the steep slopes of Rio hillside.[5] Despite this, there was a radical shift in policy from state assisted housing provision to market oriented approaches to procurement in the 1980s. However, the positive view towards squatter settlements continues to be found in the works of successive urban scholars such as Kellet and Napier (1995), Pugh (2000), Payne (2006), and Rahman (2011), among others. Kellet and Napier (1995) for example, link the phenomenon of squatter settlements with the theories of vernacular architecture. Furthermore, in the twenty-first century, parallels between squatter settlements and vernacular environments are made clearer in the works of Asquith (2006) and Vellinga (2006). Acknowledging these parallels, the housing in squatter settlements in historical and theoretical context is the focus of discussion in this section. The following presents a critical review of the historical context of squatter settlements and the principal theories that pertain to this phenomenon.

2.2.1 Attitudes to squatter settlements in the twentieth century

Informal and self-help urban housing predate historical studies of dwellings and cities. Kellet and Napier (1995, p. 8) claim that 'throughout history, the poor have constructed their dwellings around the urban centres of the rich and powerful'. However, the difference in today's urban scenario is the scale of activity. The present scenario is a result of the massive movement of people from rural areas to rapidly growing modern urban centres. The recent proliferation of squatter settlements in major cities, especially in developing countries like the Philippines, can be traced to the end of World War II (Abrams 1964). In the second half of the twentieth century, the unprecedented migration of people to the cities was beyond the capability of the

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often failed to complete the transformative cycle, and hence, for a variety of structural reasons, became squatters' (AlSayyad 2004, p. 8-9).

[4] Early generation of ideas and theories as a reaction to the realities of squatter settlements in developing countries made by Charles Abrams and John Turner is acknowledged in the publications of Pugh (1997, 2001).

[5] Perlman's book, *The Myth of Marginality* (1976), is acknowledged in the publication of Peatti (1992); and, continued by Perlman (1986). Recently, Perlman (2007) herself revisited her work after three decades and observed the major transformations occurred in Brazil that re-shaped the landscape of urban poverty. One of which, is the replacement of massive favela eradication by on-site upgrading policy.

governments to provide the basic services such as mass housing.[6] As a consequence to land inflation beyond the government's control, formal housing became inaccessible to a large sector of the urban poor, leaving the poor with no choice but to squat, even in high risk areas (Figure 2-1). In contrast to the provision of 'social housing' by the governments of European countries to solve the housing problem in the post-industrial revolution period (McNelis 2014), this recent housing problem is beyond the capacity of the governments in developing countries to solve. Despite this alarming phenomenon, positive recognition of squatter settlements in the twentieth century is associated with John Turner, an architect who worked in the squatter settlements in Lima, Peru, during the late 1950s to the early 1960s. Turner's positive attitude and his persuasive writing became the basis for numerous housing programmes including slum upgrading initiatives and sites and services schemes in the following decades. For this reason, it is important to consider Turner's contributions in the field of housing.

Figure 2-1. Squatter settlements located in high risk areas[7]

Legacy of John Turner

Scholarly recognition of the value of squatter settlements can be traced to the work of John Turner in the 1960s. Turner was an architect who immersed himself in the squatter settlements of Lima, Peru. He is oftentimes associated with William Mangin,[8] an American anthropologist who also worked in Peru at the same time as Turner (Bromley 2003; Kellet & Napier 1995; Oliver 1969). Turner's works are directly related to his experience in Lima, and the Peruvian word *barriada* which means squatter settlement, is used in his articles.[9] Turner's works continue

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[6] The case of Metro Manila, Philippines, is reported in the publication of Pinches (1994), among others, which is discussed in the succeeding chapter.

[7] Source: http://newsinfo.inquirer.net/files/2012/09/buildings.jpg

[8] Mangin observed how the urban poor employed self-help in constructing shelter in an incremental manner, in his publication, 'Latin American squatter settlements: a problem and a solution' (Mangin 1967).

[9] John Turner, as introduced in his seminal publication (Turner 1967), was 'a research associate of the M.I.T. and Harvard Joint Centre for Urban Studies, and a consultant to the United Nations on urban development and housing

to inspire and inform scholars today: Soliman (2012) works on self-help housing policies and related issues in Egypt; Bromley (2003) examines the legacy of Turner's ideas on housing policies in Peru; Mukhija (2001) explores the enabling slum redevelopment in Mumbai; Kellet and Napier (1995) attempt to draw parallels between squatter settlements and studies of vernacular architecture. However, in this context, Burgess (1977, 1978, 1982) has emerged as a staunch critic of Turner's school. In order to appreciate Turner's contribution to the contextual understanding of squatter settlement phenomenon, his ideas will be the focus of discussion in the succeeding paragraphs.

The universal applicability of mass housing standards and models in developing countries is being questioned. Turner (1967) in his seminal article 'Barriers and channels for housing development in modernizing countries',[10] promotes the consideration of 'progressive development' as an alternative to 'instant development'. He argues that the principle of 'minimum modern standards' as the basis for the 'instant development' is based on the following assumptions. Firstly, 'high structural and equipment standards take precedence over high standards' (p. 167) of living. Secondly, 'households can afford to have a larger (above minimum) standard dwelling' (p. 167). Finally, 'the function of the house is, above all, to provide a hygienic and comfortable shelter' (p. 167). Turner assumes that these assumptions may be valid in countries like the United States, but not in developing countries like Peru (or in this case the Philippines). In developing countries, residents in the lower income sector who seek a home in the city tend to follow the model of 'progressive development'. This phenomenon starts with secure land tenure, followed by the development of community facilities and adequate dwelling units, and finally the installation of utilities in that order. However, as Turner argues, what the state provides is exactly the opposite. It starts with a modern but minimum house, followed by some community facilities which are usually constructed at later phases of development, and eventually the transfer of title of the property once the mortgage is fully paid.

The agency behind the progressive form of development posited by Turner is highlighted in his seminal work 'The squatter settlement: an architecture that works' (1968b), where he emphasises the agency of the settler in a squatter settlement. In this case, a squatter is a person who practiced his freedom to invest his life's savings in a dwelling that he creates by himself in the process. In fact, Turner argues that the existence of *barriada* represents the product of

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in underdeveloped countries. His research activities are based on his work for the Peruvian government on urban housing and community development problems from 1957 to 1965' (p. 167).

[10] The term 'modernising countries' used by Turner in his publications (1967, 1968a), is synonymous to 'developing countries' used by Pugh (1994, 1997, 2001) citing Turner's work.

freedom, understood in three ways. Firstly, the freedom to select a place to live in a community and to join a community association as long as there is still enough land available and dues are paid; defined as community selection. Most importantly the member must abide by the rules applying to his/her plot. Secondly, the freedom to budget one's own resources enables the settler to build his/her house in stages, in accordance with his own priorities and availability of funds, once tenure is secure enough to risk investing in a more permanent dwelling. Finally, the freedom to shape one's own environment provides an architectural advantage whereby the dweller can consequently adapt the dwelling structure to his/her changing needs and behavioural patterns. This freedom to manipulate the squatter's own built environment is extended to the construction of the community as a whole.

As described above, the act by individuals in the lower income sector to provide their own dwelling is dominant in the formation of the urban landscape in modernising cities. Despite the attempts to plan the development and improve housing standards in urbanising countries, Turner (1968a) argued that the influence of urban planners carries little weight compared to the dominance of squatters' influence on urban growth. Turner interprets this situation as a 'result of conflicts between government programmes and the demands of the people' due to a 'misunderstanding of the urban settlement process' (1968a, p. 354). In the majority of cases, this misunderstanding often leads government to enforce the minimum modern standards which can worsen the housing condition of the urban poor (Turner 1972a). Thus, there is a need for an alternative approach to the provision of housing that places importance on the agency of the people who will create and live in their own built environment.

The unrealistic minimum standard enforced by governments is characterised as a home lot that is fully installed with modern utilities and infrastructure before it is sold to the future homeowner. This point of view, according to Turner (1972a), defines housing as a noun wherein the term housing is treated as a commodity or product. This means that a government housing agency is responsible for the planning and provision of people's housing needs. In this way, the urban poor are treated as consumers or passive beneficiaries. On the other hand, Turner provides an alternative that is to define housing as a verb wherein the term housing is treated as a process or activity to achieve the human needs for shelter. Housing from this perspective is a process and not an end product. Consequently, the decision-making lies in the hands of the end-users themselves (p. 154). This process-oriented approach to housing emphasises the agency of the inhabitants and their freedoms to choose their settlement, to build and direct the construction of their dwellings, and to use and manage the settlement based on their own practices (Turner

1968b, 1972a). This point of view was revolutionary in the late 1960s and influenced popular approaches to address the problems of housing the urban poor in the twentieth century. However, his conceptual shift presented many challenges which will be the subject of discussion in the succeeding section.

Challenges to John Turner's school

John Turner is widely acknowledged in literature by scholars in the discipline of housing[11] due to his critical views on conventional state housing policy. Conventional approaches include, among others, the Western models of state-subsidised and state-planned social housing. With the insistence placed on high quality standards, housing provision rose in cost and became unsuitable in social terms. Furthermore, Turner argued that the urban poor were being trapped in the culture of poverty. Despite this, the poor demonstrated their energy and intelligence in the use of resources for the effective articulation of their own needs and priorities which is reflective in their provision of housing. That is to say, Turner viewed squatter settlements not as a problem but as a solution provided by the urban poor themselves demonstrated since they began dwelling in a simple shack as the first stage of incremental construction. While Turner's school continues to receive recognition,[12] it has been criticised for 'rationalising poverty and romanticising substandard housing conditions of the poor'. This view was supported by left-wing academics like Burgess (1982 in Kellet & Napier 1995, p. 9). As a consequence, the Turner-Burgess debate came into existence in housing literature.

The emergence of Turner 'as one of the most important and influential writers on Third World housing policies and settlement process' is acknowledged by Burgess (1978, p. 1105). However, Burgess' opposition is based on two key points. Burgess' (1977) first critique of Turner's school which emphasised self-help housing as a new imperialist strategy focuses on two aspects: first, Turner's overall conception of housing; and second, the relationship between existing forms of self-help and all actors in the housing sector including low-income groups, government, and the private sector. Further, Burgess (1982) on self-help housing advocacy as a curious form of radicalism adds to his critique of Turner's concept of the role of the state and the planner in housing policies, and a critical review of Turner's policy recommendations.

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[11] Among other urban scholars in the discipline of housing, includes, Kellet and Napier (1995), Pugh (2000), Bromley (2003), (Harris 2003), and Rahman (2011).

[12] The most popular recognition was from the World Bank's adaptations of theories of self-help developed by Turner in Latin America, associated with William Mangin, demonstrated in the Bank's sites and services and slum upgrading approaches in the 1970s (Pugh 1997, p. 1553).

Turner's conceptualisation of housing as a verb lies at the centre of Burgess' criticism. Burgess (1977) emphasises Turner's misunderstanding of the relationship between the use-value and exchange value, and the denial of the commodity of self-built housing. In accordance with Burgess' critical view towards capitalist economy, he further explains that Turner's concept of housing 'does not consider a number of key actors. Firstly, the transformation of a self-built house into a commodity by the producer himself; secondly, that one (hu)man's use-value can be another (hu)man's exchange value; and thirdly, that a self-built house can be a very different commodity to the various interest groups operating in the market' (Burgess 1977, p. 52). In terms of comparative understanding between autonomous and bureaucratic heterogeneous systems, Turner was further criticised for his treatment of the relationship between all actors in housing provision. In the case of housing provision, autonomous systems are locally self-governing which produce varied standards, but these result in low cost and high use value. On the other hand, heterogeneous systems produce high quality housing with great cost based on hierarchical structures and centralised technology. The elements to build a house include land, tools, materials, skilled labour and management, and an exchange system. Based on this understanding, Burgess challenged Turner's argument that adequate housing solutions come from ordering the elements within an autonomous system and to access them is the function of the central authority. This means that the characteristic of an autonomous system is being user-controlled, and the role of central administration is limited to ensure appropriate access to technologies, land, and credit with the local forms of these elements being left to the people. However, Burgess views that capitalism 'is typified by generalised commodity productions which has as its end the valorisation of capital' (Burgess 1977, p. 54). Thus, Burgess further criticised Turner's view, as 'a function of the degree of heteronomy in its production and the legal framework that regulates this production' that is merely part of the system of capitalism in the petty-commodity production of housing (pp. 54-55). This example of criticism towards Turner's school can be viewed as focusing more on the technological aspect of the system in housing provision for the lower income sector that become popular during the time. Turner's school, even though it emanated from his pro-people paradigm, became influential in the capitalist political economy as implied by the implementation of slum upgrading and sites and services programmes. For obvious reasons, this concerns the activism of left-wing academics further illustrated in the succeeding publications by Burgess (1978, 1982) as an example.

The Turner-Burgess debate has prompted critical debate in the discipline of housing and planning. Conway (1982), for example, seeks 'further understanding of the issues involved,

rather than to resolve differences between ideologies and dogmas' (p. 40), in reference with a reading of Marx as a starting point to debate Burgess' views (p. 40). In addition, Rakodi (1989) partly relates the Turner-Burgess debate while exploring cases of self-help housing in Lusaka, Zambia, and Hyderabad, India. Moreover, the Turner-Burgess debate continues with the recent issues of tenure legalisation. Varley (2002), for example, primarily cites the presentation of Linn (1983 in Varley 2002) on Turner's argument 'that security of tenure would encourage people to improve their housing' that 'led international agencies to recommend property titling as the means to stimulate investment in housing' (p. 449). Varley, on the other hand, presents Burgess' (1982 in Varley 2002) counter argument 'that formalisation would facilitate the penetration of commercial interest into regularised settlements, displacing the original settlers as a result of raiding by higher income groups' (p. 449). This means that such activist's criticism towards speculated dangers brought by capitalist political economy is continuously acknowledged in housing literatures. This review of housing literatures may not go further on the discussion of Turner-Burgess debate. However, the reading from detractors like Burgess provides a deeper understanding of Turner's ideology and its challenges.

Remarks on John Turner's school

Turner's ideology may have been the basis of housing policies and programmes in the past decades but he was not the only architect to have an interest in people's capacity to provide their own shelter. Celik (1997 in Davis 2006a) examines how the French colonial architects and planners Groupe CIAM Alger praised the spontaneous order of the *bidonville* (literally a slum). This type of settlement was praised for the organic relationship between buildings and site and the flexibility of spaces that can accommodate diverse functions and changing needs of the end-users. In addition and in comparison with Turner's view towards housing by the people, Ebenezer Howard 'had no belief in the state' but 'had a belief in the goodness of human nature' (Hughes 1971 in Hall & Ward 1998, p. 191). Half a century earlier than Howard's legacy of sociable cities, 'in the 1830s Edward Gibbon Wakefield had advocated planned colonisation for the poor' (Hall & Ward 1998, p. 12). This scheme that Wakefield promoted in South Australia is associated with Colonel Light's celebrated plan for the capital city, Adelaide (Hall & Ward 1998). These planning approaches may vary in terms of who initiated them, and in what time period and place they were applied. However, they have one thing in common, like the well celebrated Garden City of Howard, these planning paradigms place importance on the role societies in the formation of their settlements.

Turner, furthermore, is not the only urban scholar who is interested in the study of squatter settlements. In the same period, scholars concerned about the issue of informal urbanisation such as Abrams and Koenigsberger (1959 in Abrams 1964) observed that squatters in Davao City, Philippines, 'have taken possession of the whole parkway area running from the city hall to the retail centre' (p. 13). Abrams (1964) further explained, based on observation in major cities in Manila, Cebu, and Davao that the massive scale of squatting in the Philippines has its roots in the period following World War II. The squatters managed to defend their conquered ground against the threat of eviction by uniting with each other. For personal security, private land owners often compromised to offer their land for cheaper rent. Consequently, in some cases, squatters sublet their dwellings to make squatting a new form of business and an alternative access to shelter in the Philippines. Apart from Abrams, Koenigsberger has focused on issues relating to squatter settlements in Third World countries at a time when governments began to consider the existence of squatter settlements in a non-systematic way. One example of Koenigsberger's involvement is his role as an adviser to the National Housing Authority of the Philippines in relation to the recruitment and training of staff needed to implement the country's housing projects in the 1970s. During this period, the prominent housing priority in the Philippines was to house more than twenty thousand squatter households in the Tondo Foreshore and Dagat Dagatan areas of Metro Manila (Koenigsberger 1979b, p. 152). Like Turner, Koenigsberger also believed that the planning profession 'has little or no power to influence development action in the poorer of the Third World nations' (Koenigsberger 1983, p. 49). As such, Turner (1972b) promoted the re-education of professionals highlighting the need to be socially aware in the practice of architecture and planning. In the same way, Koenigsberger, based on his own experiences in housing for the urban poor in different developing countries, advocated the planner's new role as 'that of promoter and leader, rather than that of controller of development' (Koenigsberger 1983, p. 49). Thus, Koenigsberger's recommendation[13] to re-educate architects, planners, and administrators is comparable to Turner's recommendation.

In the decades following World War II, Turner emerged as the most influential writer on housing in developing countries. In the 1960s as an advocate of self-help, he effected new thinking about housing. Harris and Giles (2003) argued that Turner's ideas influenced the World Bank to initiate sites and services programme in the 1970s. They maintained that this programme implemented

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[13] Apart from Koenigsberger's works cited, this is also specified in the publication of his personal account on the need for special education and training of the key players of human settlements (Koenigsberger 1979a).

between 1972 and 1980s was one of the major phases in the evolution of international housing policy, after the post-war public housing, and prior to the market oriented phase of the 1980s. In contrast, Turner's ideas on self-help, which favoured international donor agencies such as World Bank, received criticisms from left wing academics such as Burgess. Furthermore, the implementation of aided self-help projects, as observed by Koenigsberger (1986), may only have made a small contribution to eliminate the wide housing deficit in Third World countries, 'but they were a small step in the right direction' (p. 30). This issue of informal housing in the lower income sector of society has continued to challenge urban scholars. Beyond the challenges of the market oriented policies since the 1980s, recent housing and urban policies place greater importance on people's participation through the institution of community-based organisations and assistance from NGOs. With the UN's emerging attitude towards squatter settlement as a 'slum of hope' (UN-HABITAT 2006, 2008), these recent trends can be traced, in no small part, to Turner's work in which case it should be acknowledged that he is not alone in the approach he advocated towards informal urban developments.

2.2.2 Dwelling: phenomenology

The establishment of a squatter settlement in the city in our present time has a similar process of evolution as the establishment of a primitive village in the long history of human settlement. Unwin (1997) illustrates this phenomenon with reference to a prehistoric family who travels through the landscape and decides to stop for the night and light a fire. This family may stay permanently or just for the night but they have established a place to settle. For the time being, the fireplace may be the centre of their lives but in time, there will be subsidiary spaces which will be built to accommodate all their activities. From the initial choice of a site to the erection of a shelter, the construction of a house begun. Thus, 'they have begun to do architecture' (p. 14). A similar process happens in our present time when a family from a rural area who is attracted to economic opportunities in the city decides to migrate. At the start, this family will look for a site that is accessible to their place of livelihood where they can build an initial dwelling comprising a simple shack. Like the prehistoric family, they may stay permanently or temporarily but they have established a place. For the time being, their family life may be centred on their primary urban livelihood but eventually when they do more business in the city, subsidiary dwelling spaces are added as required. The initial livelihood may be in the form of informal or transient urban labour but the family members may find various opportunities which the city environment can offer to them. For example, the flow of investment into the city centre provides employment opportunities for adults and access to educational services can improve the

opportunity for qualifications and, thus, the children's prospect for employment when they grow up. These various opportunities, among others, and the incremental development of the economic status of these urban migrants can also be reflected in the incremental construction of their dwellings to accommodate their various and changing needs. Just as the prehistoric family paused in the landscape, so too, the new urban migrants selected a site in the city to settle where they initiated their own informal shelter; they have also begun to 'do architecture'.

The concept of dwelling requires reflection here; it means more than a roof to provide shelter. Norberg-Schulz (1985) articulates the concept of dwelling as follows. Firstly, dwelling is where one experiences life in various possibilities to meet others for the exchange of products, ideas, and feelings. Secondly, it is where to set common values and come to an agreement. Finally, it is a place to be oneself in one's chosen world and relates to the distinction between private and public. The creation of this basic work of architecture is done by more than one individual. The collective by-product of architecture is operated by and for a group of people based on their needs and desires, beliefs and aspirations. These people are the ones who do things and whose activities have practical requirements in the world around them (Unwin 1997). The developing needs of the inhabitants are reflected in the evolution of a dwelling from a simple shack in a squatter settlement to a more sophisticated house in a permanent urban development. Such evolution is extended towards the creation of a residential neighbourhood, a city, or an entire developing urban environment. The creation of built environments based on the individual and collective values of those who lived and created them establish the identity of a place. No two places have the same identities, they can be defined at the personal and social levels, and between sub-cultures created within the society. The culture of self-help housing created by the informal sector of a society is oftentimes neglected by the formal planning paradigm. Nevertheless, the informal housing in a squatter settlement represents the same concept of dwelling presented above. Despite the complexities that informal housing brought in the developing urban environment, it is important to note that such a phenomenon is worth further examination. One way is through understanding the concept of vernacular architecture in relation to the organic form of development in slums and squatter settlements.

2.2.3 Dwelling: vernacular perspective

Squatter settlements are mostly viewed in terms of their informality, rather than the built form of the housing or the social processes that formed it or is formed by it. However, Kellet and Napier (1995) explore both the product and the process which are part of the dynamics of spontaneous settlements and of the inhabitants who created them and settled within them. In addition,

parallels can be drawn between the conceptualisation of vernacular architecture and the characteristics of spontaneous settlements of modernising cities by theorists including Roderick Lawrence, Amos Rapoport, Paul Oliver, David Stea and Mete Turan. For instance, a squatter settlement like traditional vernacular architecture is traditionally constructed rather than academically inspired (Rapoport 1988). This type of settlement housed the ordinary activities of the common people (Lawrence 1982). It works well in terms of the culture within which it is built, the aesthetics, in terms of aspects of environmental quality (Rapoport 1988). Squatter settlements are built based on inherited knowledge, collective wisdom, and society's experience, and comprises generally accepted norms which are appropriate to its built environment (Oliver 1990). Finally, squatter settlements are characterised by the fact that they are built by a transitional society in the process of evolving from one mode of production to another (Stea & Turan 1990). In other words, similar characteristics which define traditional vernacular settlements can be observed in informal housing situated in spontaneous settlements of modernising cities.

Kellet and Napier acknowledge John Turner's reinterpretation of 'simple shacks in squatter settlements as the first stage in an incremental process of construction' (1995, p. 8). Furthermore, Kellet and Napier citing Stea and Turan (1990 in Kellet & Napier 1995, p. 14) state that the seeming disorder of settlements may be due to the fact that the observer does not understand the underlying system operating within the settlement. This visible disorder in informal settlements may be part of the ongoing transition from one mode of production to another. In cities with developing economies, these dynamic transitions in progressive urban settlements reflect the agency of the people who shaped their housing environment in relation to various social factors. Notably, theorists in the discipline of vernacular architecture moved away from viewing only the artefacts and paid attention to the people who shaped, use, alter and whose behaviour is shaped by the form. Rapoport (2006) for example, proposes to move from a natural history stage to a problem-oriented stage. This makes it possible to regard vernacular environments, including spontaneous informal settlements, as a laboratory to interpret the wide range of human responses to various factors affecting their way of living.

The theoretical implications of parallels between squatter settlements and vernacular architecture are made clearer in recent scholarship within the same discipline. Vellinga for instance, includes squatter settlements as one of the categories of building that tends to be ignored in the field of vernacular architecture studies (2006, p. 88). Despite the fact that vernacular architecture still comprises the majority of buildings in the twenty-first century, it

remains marginal in the purview of most design professionals and policy makers. Building on comprehensive work of Paul Oliver, Asquith and Vellinga (2006) emphasise the value of learning from traditional knowledge, skill, and expertise to create appropriate and sustainable built environments. Furthermore, according to Asquith, 'once the vernacular is seen not as static building form, but as constantly evolving, reacting to changes in the communities that shaped its form, it will become higher on the agenda in architectural education' (2006, p. 129). It is important to note the possibility of formulating new frameworks to understand housing and the built environment in the context of placing importance on the people who created them. The informal architecture of squatter settlements is self-built by the inhabitants by means of incremental construction. This view may be neglected by formal paradigms in architecture and urban planning. However, the incremental form of architecture in informal environments produced by the inhabitants, needs to be understood for effective housing interventions which better fit in developing countries.

2.3   Housing and squatter settlements in the context of urban planning

The most critical parts in the urbanising world are in the cities of developing countries.[14] Contrary to the conditions of highly developed countries, developing countries are characterised by the lack of urban infrastructure due to poor industries and weak economies. Despite these unstable economic conditions, the urban poor thrive in cities due to the opportunities to earn a living. However, with the lack of urban services including housing, in most cases, the urban poor are left with no choice but to dwell informally. The mushrooming of squatter settlements in cities of developing economies is popularly viewed as a disease compromising the health of cities. On the contrary, the phenomenon of progressive development observed in spontaneous informal settlement is positively viewed in the work of John Turner and his successors. Turner's view towards the role of informal settlements in developing countries was influential in the works of later urban scholars including Payne in Delhi, India, and Ankara, Turkey, in the 1970s (Payne 2006), and Kellet in Santa Maria, Colombia, in the 1990s (Kellet 1999, 2005). In the early twenty-first century, informal settlements are better recognised as examples of dynamic urban phenomenon that it is important to understand as developing countries strive for sustainability. Pugh (2000), for example, emphasises the resource and labour efficiency in the production of informal architecture in squatter settlements. Moreover, Rahman argues that self-built incremental, in-situ upgrading of informal settlements is 'a form of affordable and hence

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[14] As cited in Chapter 1, Section 2, this is being implied in the report of UN-HABITAT (2008, p. 11), considering the fact that the urban population in the developing world is ten times the total increase of the urban population in the developed world.

sustainable housing for the low-income groups in the developing countries' (2011, p. 144). Informal settlements, in general, share the same characteristics. Primarily, they are independently conceived and constructed by the occupants themselves. Secondly, occupation and construction activities take place simultaneously. Finally, such settlements are 'in a process of dynamic change and demonstrate considerable ingenuity and creativity within limited resource constraints' (Kellet 2005, p. 22). Despite being neglected in the formal planning paradigm, urban poor housing in informal environments requires detailed understanding in order to provide effective urban planning interventions, and concomitant policy decisions, which are more appropriate and sustainable in developing countries.

2.3.1   *Informal urbanisation in developing countries*

Informal urbanisation can be associated with unequal opportunities between different strata in a modernising society. Upper classes are being created because of the transfer of wealth away from the poor, not least, 'through the cutting of subsidies and the privatisation of public assets in Third World countries' (Davis 2006b, p. 7). The exclusion suffered by the urban poor can be directly related to the percentage of poverty in developing countries. As a consequence of unequal access to government services and other forms of urban development, the less-privileged members of a society have no way to house themselves but in slums and squatter settlements which is the only place they can afford to live. As a result, the phenomenon of informal urbanisation is inevitable in major cities in developing countries.

Reiterating the same issue raised in the earlier section of this chapter, present day informal urbanisation escalated after World War II. In the Philippines, for example, the phenomenon is observed by Abrams (1964) in major cities where informal settlers managed to defend their conquered grounds against the threat of eviction until squatting became a new form of business. Informal settlements were seen as a transitory phenomenon which was expected to fade away with economic growth. However, according to Smolka and Larangeira (2008), this assumption proved to be mistaken because informal settlements did not disappear with economic growth and modern urban development. Instead they grow in number, size, and density of land occupation in cities in developing countries. The increase in urban population is due to natural growth in urban areas combined with the influx of rural-urban migrants in search of economic opportunities offered by a developing economy. As half of the world's population turns urban in the first decade of the 21st century, this presents an increasingly acute challenge for urban scholars and planners now.

Countries with groups with a predominantly low to middle income such as those in Africa, Asia, and Latin America are at the forefront of challenges in relation to this 21st century urban phenomenon. The pros and cons of this urban phenomenon continues to present many challenges and continues to stimulate debate for urban scholars, policy-makers, and the general public. Exponential urbanisation can be viewed as harmful to the development of modernising cities. This view reverberates in negative images of impoverished conditions and slum growth. However, urban development, on the contrary, is also viewed as essential for economic and social development. The concentration and the proximity of urban dwellers makes it easier and cheaper to provide basic urban services and infrastructure. Urbanisation is a prime motive for socio-cultural change because cities provide opportunities to access diverse resources and knowledge in a wide range of areas (Martine et al. 2008). Furthermore, Martine, and others, argue against fallacies that the poor are a marginal minority in urban centres and a drain on the urban economy. The fact is that the urban poor make up a large proportion of the urban population in developing countries. Despite their numbers, the urban poor are often invisible to policy-makers and their condition is viewed as marginal and an often temporary component of life thus their needs are rarely prioritised in planning and policy making. This commonly held view represents a misunderstanding of the role of the informal sector in urban and economic growth. Nevertheless, the unaccounted urban employment due to informal activities plays an important role in the growing economic conditions of developing countries.

The informality of low income urban settlements often contravene building codes and zoning regulations because most of the paradigms employed in urban development often neglect the very real existence of the urban poor and their needs. There have been attempts from both public and private sectors but their solutions have often done more harm than good from the perspective of the urban poor. Thus, according to McGranahan, Mitlin, and Satterthwaite, 'conventional approaches to improving informal settlements do not need to be expanded, they need to be transformed' (2008, p. 78). This means that further solutions should be centred on the communities to promote local ownership, encourage incremental improvements, and support alternative forms of community organisation of the urban poor. It has been observed that despite being marginalised in formal planning paradigms, in the context of informal urbanisation the urban poor strive to succeed amidst the challenges of developing economic conditions. One example of this effort is the way in which the urban poor provide their own shelter in the form of self-help housing and strive to own formal housing units in the course of development. Informal urbanisation may be viewed as a transitory phenomenon in developing

countries but since this phenomenon has been part in the history of civilisation up to the present modernisation of cities, this needs further and deeper scholarly attention at a point in time when the population of cities will outstrip the population elsewhere.

2.3.2   Slums and squatter settlements: an overview

The terms 'slum' and 'squatter settlement' are most often used interchangeably. The two different terms may have different technical definitions, but in some cases the use of the term slum matches definitions of squatter settlements. Referring to Lindfield and Steinberg's broad definition, slums are 'considered to be areas with a significant incidence of poverty and poor housing conditions' (2011, pp. 9-10). Furthermore, poor housing conditions are defined according to poor structural condition, overcrowding, lack of light and ventilation, deficient infrastructure, the presence of environmental risk, and the presence of pollution of any type. According to Durand-Lasserve (2006), areas commonly designated as 'slums' in the literature refer to three main types of settlements: 'squatter settlements on public and private land; illegal commercial suburban land subdivisions on private or customary land; and, occupation of overcrowded, dilapidated buildings in city centres or densely urbanised areas' (Durand-Lasserve 2006, p. 2). This broad definition of slums also pertains to the characteristics of squatter settlements. In the latter case, poor housing conditions are also linked to the informalities of both land tenure and construction technology.

A provisional definition of slum was prepared at an Expert Group Meeting by UN-HABITAT and its partners in November 2002. In this meeting, 'slum' was defined as 'a settlement in an urban area in which more than half of the inhabitants live in inadequate housing and lack basic services' (UN-HABITAT 2006, p. 21). Furthermore, a slum household is defined as 'a group of individuals living under the same roof in an urban area who lack one or more of the following conditions: durable housing; sufficient living area; access to improved water; access to sanitation; and, secure tenure' (p. 21). With reference to the definition of slums by UN-HABITAT, there are one billion people living in slums globally (Davis 2006b, p. 7). Some slums may offer better living condition than others. The magnitude and different degree of deprivation is measured according to how many of the abovementioned shelter conditions are missing in a particular slum settlement. Based on this criterion, slum households are classified into the following categories: 1) moderately deprived with one shelter deprivation; 2) severely deprived with two shelter deprivation; and, 3) extremely deprived with three or more shelter deprivations (UN-HABITAT 2008, p. 93). In the Philippines, for example, the lack of durable housing is the main shelter deprivation (p. 101).

A squatter settlement can be further classified based on the tenure status associated with its inhabitants. According to Abrams, the eight different types of squatter tenure are as follows (Abrams 1964, pp. 21-22). First, an 'owner squatter' builds and lives in his/her own shack. Second, a 'squatter tenant' pays rent to another squatter. Third, a 'squatter holdover' who is a former tenant who ceased to pay rent and in which case the landlord fears to evict. Fourth, a 'squatter landlord' who has rooms or a shelter he/she offers to rent. Fifth, a 'store squatter or occupational squatter' who operates a business but does not pay taxes. Sixth, a 'semi-squatter' is one who ceased to be a squatter and becomes a tenant. Seventh, a 'floating squatter' lives in a dwelling made up of waste/recycled materials that is floated or sailed into the harbour. Eighth, a 'squatter co-operator' is part of a group that shares the same protection against intruders which may be public or private. Abrams categorisation of informal settlements, which focuses on the tenure status of the inhabitants, can provide a deeper understanding of the agency of the people who settled and created these settlements. Furthermore, Durand-Lasserve and Selod (2007, p. 106) distinguish two main types of informal settlements based on the type of development. The first type is unauthorised commercial land developments, often on private lands illegally subdivided by informal developers and sold as plots. The second type includes squatter settlements on public and private lands illegally occupied against the will of legal land owners.

Technical definitions of slum and squatter housing can be found in a paper by Lim (1987, p. 178) whereby housing is defined in relation to the neo-liberal market oriented paradigms of the 1980s and classified into different markets and submarkets. In this case, a slum housing market 'consists of units built on legally owned or rented land but which do not meet the legal minimum standard for physical characteristics' (Lim 1987, p. 178). On the other hand, a squatter housing market 'violates both the legality of land occupancy and physical standards' (Lim 1987, p. 178). Slums, according to this definition may include those built environments with legal land tenure and with buildings which were previously constructed passing the minimum standards but may have dilapidated over time. This physical condition as an implication associated with various social factors affecting the urban environment is characterised as a 'slum of despair' (UN-HABITAT 2006, 2008). In comparison, squatter settlements may be associated with the informality of both land and building structure but from the emerging views such as that of the UN-HABITAT, it is viewed as 'slum of hope'[15]. It has been observed that informal housing found in spontaneous settlements evolves into more formal housing in the course of urban

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[15] Reiterated in reference to the series of publications of UN-HABITAT (2006, 2008).

development in cities in developing countries. Thus, it is a positive indicator of an emerging community and a concomitant built environment as an initiative by the people themselves that requires attention by policy makers and urban planners.

2.3.3 Role of informal urban environment in the formation of cities

Western cities, especially European cities, tend to be viewed as products of order and organisation. But this view is incomplete. In Berlin for example, 'the permanent city was not exclusive and informal dwellings were an intrinsic part of the urban fabric' (Urban 2013, p. 222). This is evident in the unplanned self-help housing in Berlin on allotments originally intended as garden plots for growing plants. Urban observes that these informal settlements may have developed in different social contexts from Asia, Africa, and Latin America but they are similar in terms of the following characteristics. They are built in violation of existing laws and regulations, they housed the poorer sector of the population, they were constructed using makeshift materials, they comprised multi-functional spaces, and they were built in contrast to the surrounding modern city environment. In a similar way to informal settlements in developing countries, allotment settlements in Berlin were also viewed negatively by the authorities and they have been managed according to ambiguous state policies. Nevertheless, the dwellers in the allotments described their daily lives in positive terms. They continued to work on upgrading their dwellings and campaigned for legalisation of their settlements (Urban 2013). This is a similar scenario in the case of cities of developing countries that teach us the value of freedom and opportunities in marginal urban environments.

Modern cities may evolve from a context of informal urbanisation or organic settlement patterns. However, state regulations in urban planning as a tradition, which effectively worked since the nineteenth century in Berlin for example, are necessary for the order of urban spaces. As a matter of fact, informal settlements in the allotments in Berlin, as observed in the twentieth century, are described in the following manner. Primarily, there was no spontaneous build-up of uninhabited land. Allotment dwellers had rental agreements with the landowner and filed applications for building permits even if they ended up building without being granted with permits. They were cared for and controlled by state authorities even if they were technically regarded as squatters. Their dwellings may not be considered permanent ones but they were registered with the police (Urban 2013, p. 243). This positive scenario in Berlin may present a comparatively harmonious integration of informal settlements within the planned city. However, there is still a challenge in the way the informal sector is viewed as an asset for stability or perceived as a threat to the well-being of modernising cities in developing countries.

Squatting may be an alternative for poor migrants in the city to house themselves but this also implies economic challenges. Berner (1997 quoted in Davis 2006a) in his study of Manila points out that squatting is not necessarily cheaper than buying a home lot. What makes squatting attractive to the urban poor is the potential for incremental construction that will spread out the cost over a period of time, as well as the location of the allotment in relation to the source of livelihood. Furthermore, 'squatters trade physical safety and public health for a few square metres of land and some security against eviction' (Davis 2006a, p. 121). Not all those who live in slums are really poor. UN-HABITAT (2008) observes that many people who have risen from income poverty choose to continue to live in slums. Their reasons range from 'the lack of affordable housing in better parts of the city to proximity to family, work and social networks' (UN-HABITAT 2008, p. 115). Understanding these spatial dynamics from shelter deprivation to incremental improvements to informal settlements is necessary because this is where modern cities in developing countries are formed. This understanding is fundamental to improve the lives of the urban poor and to build urban harmony which is vital for the sustainability of the urban environment.

Squatter settlements, despite of the informality of both land tenure and the poor physical conditions are viewed positively. It is observed that informal housing and settlements have long played a role in the historical of formation of modern cities. This phenomenon has been regarded as a transitory phase that is super ceded at the height of economic and urban development. However, as shown above, it can be identified as on ongoing phenomenon intrinsic to the process of urbanisation. Thus, urban informalities which has been regarded as a temporary or an integral component in the formation of cities, should be considered as an ongoing phenomenon for consideration in the policy making and planning of cities.

2.3.4   *Informality in the context of urban planning and policy making*

Any planning activity involves the allocation of limited resources to achieve a desired goal. In the context of urban governance, decisions are to be made by state authorities whereby urban planning is more political in nature rather than technical. An urban scholar, Peter Marcuse asserts that cities are not disordered, the issue at stake is who is ordering the city, for what purpose, and for what interest (Zunino 2006 in UN-HABITAT 2008, p. 185). Urban planning professionals and academics may have promising alternatives for a better city environment, however, they remain powerless to make any substantive changes unless political decisions are made. In the civilised world, all acts by the different agents of urban development are governed by laws which may reflect the interests and rhetoric of influential political leaders.

These state authorities may have been elected to represent their constituents but their political decisions do not necessarily please all individuals. Obviously, when resources are limited, a much greater percentage of the population may not benefit from the expected government services including housing and related urban infrastructure. In most cases, the less-privileged ones are those in the lower income sector evident in their poor housing and urban settlement conditions.

Planning for new settlements that accommodated the conditions of poor people can be traced to the early nineteenth century. In the 1830s, planned colonisation for the poor was advocated by Edward Gibbon Wakefield. When this scheme was promoted in South Australia, it became the basis for Colonel Light's celebrated plan for the capital city of Adelaide. The idea was that once the city reached a certain size, the growth would be halted by a green belt to begin another city. This was acknowledged by Ebenezer Howard of which his notion of a social city originates (Hall & Ward 1998, p. 12). Furthermore, Hall and Howard identify sociable cities as a legacy of Howard and outline twelve key strategic policy elements (pp. 151-154). However, none of these directly concerns informal urbanisation and the creation of social cities for the urban poor in developing countries. On the other hand, on in relation to the planning of 'do-it-yourself new towns', Hall and Ward claim that 'it is usually landowners and speculative developers who attempt to subvert the planning machinery for their own benefit' (p. 191). Both authors are aware that the choices of a variety of people or of those living in involuntary poverty fail to fit the assumption of planners. Thus, the concept of 'do-it-yourself new town' is advocated which means that there will be a relaxation of building regulations for people to experiment in alternative ways to provide their own shelter in varying degrees of completion (Ward 1990 in Hall & Ward 1998).

Lewis Mumford is noted for his 'unparalleled ability to weave together an encyclopaedic knowledge of history with an eloquent rhetorical style and a passionate concern for human culture and welfare' (Wheeler & Beatley 2004, p. 18). Mumford's (1938) eras of human activity and mindsets explains that the present period is defined as a restorative biotechnic era; an era of human thinking that is based on biological science and a more organic philosophy. This new order that provides a more organic view towards how cities nurture human culture is based on the ideologies of Howard in England and Geddes in Scotland, among others. Mumford further believes in the piecemeal improvement of cities based on the works of individuals like the sanitarian Chadwick or the community designer like Olmsted. In this manner, the foundation for a collective environment is laid 'in which the needs of reproduction and nurture and

psychological development and the social processes themselves would be adequately served' (Mumford 1938, p. 10). These planning paradigms consider the agency of the society which is the creator of its own built environment. In the case of informal urban environments, their informalities are oftentimes defined from the views based on the super-imposition of ideas by the intellectuals rather than being based on understanding of the various social factors affecting the urban forms. Informal environments that have been part of the formation of modern cities incrementally improve in the course of urban development in relation to the economic status of their inhabitants. Being created by the agency of their own end-users, informal environments present fertile ground to explore similar planning paradigms mentioned in this paragraph.

Traditional urban and housing policies in the past influenced urban planning strategies which emphasise the power of the state over the everyday life of its citizens. However, the failures of these policies in the past created opportunities to search for good governance and urban planning practices which are prepared with people in mind. This practice implies the concept of inclusive urban planning that is aimed to engage the residents in improving their own well-being. This approach is highly sensitive to the context of different places which varies depending on the 'political climate, social networks and the goals of cities and people' (UN-HABITAT 2008, p. 184). Inclusive urban planning aims to establish harmonious urban development and UN-HABITAT discussed the implication of this trend in the conditions of cities of developing countries. One of which is the issue of how to make a difference with political commitment to pro-poor developments (p. 185). Another is the importance of partnerships between citizens and governments for poverty elimination efforts and infrastructure development (p. 187). There may be no fixed recipe for a harmonious urban development that integrates different social factors because each city is unique and replication of a successful infrastructure effort may have no guarantees in other circumstances. However, with a sound political commitment to the needs and rights of the urban poor and the inclusion of the people in governance could present a promising alternative offering a more sustainable form of urban environment in cases where urban informalities cannot be denied.

The appearance of informal urban environments within a modern city may be perceived as a misfit. Most probably, this is because the planning of modern cities excludes poor migrants from rural areas. On the other hand, urban informalities can be viewed as the foundation from which the modern city evolved and formed. Furthermore, the existence of both the informal and formal urban environments can also be considered as key elements which are characteristic of the city in the process of modernisation. For example, the unplanned self-built settlements in Berlin on

allotments for growing plants are part evidence of modernisation. Urban, in his study of these informal settlements concludes that 'they show how a modern city evolved from the struggle between formality and informality, rationality and disorder, principles and pragmatism' (Urban 2013, p. 234). In addition, these informal dwellings are unique in the sense that the spaces are quite in order. This is because planning regulation imposed by the state effectively worked since in the nineteenth century (Urban 2013). Western cities like Berlin may be the recipient of modern planning and regulations but the existence of informal settlements that are unique to the city environment can never be denied. The same case with the cities in developing countries of Asia, Africa, and Latin America which are at the forefront of urbanisation in the 21st century, they are also recipients of modern planning and policy making with the co-existence of informal urban environments.

2.4   Synthesis

The development of squatter settlements as a physical expression of urban informalities in the developing world is characterised by the absence of legal land ownership by the occupants and construction of houses that are not in accordance with the standards set by the building code. This is due to the fact that with a rapidly increasing urban population, governments in developing counties are not able to cope with the demand for social services including shelter provision. Coupled with widespread urban poverty, informal housing is the only affordable form of shelter for the urban poor. According to Berner (2001),[16] despite the fact that squatting is not a cheap way to live,[17] its major benefit lies in the possibility of incremental development which leads to the diffusion of the costs. The appearance of squatter settlements in urbanising cities in the developing world is seen in opposing point of views. Urban informalities have been regarded as temporary in nature as cities start to develop and are expected to disappear with economic growth. On the contrary, in many cities in developing countries, it seems permanent in nature evident in the mushrooming of slums and squatter settlements when cities grow in terms of physical and economic developments. Despite the informality, in some points of view, squatter settlements are appreciated as a means of affordable shelter for the urban poor who are playing an important role in a developing economy. However, it is also being regarded as a culprit of environmental (e.g. urban sanitation) and social (e.g. public safety) problems. Being disregarded in the formal modern planning paradigm, informal urban environments are viewed as threats to the sustainable development of the city. In spite of this view, many urban scholars

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[16] This point refers to Berner's synthesis and critique of various sources cited in his publication (Berner 2001).
[17] On top of the price of land 'rights' and other illicit aspects, the cost of water and electricity, among other services, are normally higher than what regular customers pay (Berner 2001).

are optimistic, maintaining that the dynamic phenomenon of squatter settlements presents an alternative paradigm for planning cities in the developing world.

This positive view towards squatter settlements in the twentieth century can be traced to the work of John Turner which developed as a result of his involvement in Lima, Peru in the 1960s. Turner was popularly influential with the World Bank's programme on sites and services and *in situ* upgrading schemes in the 1970s.[18] Turner's work inspired succeeding urban scholars, among others, Geoffrey Payne's work in Delhi, India and Ankara, Turkey, in the 1970s, and Peter Kellet's work in Santa Maria, Colombia, in the 1990s. In the twenty-first century, the dynamic urban phenomenon of informal settlements continues to be an important topic which lends insight into how developing countries might strive for sustainability within the urban environment. With the emerging view of squatter settlements as 'slums of hope' in contrast to 'slums of despair', the existence of informal environments can be regarded as an important dimension in inclusive approaches to urban planning. Placing more importance on the role of the urban poor in developing economies and their role in the formation of urban environments, it is important to note how the phenomenon of informal housing and settlements and their role in the formation of cities in developing countries. In the civilised world, there is no doubt that urban development and transformation is governed by the development of housing and urban policies. Therefore, the discussion of informal housing and urbanisation in developing countries in this chapter needs to be related to the development of housing policies and programmes that is being discussed in the next chapter.

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[18] Furthermore, World Bank programmes are reviewed in Buckely and Kalarickal (2004).

Chapter 3:   Housing Policies and Programmes

3.1   Introduction

Housing policy serves as the instrument of the state to provide and regulate the shelter needs of its constituency. Lund[1] argues that it 'is best understood as attempts by governments to modify the housing market or, perhaps more accurately, housing markets (there being marked regional and local variations in supply and demand) to achieve social objectives' (Lund 2011, pp. 1-2). Understanding housing policy can be approached in many ways and one must be mindful of diverse political and geographical contexts. Focusing primarily on the development of housing policy in the UK, Lund (2011) enumerates the following approaches and priorities: laissez-faire economics; social reformism; Marxist political economy; behavioural approaches; and, social constructionism. It is important to understand such approaches, in principle, given that housing policy approaches from the UK, in particular, have often influenced the development of housing policies in the developing world with varying degrees of success and failure. This is because the assumptions that underpin these policies, as the basis for the development of traditional housing policies cannot easily be transferred to the realities of the developing countries. For example, the acts of the state and the private sector to provide completed housing units for the low-income population have been widely criticised. The provision of completed housing units has given rise to more problems rather than providing the promised solution.

In the case of the Philippines, the provision of housing through high government subsidies in the 1970s, during the Marcos regime, was barely affordable for the urban poor. In the 1980s, when the market economy emerged, housing became less accessible to the low-income population leaving the urban poor with no choice but to live in informal settlements. The rise of the people's empowerment between the mid-1980s and the 1990s led to the crafting of decentralised policies which devolved functions from national to local government units in terms of housing and urban governance. This development is made manifest in the widening role of NGOs to mobilise the participation of civil society in housing provision. Like the Philippines, other developing countries in Asia, Africa, and Latin America were influenced by successful housing policy approaches in the UK and the USA in particular. This chapter reviews influential housing policies and programmes in the international context, and the emulation of these in a number of developing countries in Asia, Africa, and Latin America – examples chosen because

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[1] Brian Lund, in his book 'Understanding housing policy' (Lund 2011), is introduced as an author with extensive experience in implementing housing policy and a visiting lecturer at the Manchester Metropolitan University, UK.

of the parallels that can be drawn with the Philippine context – before turning to the policies and programmes which have been applied in the Philippines. Given the rapidly increasing global urban population in the twenty-first century, this chapter reflects on the success or otherwise of these housing policies and programmes and concludes with recommendations which capitalise on the contributions of all actors in housing production. The intent is to move toward a new policy paradigm which enables sustainable urban development in developing countries, and which places more importance on the agency of the people who created and settled in the cities.

3.2   International housing policies and programmes

Traditionally, housing is delivered as a finished product. Completed housing units are either provided by the state through social housing programmes, or provided by the private sector in the housing market through mortgage or direct sales. Firstly, this means that housing provision is managed by the state where people tend to be passive beneficiaries. Secondly, from the market point of view, it is assumed that housing beneficiaries allocate a portion of their income for housing investment. These assumptions are true in developed countries. However, the application of a traditional housing approach has given rise to many challenges when adopted by governments in developing countries.[2] In order to further discuss this issue, this section presents a critical review of various housing policies and programmes from an international perspective before focusing on the application of policies and programmes in a select number of developing countries in Asia, Africa, and Latin America.[3]

3.2.1   Traditional urban poor housing policy approach

Traditional housing policies and programmes for the urban poor primarily reflect the views of state authorities. As a case in point, a Peruvian politician viewed the squatter site in Arequipa as a slum of despair (Turner 1976, p. 24). In the same context, a visiting British government minister was depressed by his observations of the *barriadas* in Lima (Turner 1976, p. 24). Similar, despondent views can be identified in the attitudes of planning and design professionals towards less-privileged urban dwellers and their precarious urban settlements. However, the progressive development achieved with limited resources that Turner observes in the squatter settlements reaffirms his faith in the people (Turner 1976, p. 25). In the case of modern planning, there is a consistent assumption that people will allocate a certain portion of their income for

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[2] The evolution of housing policy in developing countries are also discussed in the publication of Buckley and Kalarickal (2005, pp. 235-238).

[3] Similar grouping of country cases presented in the most recent book, 'Affordable housing in the urban Global South: seeking sustainable solutions' (Bredenoord, van Lindert & Smets 2014); and, in the list developing countries per region classified by the United Nations (2015) shown in Figure 3-1.

housing. This practice may be applicable in conventional banking assuming that the targeted beneficiaries have the ability to invest, but not in the case of lower income groups. This example of a paradigm that is poorly matched to a particular context makes the built environment vulnerable to urban dysfunction. Thus, there is a need for an alternative ideology that requires a comprehensive view in the planning of the built environment, which considers simultaneous and complementary actions between the people at the grassroots of society and those who can influence or make policy decisions (Turner 1978, p. 1142). This kind of paradigm provides a platform for the lower income sector to participate in the dialogue for policy making and urban development.

Africa		Asia	Latin America and the Caribbean
North Africa	**Southern Africa**	**East Asia**	**Caribbean**
Algeria	Angola	Brunei Darussalam	Barbados
Egypt	Botswana	China	Cuba
Libya	Lesotho	Hong Kong SAR[b]	Dominican Republic
Mauritania	Malawi	Indonesia	Guyana
Morocco	Mauritius	Malaysia	Haiti
Sudan	Mozambique	Myanmar	Jamaica
Tunisia	Namibia	Papua New Guinea	Trinidad and Tobago
Central Africa	South Africa	Philippines	**Mexico and Central America**
	Zambia	Republic of Korea	
Cameroon	Zimbabwe	Singapore	Costa Rica
Central African Republic	**West Africa**	Taiwan Province of China	El Salvador
Chad		Thailand	Guatemala
Congo	Benin	Viet Nam	Honduras
Equatorial Guinea	Burkina Faso	**South Asia**	Mexico
Gabon	Cabo Verde		Nicaragua
Sao Tome and Prinicipe	Côte d'Ivoire	Bangladesh	Panama
East Africa	Gambia	India	**South America**
	Ghana	Iran (Islamic Republic of)	
Burundi	Guinea	Nepal	Argentina
Comoros	Guinea-Bissau	Pakistan	Bolivia (Plurinational State of)
Democratic Republic of the Congo	Liberia	Sri Lanka	Brazil
Djibouti	Mali	**Western Asia**	Chile
Eritrea	Niger		Colombia
Ethiopia	Nigeria	Bahrain	Ecuador
Kenya	Senegal	Iraq	Paraguay
Madagascar	Sierra Leone	Israel	Peru
Rwanda	Togo	Jordan	Uruguay
Somalia		Kuwait	Venezuela (Bolivarian Republic of)
Uganda		Lebanon	
United Republic of Tanzania		Oman	
		Qatar	
		Saudi Arabia	
		Syrian Arab Republic	
		Turkey	
		United Arab Emirates	
		Yemen	

Figure 3-1. List of developing countries per region classified by the United Nations[4]

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[4] Source: United Nations (2015), World Economic Situation and Prospects 2015, p. 140, http://www.un.org/en/development/desa/policy/wesp/wesp_archive/2015wesp_full_en.pdf

Traditional housing policies and programmes in developing countries are oftentimes modelled on examples from advanced industrialised countries. Mayo, Malpezzi and Gross (1986, p. 184) enumerate the common housing problems in developing countries and the solutions that their governments implement. Firstly, if there is a perceived shortage of shelter, the government will build new houses. Secondly, if there is low quality shelter for the poor, the government will raise the standard by enforcing stricter building codes. Thirdly, if there are too many squatters, the government will clear them through demolition and eviction. Fourthly, if there is an increase in the price of shelter that it is too high for the majority of households, the government will control rents as well as the price of land and building materials. Mayo, Malpezzi and Gross further claim that these housing problems may appear simple and solutions can be easily implemented. However, these superficial initiatives often complicate the problems as they rely on heavy subsidies and implement high standards of social housing. Similar critiques are presented by other authors who have described the traditional approach as a 'one-step regularization model' (Lim 1987); 'instant development' (Turner 1967); and, a 'product approach' (Ferguson & Navarrete 2003) that can works and has often become popular in developed countries. In order to further explore this subject matter, a review of examples of housing policies and programmes in different countries, specifically in Asia, Africa, and Latin America,[5] outlined in Table 3-1, are discussed in the succeeding subsections.

Table 3-1. List of developing countries per region included in this thesis

Asia	Africa	Latin America
Thailand	Egypt	Peru
Indonesia	South Africa	Brazil
Vietnam	Ghana	Chile
India	Nigeria	
Turkey	Zambia	

3.2.2 Asia

Thailand

International agencies have influenced housing and urban policies in developing countries. However, housing policy maintains autonomy from international agencies such as the World Bank and the United Nations (Giles 2003). These agencies recommended housing programmes such as 'sites and services' and 'aided self-help' that were assumed to be cost-effective

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[5] Based on the grouping by the United Nations presented in Table 3-1, the choice of developing countries per region outlined in Table 3-1 depends on the availability of publications substantial to discuss respective housing and urban policy developments in the subjected country.

strategies. Nevertheless, the Thai government insisted on focusing exclusively on building public housing and providing slum clearance through the 1950s to the 1970s in order to solve the housing shortage. The reluctance of Thai government officials to adhere to a self-help housing alternative is not unsurprising when one considers Thailand's hierarchical society. Within this social structure, the officials firmly maintain that they are capable of making decisions that are in the best interests of the general population. As Giles further explains, 'self-help, requiring input from slum dwellers and squatters, seemed foreign, and probably threatening to government officials' (Giles 2003, p. 235). In the 1980s, when the international trend switched to a market-oriented approach, the Thai government found a convenient rationale to abandon self-help concept that it did not find appealing. On the other hand, the government had no explicit long-term housing policy and tended to be reactive rather than proactive (Yap & Wandeler 2010). It allocated funds when there was a need to assist evicted slum dwellers or those who faced eviction. In the 1970s and the 1980s, slum improvement and sites and services schemes were introduced by the government aimed at regularising and upgrading informal settlements. However, these programmes failed to keep pace with rapid growth of the slum population. Thus, none of the government or the international agencies were successful in solving the housing situation in Thailand.

Slum clearance in Thailand continued in the 1990s. In 1991, the Thai government forcibly removed over 2,000 slum dwellers from the areas surrounding the Queen Sirikit National Convention Centre where the World Bank and International Monetary Fund held their joint convention in Bangkok (Branigin, 1991 in Greene, SJ 2003, p. 161). However, lately, there was a shift from top-down to bottom-up approach. Reported in the thesis of Uancharoenkul (2009), in 2000, the Thai government set up the Community Organisations Development Institute (CODI) to strengthen grassroots activity for community based projects such as slum upgrading. Furthermore, in 2003, the government decided to implement slum upgrading at a nationwide scale known as '*Baan Mankong (BMK)*' (in Thai), or literally, Secure Housing (in English), which is assigned to CODI for implementation in cooperation with the NHA[6] (Uancharoenkul 2009, p. 12). While the programme has proven to be effective in improving land tenure and housing conditions of urban poor communities, there are limitations when it comes to effectiveness, inclusiveness, and sustainability (Yap & Wandeler 2010, p. 340). Research results show that while residents appreciate their new houses and the improved living environment, they are wary

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[6] The National Housing Authority (NHA) was set up in 1973 in Thailand with the implementation of World Bank's sites and services programme (Giles 2003; Uancharoenkul 2009).

of the resulting debt. Despite the fact that tenure is secure in the short term, the long term situation is not so clear (Archer 2012). Among other limitations, Yap and Wandeler (2010) argue that Thailand urgently needs a national housing policy with a goal of adequate housing for all (p. 340).

Indonesia

Indonesian housing policies are aimed to support and improve self-initiated urban settlements (Tunas & Darmoyono 2014; Tunas & Peresthu 2010). As a matter of fact, *kampong* which literally means a self-initiated urban settlement sets the framework for self-help housing policy in Indonesia (Tunas & Peresthu 2010). *Kampong* improvement began in Jakarta in 1969 by the Governorate but the programme was later reorganised to meet the World Bank financing schemes (Marcussen 1990, p. 101). Marcussen (1990) further reports that an institutional setup was prepared by the New Order Government in the early 1970s with support from international agencies such as the World Bank. This became the basis for a number of housing programmes. The new institutions and programmes were realised with a second five-year plan known as *Pelita II* begun in 1974. Consequently, the National Housing Authority and the National Urban Development Corporation, among others, were created. Eventually, the new *Kampong* Improvement Programme (KIP) started to mobilise with financial assistance from the World Bank. The KIP was implemented to provide basic infrastructure and community facilities in poverty-stricken high density *kampongs*. The KIP was expected to address twice as many household beneficiaries because its scheme did not include the cost of construction. However, the World Bank (2003, in Tunas & Peresthu 2010, p. 318) claims that the problem, among others, is that the programme only focuses on limited components of housing although other components, such as security of tenure, are not included. In the same way, Marcussen (1990, p. 102) observes that the KIP is officially considered as a temporary measure because it is assumed that the distribution of registered titles would only make later urban renewal schemes impossible. For this reason, the programme did not interfere with people's initiatives in the construction of their houses and the culture of self-help housing is maintained in the *kampongs*. Furthermore, Monkkonen (2013b) explored the informal housing production system in relation to urban land use regulations and housing markets in Indonesia. In relation to the impact of strict land use regulations with flexible enforcement on the quality of urbanisation, 'formally built housing will be a minority of total housing production for years to come, and the majority of the population will acquire housing through an informal, incremental process' (p. 262). Despite the fact that incremental construction of housing is an important solution, Monkkonen argues that it

is inefficient in many ways. Thus, according to Monkkonen, it needs regulatory reforms, citing an example from Greene and Rojas' (2008) recommendation to promote housing microfinance and government-facilitated access to land[7] (Monkkonen 2013b).[8]

Vietnam

Housing policies in Vietnam tend to be rooted in socialist ideology. In the case Ho-Chi-Minh City, Coit (1998) enumerates major phases of housing policies in southern Vietnam after the reunification with the north in 1975. From 1975 to 1986, the centralised Communist government administered a policy based on models from the Soviet Union.[9] As such the government maintained the full responsibility in the provision of shelter for people working for the state. However after 1986,[10] Coit (1998, p. 276) reports that the government stopped trying to provide housing under its new liberal policy, and 'it was clear that it was not able to make available a sufficient supply of housing for the majority of the low-income urban population'. Instead of upgrading the slums, there was a total renovation in order to transform the urban areas into business and commercial zones. In the process of slum clearance, the urban poor were uprooted and relocated into undesirable remote areas of the city. In many cases, the poor moved back to the city centre. As the city's population was growing faster, slum and squatter settlements continued to grow anywhere where the urban inhabitants could find a place to build a shack. Consequently, neither of the socialist paradigm nor the latter liberal housing policy that the Vietnamese government embraced, provided adequate housing for the low-income sector.

India

India is known for its social and geographical heterogeneity which dominates its politics,[11] thus it is difficult for the country to develop national integration with cohesive housing solutions and urban development policies (Pugh 1990). After independence, the legacy of British administration shaped democracy, law, and public administration, India in stages achieved full independence in 1947. With the Planning Commission created in 1950, urban development in India was managed according to a series of five-year plans which were documented in the

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[7] Access to land as the first phase, and other phases, of incremental construction process by Greene, M and Rojas (2008) is cited in the later Chapters of this thesis.

[8] In a separate publication, Monkkonen (2013a) attempts to use 'housing deficits' as a frame for housing policy in Indonesia.

[9] Also referred as the Subsidised Period (1958-1986) in the alumni paper of Huong (1999, p. 1), Housing Development & Management, Lund University.

[10] Furthermore, referred to as the Transitional Period (1986-1992) ending Soviet financial assistance and beginning Vietnam's 'Doi moi' policy with proclamation of 'market socialism' (p. 3), which was later followed by the recent period starting in 1992 (Huong 1999).

[11] For specific geographical housing policy, such as Kolkata (formerly Calcutta), the capital of India's West Bengal state, see the works of Sengupta (2006, 2007, 2010) and Sengupta and Tipple (2007).

works of Pugh (1990), Bhattacharya (1990), and Narasaiah and Jyothi (2009). With the first Five-Year Plan, published in 1951, the series of plans went through rational changes to respond to the needs of various urban conditions in the country. A centralised housing policy can be observed until the fourth Five-Year Plan (1969-73) which refashioned the institution of socio-economic democracy. The plan 'concentrated its activities on social housing schemes such as subsidised housing for industrial workers, slum clearance, re-housing, and housing for low-income and middle-income sectors' (Bhattacharya 1990, p. 70). This led to the creation of the Housing and Urban Development Corporation by the central government in 1970 which expanded the range of housing programmes in the succeeding fifth Five-Year Plan (1974-79).

In relation to the UN General Assembly's proclamation in 1987 as the International Year of Shelter for the Homeless, the government of India drafted the first National Housing Policy (NHP) based on its 40 years of experimentation on piece-meal housing programmes. However, after a lengthy process of presentation to the parliament and discussion at different levels, the NHP was only approved in 1994. In order to provide affordable housing for the poor, the policy aimed at removing constraints on the housing market. This liberal approach enabled the 'invisible hand' to work whereby the government acted as a facilitator rather than an active participant in the provision of housing (Narasaiah & Jyothi 2009, pp. 96-97). This approach is criticised by Narasaiah and Jyothi (2009, p. 98) due to the absence of concrete proposals and details, they argue that the NHP remains 'merely as an expression of good intentions' because this leaves too much to the discretion of the bureaucrats and politicians. Despite these criticisms, the responsibility of the state towards the poor was clearly established, and the policy gave impetus to institutionalise NGO participation in housing (p. 99). Following the reforms in the 1990s which encouraged the private and cooperative sectors to play a major role in housing, the government of India adopted a new Housing and Habitat Policy that was approved by the Cabinet in 1998. The same aim, with its precedent in the NHP - to provide shelter for all especially the poor and the deprived -led to a revised policy which became the basis of the succeeding five-year plans in India where heterogeneity in social and geographical is continuously observed.[12]

On the other hand, housing policy supporting self-help housing existed in India. For example, Nakamura (2014) investigates the extent to which 'slum notification'[13] has stimulated housing

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[12] Furthermore, 'new frontiers and challenges for affordable housing provision in India' is the subject of the most recent publication of Sengupta (2014).

[13] 'A tenure formalisation policy that officially recognises settlements as slums and ensures the occupancy rights of the residents' (Nakamura 2014, p. 3420).

investments in India. The paper suggests, in addition to implementing policy formalising slums, supporting self-help initiatives of residents in non-formalised slums would be effective for the improvement of their housing conditions (Nakamura 2014).[14] In addition, slum redevelopment strategy was being introduced by the state government of Maharashtra in its capital city, Mumbay (Bombay) in the mid-1980s. This complex enabling approach to urban upgrading is explored in the works of Mukhija (2001; 2002).

Turkey

Housing policy in Turkey was not a political priority until the 1960s when the slow pace of urbanisation gradually changed with increasing urban population. Keles (1990) enumerates the four stages of housing policy in Turkey. The first stage was the period from 1923 to 1945 which coincided with the establishment of the Republic until the end of the Second World War. During this period, housing policy focused on the provision of shelter for civil servants. The second stage spanned from the Second World War to the early 1960s. It was characterised by the mushrooming of squatter settlements in metropolitan area. Eventually, nearly half-a-dozen laws were enacted to prevent squatting and to increase the supply of housing units. The third stage was the period between 1960 and 1980. During this period, Turkey, like India, had a series of five-year plans, but this was marked with military interventions. Housing and planning became an important policy based on the Constitution adopted in 1961. In the first Five-Year Plan (1963-67), housing investment was kept to a minimum in order to increase the number of housing units without increasing the appropriated amount. This initiative led to the creation of new types of dwelling known as 'social housing' or 'peoples' housing', distinct from luxury dwellings. Acknowledging the existence of *gecekondu*[15] that is Turkey's local version of squatter settlement and is the focus of the work of Erman (2001), the first Gecekondu Act was passed in 1966. For the first time, this Act legally recognised the presence of *gecekondu*.[16] The policy sought to improve *gecekondu* settlements which were in comparatively good condition. As a consequence of programmes which sought to bring infrastructure and services to these settlements, in the late 1960s, many shanty towns turned into established low-density residential neighbourhoods complete with infrastructures and services. However, with the issue of legal

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[14] Furthermore, how slum formalisation without title provision stimulates housing improvement in India is found in Nakamura's most recent publication (Nakamura 2016).

[15] The origin and development of *gecekondus* in Turkey are well-discussed in the publications of Baharoglu and Leitmann (1998) and Karpat (2004), among others.

[16] The Turkish government's first approach was to demolish the *gecekondus* but failed due to political, social, and economic reasons, thus, the second approach meant to legalise the *gecekondus* was adopted (Uzun, Cete & Palancioglu 2010).

land title unsettled, the people in the *gecekondus* remained vulnerable to further government action (Erman 2001, p. 986). A similar paradigm continued in the second Five-Year Plan (1968-73) when the role of the state in housing as 'regulator' was defined as opposed to being a direct 'investor' or 'constructor'. On the fourth and last stage of housing policy that started in the 1980s enumerated by Keles (1990), the government of Turkey is characterised by military power that endured for more than three years. It enacted the First Mass Housing Law (No. 2487) in 1981 followed by a second one (No. 2985) in 1984. The market oriented approach was manifested in mortgage systems, which was the global trend in the provision of housing in the 1980s , was also found in Turkey as being reflected on the work of Erol and Patel (2004). Turkey as a developing country has a high volatile inflationary environment, and against persistent inflationary pressure, the Turkish government embarked on major housing finance reforms which remain to be its present challenges in the late 1990s.

3.2.3   Africa

Egypt

Shelter provision in Egypt has been delivered through government housing programmes as well as self-build processes initiated by the urban inhabitants. In 1996, the Egyptian government launched a national housing project for low-income families known as 'Shelter for All' (Gelil 2011). The program was composed of two housing projects with the aim of building 70,000 dwelling units each of the various phases. This included the 'Youth Housing Project' in 1996 and the 'Future Housing Project' in 1998. Gelil (2011) further describes, the Egyptian government made an effort to build housing units that were more attractive externally. However, 'specifications of the appropriate shelter provided by the government projects were determined according to economic and political criteria and do not consider the users' social needs' (Maher 2007, in Gelil 2011, p. 26).

On the other hand, self-build housing is also common in Egypt. This phenomenon was analysed in relation to the different housing policies in Egypt (Soliman 2012). For being popularly practised, Soliman's paper implied that self-build housing appears to be the most appropriate and available alternative for the poor to house themselves. However, Soliman (2012, pp. 234-235) argues that the consequence of uncontrolled self-help urbanisation promotes indiscriminate urbanisation in the peri urban areas and threatens productive agricultural lands. Undoubtedly, the Egyptian government and the Egyptian people made their respective efforts in shelter provision. However, the government's action did not fit the needs of the end users

(Maher 2007, in Gelil 2011), and the people's initiative consequently threatened the sustainability of the environment (Soliman 2012).

South Africa

South Africa has a long and diverse political history that resulted in insufficient and inadequate housing for less-privileged urban inhabitants. This phenomenon goes 'with apartheid-era policies of urban containment resulting in overcrowded and under-serviced townships and informal settlements on the urban periphery' (Lemanski 2009, p. 473). In addition, Wilkinson (1998) and Watson and McCarthy (1998) review the history of housing policies in South Africa. Wilkinson generally focuses on the historical significance of South Africa's housing policies and their implications for the present housing provision for the poor. On the other hand, Watson and McCarthy focus on the implication of housing policies for the rental housing sector. Moreover in the 1990s, policy approaches were influenced by the three different powerful sectors in the South African Society (Huchzermeyer 2001, p. 304).[17] These sectors are the '(1) organised labour and community (through the Mass Democratic Movement); (2) the private sector (through the then Urban Foundation); and (3) the Homeless People's Federation/People's Dialogue alliance'. When the country was under the new democratic government installed in 1994, several policies were formulated. These included the 'White Paper' on national housing policy and a strategy initiated by Joe Slovo who was then appointed as the first Minister of Housing. Furthermore, the delivery of low-cost housing projects from 1993 to 1997 focused on community involvement (Jenkins 1999). Similar to other cities in the developing world, Jenkins (1999, p. 444) observes that 'informal housing solutions and "counting on one's own resources" is already the dominant mode of socio-economic activity for lower-income groups'. However, Wilkinson (1998, p. 226) argues that 'the current policy framework has clear limits in terms of addressing the fundamental social and spatial divisions' that is a common characteristic of South African cities. Hence, despite the changes in the approaches to policy making,[18] various policy initiatives in South Africa remain unsuccessful to provide adequate housing for the urban poor.

Ghana

Housing policies in Ghana have undergone significant changes since independence in 1957 and continues to undergo change presently as presented in the works of Tipple and Korboe (1998), and Arku (2009). After the Second World War, the British-led administration erected few

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[17] Housing policy and government intervention in informal settlements, in South Africa, are further discussed in the succeeding publications of Huchzermeyer (2003a; 2003b).
[18] Changing housing policy in South Africa is reiterated in the most recent publication of Huchzermeyer (2014).

thousand small dwellings as show of gratitude to war veterans and public servants. During independence in 1957, the Ghanaian government made housing the core of its social policies. Housing provision activities were carried out in Tema New Town by the Tema Development Corporation and in major cities by the State Housing Corporation. In the 1970s, successive Ghana governments adopted international policies which led away from direct provision, evident in reported co-operative housing and upgrading projects.[19] With the worsening housing crisis in the 1980s, policy makers recognised the need to change towards focusing on economic liberalisation and de-regulation of land, housing markets and building industry. Thus, the government's role in housing provision was reduced in the late 1980s. The housing system has two major segments. Firstly, the formal public sector that focused on the provision of housing for the middle class and the formal private sector for the upper class. As the only alternative left for the low-income group, the second segment means the informal sector includes the self-builders and small-scale enterprises. Housing reform opened the housing sector to competition, which remains a challenge in housing provision especially in the low-income group. Considering the poor past performance of the commercial formal sector that missed the low-income group, Tipple and Korboe (1998, p. 255) recommend utilising the informal housing sector as a basis for workable housing policies. With some interventions needed to protect the interests of the poor, Arku (2009, p. 270) recommends strengthening the formal private sector whilst recognising its limited impact on the informal housing market. Thus, it is further recommended that the government reconsiders its complete withdrawal from the housing sector and establish affordable mortgage institutions.

Nigeria

Frequent changes in the government in Nigeria since independence brought various forms of interventions in housing provision. These are reported in the works of Ogunshakin and Olayiwola (1992), Ogu and Ogbuozobe (2001), and Aribigbola (2008). The first popular reaction towards the housing crisis in 1970 brought about by high rent speculation dictated by greedy landlords was the rent decree enacted by the Gowan military government. With the failure of the rent control policy and a continuing housing crisis, in 1971, the military government created a National Council on Housing that led to the announcement of a National Housing Programme as the first housing policy. The policy is unique 'in the sense that it provides for the interest of all social groups whether displaced or not from the competitive housing market' (Ogunshakin &

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[19] A detailed report and discussion on housing policy changes and development in Ghana are found in the publications of Tipple and Korboe (1998) and Arku (2009).

Olayiwola 1992, p. 45). In 1976, following the overthrow of the military regime, a reappraisal of the housing policy was incorporated in the 1975-1980 National Development Plan. The installation of the Shagari civilian regime saw again another reappraisal of the housing programme. During the 1981-85 planning period, the federal government embarked on the provision of 2,000 housing units per year in each of the 19 states. Following the newly instated military regime in 1984, the mass housing exercise was closed because of the economic crisis faced by the government. In 1991, a national policy on housing was launched with a goal to provide housing accommodation for all Nigerians by the year 2000. Despite the poor and erratic performance in housing provision, in 1994, the military administration launched a new public housing scheme but failed to meet its objective. Since the return to civil rule in 1999, the federal government indicated intentions to embark on limited housing schemes including sites and services contracts and small-scale direct housing provisions. With the failure of the 1991 housing policy, in 2002, the National Urban Development and National Housing policies were revised with significant emphasis placed on citizen participation in decision making and programme implementation, monitoring and evaluation. In summary, in Nigeria, 'governments rise and fall, revolutions come and go, but the mass of urban population will always remain with the housing problem' (Ogunshakin & Olayiwola 1992, p. 46). Policy deviations further displaced the urban poor and the middle-class from the formal housing market. As a result, self-help housing is the main source of development in the country. With the shift from a provider paradigm to an enabling paradigm in housing provision, Ogu & Ogbuozobe (2001, p. 479) assume, probably, individual self-help owners, small-scale housing developers and housing firms are going to be major players in the housing process in Nigeria in the future.

Zambia

Zambia was a recipient of World Bank funding for a sites and services programme and monies to upgrade housing in the 1970s[20] (Rakodi 1991). Furthermore, developments in housing policy are reported in the work of Schlyter (1998). With serviced plots are still unaffordable for the poor who comprise the majority of the population, the number of squatters grew and in some cases this led to demolition of slums. Housing upgrades implemented in the 1970s were not fully accepted as Zambian policy, and were identified as 'World Bank' products. High level politicians were not willing to publicly accept responsibilities on the physical conditions of upgraded squatter areas which remained muddy residential compounds. As a result, very few upgrading

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[20] Prior to this period, earlier self-help housing policies in Zambia are found in the publication of Tipple (1976).

projects were initiated at this time. Eventually, with the deteriorating economy at the end of the 1980s, housing and settlement improvements were not on the agenda.

Approaches to finding solutions to the housing shortage changed significantly when the government in Zambia changed from a one-party to a multi-party system in 1991. However, its first policy was extremely insensitive to the conditions of the poor. Due to political rivalry, houses on plots that were informally allocated to the opposing party leaders were bulldozed and demolished. Criticising the failures of the former government, the new government declared their focus on home ownership, rental housing and the improvement of housing quality. Furthermore, the sites and services projects of the former government were criticised by the new government for being not affordable to the majority of the population despite being sub-standard in terms of quality. In 1996, the local governments took on a new role as facilitators within the country's new National Housing Policy, the draft National Housing Development Programme and the draft National Decentralisation Policy. In addition to clearing the housing backlogs, the new housing policies operated with emphasis on supporting local communities to improve their housing situation. One observation made by Schlyter (1998), is that the 'bottom-up' approach was reflected in the creation of Residential Development Committees and other community-based organisations to represent local communities in consultation with the authorities, or may act as programme partners. Despite promising to solve the housing problems, these policies are questioned by Schlyter (1998, pp. 268-270) in the context of Zambia.

3.2.4   Latin America

Peru

Peru's housing policies are undeniably influenced by John Turner's studies in Lima and his case for progressive forms of development as a viable housing strategy for developing countries. Bromley (2003) illustrates the Peruvian housing policies from 1957 when Turner started to work in the *barriadas* for extended periods until 1977. Bromley claims that the works of Turner, with Mangin, opened up new knowledge. This led to the understanding of rapid urbanisation, the social and physical conditions of informal settlements, and the new paradigm where the self-help initiative of the poor can be capitalised on in the upgrading of urban neighbourhoods. However, Turner's influence faded in the late 1970s. Peru was obliged to shift away from an assisted self-help approach to embrace a market-oriented neo-liberal economic paradigm that

was imposed by international funding agencies (Fernandez-Maldonado & Bredenoord 2010).[21] This same pattern occurred in several other developing countries requiring assistance from international funding agencies during this period.

Brazil

Brazil's housing policy is strongly influenced by the political situation of the country. In his analysis, Shidlo (1990) divides Brazil's housing policy into three periods. The first period is defined as a civilian era, a period when the private sector was the main actor in the housing market. Secondly, the military regime between 1964 and 1985 coincided with centralised state intervention in the housing market. Lastly, the centralised regime gave way to social housing policy proposals emerging in Brazil under its new democratic government that started in the 1990s. Furthermore, Valenca and Bonates (2010) discuss social housing policy in Brazil since the 1990s. The Collor government (1990-1992) acknowledged the poor housing situation in the country and proposed housing policy which had a pro-market orientation. Following Collor's impeachment, the Itamar transition government (1993-1994) had to source for funds to complete 260,000 houses started during the Collor period, but there was huge crisis due to declining real income and growing mortgage repayment bills. In the following first Cardoso government (1995-1998), housing policy reflected some demands of organised interests relating to house building and financing. The tendency to favour profit-driven investments is maintained in the second term of Cardoso (1999-2002). In the following Lula government (2003-2006), the main programmes started during Cardoso government were maintained with some changes introduced. For example, the setting up of the new Ministry of Cities, and in any case, the Lula government made an unprecedented effort to reach the poorer groups. Housing policies under these governments approached housing financial structure the way private interest operate within the system. For the reasons that the fundamental social results have not yet been achieved for the poor, thus it is viewed more of a failure (Valenca & Bonates 2010).

Chile

Housing is a salient feature in political affairs in Chile. Housing policies prepared under different governments are examined by Kusnetzoff (1990). In the post-war period, Jorge Alessandri (1958-64) expanded his political base by increasing the construction of houses for low-income families. Subsequently, Eduardo Frei (1964-70) created the Ministry of Housing and Urban Affairs in 1965. This Ministry aimed to reduce the cumulative housing shortage, and align the

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[21] Fernandez-Maldonado, in her most recent publication, traced the practise incremental housing in relation to the role of the social housing sector in Peru (Fernandez-Maldonado 2014).

production of housing with income distribution which stimulated popular participation as well as stimulating the internal market. During this political regime, 'housing solutions' were introduced in 1967, which included one of the first tests of the much-debated sites and services approach. The succeeding government led by Salvador Allende (1970-73) was more open to a new paradigm towards housing in comparison with the two previous regimes. Allende gave voice to the concept of housing as a right. His Emergency Housing Plan, that promised 80,000 dwellings by 1974, was an ambitious figure but nonetheless it was attained (Kusnetzoff 1990, p. 53). Gilbert (2002, p. 309) states that the Allende government rejected the idea of sites and services and tried to use housing construction to generate work and economic growth. However, Allende's initiative was short-lived due to the military coup in 1973. Housing policy under General Augusto Pinochet (1973-88) underwent drastic changes. Among others, these include the liberalisation of urban land and production of housing according to income groups (Kusnetzoff 1990). Consequently, it dropped the socialist housing approach and the new housing system outlined in 1975 was market led and embedded within much more competitive economic and financial systems (Gilbert 2002). It is observed in Chile that successful urban and housing policies were important electoral factors of the three earlier governments, and a powerful instrument for a legitimate military regime to build its loyal constituency (Kusnetzoff 1990, p. 63). The new and improved policy is the result of various government interventions, however, a similar structure remains, hence, many of the problems existed earlier remained (Jiron M 2004).

3.3   Housing policies and programmes in the Philippines

Globalisation plays a major role in recent urbanisation in developing countries. Marcotullio (2003) argues that it is the strongest factor that influences urban form and the environmental conditions[22] of cities in the Asia-Pacific region (Marcotullio 2003). The rise of urban poverty and insecure occupancy conditions in developing countries take place in the context of accelerated globalisation and structural adjustment policies combining: '(i) deregulation measures; (ii) massive government disengagement from the urban and housing sector; (iii) attempts to integrate informal markets within the sphere of the formal market economy'. Of which, such policies, 'along with the lack of, or inefficiency of, safety net programs and poverty alleviation policies have resulted in increased inequalities in the distribution of wealth and resources at all levels' (Durand-Lasserve 2006, p. 1). This condition directly affects the shelter status of the

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[22] In general terms, among others, these include air pollution, water pollution, solid waste disposal problem due to inadequate garbage collection, and general environmental degradation evident in extreme water shortages during dry season and dangerous flooding during wet season (Marcotullio 2003).

urban poor in low income settlements. Furthermore, the impact of globalisation in megacities like Metro Manila, where the urban poor are often disregarded, 'is not an immutable process, but rather a consequence of conscious decisions made by influential factors' (Shatkin 2004, p. 2481).[23] Shatkin's observation supports an argument that in globalising cities of developing countries there is a contradiction between extensive urban development coupled with rising property values and the housing needs of the urban poor. The unequal opportunities between rich and poor to access legal accommodation are due to the fact that the urban real estate market was controlled privately by urban elites who practised land hoarding and speculation.[24] These inequalities left the urban poor with no other choice but to illegally squat on land that is in close proximity to their place of livelihood. For this reason, there is a need to review the urban development policies in the Philippines which respond to the pressures of globalisation and the need of the urban poor for shelter.

3.3.1 History

The history of urban development and policy responses in relation to the phenomenon of urbanisation in the Philippines is illustrated in the case of Manila[25] which is the first major city that eventually grew into a metropolitan region. In Metro Manila, the proliferation of squatter settlements and urban slums increased because of massive movement of the rural poor to the metropolitan area. In the late 1960s, squatter settlements that could be found throughout the metropolis were often in large clusters because of the stronger mutual protection offered by the greater number of inhabitants (Pinches 1994). Pinches' observation of the incremental growth of squatter settlements in Metro Manila in contrasts the overnight invasions that characterised the squatting activities in Latin American cities. However, it is similar to the cases in many other cities in developing countries. The recent debate on the precarious condition of slums and squatter settlements in the Philippines is directly related to current globalisation trends.

The Philippines experienced rapid urban growth and widespread urban poverty towards the end of the 20th century. Urban growth in the entire country exceeds five per cent per year. This is one of the highest rates of urbanisation in the world with over 50 per cent of the country's population living in urban areas (Lee 1995, p. 531). Moreover, about 40 per cent of Filipinos live below the poverty line and most of them do not have security of tenure for their shelter (Porio &

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[23] The impact of globalisation to fragmentation and local struggles of squatter organisations in Metro Manila is also discussed in the publication of Berner (1998).
[24] This is continuously observed evident in rising real estate property values and flow of investment for real estate developments in CBDs of Metro Manila, for example.
[25] This refers to the City of Manila, an independent local government unit, which is one of the 17 cities and municipalities composing Metro Manila.

Crisol 2004). In 2002, the National Housing Authority estimated that the total number of informal settlers in major urban centres was 1,408,492 families and 52 per cent of them were in Metro Manila (Porio & Crisol 2004, p. 204). For most of the urban elites, this growing numbers of squatters posed a threat to both moral and physical well-being, stability, and development in the capital city and to the entire country at large (Pinches 1994). In order to address this poor urban condition, the Philippine government under the different administrations, has attempted to solve this problem through the implementation of various housing policies and programmes. How these government initiatives impact on urban development and poverty alleviation in the country will be the main focus of discussion in the following sections.

Historical background

Early urban development initiatives by the Philippine government began in the capital city of Manila and its growing metropolitan area. In 1939 during the administration of President Quezon, large tract of lands were acquired outside Manila that is now known as Quezon City. However, it was during the administration of President Marcos that more land was acquired from the late 1960s to the mid-1970s outside Manila. These lands were used to relocate informal settlers when the country's capital was developed into a modern city (Porio & Crisol 2004, p. 208). Notable housing policies and urban development programmes were implemented when Marcos ruled the country for two decades. Marcos' regime began with his first election to presidency in 1965 and ended in 1986 as a result of the popular People Power revolution. During this period, a centralised form of governance and greater state interventions to solve urban problems came in 1972 when Marcos declared martial law. Under this regime, urban development initiatives were associated with the first lady, Imelda Marcos, who was appointed by Marcos to sit in powerful government positions. The Marcos' initiatives had mixed implications for shelter development (Lee 1995). Relatively large amount of government expenditure was allocated for massive housing projects but many Filipinos felt that these large sums were wasted on prestigious large scale projects.[26] However, it is notable that the Ministry of Human Settlements was created when few countries considered the importance of this sector at the time. Despite the Marcos' initiative for massive urban development, it was believed that if only those funds were properly allocated they could sufficiently address the country's housing

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[26] This includes mass housing projects such as BLISS and *Dagat-Dagatan* housing, and Dasmariñas *Bagong Bayan* resettlement, which are discussed in the succeeding sections; and, large scale buildings in Metro Manila such as the Cultural Centre of the Philippines and the Folk Arts Theatre, among others mentioned by Pinches (1994).

needs. In spite of these political controversies, the scale of Marcos' housing policies and programmes have not been duplicated since, even in recent administrations.

The shift to a decentralised form of governance started in 1986 under the revolutionary government of President Corazon Aquino who was installed by the People Power revolution. The new government instituted the 1987 Philippine Constitution. The new Constitution became the basis for the crafting of laws to devolve government functions to the local government units and to empower the people to participate in governance. This major shift in the Philippine governance serves as the basis for housing policies and programmes in the recent post-People Power revolution administrations. Based on the major political events in the second half of the 20th century, the timeline of housing policies and programmes in the Philippines can be divided into three major periods. These are pre-Martial Law; Martial Law; and, post-People Power revolution. President Marcos was first elected to presidency in 1965, however it was not until his declaration of Martial Law in 1972 that there were significant impacts on housing and urban development policies in the country. Although the Martial Law regime was lifted in 1981, its influence continued until a major shift was notable with the event of the People Power revolution in 1986. During the pre-Martial Law period, there were no significant housing policies and programmes due to the lesser degree of urban related problems as well as the degree of state interventions needed at that time. For this reason, the succeeding discussions of Philippine housing policies and programmes will focus on the Martial Law and the post-People Power revolution.

Martial Law period

Centralised planning and notable state interventions in the Philippines came in 1972 when President Marcos declared Martial Law. The regime's slogan was the 'New Society'. During this regime, the National Housing Authority (NHA), the Metro Manila Commission (MMC) and the Ministry of Human Settlements (MHS) were instituted. Marcos' initiatives to solve the urban problems in Metro Manila and the entire country were associated with the powerful first lady Imelda Marcos. The first lady was then appointed as governor of MMC and the minister of MHS wherein the NHA was an attached agency. To sum up, state power over urban development was increased and consolidated in the hands of the presidential family (Pinches 1994; Shatkin 2004).

During the Martial Law period, all existing housing agencies were abolished and replaced by one agency. The new NHA was created by Presidential Decree (PD) 757 in 1975. The creation

of this new agency was influenced by World Bank (Pinches 1994). The agency was founded to house the poorest 30 per cent of the population (Shatkin 2004, p. 2478). However, in 1978 a more powerful MHS was created making NHA as an attached agency to the new ministry. On paper, the MHS covers all facets of development planning and implementation in the s country. This development framework was derived in part from the ekistics design tradition associated with Greek architect Constantine Doxiadis.[27] Owing to this ekistics concept, the ministry's involvement focused on 'man's eleven basic needs': water, power, food, clothing, livelihood, medical services, education, ecology, sports, shelter, and mobility (MHS 1978; Benitez 1981-82; Mathay 1981-82; Serrote 1987-88 in Pinches 1994, p. 29). Pinches further relates this framework to the works of Patrick Geddes and Le Corbusier that defined an 'integrated and humanistic approach to urban design in that it attempted to consider the multiple ways in which man was connected to the physical habitat' (Pinches 1994, p. 29). In brief, the MHS headed by Imelda Marcos became the most influential and powerful housing agency during the Marcos' regime.

The National Shelter Programme by the MHS was one of the major actions by the Marcos regime which utilised an integrated approach to solve the housing needs of the country. As a matter of fact, 11 billion Philippine pesos from public and private funds were allocated in 1983 for the construction of 128,000 units (Abueg 1986). The provision of shelter was based on the 'human settlement approach' which conceives the construction of economical housing units that meet architectural and engineering design and construction standards set by the government (Abueg 1986, p. 199). Moreover, Abueg further reports a major housing programme under Marcos regime known as the *Bagong Lipunan* Improvement of Sites and Services (BLISS). This housing programme was conceived in December 1978 during a corporate planning workshop of the MHS. The objective of the programme was to provide shelter for low-income families with long term loans and lower interest rates. In addition, it was intended to provide livelihood and employment opportunities for unemployed residents. However, Abueg comments that even if the original idea of the programme was to house the rural poor, the first BLISS project was constructed in Metro Manila in February 1979. Ironically, when many BLISS projects were completed in Metro Manila in March 1983, the buildings were similar to upper-class condominiums that did not seem to match the affordability level of the urban poor (Abueg 1986).

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[27] See, 'Ekistics: an introduction to the science of human settlements' (Doxiadis 1968); and, 'Ekistics, the science of human settlements' (Doxiadis 1970).

Place-based poverty alleviation strategies such as settlement upgrading and sites and services were implemented during the first half of Marcos' regime. A Slum Improvement and Resettlement (SIR) Programme was established throughout the country. The same programme was implemented as the Zonal Improvement Programme (ZIP) in Metro Manila (Pinches 1994; Porio & Crisol 2004). Moreover, the attempt to solve the squatter problems was one of the major efforts of the Marcos regime to transform Manila into a City of Man.[28] As a consequence, the beautification programs associated with the first lady Imelda Marcos attempted to remove slums and squatters settlements, which were viewed as eyesores, from public vision. In some cases, these were done by the erection of white washed fences to hide the slums, especially during visits by foreign dignitaries or during international events. These notable events included the Miss Universe Pageant in 1974, the state visit of US President Ford in 1975 and the IMF-World Bank Conference in 1976[29] (Jimenez et al 1986; Bello et al 1982 in Pinches 1994, p. 31). Furthermore, President Marcos issued PD 772 in 1975 which made squatting on public or private lands a criminal offense subject to imprisonment (Pinches 1994; Aberia 1997 in Porio & Crisol 2004). The law was repealed in 1997, and it is observed that the proliferation of squatter settlements and their eviction and demolition continue up to the present administration (Figure 3-1).[30] Accordingly, the place-based strategies that were introduced during the Marcos' regime did not transform the squatters' settlements into a more legal form of urban development.

Figure 3-2. Davao City Mayor punched a Court Sheriff who insisted to implement demolition[31]

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[28] This Marcos regime's effort, although failing in terms of its own definition, nevertheless, had profound impact on squatter problems in Manila than any regime had before it (Pinches 1994, p. 30).

[29] This case in the Philippines, also happened in Thailand in 1991 when the IMF-World Bank joint conference was held in Bangkok. Over 2,000 slum dwellers from areas surrounding the Queen Sirikit National Convention Centre were forcibly removed. Both cases in Thailand and the Philippines are cited by Greene in the introduction of his paper 'Stage cities: mega events, slum clearance, and global capital' (Greene, SJ 2003).

[30] In 1 July 2011, there was an incident in Davao City where the lady Mayor Sara Duterte punched a Court Sheriff who insisted the demolition of houses inside a contested property (ABS-CBN 2011; Tupas 2011).

[31] For detailed report of the incident, see, Tupas (2011). Image source: http://newsinfo.inquirer.net/20369/davao-mayor-punches-sheriff-over-demolition-of-shanties-2

Major resettlement projects were implemented during the Martial Law regime of Marcos. One of them was the Dasmariñas *Bagong Bayan* (DBB)[32] resettlement area which was acquired by the National Housing Authority in 1975 (Abueg 1986). The 625 hectares of land was conceptually subdivided into seven sections with one area for commercial and industrial uses and another one for government offices and public schools. The resettlement site would have been able to accommodate 15,000 families. The project was aimed to serve as a resettlement model and a new town development for the low-income group not only in the Philippines but in the whole of Asia. The first beneficiaries of the project were given 200 square metres of land on which to build their own houses out of materials salvaged from their previous houses in Manila. The pioneer residents encountered a number of problems including costly transportation services, inadequate water supply, and lack of electricity. Moreover, the site did not include a cemetery.[33] These residents were forced by the government to leave their squatter settlements in Manila. The main objective of the government for the new resettlement project was to improve the living conditions of the squatters. However, Abueg (1986) claims that the beneficiaries found it difficult to pay the terms despite the relatively easy repayment schemes.

Another Marcos' initiative to solve the squatting problems and to beautify Manila was the construction of cluster housing for approximately 500 families in Dagat-Dagatan (Pinches 1994). The site was a reclaimed fishpond located just north of Tondo Foreshore. Under the direction of Imelda Marcos, this housing project was named *Kapitbahayan* (literally: neighbourliness). This project was supposed to embody the ideals of *bayanihan* (mutual help) and *barangay* (the pre-colonial local community) to become a model community for housing in the entire country. Ironically, for what was supposed to be affordable for low-income families, Imelda Marcos ordered the construction of houses with costly Spanish style terra cotta tiles for the roofing. Pinches (1994) further reports that the *Kapitbahayan* project was then presented as the first lady's and the Philippines' contribution to the United Nations' Vancouver Habitat conference in 1976 (Figure 3-2). The project might appear appealing in the international exhibition. Nevertheless, it did not benefit a large number of people due to the high cost of construction materials being installed.

A national savings programme for housing was also created during the Marcos regime. As a consequence, there was a sharp increase in the volume of public and private housing

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[32] Dasmariñas is located approximately 27 kilometres south of Manila, and the resettlement site is located approximately eight kilometres from the centre of Dasmariñas.
[33] Other than this, in the 1970s, the resettlement site was remotely located away from amenities and other urban services.

throughout the early 1980s. In part, this was due to large scale mobilisation of funds through the establishment of Home Development and Mutual Fund (HDMF) (Lee 1985, p. 320). The HDMF is a provident savings scheme that provides cheap mortgage financing mainly on housing for its members. HDMF was originally established in 1978 by PD 1530. After a couple of institutional amendments, it became independent by 1980 by PD 1752 of which it is now known as the Pag-IBIG Fund. This national saving scheme for housing that was introduced during the Marcos' administration is playing a major role in financing the housing needs of the majority of the Filipino people.

Figure 3-3. *Kapitbahayan* project in *Dagat-Dagatan* housing site, Tondo Foreshore[34]

Post-People Power Revolution period

The post-People Power revolution period began with the presidency of Corazon Aquino. She inherited leadership from her martyred husband, senator Benigno Aquino, Jr. (Choguill 2001) when she was installed by the popular People Power revolution in February 1986 (Figure 3-3). The first housing and urban development policy of Aquino was Executive Order (EO) 90[35] issued in 1986 to define the mandates and coordinate all agencies involved in housing. Part of this policy was the creation of the Housing and Urban Development Coordinating Council (HUDCC) that was created to replace the abolished MHS. This new housing agency structure faced a more challenging housing situation in the Philippines especially in major urban centres like Metro Manila. Shatkin (2004) reports that in the earlier months of Aquino's administration, hundreds of thousands of people from all over the country flooded into Metro Manila and illegally

[34] Source: Imelda Romualdez Marcos, http://imelda.mybcnet.net/?p=3247
[35] For complete document of Executive Order 90, see, Republic of the Philippines (1986), http://hlurb.gov.ph/wp-content/uploads/laws-issuances/charter/eo_90.pdf.

settled wherever they could. These new urban migrants were hoping that their informal security of tenure would be legalised by the new government as it promised to strengthen poverty alleviation efforts. As a matter of fact, early attempts to provide tenure security includes a presidential proclamation of 650 hectares of government land for 90,000 informal settlers in Quezon City. However, this was never fully implemented due to budget shortfalls and political instability (Shatkin 2004, pp. 2478-2479). Despite the unstable political condition in the early stage of Aquino's administration, there were apparent initiatives to take care of the housing needs of the Filipino people.

The most notable initiative to elevate the security of tenure of the urban poor under Aquino's administration was the Community Mortgage Programme (CMP).[36] This programme was conceived immediately following the overthrow of Marcos and was formalised in 1988 (Lee 1995). The CMP was 'a low-income home financing programme that allowed informal settlers to acquire an undivided tract of land through a community mortgage' (Llanto 2007, p. 415). This programme was undertaken by the National Home Mortgage Finance Corporation (NHMFC) as the policy-making body, funder and administrator. The implementation of CMP was incremental. It began with an initial loan for the purchase of land to improve security of tenure. The second loan was for the upgrading of utilities and infrastructure services. The third and final loan was for the individual beneficiaries to improve their houses. The CMP could be initiated when a community association was formed and was recognised by the Presidential Commission for the Urban Poor (PCUP). Each community association was required to enter into an agreement to work with a partner institution known as the originator. The NHMFC purchased the land from the legal land owner and mortgaged it to the community association with heavily subsidised terms (Lee 1995).

Figure 3-4. The People Power revolution that installed the presidency of Corazon Aquino[37]

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[36] CMP could be a 'specially designed mortgage program', referred by Durand-Lasserve (2006, p. 11), that may be an efficient tool for mobilising resources for securing tenure, when lending procedures of commercial banks and other lending institutions are nor adapted to the needs of the urban poor.
[37] Source: http://graphics8.nytimes.com/images/2009/07/31/world/29317173.JPG

The CMP was designed to provide assistance to organised informal settlers to purchase land in order to improve their security of tenure. This initiative differs from conventional upgrading programmes by the government in such a way that CMP projects were initiated and implemented by the communities themselves. The government's responsibility in the implementation of CMP was to finance, guide and regulate the programme. For these reasons, CMP was unique to the Philippines and due to its successful innovation it has gained a certain international reputation (Lee 1995). Pacione (2001) describe this programme as one of the 'significant top-down government-sponsored attempts to provide subsidised housing finance for low-income communities' (Pacione 2001, p. 528). In comparison with similar successful initiatives in other countries, Lee (1995) refers to the Grameen Bank Housing Project in Bangladesh, the Trift and Credit Cooperative Societies in Sri Lanka, the non-governmental Self-employed Women's Association Bank in Ahmedabad, India, and the public sector Bank Rakyat in Indonesia. However, all of these mentioned initiatives have tight rules of access which may exclude most CMP clients with loan periods that are beyond the affordability level of targeted CMP beneficiaries (Lee 1995, p. 530). Along with the Hyderabad's incremental development scheme *'Khuda ki Basti' (KKB)* in Pakistan, the CMP is acknowledged by Berner (2001) as innovative approach to facilitate self-help housing.

The CMP was hailed as the most responsive programme to the needs of the urban poor for tenure security since it was instituted under the Aquino's administration. It allows the urban poor to acquire land and build their houses without collateral. In fact, the programme has benefited about 137,000 households in over a thousand urban and rural poor communities (Porio & Crisol 2004, p. 209). The implementation system of CMP for land acquisition, site development, and housing construction is being utilised by local government units and other shelter agencies to upgrade slums. Despite being innovative in the focus on the need of the urban poor, the CMP did not meet its annual targets. Thus it failed to make substantial impact on shelter provision for the low income sector in the entire country (Minnery et al. 2013). Moreover, the CMP is no longer feasible in highly urbanised cities where it is needed most due to the scarcity of affordable land (Porio & Crisol 2004). In addition, the programme may not offer much help to low-income renters in slum and squatter settlements (Lee 1995). However, with the improvement of security of tenure status of informal settlements offered by the CMP[38], it is an enabling start for an

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[38] In the Philippine context, the Community Mortgage Programme is an example of a government-facilitated 'access to land' identified by Greene, M and Rojas (2008) as enabling first phase of incremental construction process.

incremental improvement of individual houses, site development, and provision of urban services.

The 1987 Philippine Constitution was a major landmark in the country's governance after the People Power revolution. The Constitution serves as a general framework for the new governance which takes explicit stands on issues related to urban poverty alleviation. It sets guiding principles on the conditions of evictions and the roles of the government, private and non-profit organisations in housing delivery and infrastructure development (Shatkin 2007). These key provisions regarding urban poverty alleviation and the delivery of affordable housing are written in the Constitution[39] as follows:

> *Section 9*
> *The State shall, by law, and for the common good, undertake, in cooperation with the private sector, a continuing program of urban land reform and housing which will make available at affordable cost, decent housing and basic services to underprivileged and homeless citizens in urban centres and resettlement areas. It shall also promote adequate employment opportunities to such citizens. In the implementation of such programs the State shall respect the rights of small property owners.*

> *Section 10*
> *Urban or rural dwellers shall not be evicted nor their dwelling demolished, except in accordance with law and in just and humane manner.*

> *No resettlement of urban or rural dwellers shall be undertaken without adequate consultation with them and the communities where they are to be relocated.*

The new Constitution and the previously instituted EO 90 became the bases for the two major legislations that were created in later years. These new laws are the Local Government Code (LGC) of 1991[40] and the Urban Development and Housing Act (UDHA) of 1992.[41] These became the bases of recent housing policies and programmes (Choguill 2001; Minnery et al. 2013; Porio & Crisol 2004; Shatkin 2004). Porio and Crisol (2004) describe them as legislations which 'marked the departure from eviction and relocation to the adoption of a more

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[39] For complete document of the 1987 Philippine Constitution, see, Republic of the Philippines (1987), http://www.gov.ph/constitutions/1987-constitution/.

[40] For complete document of the Local Government Code of 1991, see, Republic of the Philippines (1991), http://www.dilg.gov.ph/PDF_File/reports_resources/dilg-reports-resources-2016120_fce005a61a.pdf.

[41] For complete document of the Urban Development and Housing Act of 1992, see, Republic of the Philippines (1992), www.dilg.gov.ph/PDF_File/reports_resources/dilg-reports-resources-2016120_fce005a61a.pdf.

decentralised approach towards housing and urban development' (Porio & Crisol 2004, p. 208). These policies also integrated the participation of the urban poor in land use planning and redefined the roles of government agencies, urban poor communities, and mediating groups such as the NGOs. Thus, they 'changed the performance and relationships of stakeholders in the housing and land sector' (Porio & Crisol 2004, p. 208).

The LGC of 1991 set a framework for a decentralised system of governance in the Philippines. The law devolved significant functions and responsibilities from the national government to the different levels of local government units in terms of local infrastructure and service provision. It mandated the transfer of 40 per cent of national revenues to the local government entities and provided localities with enhanced authority for revenue generation (Shatkin 2007). Furthermore, the LGC supports civil society participation in governance (Minnery et al. 2013). Thus with decentralised urban responsibilities, local governments became more responsible for the provision of local housing (Choguill 2001). It goes without saying that with increased responsibilities for the local government units equated more power and authority for them to govern their respective localities.

The UDHA was enacted in 1992 to ensure the basic right of the Filipino people to access shelter and to use and develop urban land. In addition, the law includes the provision of land tenure, promotes public participation and enhances the role of the private sector in the development process (Choguill 2001; Minnery et al. 2013). The UDHA is unique in the sense that it explicitly protects the rights of the informal settlers and mandates local government units to proactively respond to the needs of the urban poor for affordable housing (Shatkin 2007). In principle, informal settlers may not have rights to occupy the land but the legislation stipulates an assurance for serviced relocation sites in case of eviction (Porio & Crisol 2004). Evidently, the UDHA is an urban policy instrument which prioritises the needs of the urban poor.

The LGC and UDHA became the bases for the local government units to make their own initiatives to solve housing and urban development related problems. In 2003 the local government unit of Quezon City, as an example, created the Housing and Urban Renewal Authority Inc. (HURA). This is a 'local government owned and controlled corporate entity charged with providing affordable housing to low-income residents' (Minnery et al. 2013, p. 165). HURA is mandated to 'upgrade, renew or redevelop slums and other blighted urban communities, develop resettlement sites and generally enhance and promote urban development' (Veneracion 2008 in Minnery et al. 2013, p. 165). Moreover, Porio and Crisol

(2004) claim that following the enactment of the LGC and UDHA, innovative local government units have passed their respective local legislations to allocate budget for land acquisition and development, and to create local housing boards and offices for the urban poor. Thus, the two major laws have proved to empower and enhance the local government units to attend to their respective housing and urban development needs.

Recent Philippine administrations consistently declare urban poverty alleviation as their main agenda. This is implied in the major housing policies of the different administrations after the People Power revolution (Porio & Crisol 2004). Housing and land reform initiatives were rationalised through the UDHA under President Aquino (1986-1992). This was continued by the administration of President Ramos (1992-1998), but the short-lived administration of President Estrada (1998-2001) shifted to focus on resettlement, building core housing and mortgage financing. The following administration of President Macapagal-Arroyo (2001-2010) focused on social housing and land proclamations to secure tenure for the urban poor. Housing and urban development remain a major political agenda in the present administrations. It has been observed that the chairmanship of HUDDC is delegated to the respective vice-presidents of the Macapagal-Arroyo and Aquino III (2010-2016) administrations. How the political factors influenced housing and urban development policies in the Philippines is the subject of discussion in the subsequent section.

3.3.2   Politics of housing and urban development in the Philippines

The government once supported and encouraged the delivery of housing by the private sector. The public sector only intervenes where the private sector is unable or unwilling to operate. However by the mid-1970s, it was 'clear that a policy of non-intervention by the government was not producing the desired results' (Lee 1985, p. 318). Thus, the public shelter programme was expanded to target specific groups of beneficiaries especially in the lower-income sector (Lee 1985). The problem of informal urban settlements then became the focus of the government's intervention. As a matter of fact, Pinches (1994) synthesises two major responses of the government to the squatting problems in Manila. These are the 'rehousing of squatters in inner city medium-rise tenement buildings' and the 'wholesale relocation of squatters to resettlement sites outside the city' (Pinches 1994, p. 26). For example, the first response includes the BLISS housing projects constructed from 1979 to 1983. On the contrary, Abueg (1986) observes that these buildings were beyond the affordability level of the urban poor. In the case of relocation of squatters to resettlement sites, the first major case happened in 1963. Pinches (1994), cites the case involving about 80,000 squatters from Tondo, North Harbour and the old Spanish

walled city of Intramuros. The squatters were relocated to a site known as *Sapang Palay*[42]. About 25,000 squatters were forcibly carried by city garbage trucks to the new site. The site is located distant from the city and was inadequately prepared. Consequently, the new settlers were left to fend for themselves (Laquian 1966; Juppenlatz 1970 in Pinches 1994, p. 26). Similar cases of squatting and relocation of squatters continued to happen during the Marcos regime when Manila was ideologically developed as a City of Man. However, for what was supposed to improve the lives of the poor, these government interventions did more harm than good by displacing the beneficiaries away from their source of urban livelihood.

Influences of international donor agencies and Marcos' political agenda can be traced in his regime's housing and urban development policies. In the 1960s and 1970s, the largest agglomeration of informal settlement in the Philippines was in the Tondo Foreshore area in the city of Manila (Figure 3-4). The site is located in a 137 hectare reclaimed land from Manila Bay for port development at the end of World War II. In 1974, the settlement had a total population of 157,860 individuals or 26,756 households. Before its redevelopment, it was the largest squatter settlement not only in the Philippines, but in all of Southeast Asia (Abueg 1986; Munarriz 1986; Pinches 1994; Shatkin 2004). As a consequence, Tondo Foreshore then became a recipient of development ideologies from international donor agencies and of Marcos' political agenda.
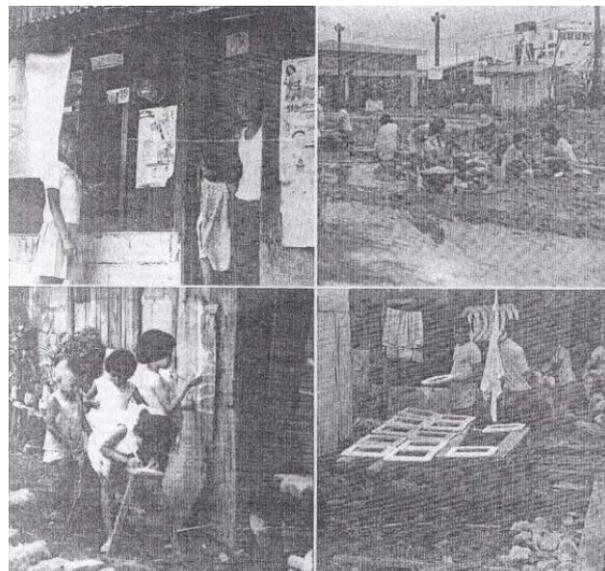
Figure 3-5. Tondo Foreshore informal settlements, Manila[43]

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[42] *Sapang Palay* resettlement project is located in the municipality of San Jose Del Monte, province of Bulacan, approximately 37 kilometres north of Manila.
[43] Source: http://image.slidesharecdn.com/architecturalrecords-140908105306-phpapp02/95/architectural-records-14-638.jpg?cb=1410173704

International donor agencies have promoted settlement upgrading. This was one of the twin pillars of urban housing reform programmes together with sites and services development during that period as influenced by Turner's school of thought. These internationally known concepts influenced Marcos' housing programmes. The Tondo Foreshore Development was a major settlement upgrading project and the forerunner of numerous smaller schemes (Lee 1985). These schemes are sites and services, core housing, 'flexihomes', private and public sectors joint venture projects, savings scheme for financing home purchase, secondary mortgage market, mortgage guarantee and insurance system, and many others which were implemented by the central government agencies under the Ministry of Human Settlements (Lee 1985, p. 318). Apart from the Tondo project, Marcos' implemented the BLISS project which means *Bagong Lipunan* (New Society) Improvement of Sites and Services. This was supposed to be Marcos' contribution to the sites and services concept. However, the project was implemented as fully completed housing development that did not purely translate the real concept. Moreover, the beautification efforts associated with the first lady Imelda Marcos led to the construction of white washed fences to hide slums and squatter settlements, and the installation of costly roofing tiles for low cost housing. Thus 'in sum, the Marcos regime's effort at shelter improvement were intended more as instruments of public relations and opportunities for corruption than as meaningful poverty alleviation strategies' (Shatkin 2004, p. 2478).

An economic crisis and unstable political conditions hit the Philippines in the mid-1980s. This situation discouraged the private sector to invest in housing. With the overthrow of the Marcos regime, there was a massive invasion of people in public and private lands in Metro Manila. These new urban migrants established new squatter communities in the metropolitan area. The proportion of the population who took squatting as a means for shelter was increasing because of limited financial access due to the austerity measures by the Aquino government. The urban poor were unable to access any formal credits because of their tenure status in informal settlements. Moreover, the authorities were reluctant to provide urban services to this less privileged group of people because of disputed land ownership. However, this significant group became the target beneficiaries of the Community Mortgage Programme (Lee 1995). This new programme was conceptualised by a number of NGO leaders who served in the new Aquino government (Porio & Crisol 2004). This emerging situation that was influenced by the People Power movement is an indication for a wider community participation in governance and urban development.

In the 1980s, the 'new policy agenda' marks a significant shift from place-based strategies such as sites and services and upgrading. The new approach intends to enhance access to shelter and community improvement through liberalisation of the housing market to increase competition and lower down prices of land and building materials. In addition, it decentralised housing responsibility to local governments, and encouraged the participation of civil society as a valuable resource in shelter provision (Shatkin 2004). However, this emerging political trend was being challenged in the Philippine setting. Shatkin (2007) summarises the two main political discourses since the end of Marcos era. The first discourse represents the efforts of the Filipino people to overthrow authoritarianism and embark on localised democratic government that is evident in the rising participation of grassroots people's organisations. On the other hand, the second discourse holds the argument that the recent reforms will bring back the rich and influential pre-Marcos political families into power (Shatkin 2007, p. 32). These two discourses can be observed on the greater participation in the government by civil society organisations, yet their initiatives can be easily hindered by the stronger political power of the elites' economic interests. Despite the influence of the powerful elites, the LGC of 1991 and UDHA of 1992 were passed. These two major laws serve as landmark legislations for decentralised governance with greater civil society participation for urban development in the Philippines.

Housing and urban development were given more attention in the succeeding administrations of the post-People Power revolution period. President Aquino was followed by President Ramos whom Choguill describes as 'a well-meaning and apparently quite effective ex-military man who at least started the country on the path to rational urban development' (2001, p. 4). Following Ramos' term, in 1998 the popular movie actor Joseph Estrada was popularly elected into presidency. President Estrada was marked as the champion of the poor. During his administration, housing was one of the country's top priorities which made up a major part of the terms of reference for the National Urban Development and Housing Framework (NUDHF) (Choguill 2001). Choguill was then hired by the Asian Development Bank in 1999 to lead the Philippine team to update the NUDHF for the 1999-2004. He observes that 'many Filipinos see housing and urban development as synonymous' (Choguill 2001, p. 4). Thus, the new NUDHF was meant to focus on urban poverty alleviation in the country.

The principle that was adopted in the formulation of the NUDHF was in conflict with the political interest of the Estrada administration. The initial formulation of the NUDHF reflected the priorities of Karina David who was then Estrada's Presidential Housing Adviser and Chair of HUDCC. David was an experienced community organiser and NGO leader. She advocated a

massive public consultation in the preparation of NUDHF and insuring ownership of the plan by the Filipino people. The exercise began in July 1999 but when it was about to be finalised, on 13 October of the same year, Estrada announced the formation of the Presidential Commission on Mass Housing and named himself as the country's 'housing czar' (Choguill 2001, p. 8). Estrada reduced David's appointment to an Adviser on Socialised Housing and appointed a stock market executive as the Presidential Adviser of Mass Housing to be David's superior (Choguill 2001; Shatkin 2007). In other words, there was a takeover by the private construction industry and real estate developers in the social housing sector. This event implies that housing provision was backed by the neo liberal market-oriented approach that marginalised the ability of the civil society to participate.

The housing and urban development agenda continued to be an instrument to gain political popularity in the Philippine setting in the succeeding administrations. As started in the Macapagal-Arroyo administration and followed by the present Aquino III administration, the chairmanship of HUDCC is delegated to their respective vice presidents.[44] Vice-president Noli de Castro of the Macapagal-Arroyo administration gained political popularity as the then chair of HUDCC. This opportunity made him one of the top prospective presidential candidates in the following 2010 elections. However, he opted to quit politics after his term as the vice-president. The same opportunity was gained by Vice-president Jejomar Binay of the present Aquino III administration, who also chaired HUDCC. Unlike de Castro, Binay is taking advantage of the housing and urban development agenda for his presidential candidacy ambitions for 2016. In other words, housing as a major political agenda since the Marcos' regime is an important part of Philippine politics which can be observed in the succeeding and present administrations.

3.3.3   *The Philippines in the context of international trends and ideologies*

The impacts of globalisation in the formation of cities in the Philippines are inevitable. In the same way, influences from international trends and ideologies can be traced in housing and urban development policies in the country. Pacione (2001) enumerates the post-World War II urban policy in the UK. It starts with the physical redevelopment phase from the end of the war until the late 1960s. It was followed by the social welfare phase in the 1970s focusing on the improvement of welfare for disadvantaged individuals and communities. With the advent of the Thatcher government in 1979, the state policy shifted from welfare to enterprise approach to restructure Britain economically around free-market individualism and rejecting the post-war

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[44] Most recently, the same thing with the newly installed President Rodrigo Duterte, he appointed the new Vice President Ma. Leonor Robredo as HUDCC chief (Corrales 2016).

welfare state policy. With the failure of the entrepreneurial phase to reverse urban decline, the competitive phase became a new approach in the early 1990s. Finally, with the election of the New Labour party in 1997, the 'Third Way' paid greater attention to the social consequence of state policies. This latest phase is based on the principles to focus on problems of the socially disadvantaged, giving a stronger role to local authorities and encouraging 'sweat equity' by the local people for community development. There is no known direct influence with these policy developments in the UK, however, it is noted that recent housing and urban policy developments in the Philippines encouraged the participation of civil society and NGOs in shelter provision.

After World War II, the Philippines was also in the process of rebuilding its cities, in the same way as the UK and other countries. Following this period, social welfare state policy in the Philippines can also be observed during the Marcos regime especially in the 1970s when Martial Law was declared. Despite the massive eviction of squatters in major cities and the declaration of squatting as a criminal act under Martial Law, there were notable socialised housing projects which were implemented. These housing projects were constructed to provide a humane environment for the urban poor. A number of them included the BLISS projects implemented throughout the country and the Dagat-Dagatan relocation site with houses installed with terra cotta roof tiles. These projects were implemented with high government subsidies. Between the late 1970s and the 1980s the country was in political crisis, thus the chaotic condition in the country was more relative to the political condition rather than to the international economic situation. The country was rebuilding its political system under the new government of Aquino installed by the People Power revolution in 1986. Notable towards the end of Aquino's administration was the institution of the LGC in 1991. This law led to the initiatives for decentralised governance with greater civil society participation.[45, 46] Following this event, the Ramos administration focused on market liberalisation and increased competition. This principle is relative to the 'new policy agenda' that emerged in the late 1980s (Shatkin 2004). Furthermore, the failure of the government to provide sufficient housing for the urban poor through economic and policy interventions prompted the NGOs to participate with civil society to take over shelter provision. Hence, the NGOs play an important role in the institution of 'sweet equity' as component in the provision of housing for the low-income sector. Relevance to the

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[45] Comparatively, in the case of Indonesia, problems and challenges of the country's new decentralisation policy is explored in the publication of Firman (2008).
[46] Decentralised policy and planning approach is also noted with the increasing number democratic governments in the world, and with the fall of the Soviet Union in 1989 and the adoption of market-oriented economic policy in China and India during the 1990s (Buckley and Kalarickal 2005, p. 234).

development in the Philippines towards the end of the 1980s, Takahashi (2009) links the timely concept named 'enablement'. This is an approach for the state to prescribe legislative support to mobilise all relevant resources of the private sector, NGOs, community-based organisations, and households. Thus, the participatory approach in housing and urban governance came on to the scene.

Initiatives for participatory approaches to housing and urban development in the Philippines can be found during the early years of Estrada administration. However, when Estrada put housing directly under him, he appointed a new adviser from the stock market and brought in private developers and contractors for his housing programmes. This housing provision approach adopts market capitalism referred by Pacione (2001) as the governing philosophy in urban development and policy in the US. Together with the zoning concept introduced by the Americans in the Philippines, it was difficult to avoid a market-oriented approach in the implementation of housing programmes. In the case of residents in low-income settlements, also referred as 'slum dwellers' by Buckley and Kalarickal (2005), 'who by force of circumstances have always been among the most market-oriented of all consumers because they have no other options' (Buckley and Kalarickal 2005, p. 250). This policy approach was visible under the Estrada's administration and the following Macapagal-Arroyo's administration when completed housing subdivision and multi-storey housing projects were constructed. Most of these housing units were implemented by the private sector with government subsidies and mortgaged to the urban poor beneficiaries. On the other hand, there is a demand by the leftist political faction for socialised housing. This movement is relative to the Marxist-Leninist principle of the Soviet socialist urban policy referred by Pacione (2001). However, the implementation of a socialised housing programme in the Philippines did not exactly reflect the real scenario in a socialist country. In the Philippine setting, socialised housing is not purely delivered through government programmes. It was also delivered as a balanced housing requirement for private developers and through the initiative of concerned NGOs. To sum up, it seems that shelter provision in the Philippines is chaotic in nature as initiated by the different agencies. However, it is interesting to note that the country looks like a recipient of international policy trends or a battleground of warring ideologies. Despite becoming a chaotic environment for the provision of urban poor housing, it is observed that people's initiatives continued towards the new millennium and with the present administrations. Thus, civil society's contribution to the provision of shelter for the urban poor will be given attention for effective urban development and housing policies.

3.4   Synthesis

This chapter has demonstrated how housing policies in developing countries fall into three broad categories. Narasaiah and Jyoti (2009, p. 95) enumerate them as follows. The first group of countries tried to emulate models from the successful developed world in terms of financial intervention in the housing market such as guaranteeing loans provided by commercial banks. The second group of countries skilfully integrated housing policy with the overall developmental and economic policies of the government. Lastly, the third group of countries simply adapted housing policy in relation to the economic and fiscal capacity by following a gradual approach to solve the housing problems especially in the low-income sector. In cities in developing economies, an undeniable percentage of the urban population who lived in precarious informal settlements dominated the formation of the urban environment. In some cases, these urban inhabitants provided their own shelter through self-help or they were beneficiaries of their respective government's housing programmes. However, most of the government's initiatives failed because they are modelled on influential advanced industrialised countries (Ferguson & Navarrete 2003; Lim 1987; Mayo, Malpezzi & Gross 1986). To search for alternative scheme that are more successful in developing countries, John Turner began studying the *barriadas* in Lima, Peru in the 1950s (Turner 1967, 1968a, 1968b). Consequently, Turner's ideas generated from the progressive development of squatter settlements paved a way for the notion of 'aided self-help' and 'sites and services' programmes which became popular in the 1960s to the 1970s (Bromley 2003; Kellet & Napier 1995; Soliman 2012). Turner's influence is evident in the Philippine setting in the 1970s, which is observed in one of Marcos' housing project labelled as BLISS meaning *Bagong Lipunan* (New Society) Improvement of Sites and Services. With its meaning, BLISS in itself tags the popularised sites and services concept with the Marcos' 'New Society' political banner. The influence of Turner's school may or may not be successful, but it was short lived when the global trend in the 1980s shifted into a neo liberal market-oriented policy. This major shift prompted most governments to refocus their direction into a more market-oriented housing policy approach (Coit 1998; Fernandez-Maldonado & Bredenoord 2010; Giles 2003). This means that the self-help housing concept that recognised people as valuable resource in the provision of shelter seems to have been abandoned. In the Philippines, for example, the early period following the - People Power Revolution administrations attempted to include people to participate in housing provision and urban governance. However, this initiative was not sustained sustain when the private financial and real estate development sector took over the provision of lower-income housing during the Estrada administration, which was continued in the succeeding Macapagal-Arroyo administration.

The product approach towards socialised housing provision that is related to the neo liberal market-oriented housing policy orientation fails in most developing countries. Among others, its failures include gaps in the financial aspect characterised as the inability of the government to fully implement their housing programmes due to lack of funds (Fernandez-Maldonado & Bredenoord 2010; Valenca & Bonates 2010). As a consequence, the sufficient supply of housing is not made available to the majority of the low-income urban population (Coit 1998). Due to this limitation, human resource is reconsidered as a valuable capital for urban development in developing countries. This means that policy paradigms aimed at sustainable urban development are starting to shift their focus from the government towards giving importance on the role of the urban poor (Drakakis-Smith 1995). In the Philippine case, the popular People Power Revolution in 1986 paved a way for pro-people governance with the institution of the 1987 Constitution that was consequently followed by the enactment of the LGC in 1991 and UDHA in 1992. Hence, the failure of the government and the private financial sector to provide adequate shelter for the urban poor implies an emerging alternative that is centred on the role of the people.

The framework of policy-making has undergone major changes towards the end of the 20th century. Top-down strategies have given way to market and people-based solutions, process-based approaches, and place emphasis on building institutional capabilities. These dynamics influenced housing policies and programmes for the lower income sector. However, in the Philippine political environment, there seems to be a contradiction between the initiatives of the national government to provide completed housing units and the initiatives of the urban poor to provide their own shelter with the assistance from NGOs. Similar to the provision of completed housing units, earlier attempts such as aided self-help housing and sites and services schemes are proven to be unsustainable due to high government subsidies involved. Later attempts shifted to upgrading approach which is assumed as a more enabling strategy that capitalises on the contributions of all actors in housing production (UN-HABITAT 2002, p. 4). Upgrading programmes may allow the urban poor to improve and transcend their settlement from one housing submarket to another with a more secure tenure and legal status. However, at the start of the new millennium, the urban population becomes equal to its rural counterpart and is expected to grow. Hence, this presents a great challenge for policy makers to adopt a new paradigm towards sustainable urban development that capitalises on the contribution of the people in the formation of cities they created and settled in.

Chapter 4:   Citizen Participation in Housing Provision

4.1   Introduction

The previous chapter discussed how the Philippine government (and other countries) attempted to embark on a centralised policy to provide housing for the urban poor. Following the failure of the welfare state to provide sustainable low-income housing, the financial sector then played a role when a neo-liberal market oriented policy was adopted. However, in this context, the poor who occupied informal settlements were systematically excluded from formal housing and land markets. Most especially in the developing world, the disparities between the rich and the poor increased. Consequently, a new relationship between the entities of the state, the market, and civil society was configured with a decentralised approach to policy making. In the Philippines, the departure from authoritarian control can be specifically dated to the 1986 People Power Revolution that eventually paved the way to the creation of the 1987 Constitution, and the later legislations of the Local Government Code of 1991, and the Urban Development and Housing Act of 1997. In relation to these landmark legislations which place more importance on the role of civil society in governance, this chapter traces people power in conjunction with decentralised urban policies and devolved functions from national to local government units. According to Friedman (1992 in Takahashi 2009), 'civil society is conceivably a fundamental and appropriate actor in implementing locally sustainable development, thereby contributing to the creation of a more democratic society' (Friedman 1992 in Takahashi 2009, p. 113). Eventually, with the concept of enablement, the role of NGOs widened as an essential component to mobilise the participation of civil society in the democratic planning process in housing and urban governance. In terms of low-income housing provision, the significant shift from a centralised model to people-oriented initiatives is observed by Takahashi (2009) in the Philippines. Thus, the Philippines is a valuable case to demonstrate citizen participation because of its experience in this kind of development where people-based actions played an important role in the structural reforms in urban governance.

Citizen participation in theory and practice in the disciplines of urban planning and architecture is reviewed in this chapter. Furthermore, citizen participation in relation to low-income housing provision is discussed in the context of the Philippines, in term of its cultural traits, the political setting, and the empowerment of NGOs to mobilise civil society. This chapter reflects on the culture of citizen participation in the formation of the built environment, materialised in the provision of urban poor housing and the construction of communities. Furthermore, this identifies an emerging role for architects and planners.

4.2 Citizen participation in theory and practice

The current wave of citizen participation is a reaction to highly centralised development in the 1970s and 1980s that is perceived by activists and NGOs as 'top-down' approach disconnected from the needs of the poor (Mansuri and Rao 2013). Participatory approaches in architecture and urban planning were eventually developed from the exposure of professionals and theorists in the discipline to the realities of the developing world. Aside from the well-cited works of John Turner, Otto Koenigsberger also opposed the imposition of a master plan based on Western models and argued that planners in the developing world should prepare dynamically adaptive plans to involve local communities. This argument was popularised with Koenigsberger's (1964) case for 'action planning' which is well-cited, not least, in the works of Rosser (1970) on 'reaction planning';   and, Mumtaz (1983) on issues of community participation. Moreover, Liscombe (2006) investigates Koenigsberger's career in relation to Modern town planning in India. From the human ecological perspective, Lawrence (2006) recommends that citizen participation is an integral component in the construction of settlements and one of the basic principles for professional practice. Like Lawrence, Payne (2006) also places value on citizen participation in his study of initiatives by the urban poor in informal settlements in India and Turkey. He explores how people from different backgrounds have evolved rational and ingenious solutions to meet their need for shelter, being influenced by the works of Oliver, Turner, Rapoport, and others engaged in the fields of housing, spatial organisation, and the role of communities. Thus, the ingenuity of the urban poor in providing their own shelter can provide lessons for professionals to address the issues of housing and urban development (Payne 2006), most especially in developing countries. The cultural expression of citizen participation is exhibited in the construction of urban poor housing and settlements in developing countries. For example, Labonne and Chase (2011) present cases of community-driven projects in the Philippines in relation to the enhancement of social capital.[1] Thus, it is necessary to discuss the concept and practice of citizen participation in relation to the formation of the built environment.

4.2.1 Citizen participation in urban planning

Initiatives to include citizens in the planning process have become increasingly popular in the past 40 years.[2] In the UK, the interest in participation in the late 1960s and early 1970s led the

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[1] 'Social capital' is well-discussed in the publications of Coleman (1988), Putnam (1995, 2000), Lyons and Snoxell (2005), and Kleinhans, Priemus and Engbersen (2007), among others. 'Social capital' is also suggested as one of the four types of capital indicators (with manufactured, environmental, and human capitals) to measure the impact of programmes for local sustainable development (Ekins & Medhurst 2006 in Hanberger 2011, pp. 270-271).

[2] Citizen participation in the 1970s is found, not least, in the journal publication of Fagence (1974), 'A code for citizen involvement in the planning process'; and, in his book publication, 'Citizen participation in planning' (Fagence 1977).

development of decision-making, planning and design methods involving residents (Broome 2005). In the case of the US, isolated cases of citizen participation in urban planning were reported by Brody, Godschalk and Burby (2003, pp. 245-246). At the federal level among other initiatives, citizen participation was first mandated in the 1954 Urban Renewal Program and later expanded in the 'Model Cities' and 'War on Poverty' programmes of the 1960s. At the state level, as an example, Hawaii's state growth management law in 1962 required citizen involvement. In the case of Czech planning legislation, 'certain levels of public access in the process of the statutory land-use planning have been part' of practice since the 1970s (Maier 2001, p. 707). However, actual citizen participation has only been totally adapted in planning practice towards the end of the twentieth century. The shift is noted from 1989 onwards when Czech society was slowly recovering from the influence of a one-party government. This is marked by the lifting of oppressive principles which led to the gradual removal of former constraints which prevented citizen participation by the Czech's new government (p. 708).[3] Theoretically, citizen participation is the cornerstone of democracy and has been used as a tool, with varying degrees of success in the late 20th century, for effective planning and governance that involves a greater number of players, most specifically, the people.

The rhetoric of citizen participation is a commendable political agenda. It assures the power holders of popular support and complementarily empowers the people because of its promise of involvement in the process. However in reality, the achievement of genuine citizen participation is perceived as wishful thinking by some experts. Implied, not least, in the publications of Arnstein (1969); Glass (1979); Maier (2001); and, Brody, Godschalk and Burby (2003), scholars in the field are aware that despite the idealism, in planning or public governance, citizen participation is complex and vulnerable to chaos when not properly handled. This is because the nature of involving the people is political in itself, of which the game of power is a tug-of-war between the elite power holders and the common have-not citizens (Arnstein 1969; Maier 2001). In a negative sense, Williams (2004) emphasises the dangers of institutionalised participation. With excessive demands on the time of all concerned, 'governmental and NGO resources can be poured into activities that have little influence on key managerial decisions, and build only cynicism among their lay participants' (p. 571). However, if the dynamics of local political society are favourable, the moments of participatory initiatives initiate the empowerment at grass roots level which extract public promises from politicians,

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[3] Furthermore, Maier (1998, 2000) discusses issues and development of Czech planning in relation to changes of country's governance.

bureaucrats and managers, or else, **make explicit wider political conflicts and agendas** (Williams 2004). In the case of developing countries, Mansuri and Rao (2012; 2013) explore the comparison between 'organic' and 'induced' participation.[4] It is observed that induced participation when packaged within a project – 'is almost set up for failure due to unrealistic predictions that emerge from bureaucratic imperatives (Mansuri and Rao 2013, p. 19). For this obvious reason, there is a need to explore the imperfection of the movement of citizen participation in planning, contrary to its promising success.

Loopholes in citizen participation were already acknowledged when the ideology gained popularity between the late 1960s and the 1970s. Involving the people may be a healthy democratic exercise, however Arnstein (1969), noting a French student poster (Figure 4-1), observed that 'participation without redistribution of power is an empty and frustrating process for the powerless' (Arnstein 1969, p. 216). The participatory exercise allows the power holders to claim that the voices of all sectors were heard. However in reality it is only possible to benefit some of the sectors. Furthermore, while citizen participation has become a common element in planning, Glass (1979) claims that 'both planners and citizens often assess the participatory elements as being unsatisfactory' (Glass 1979, p. 180). Thus, Glass examines the matching of objectives and techniques because if this is ignored in the design of participatory programmes, the probability of success decreases. Success of citizen participation in planning is crucial at the local government level. Brody, Godschalk and Burby (2003) examine the strengths and weaknesses of involving citizens and the degree that the participatory exercise is related to local planning practices which resulted in broader citizen participation during the planning process (Brody, Godschalk & Burby 2003). Aside from the importance of mandating citizen involvement, the study further emphasised that strategic planning choices which the planners make in the design of participation programmes will affect the level of public participation. In the same way, citizen participation in the preparation of comprehensive plans of 60 local governments in the states of Florida and Washington was examined (Burby 2003). The study concluded that broad stakeholder involvement contributed to more effective plans as well as to successful implementation of proposals which resulted from the participatory process. Moreover, they argue that participatory planning must be a continuous process. Based on projects in Norway, Amdam (2000) emphasised the importance of confidence building towards self-reliance, and self-help, among other self-developing strategies, which is expected to strengthen local

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[4] Organic participation is spurred by civic groups acting independently, which is different from induced participation promoted through policy actions of the government, and/or supported by donor-agency (Mansuri and Rao 2013).

communities with a positive influence on local development. In a case of a riverfront development, Sanoff (2005) reports a community-building approach[5] that was employed in a small mid-western town bounded by the Ohio River. The workshop results became the basis for the subsequent development proposals followed by implementation of the first phase (Sanoff 2005). It is interesting to note that citizen participation can work better at the local level because it involves people directly. It is the most accessible venue for broad stakeholder involvement and where the power holders can directly access their constituency.

*French Student Poster. In English, I participate; you participate; he participates; we participate; you participate . . . **They profit.***

Figure 4-1. French student poster[6]

Citizen participation is simplified by understanding the dynamism of the different levels of citizen involvement in planning. Arnstein's (1969) 'Eight Rungs on a Ladder of Citizen Participation' is popularly cited in the recent publications by Broome (2005), Brody, Godschalk and Burby (2003) and Maier (2001), among others. The typology of citizen participation 'is arranged in a ladder pattern with each rung corresponding to the extent of citizens' power in determining the plan and/or programme' (Figure 4.2) (Arnstein 1969, p. 217). Arnstein identified the typology that is designed to be proactive by using the examples of three federal social programs which include urban renewal, anti-poverty and Model Cities. The typology of eight levels of participation is illustrated as 'rungs of a ladder' in the following manner. The lowest two rungs (1) *Manipulation* and (2) *Therapy* are classified as the level of 'non-participation' (Arnstein 1969, p. 217). In this level the people may not be able to participate in planning but the objective is to

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[5] Furthermore, for complete community participation methods in design and planning, see, Sanoff (2000).
[6] Adopted from Arnstein (1969, p. 216).

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enable the power holders to 'educate' or 'cure' the participants. Climbing up the ladder will reach the 'degrees of tokenism' (Arnstein 1969, p. 217). The rungs of (3) *Informing* and (4) *Consultation* allow the have-nots to be heard and to have a voice. The rung (5) *Placation* is a higher level tokenism because it allows the have-nots to advise but the right to decide is retained by the power holders. The highest level tokenism that is rung (6) *Partnership* enables the have-nots to negotiate and engage in trade-offs with the power holders. The top most rungs (7) *Delegated Power* and (8) *Citizen Control* are the 'degrees of citizen power' wherein the have-not citizens gain the majority in decision-making and obtain full managerial control (Arnstein 1969, p. 217). The rhetoric of empowerment in contrast to the resistance of the power holders to citizen participation may have been the cause of barriers to the achievement of genuine participation. However, Arnstein's ladder of citizen participation illustrates that participation is a gradual process of empowerment for the people whereby certain efforts are needed to overcome possible resistance from the power holders.
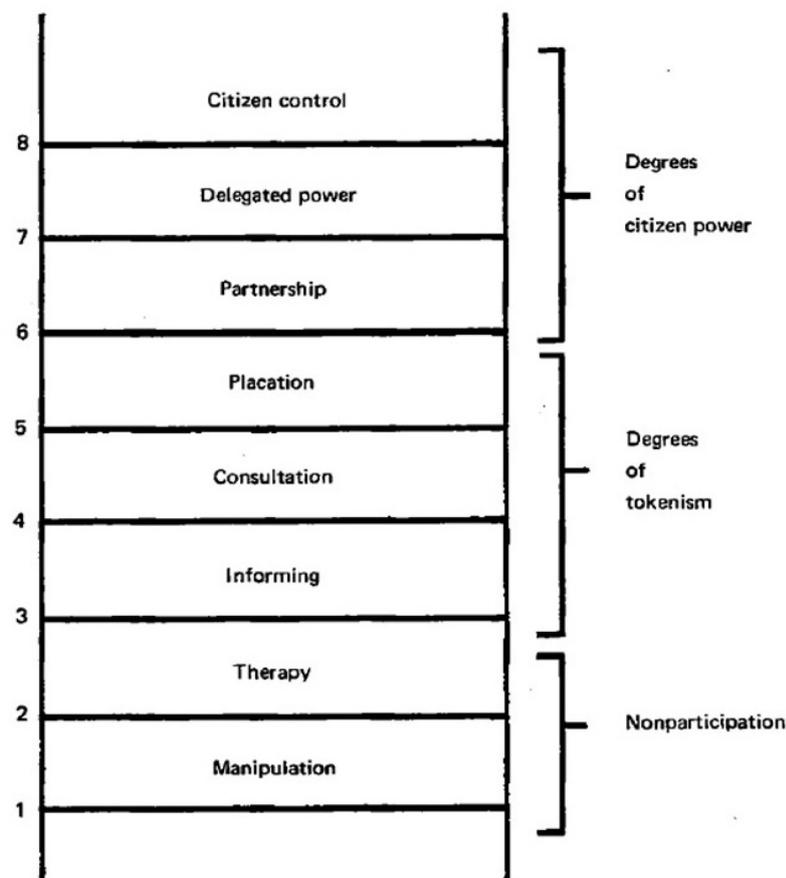
Figure 4-2. Eight rungs on a ladder of citizen participation[7]

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[7] Adopted from Arnstein (1969, p. 217).

Generally, citizen participation is defined as 'providing citizens with opportunities to take part in governmental decision or planning processes' (Glass 1979, p. 180). However Maier (2001) views that 'an opportunity to take part in planning and decision-making may not necessarily lead to real participation' (Maier 2001, p. 709). Considering that citizens may fail or refuse to take part in participation due to their incapacity or lack of willingness to take responsibility, Maier claims that Arnstein's paradigm is more appropriate to the dynamic nature of citizen participation. Since Arnstein's view is based on the presumption of two constantly opposing parties – 'them' and 'us' or precisely represented by the 'have-nots' and 'power holders', Maier further shows the changes in the scope and participation of players in the process. According to Maier, the process of involvement and empowerment in citizen participation is multi-dimensional. Unlike the simplified one-dimensional process parallel of 'climbing a ladder', citizen participation 'might best be compared to the effect of a lake after a stone has been thrown in' (Maier 2001, p. 716). This is described and modelled as a 'Concentric Pattern of Selective Involvement' (Figure 4-3). This model is illustrated with larger and wider circles which emerge around the spot where the stone penetrated in the surface of the water. The concentric circles represent the different interest groups, each who claims to be heard and involved, while the spot where the stone hit symbolises an initial power centre where decisions are made. This citizen participation paradigm is developed from Maier's studies of the Czech planning cases dating from the pre-1989 period[8] to date of publications (Maier 1998, 2000, 2001). Similar to Arntein's rungs of a ladder, the interaction between the power centre and the outside interest groups in Maier's concentric pattern also passes through several stages. In the first stage, the groups start to manifest their existence by protesting to a proposal. If the groups succeed, they will be accepted as regular opponents in the second stage where their consent is sought by the power centre. In the further stages, the groups' alternative plans may be incorporated in mainstream planning where they possibly become part of the power centre (Maier 2001). Arnstein's ladder and Maier's concentric pattern of involvement may have emerged from different cases and illustrate the process of citizen participation in different ways. However, both models can be used as tools to understand the complexities of involvement of different players and the processes involved to achieve genuine citizen participation in the field of urban planning.

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[8] The time period is marked with the 1989 Velvet Revolution, a non-violent transition of power against the one-party government of the Communist Party in what was then Czechoslovakia.
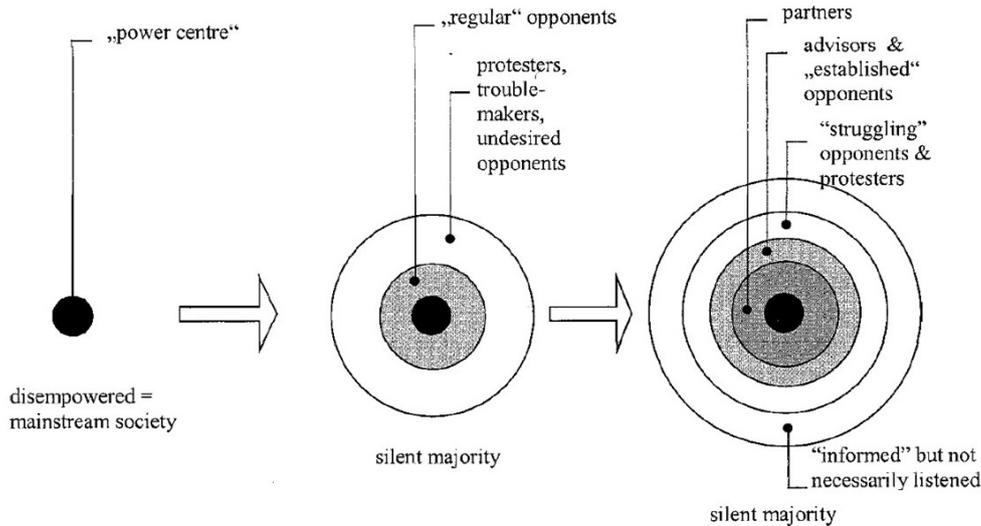
Changes of the pattern of involvement from totalitarian society to emerging democracy.

Figure 4-3. Concentric pattern of selective involvement model[9]

4.2.2 Citizen participation in architecture

Architecture is a product of interaction between the architect and the end user. Nevertheless, the concept of citizen participation is still in the process of emergence in the discipline of architecture. For instance, Albrecht's (1988) examination of humanistic planning theories is aimed towards a theory of participation in architecture. The quest for equality that promoted participation is traced back from the 1960s.[10] It is argued that 'if planning were to further urban democracy, then it must include all interest rather than just the most vocal or powerful' (Albrecht 1988, p. 24). Furthermore, it is assumed that participation in architecture, when it reached a certain level of acceptance, it will be experienced by architects who were less concerned about it (Albrecht 1988). Despite the conventionally understood collaborative process between the architect and the end user, few publications on the topic of participatory process in the built environment professions, such as that of Jones, Petrescu and Till (2005a), formally acknowledge citizen participation in architecture.[11] In my observation, this is because the popular practice of architecture, especially in the twentieth century, was influenced by an anthropocentric way of thinking brought by the modern age. Tracing back to the Renaissance period, the position of 'Man' at the centre of the modern world led to the egocentric attitude of

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[9] Adopted from Maier (2001, p. 717).

[10] Aside from being the starting point of Albrecht (1988) to explore participation theory in architecture, the same event in the 1960s is also claimed by Jenkins, Milner and Sharpe (2010, p. 24) acknowledging the work of British architect John Turner who was involved with squatter settlements in Peru.

[11] Furthermore, the emergence of citizen participation in architecture can be read in the recent book publications of Hague and Jenkins (2005); and, Jenkins and Forsyth (2010).

the architect[12] who claimed to be the lead professional in the built environment as co-creator of the Supreme Being.[13] In this manner, going back to Jones, Petrescu and Till, it turns out, there was 'a removal of the general public from the processes of architectural production, which in turn leads to a sense of alienation of the users from their environment' (Jones, Petrescu & Till 2005b, p. xiv). The gap can be observed in mass housing projects of the mid-twentieth century when standardisation of design was superimposed 'rather than being allowed to grow more spontaneously according to people's wishes' (p. xiv). In addition, as observed by Collin Ward (1985 in Broome 2005), 'housing policy assumes that people are helpless and inert consumers and ignores their ability and their yearnings to shape their own environment' (Ward 1985 in Broome 2005, p. 67). For this reason, Broome (2005, pp. 66-67) with reference to the Rio Summit of 1992 which underpins Local Agenda 21, emphasises the crucial role of people in the process of establishing sustainable systems. In support of this argument, Broome further mentions the concept of 'Dweller Control' developed by John Turner in the 1970s and presents Turner's Laws as follow:

Turner's First Law:

> 'When dwellers control the major decisions and are free to make their own contribution to the design, construction or management of their housing, both the process and the environment produced stimulate individual and social well-being. When people have no control over, nor responsibility for key decisions in the housing process, on the other hand, dwelling environments may instead become a barrier to personal fulfilment and a burden on the economy'.

Turner's Second Law:

'The important thing about housing is not what it is, but what it does in people's lives, in other words that dweller satisfaction is not necessarily related to the imposition of standards.'

Turner's Third Law:

'Deficiencies and imperfections in your housing are infinitely more tolerable if they are your responsibility than if they are somebody else's.'

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[12] The Modern Movement is being criticised in the publication of Albrecht (1988). One critique, is its failure because it created an environment turning man/woman into a non-conscious and passive subject (Albrecht 1988, p. 26).
[13] The theocentric era, with a way thinking centred on Supreme Being, ended with the Middle Ages. This is followed by the anthropocentric era with then emerging way of thinking centred on Man, which can be traced with the Renaissance Period and the start of the Modern Age (Klassen 1990).

Moreover, the concept of a 'Pattern Language' presented by Christopher Alexander[14] (1977 in Broome 2005, p. 69) is supported as a useful concept for introducing people to the idea about what makes good architecture. It is believed that people can shape buildings for themselves as they have done for centuries. This is evident in the self-help housing sector that 'occupies more than 50 per cent of the market in Germany and around 30 per cent in the US' (Broome 2005, p. 74). Citizen participation in housing was an economic necessity as seen by Turner in the 1970s and was added as a political one by Ward in the 1980s. As a synthesis, Broome observes that citizen participation become an element in government policies on social inclusion in the 1990s. This is still true up to the present. Based on his experience as an architect who worked in housing in the 1970s and 1980s, Broome (2005) concluded that 'participation should be at the heart of housing policy' because 'those involved in making their house have grown enormously in self-confidence through working with the authorities, with professionals and with one another' (Broome 2005, p. 74). For this obvious reason, there is a need for the concept of citizen participation to be integrated in the field of architecture that may imply political involvement of the architects beyond the technical and economic norms of practice.

Demand for participation movement has been in the modern history of education of the architects. In French setting, architecture was studied only at the *Beaux-Arts* in Paris, which concentrated on designing over-scaled public buildings. This traditional pedagogy in architecture led to a revolution inside the school in 1965. As a result, in 1966, exterior workshops were created to allow students to study social housing (Querrien 2005, p. 105). In many universities in Europe since the end of World War II, students in architecture were the first to demand for radical renewal in the education system. The students who matured by their struggle, changed their outlook and 'realised that it was not just a matter of organisational structures and teaching methods, but a more fundamental question about the purpose of their training and social role' (De Carlo 2005, p. 4). Thus, towards the second half of the twentieth century, the participatory method in the field of architecture is emerging, which is observed in the housing sector. Huth (2005) for example, reports his projects involving citizen participation in architecture in Graz and Berlin. These include his experiment in self-help housing project Zellflix in 1963 and in 1965, and his involvement in participative housing projects, the Eschensiedlung at Deutschlandsberg from 1972 to 1992, and in Graz-Puntigam from 1976 to 1982. With these experiences, Huth (2005, p. 141) claims that 'architecture is an instrument of

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[14] Christopher Alexander's 'Pattern Language' was originally published in Alexander, Ishikawa and Silverstein (1977).

mediation and of translation'. Architecture answers humans' basic need and satisfies humans' feelings and sensitivities to the built environment. In other words, architects play an important role as mediator to translate into reality the preferences of the end users through participatory design process while preserving the value of aesthetic.

Cases of citizen participation integrated in various architectural institutions are reported in the edited book publication of Jenkins and Forsyth (2010).[15] For example, in architectural education, participation is embedded into the curriculum in the Department of Architecture and Spatial Design at London Metropolitan University. A participatory approach is employed in design studios giving the students to work on real projects. In the case of the School of Architecture at the University of Detroit-Mercy, the Detroit Collaborative Design Centre was established in 1994 to provide internships for students to focus on neighbourhood design, organisational capacity-building, and education on collaborative design processes. In terms of professional practice, a London-based firm, Fluid was established in 1996 as architectural and design practise which builds on participation as key to production of sustainable communities and high-quality design.

While architecture is the responsibility of architects, the design and construction of housing must involve the people in the planning and design exercise. This means that in the process, architects will plan 'with' the people which is contrary to the conventional practice of planning 'for' them (De Carlo 2005, p. 14). It can be noted that architects' crusade for citizen participation have borne fruit in the past decades. In France for example, the law on Solidarity and Urban Renewal was passed on 13 December 2000 requiring approval from residents for any development in their neighbourhood. In addition, citizen participation had become compulsory by law for regeneration projects in 2002 throughout the country (Querrien 2005, p. 106). Despite citizen participation being compulsory, Querrien claims that true participation 'has been more difficult to obtain, because the field is already occupied by the official organisations' (Querrien 2005, p. 113). In the same way, another issue at the centre of citizen participation debate is 'the possibility of consensus' (Richardson & Connelly 2005). The participation exercise has been in agora where public consultations were held and popular decisions made. It has been in round table discussions where authorities and their constituents are given the same level of

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[15] More cases of citizen participation in architecture by various institutions such as non-profit and community organisations, among others, are reported as appendix in the edited book publication of Jenkins and Forsyth (2010). Moreover, visit the website of The Bartlett Development Planning Unit, UCL, http://www.bartlett.ucl.ac.uk/dpu; and, see the edited book publication of Hughes and Sadler (2000), 'Non-plan: essays on freedom participation and change in modern architecture and urbanism'.

engagement in dialogues. An architecture that is an ideal translation of true citizen participation may be a powerful rhetoric but it remains a wishful thinking. It may be political in nature when architects need to be involved, but to obtain a genuine participation remains a major challenge in the professional practice of architecture. If architecture is an instrument of mediation and of translation, the architects' responsibility is to continuously pursue a new form of citizen participation.

4.3   Citizen participation in low-income housing provision in the Philippines

Contemporary citizen participation in the Philippines, in the political arena, is marked with the historical People Power revolution of 1986. In a cultural sense, contemporary citizen participation is a revival of the traditional Filipino spirit of community known as the *bayanihan*[16] (Figure 4-4). This is visually translated as 'people-carrying-a-house' that describes a tradition of communal cooperation (Pascual 1990, pp. 108-109). Traditionally, in rural areas where houses are made of lightweight materials like bamboo, the family who wants to move their house to another location will give a party welcoming friends and neighbours. At the end of the festivities, those who joined in will help carry the house to its new site. Today, *bayanihan* refers to any endeavour requiring community participation, among others, in the organised self-help provision of urban poor housing. For example, the NGO which originated in the Philippines known as *Gawad Kalinga* institutionally embodied the *bayanihan* spirit in its aim to provide decent homes for the Filipino families (Odivilas & Odivilas 2015). From an external funding agency's point of view, it is integrated in community-based approaches to settlement upgrading. For example, the Asian Coalition for Community Action programme which worked with the *Kabalikat* community organisation facilitated their projects in a *bayanihan* manner at the   Baseco site[17] in Manila (Galuszka 2014). This involved facilitating proposal for a Baseco development plan to the local government unit, supported by the NGO Urban Poor Associates which negotiated with various key actors in the government (Galuszka 2014, p. 16). In addition, it is seen as an important component of the institutions of collective action in relation to the definition of social capital (Labonne & Chase 2011, p. 350). Thus, the enhancement of social capital through community-driven development projects in the Philippines, reported in the works of Labonne and Chase (2009, 2011), are quite unique, despite the same universal concept of community empowerment

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[16] *Bayanihan* is a Filipino custom derived from a word '*bayan*' meaning nation, town, or community. The term *bayanihan* itself literally means 'being in a *bayan*', referring to the spirit of communal unity, work, and cooperation to achieve a particular goal (Yumul 2013).
[17] Baseco is located in the harbour area of Manila, a landfill area stretching into the sea, and informally settled with about 10,000 families because of access to employment opportunities in the shipping industry (Galuszka 2014, p. 13).

which is activated through citizen participation. The political and institutional components of citizen participation in the Philippine setting are discussed in the following sections.

Figure 4-4. *Bayanihan* visually translated as 'people-carrying-a-house'[18]

4.4 The politics of citizen participation in the Philippines

One of the government's earliest initiatives for citizen participation in the Philippines can be traced in the Slum Improvement and Resettlement Programme of 1977 during the administration of President Ferdinand Marcos. Under the centralised form of government, the concept of participation was valued as an integral part of planning however the concept was not fully understood and it was unclear how it could be achieved. Despite the growing impetus to include the affected communities, constraints existed because of the lack of experience in citizen participation and the kind of political system under the Martial Law regime (Blunt 1982).[19] More cases of attempts to incorporate the concept of citizen participation and its implication in housing provision under the Marcos administration are also reported in the work of Abueg (1986). Following the Marcos administration, and the People Power revolution of 1986, the institution of the 1987 Constitution mandated a greater role for civil society in governance. In reference to the new Constitution, Pascual (1990, p. 103) presents the role of citizen groups as an essential vehicle of the people power movement as stated in Article XIII, Section 15[20]:

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[18] Source: https://en.wikipedia.org/wiki/Communal_work#/media/File:Bayanihan_2.JPG

[19] In the 1980s, challenges of community participation are also observed in cases of upgrading irregular settlements in three Latin American cities: Bogota (Colombia), Mexico City (Mexico) and Valencia (Venezuela). Community involvement, such as lobbying officials and attending meetings, among others, was quite limited with no more than two-fifths of surveyed households participated (Gilbert and Ward 1984).

[20] For complete document of the 1987 Philippine Constitution, see, Republic of the Philippines (1987), http://www.gov.ph/constitutions/1987-constitution/.

The state shall respect the role of independent people's organisations to enable the people to pursue and protect, within the democratic framework, their legitimate and collective interests and aspirations through peaceful and lawful means.

People's organisations are bonafide associations of citizens with demonstrated capacity to promote the public interest and with identifiable leadership, membership, and structure.

Section 16 of the same Article further states:

The right of the people and their organisations to effective and reasonable participation at all levels of social, political, and economic decision making shall not be abridged. The State shall by law facilitate the establishment of adequate consultation mechanisms.

In addition, the Constitution calls for political autonomy of local governments which was accomplished by the passage of the Local Government Code of 1991 (Shatkin 2007, p. 23). Citizen participation gained its momentum after the 1998 presidential election when President Joseph 'Erap' Estrada was popularly elected with his campaign slogan *'Erap para sa mahirap'* (Erap for the poor). President Estrada appointed Karina David as presidential adviser on housing and the chair of the Housing and Urban Development Coordinating Committee (HUDCC). As an experienced community organiser and NGO head, David was influential in implementing the idea of citizen participation in housing delivery by expanding the role of NGOs and community-based organisations (CBOs). However, David's influence on citizen participation through her engagement in the national government was short-lived. President Estrada replaced her with a new presidential housing adviser from the private sector. This eventually led to David's resignation as chair of the HUDCC (Shatkin 2007, p. 19). In theory, citizen participation in the Philippines was already laid out, however, due to the strong influence from the private sector and the political decision of the President, the NGOs and CBOs were again facing many constraints.

The origins of citizen participation in the Philippines can be traced prior to the 1970s with small-scale community organising efforts which focused on minor local improvements. Later, more formal organising efforts were made in the early 1970s. These efforts were often supported by prominent components of the Philippine Communist Party and church organisations inspired by liberal theology. In connection with this, large federations of CBOs then emerged which attempted to scale up the political impact of their activities (Shatkin 2007, p. 30). The political nature of community organisation is true to Shatkin's (2003) examination of the determinants of

the formation and activities of CBOs in informal settlements in two cities in Metro Manila. The study revealed that if CBOs confront a politically hostile environment and face the prospect of eviction, they are more likely to engage in politically oriented rallies rather than to engage in collective action for community development. As in the case of Cebu City, NGOs and people's organisations sought to ensure the election of mayors with pro-poor policies and ensure the implementation of these policies (Etemadi 2000). Consequently, 'politicians commit themselves to the urban poor agenda for the purpose of vote-banking' such as to prioritise social housing 'in order to gain political mileage or to fulfil electoral promises to the poor' (Etemadi 2004, p. 91). Thus, it is interesting to note that institutionalising citizen participation by formally organising the people for a cause is undeniably political.

4.5   Empowerment of NGOs in urban poor housing provision

NGOs play an important role as the agent for civil society to participate in governance and/or poverty alleviation in the case of developing countries. Mitlin (2001, pp. 151-152) describes the shifting paradigm of governance and the emerging role of NGOs in civil society. The contribution of NGOs was being seen by development professionals throughout the 1970s and 1980s as participatory, people-oriented, and responsive to local needs. In the 1980s and 1990s there was a reduction in the role of the state. Based on the ideology that the private sector should take over some state functions, this situation gave an opportunity for NGOs to grow in scale. Towards the end of the 1980s and the beginning of the 1990s, the focus of NGOs began to shift. There was increasing emphasis placed on the term 'civil society' rather than 'non-government organisation'. Among other factors, this was due to an increasing awareness of the importance of institutions and institutional changes, and the roles of both non-government and non-private sector institutions in economic and political development. This paradigm shift has been noted in this thesis,[21] and it can be related to the concept of social capital identified by Putman (1993 in Mitlin 2001, p. 152). Hence, the concept of social capital became the language of governance where the participation of civil society was given increasing importance.

In many urban settlements, there may be a multitude of grassroots organisations such as homeowners' associations and civic groups. The NGOs social relationship with these grassroots organisations is crucial for the success of citizen participation. In Metro Manila, for example, there were formally organised associations in all squatter and slum settlements that were visited during the study of Berner (1997 in Mitlin 2001, p. 153). In the Philippines, kinship and religious

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[21] This is implied in the discussion of previous Chapter 3 about housing policies and programmes, and discussed in this Chapter 4 about citizen participation in low-income housing.

organisations are the common factors instigating and supporting grassroots organisations and they have undertaken numerous activities to support the multiple needs of their members. These activities include collective initiatives to access land tenure, improve infrastructure and services, and better housing (Mitlin 2001). With this case, however, grassroots organisations can better access funds and operate formally if they are connected with NGOs.

A number of NGO activities support the shelter needs of the urban poor in low-income settlements. NGO assistance includes financial, technical and community mobilisation covering both upgrading and incremental housing developments (Mitlin 2001, p. 158). The NGO is instrumental as the originator in the implementation of the Community Mortgage Programme in the Philippines (Porio et al. 2004). In addition, some NGOs which have developed a strong relationship with the local government units serve as advocates for the urban poor. These include 'The Pagtambayayong Foundation in Cebu City, the Julio Ledesma Foundation in San Carlos City, and the Mindanao Land Foundation' (Porio et al. 2004, p. 67). In Cebu City, Etemadi (2000) further reports the active involvement of NGOs in governance through their collaboration with the local government unit for the benefit of the low-income groups. The sustained advocacy and participation by the NGOs produced better results. This is evident in the declaration of a policy agenda for the poor supported by local legislation with corresponding budgets, which has earned the city the distinction of being the first, or one of the best local government units in the country (Etemadi 2004, p. 92). Success in local governance may have been enhanced by NGOs by involving the citizen's participation in the political arena, however, there are also issues of concern in the manner the organisations operate. The NGOs can impose their own agenda on some grassroots organisations they work with, they may be insensitive to political and power struggles within the community, or they may undertake most of the activities by themselves. In brief, the NGOs 'may be reluctant to delegate power and responsibility to local residents' thereby 'failing to strengthen independent and capable agencies' at the grassroots level (Mitlin 2001, p. 160). In such cases, the activities of the NGOs in shelter provision and poverty alleviation may be more visible than the agency of the people themselves at the grassroots level. Nevertheless, with the successful contribution of NGOs, a genuine form of citizen participation is essential which begins with the people themselves. Organised people's federations and NGOs in the Philippines which are active in the provision of urban poor housing, which have been well documented, are briefly presented as follows.

Homeless People's Federation Philippines

The Homeless People's Federation Philippines (HPFP) was active for many years. It has operated in the dumpsites of Payatas, Quezon City, since the 1990s. It was formed to bring together low-income community organisations that had developed housing savings groups. The Vincentian Missionaries Development Foundation (2001), as the Federations NGO partner reports, forged strong ties between the low-income savings groups in ten cities in the Philippines. In 2003, this community-driven initiative had 39,000 members nationwide, with a combined savings of 35.3 million Philippine pesos (US$ 700,000) as of December 2002 (Yu & Karaos 2004, p. 107). As a self-help community-based federation, HPFP works towards securing land tenure, upgrading settlements, and raising the economic status of its members. The Federation is able to engage proactively with government to address their shelter needs. In terms of land tenure, the community-led land acquisition strategies experienced by HPFP includes cases of 'direct purchase' in the cities of Montalban, Iloilo, and Albay; a 'Community Mortgage Programme' in Quezon City; and, 'usufruct'[22] in the cities of Quezon and Montalban (Teodoro & Co 2009). Furthermore, HPFP is active in disaster-affected communities, where it works with its support NGO, the Philippine Action for Community-led Shelter Initiatives, Inc. (Carcellar, Co & Hipolito 2011). At the time of Papeleras publication (2012), the Federation was active in 17 cities throughout the country with a total savings of US$987,844. Savings is mainly used as a strategy by HPFP not only to finance their housing needs but to bring people to work together towards a common goal. Thus, the self-help initiative of the urban poor federation is not only a financial tool but also a social mechanism to build networks of communities.

Gawad Kalinga Community Development Foundation, Inc.

This NGO popularly known as *Gawad Kalinga* (GK) is reported in the works of Santos-Delgado (2009), Takahashi (2009), and Odivilas and Odivilas (2015). '*Gawad Kalinga',* literally translated in English means 'to give care' (Santos-Delgado 2009, p. 61). It is seen as alternative solution to the problem of poverty in the Philippines; it aims to provide a 'better quality of life for families by helping them build homes that provide a sense of security and well-being, embodying the Filipino b*ayanihan* spirit' (Gawad Kalinga 2008 in Odivilas & Odivilas 2015, p. 117). The GK movement began in 1995 with a group of people concerned about the marginal status of the

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[22] 'Usufruct' comes from the Latin word *ususfructus* or *usus et frustus.* This is defined in the Philippine civil law as 'a real right, temporary in nature, which authorises the holder to enjoy all the benefits that result from the normal enjoyment and exploitation of another's property, with the obligation to return at the designated time either the same thing or in special cases its equivalent' (Article 562, New Civil Code of the Philippines in Teodoro & Co 2009, p. 425).

majority of Filipino people. Since then, the success is marked by the participation of government organisations, private companies, individuals, and other concerned groups whose aims are to alleviate the plight of the poor. Parallel to this NGO's initiatives to provide housing for the poor all over the country, it hopes to achieve community empowerment, mobilise volunteerism embodied in the Filipino *bayanihan* spirit, and establish partnerships in nation-building between the government and civil society. The GK housing programme is designed based on give-and-take sweat equity. Takahashi (2009, p. 119) acknowledges GK as an accomplished NGO that 'sought to build a harmony with the public and private sectors on a domestic scale, and have in effect made a profound impact on national planning agendas'. The GK model in housing provision is based on an aided self-help approach. The success lies in the extensive networks that accumulate financial assistance from the home country and abroad. To ensure the stability of monetary flows, the ANCOP Foundation International as its arm assumes this vital role in finance. In terms of replicability of its model, GK moves in global stages by launching projects in Indonesia and Papua New Guinea (Takahashi 2009).

4.6   Synthesis

Failures of both the state and the market to sustain the provision of housing for the low-income population in developing countries led to an alternative approach strengthening the role of the civil society. In the Philippines, it is marked by the historical People Power revolution in 1986 and its consequent 1987 Constitution, and other landmark legislations in the 1990s. In the international context, this trend is manifested in the theory of empowerment conceivably focusing on the role of civil society, and the concept of enablement centred on the role of the state to prescribe legislative supports to mobilise resources of the private sector, NGOs, community-based organisations, and households (Takahashi 2009, p. 113). Despite being a well-applauded political agenda, the bottom-up approach remains an ideal rather than a reality when it comes to the power struggle between the power holders and the common citizens. This was evident when citizen participation gained momentum in housing and urban governance in the Philippines when Karina David was appointed as the presidential adviser on housing by President Estrada in the late 1990s. However, it was short-lived when this president exercised his political power by replacing the experienced community organiser and citizen participation advocate, David, with a representative from the private sector.[23] Undeniably, the tug-of-war between the empowered citizens and the powerful state authorities is reflected in the chaotic urban environment. This is reflected in an urban scenario where the state interventions such as

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[23] For further details about this political issue in the Philippines in 1999, see, Shatkin (2007, p. 19).

housing provisions and building regulations are in conflict with the acts of the people such as self-help housing in informal settlements. Despite being viewed as chaotic in nature, the ideology of citizen participation is practised within a certain social context. The cultural Filipino *bayanihan* spirit and the political People Power movement are social expressions that make citizen participation in the Philippines unique, which needs further understanding in comparison with cases in other developing countries. This thesis works on self-help provision of urban poor housing in low-income settlements as the physical expression to trace the culture of citizen participation. From the point of view of Berner (2005), self-help can be seen as participation squared. This can be seen how the urban poor have completed their journey from being recipients, via beneficiaries and stakeholders, to become champions of development (Berner 2005). Since the 1990s, the role of NGOs in housing provision is strengthened as the institutional shell to mobilise civil society and the professionals in building industry. This kind of participatory initiative belongs to what Fung and Wright (2001) characterised as 'reforms that primarily address failures of specific administrative and regulatory agencies' (p.8), concluded in their five experiments in participatory deliberative governance. In the profession of architecture, a new breed of community architects are working with NGOs to participate in the survey and mapping of communities (Archer, Luansang & Boonmahathanakorn 2012). The activity of social mapping facilitated by architects can lead not only to the preparation of a physical plan but also serves as a dialogue between community residents, thereby making the end-users active participants in the planning and design of their homes. Furthermore, the emergence of community architecture and its difference with conventional architecture, originally from Wates and Knevitt (1987), are cited and discussed in the publications of Sanoff (2000, pp. 26-27), and Jenkins, Milner and Sharpe (2010). The expert's role of architect as a 'provider' in conventional architecture emerged as an 'enabler' in community architecture. Conventionally, from being an elitist, neutral bureaucrat and professional in institutional sense, the architect in community architecture, acts as facilitator, social entrepreneur, educator, and professional who is competent and efficient adviser.[24] In terms of participatory development, there holds 'the potential of building a common language community between the architects and recipients of development programmes' (Williams 2004, p. 572). The role of architects in the context of citizen participation has evolved from the advocacy to integrate the idea of participation in architectural education, to the widening engagement of architects with the society, to the increased awareness of architects about the realities of shelter in the developing world, and to the

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[24] For more differences between 'conventional architecture' and 'community architecture' from various aspects, see, Wates and Knevitt (1987); Sanoff (2000); and, Jenkins, Milner and Sharpe (2010).

contemporary involvement of architects in urban poor housing. This is perceived as a shift from a pure modernist paradigm where an architectural product is centred around on the ego of the educated professional to a post-modern paradigm embodying an ecological understanding of the phenomenon. It is argued that architecture remains the responsibility of the architects. Thus, it is important to note the development of the concept of citizen participation discussed in this chapter, which implies an emerging role of architects in the provision of low-income housing in the developing world in the twenty-first century.

Chapter 5:   Theoretical Framework

5.1   Introduction

In this thesis, the phenomenon of urban poor housing in developing countries is viewed from the disciplinary perspectives of architecture and urban planning. In the previous chapters, this is demonstrated by the review of literature which underpins the theoretical framework of this thesis. From the discipline of architecture per se, the view of Turner (1968b) towards the architecture of squatter settlements is employed as the point of departure. Being dynamic in nature, the aggregate incremental construction of informal housing generates a progressive form of urban development. In turn, this same phenomenon is viewed from the discipline of urban planning which led to the discussion of policy issues in Chapter 3. The critical review of cases in the developing world − with primarily unstable political and economic conditions − questioned the emulation of housing policies applied in developed countries. Furthermore, the review of shifting paradigms revealed the emergence of decentralised housing policies and the increasing participation of NGO and community-based organisations in the provision of shelter for the urban poor. In the Philippines, this phenomenon can be identified in relation to international trends and ideologies but these must be appreciated in conjunction with this country's unique historical events such as the People Power Revolution in 1986. Hence, parallel to the emergence of international concepts such as 'enablement' in the 1980s (Takahashi 2009) and the 'Third Way' in the United Kingdom in the 1990s (Pacione 2001), recent housing and urban governance in the Philippines widened the role of NGOs and empowered citizen participation. Considered in this light, the political and socio-cultural specificity of the Philippine context, and the agency of the urban poor that was mobilised within this context, emerged as a valuable instrument in the provision of housing and the formation of urban settlements.

This chapter presents the theoretical framework for this thesis outlined in Figure 5-1. From a broader point of view, this thesis looks at the phenomenon of informal urbanisation typical in cities of developing countries in Asia, Latin America, and Africa in general, and the Philippines in particular. Given this phenomenon, the theoretical framework of this thesis was presented in this chapter in the following manner. Firstly, the key concepts which emerged from the review of literature in the previous chapters which inform this theoretical framework are highlighted. These concepts can be summarised as follows: the ideology of Turner and the legacy which continues to resonate in emerging housing initiatives in the twenty first century; the relationship of urban poor housing to the theory of vernacular architecture and the emergence of a human ecological perspective; and, the shifting paradigms in housing policy from traditional to

participatory practices. This informal urban phenomenon is viewed through the lenses of architecture and urban planning (Figure 5-1). In the field of architecture, the phenomenon is viewed focusing on agency of the urban poor to create their own environment, of which qualities relate to recent developments in theories of vernacular architecture. In the field of urban planning, the phenomenon is viewed significantly to issues in governance, policy making and implementation of housing programmes, specifically in the context of developing countries.
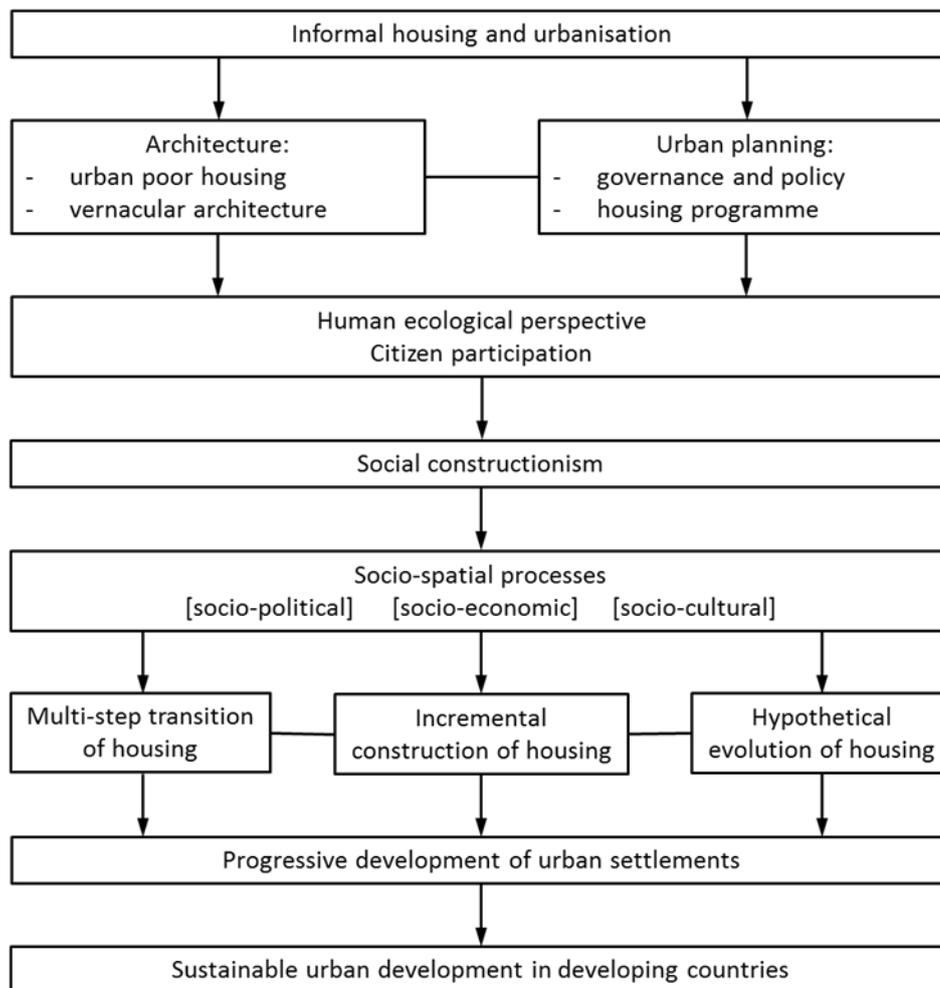
Figure 5-1. Theoretical framework

Secondly, the key concepts mentioned above are evaluated and discussed to identify the gaps in the existing body of knowledge to establish the theoretical significance of this thesis. Finally, based on the critique of the traditional modern positivist approach in housing studies, the postmodernist approach of 'social constructionism' (Jacobs, Kemeny & Manzi 2004b; Lund 2011) is established as the theoretical perspective to frame this research project. The aim is to move beyond the treatment of housing problems as object in nature (where solutions were often implemented based on the ideology of a concerned government), to a focus on processes

whereby the phenomenon of urban poor housing provision is treated as a social construction. Thus, the subjected phenomenon of informal housing and urbanisation in developing countries is mainly viewed from the theoretical paradigm of 'social constructionism' (Figure 5-1).

Figure 5-1 continues to illustrate that this thesis discusses the abstracted social construction of housing and urban environment with the social processes related to formation of the built environment. The concept of socio-spatial processes, following the paradigm set by Madanipour (1996; 2006), is concretely discussed with the research results synthesised in the phenomena of multi-step transition of housing; incremental construction of housing; evolution of housing; and, progressive development of urban settlements. Thus, this thesis aims to address continued search for effective and sustainable urban development in developing countries.

5.2   From Turner's school to housing initiatives in the twenty-first century

The theoretical framework of this thesis primarily builds on the works of John Turner whose involvement with the squatter settlements in Lima, Peru, highlights progressive urban development in developing countries.[1] Turner's reputation as an influential writer about housing in the developing world in the latter half of the twentieth century is highlighted by Kellet and Napier (1995), Pugh (2000), Payne (2006), and Rahman (2011), among others. Given this renewed validation of Turner's work, his important studies serve as a starting point for the formulation of the theoretical framework of this thesis. Turner's studies of the *barriadas* in Peru drew attention to the role that people can play in urban development, and he placed importance on their ability to provide shelter despite precarious environmental conditions. From the perspective of architecture, Turner interpreted the simple shack found in squatter settlements as the basic nucleus for the first stage of incremental construction (Kellet & Napier 1995, p. 8). Bromley (2003) on the other hand, claimed that the works of Turner, with William Mangin,[2] opened up new knowledge about rapid urbanisation, the social and physical conditions of informal settlements, and an alternative paradigm where the self-help initiative of the poor can be capitalised on to upgrade urban neighbourhoods. Turner's ideology was then implemented insites and services programs and *in situ* slum upgrades by the World Bank, popularly recognised internationally in the 1970s (Pugh 2000). For example, among other countries, these World Bank schemes were applied in Thailand (Giles 2003), and in Zambia (Rakodi 1991). As in other countries, , the implementation of sites and services and slum upgrading programmes

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[1] Referring to the publications of Turner (1967, 1968a, 1968b, 1969, 1972a, 1972b, 1976, 1978).
[2] The American anthropologist who also worked in Peru during the time of Turner (Bromley 2003; Kellet & Napier 1995).

in the Philippines parallels the creation of the National Housing Authority (Pinches 1994). Despite being promising housing programmes, these were once viewed as unsustainable in countries with poor economic and unstable political conditions because of high reliance on government subsidies.

Housing policy shifted to a neo liberal market oriented approach in the 1980s and the emergence of housing markets and submarkets. Despite the sale of completed housing products, Lim (1987), in his critique of the 'one-step regularisation model', proposed a 'multi-step transition model'. This model illustrated the transition that the urban poor experienced through the series of housing submarkets from the status of a homeless street sleeper to the owner of formal housing in due course. Although there is no established relationship, Lim's 'multi-step transition model' is similar to Turner's view of progressive urban development which resulted from his observations of low income settlements in Peru.

Turner's ideas about squatter settlements caught the attention of urban scholars around the world, especially a growing chorus of western writers who celebrated the rights and self-help capacities of the urban poor (Harris 2003). However, Turner was not excused from criticism, with the emergence of the Turner-Burgess debate in the late 1970s.[3] Despite these challenges, Turner continued to influence subsequent urban scholars. including Peter Kellet with his involvement in Santa Maria, Colombia, in the 1990s (Kellet 1999, 2005), and Geoffrey Payne's work in Delhi, India, and Ankara, Turkey, in the 1970s (Payne 2006). There may be no direct discussion in the literature, but Payne's (2001) identification of contiguous tenure categories[4] might have been influenced by Turner's view of the progressive development of low income settlements in developing countries.

Turner's ideology remained relevant during the environmental movement of the 1990s. Pugh (2000) recognised the significance of Turner's ideas at the UN Conference on the Environment and Development (UNCED), Rio de Janeiro, in 1992. Consequently, a set of guidelines for sustainable urban development was set out in Chapter 7 of Agenda 21 when local governments were called upon 'to mobilise their communities for broad-based, participatory environmental improvement in urban areas' (Pugh 2000, p. 327). In effect, a new approach to 'environmental planning and management' was proposed through the UN Centre for Human Settlements (UNCHS) Habitat Agenda which resulted from the Habitat II meeting in Istanbul in 1996. Despite

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[3] Criticism of Turner can be found in the publications by Burgess (1977, 1978, 1982).
[4] The contiguous tenure category range in different levels of security from being a pavement dweller to becoming a freehold owner as the ultimate legal tenure category (Payne 2001).

the slow progress in the application of Agenda 21, often due to varied understandings of sustainability,[5] Pugh (2000, p. 327) stressed that the stated principles can be associated with Turner's ideas.

Facing the challenges of the twenty-first century, the eight Millennium Development Goals were adopted at the United Nations Millennium Summit in New York City in 2000 (UNDPI 2002 in Groenewald 2011). In terms of housing provision, the most significant one is Goal 7 to ensure environmental sustainability, which includes Target 11 to significantly improve the lives of at least 100 million slum dwellers by 2020 (Choguill 2007; Groenewald 2011; Payne 2005; Satterthwaite 2003). Referring to numerous housing studies,[6] Satterthwaite (2003) places emphasis on the need for institutional innovations to improve the lives of slum dwellers that do not require massive external funding. Centred on participation of the urban poor in poverty reduction, this means 'supporting solutions that the urban poor develop themselves, together with the processes by which they develop solutions and negotiate with government and other external agencies' (Satterthwaite 2003, pp. 189-190). The role of NGOs and community-based organisations in the improvement of the lives of slum dwellers is recognised for its increasing importance in the twenty-first century due to their role in citizen empowerment. A paradigm which seeks to improve the conditions of slums centred on the abilities of the people continues to emerge. As acknowledged in the previous chapter, UN-HABITAT (2006, 2008) expressed a shift in viewpoint from a 'slum of despair' to a 'slum of hope' . In other words, the dynamics in informal settlements which Turner valued half a century ago continue to be mobilised in the provision of housing for the low-income population in the developing world.

5.3   Vernacular architecture and emergence of human ecological perspective

Informal architecture found in slums and squatter settlements has always been part of the formation of urbanising civilisations. Historically, 'the poor have constructed their dwellings around the urban centres of the rich and powerful' (Kellet & Napier 1995, p. 8). Furthermore, Kellet and Napier (1995) examine the relationship between squatter settlements and the qualities of vernacular architecture defined by primary theorists.[7] Being an architecture built by non-professionals, squatter settlements like vernacular architecture may appear to be disordered because the observer does not understand the underlying socio-spatial processes.

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[5] For further reference on sustainable development in the 21st century, see, United Nations (2012).

[6] The case studies of national and local government institutions and civil society organisations that have sought to support community-driven poverty reduction referred by Satterthwaite (2003).

[7] Among others, this includes the works of Rapoport (1988), Lawrence (1982), Oliver (1990), and Stea and Turan (1990).

The visible disorder may be part of the ongoing transition from one form to another in a progressive manner. Rather than viewing vernacular architecture as artefacts, theorists in the field began to pay attention to the people who build and modify the dwelling, who live there, and whose behaviour is shaped by the form. The informal architecture of squatter settlements, for instance, is one of the categories that tends to be ignored in studies of vernacular architecture (Vellinga 2006, p. 88). In order to become higher in the agenda in architectural education, vernacular architecture must be seen as a dynamic form that is constantly evolving and reacting to changes in social processes that shaped its form. In reference to Rapoport's (2006) proposal to move from a natural history stage to a problem-oriented stage, vernacular environments, including informal settlements can be regarded as a laboratory of the wide range of human responses to various factors affecting their way of living.

Ecology, originating in the natural sciences, refers to the reciprocal relationships between the biotic and abiotic elements of the environment. Humans, who are living beings, are interacting not only with the defined physical abiotic environment, but also within the social environment. Accordingly, ecology emerged in the field of social science. In the study of the built environment, a human ecological perspective is manifested in citizen participation. Lawrence (2006) sees it as an integral component in the construction of settlements, and recommends citizen participation as one of the basic principles for professional practice. Apart from this, Payne (2006) sees how people from different backgrounds have evolved rational and ingenious solutions to meet their need for shelter, and places value on citizen participation in his study of informal settlements in India and Turkey. The acts of the users, broadly referred to as the 'urban society' (Madanipour 2006), define the socio-cultural processes in the design of built environment. In the most recent work of Lawrence (2006), a human ecological perspective is promoted based on both ecological principles and cultural practices with his study of vernacular building and human settlements.[8] Referring to the basic definition of ecology, humans are seen as an integral part of the ecological system and they engage in ecological relationships, thus, a human ecological perspective has emerged. In the case of the informal architecture of squatter settlements, self-built by the inhabitants, the ecological relationships between the people and the social environment is established. This denotes an alternative framework of understanding

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[8] Furthermore, in his most recent book publication, 'Human Ecology', noted city planner and landscape architect Frederick Steiner encourages us to consider how human cultures have been shaped by natural forces, and how we might use this understanding to contribute to a future where both nature and people thrive (Steiner 2016).

the formation of the built environment, most specifically in the conditions of developing countries.

5.4   Shifting paradigm from traditional to participatory housing policy

The three main phases in the evolution of international housing policy after the Second World War until the present day are presented in the publications of Harris and Giles (2003) and Choguill (2007). Firstly, following the Second World War, the focus for public housing was the construction of new dwellings. Secondly, from 1972 until the 1980s, a sites and services phase based on self-help housing experiments. This phase was championed by the World Bank and enabled the government to provide tracks of urban land, divided into plots with basic support services, to enable the urban poor to build their own houses (Choguill 2007, p. 146). Thirdly, with the realisation that the sites and services approach was unlikely to meet the massive housing shortage, a market enabling phase emerged in the 1980s which remains active today, evident in operations of the Pag-IBIG Fund,[9] government and commercial banks offering mortgage loans to qualified members (in case of Pag-IBIG Fund) or borrowers (in case of banks).

The provision of completed housing units by both the welfare state and the market sector is criticised by this thesis as a traditional housing policy approach. This might have been successful in more developed countries, however, when it was adopted in developing countries by implementing a high standard of social housing, it created more problems than solutions. This traditional approach is referred to by its critics as 'instant development' (Turner 1967); 'one-step regularization model' (Lim 1987); and, a 'product approach' (Ferguson & Navarrete 2003). The failure of the government to fully implement housing provision programmes is due to lack of funds. Furthermore, with the market enabling approach, financial sustainability is at risk due to unstable economic conditions. With available social housing being beyond the financial capacity of the low-income population, the urban poor have no choice but to live in informal settlements and provide their own shelter.

Failures, in both the political and the economic sectors, to provide the affordable housing for the urban poor has broadened the role of civil society and the move towards a decentralised form of urban governance which emerged in the late 1980s. In the international context, it was manifested by the concept of enablement centred on the role of the state to prescribe legislative support to mobilise resources of the private sector, NGOs, community-based organisations, and

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[9] Pag-IBIG Fund, a national saving scheme for housing is introduced in Chapter 3, Section 3 of this thesis.

households (Takahashi 2009, p. 113). Furthermore, in the 1990s, the UK adopted the 'Third Way' that focused on the socially disadvantaged and encouraged participation of the local people for community development through sweat equity (Pacione 2001). In the Philippines, the shift is mainly influenced by the People Power Revolution in 1986 leading to the institution of the new 1987 Constitution. Eventually, decentralised and pro-poor housing and urban governance are set by the enactment of the Local Government Code in 1991 and the Urban Development and Housing Act in 1992. Hence, a participatory nature in housing provision emerged with the empowerment of the agency of NGOs to mobilise community-based organisations at grassroots level.

The NGO's new role in the housing provision for the low-income population was noted with the implementation of the Community Mortgage Programme (CMP). This programme, formalised in 1988, was conceived immediately following the People Power Revolution (Lee 1995), which allowed informal settlers to acquire track of land through a community mortgage programme (Llanto 2007). In the implementation of the CMP projects, the NGO is instrumental as the originator to institutionally assist the beneficiary urban poor organisations (Porio et al. 2004). With the reduction on the role of the state, the NGO's social relationship with the grassroots organisations is important in the exercise of citizen participation. This is exemplified with the organisation of the Homeless People's Federation Philippines that originated in the dumpsites of Payatas, Quezon City, in the 1990s to bring together low income community savings organisations (VMSFDI 2001). Similarly, another Philippine-based NGO, the *Gawad Kalinga*, is acknowledged as an accomplished NGO that balances contributions by the public and private sectors at a domestic scale, which made a profound impact on national planning agendas (Takahashi 2009). Coupled with the culture of *bayanihan* spirit, the period following the housing and urban policies mobilised by the People Power Revolution in the Philippines offered a unique example of citizen participation manifested in housing provision for the urban poor.

5.5 Discussion and identification of gaps in the existing body of knowledge

The ability of the urban poor to contribute to the provision of housing is valued in the works of several influential authors who have already been identified in this thesis. Primarily, Turner[10] valued the people as important agents in self-help housing and progressive urban settlements with his involvement in Lima, Peru in the 1960s. Secondly, when housing was viewed as markets and submarkets in the 1980s, Lim (1987) proposed a model that illustrated a multi-step

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[10] In reference to Turner's publications cited in this thesis.

transition that the urban poor undergo through a series of housing submarkets until they became owners of formal housing. While there are no documented discussions between these authors, Turner's and Lim's views are similar to those of Payne (2001) who claimed that the urban poor undergo a series of tenure categories before they attain the ultimate legal tenure category as a freehold owner in due course. These socially rooted paradigms where emphasis is placed on the agency of the urban poor exemplify social ecological principles. However, these have not been documented or presented in relation to the theoretical framework of a human ecological perspective in architecture and urban planning established in this chapter.

Traditional housing policy and programmes are implemented based on technical and creative methods. The aided self-help and sites and services programmes popular in the 1970s as a consequence of Turner's revolutionary ideas relied on high government subsidies. Due to limited funds, these attempts were viewed as unsustainable in developing countries. Consequently, the market sector widened its role in housing provision in the 1980s. However, both attempts made by the welfare state and the market oriented policies are practised based on technical and creative approaches. From the point of view of urban design, Madanipour (1996) asserts that failures in urban design are due to the lack of recognition of socio-spatial processes in the environment. Socio-spatial processes include socio-political, socio-economic, and socio-cultural considerations respectively acted by the 'regulators', 'producers', and 'users' (Madanipour 2006) of the built environment.

Madanipour (1996, 2006) provides insight into the failures of housing policy and programmes in developing countries. In Thailand, the reluctance of the Thai government to adhere to the timely implementation of aided self-help housing in the 1970s was due to the hierarchical nature of the society. It was believed that the Thai government officials were capable of deciding what was best for the general population (Giles 2003). In this case, the participation of the people through a self-help approach seems to have been regarded as a foreign cultural practice. In Indonesia, although a self-help housing approach was in keeping with the culture of *kampongs* (literally a self-initiated urban settlement), the economic side of the *Kampong* Improvement Programme did not encompass some important components such as security of tenure (Tunas & Peresthu 2010). In Vietnam, the socialist government's political decision to model that of the Soviet Union and to take full responsibility for the provision of housing for the people failed due to the limited funds available for public service (Coit 1998), a characteristic evident in many developing countries. In South Africa, the unstable political context and the apartheid-era urban policy limited the ability of the government to address fundamental social issues in housing and

spatial divisions in the urban environment (Lemanski 2009; Wilkinson 1998). In Egypt, even if the housing programmes implemented the construction of houses that were extremely impressive, their specifications were determined through economic and political criteria, and not the user's social needs (Gelil 2011). In Peru, although Turner's ideology was grounded in this context, long-term housing policy and programmes could not be implemented successfully because of the unstable national leadership. Peru was obliged to embrace the market oriented housing approach that was imposed by international funding agencies (Bromley 2003; Fernandez-Maldonado & Bredenoord 2010). In Brazil, like many other countries with unstable political conditions, the newly installed democratic government in 1990 simply followed the global market-based policy which failed to achieve fundamental results for the urban poor (Valenca & Bonates 2010). Consideration of these different cases from countries with developing economies, suggests that there is a need to evaluate the impacts of housing policy and programmes which shaped the built environment in terms of political, economic, and cultural components of the social environment.

In the search for sustainable development in the context of housing provision, as the focus of this thesis, architects and urban planners often resort to basic definitions and principles of the science of ecology. This is evident in the interpretation and articulation of popular concepts like 'green architecture' and 'green urbanism', which place emphasis on the biological and physical dimensions of sustainability rather than on the social dimensions. With the emergence of ecological principles in the social sciences, humans engaged in ecological relationships with their social environment. Building on the ecological principles underpinned by Steiner (2016), understanding how human settlements have been shaped by social forces can also inform efforts to realise sustainable development in future. Turner's engagement of the people in his search for alternative housing solutions distinguished his work in Peru, yet despite the parallels to ecological principles, Turner's work has not received adequate attention despite the emergence of a human ecological perspective in the built environment disciplines. Further aspects of a human ecological perspective can be identified in the writing of Kellet and Napier (1995) who link the product and process evident in spontaneous settlements with the theories of vernacular architecture. Building on this scholarship, this thesis further explores the formation of the built environment shaped by the people themselves in relation to the political, economic, and cultural factors, hence, the socio-spatial processes in low income housing and settlements. Therefore, a study of the urban poor and how they provide their own shelter and build their settlements, which contribute to the physical development of urbanising cities may serve as an

example of the implementation of social ecological principles for sustainable urban development in developing countries.

5.6   Towards social constructionism in housing research

It is evident from the discussion in this Chapter, and the points made in the preceding Chapters, that there are alternative paradigms emerging that view informal settlements in a positive way. One of which, is the recognition of the ability of the urban poor to provide their own shelter when both economic and political sectors fail to provide them with basic shelter in the city. With the contradicting views towards informal settlements in countries with unstable economic and political conditions, there is a need to consider this unique phenomenon of urban poor housing provision in a rigorous and systematic way which has motivated the current study involving research and analysis, in-situ, of urban poor housing in a developing country.

The body of housing research consists of very broad range of works focusing on different aspects of housing and it is beyond the scope of this thesis to cover them all. The intent of this section of the thesis is to take stock of the studies which focus on housing provision for the urban poor and to reflect on their approach to the topic, including:[11] architecture (Turner 1968b), vernacular architecture (Kellet & Napier 1995; Rapoport 1988), culture (Kellet 1999, 2005), policy (Choguill 2007; Koenigsberger 1986; Lim 1987), sustainability (Pugh 2000; Rahman 2011), citizen participation (Etemadi 2000; Papeleras, Bagotlo & Boonyabancha 2012), NGO participation (Odivilas & Odivilas 2015; Porio et al. 2004; Teodoro & Co 2009), and others. In terms of epistemological and ontological approaches, McNelis (2014, p. 11) identifies a 'positivist' approach as the most common being employed by housing researchers.

Traditional housing policy is underpinned by a positivist paradigm that sees housing problems in an objective way.[12] In this way, housing solutions were implemented based on the ideological tendencies of concerned governments. For example, Mayo, Malpezzi and Gross argue that if there is a perceived shortage of shelter, the government will build houses (1986, p. 184). This traditional approach fails to cope with the dynamism and complexity evident in informal environments. Housing research, demands more than the analysis and review of policies and recommendations for new ones; critiquing individual and collective decisions; or, acting strategically and practically (McNelis 2014, p. 2). As in the case of studies of informal

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[11] These aspects of housing and their references serve only as examples. Some more of them are discussed in the entire manuscript.

[12] Criticised in this thesis, based from the reading of edited book, 'Social Construction in Housing Research' (Jacobs, Kemeny & Manzi 2004b).

settlements, 'this requires an analysis of where such settlement emerged and why; an understanding of the morphology and dynamics of how such settlements work – the spatial patterns, construction systems, increments of change and informal codes' (Dovey 2014, p. 45).[13] If in the level of scientific knowledge, the goal is to search for the ultimate truth, thus, there is a need for research that offers an account of the processes by which a housing phenomenon is treated as socially constructed. In so doing, the aim is to provide a clear understanding of a dynamic and complex urban phenomenon. Beyond the modernist rational views which claim to capture the objective knowledge of the phenomenon, this thesis adopts the postmodernist paradigm of 'social constructionism', which is one the five approaches used by Lund (2011) in understanding housing policy in the UK. [14]

This thesis attempts to develop a research agenda that is independent from the demands and priorities of policy makers. As a theoretical framework, the strength of social constructionism is in 'its focus on broader social processes and its emphasis on the importance of social, political and economic context' (Jacobs, Kemeny & Manzi 2004a, p. 3). Social constructionism is the antithesis of positivism (singled out by McNelis) that remains a dominant paradigm. Positivism maintains that same as nature, the social world has an objective and independent existence, thus, can be studied using scientific methods. However, Travers (2004) argues that social science requires different methods and assumptions to natural science, and must therefore address the meaningful character of the human group. Social constructionism with its emphasis on the importance of social, political and economic processes, thus, is applied in this thesis as an alternative to positivism. Proponents of social constructionism maintain that the shaping of *process* which can inform policy is significantly influenced by agenda setting, advocacy coalitions, lobbying, and media campaign of interest groups (Jacobs, Kemeny & Manzi 2004a, p. 5) (my emphasis). In other words, the role played by powerful interest groups to bring housing issues into policy making is better captured within a social constructionist paradigm. In the case of the Philippines, for example, the national Community Mortgage Programme which aimed to assist informal settlers to improve their security of tenure was conceptualised by a number of pro-poor NGO leaders who served in the new Aquino government following the 1986 People Power Revolution (Porio et al. 2004). Locally, in the case of Cebu City, sustained advocacy by the NGO resulted in the declaration of a policy agenda for the poor supported by local legislation

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[13] Furthermore, Kim Dovey's publications related to informal settlements are found in Dovey and King (2011); and, Dovey (2013, 2015, 2016).

[14] Laissez-faire economics; social reformism, Marxist political economy, behavioural approaches; and, social constructionism (Lund 2011).

with a corresponding budget (Etemadi 2004). Recognising the interactions between different members in the society, such as those mentioned here, and their influence on the formation of the built environment, social constructionism is employed in this study of urban poor housing and settlements in Davao City, Philippines.

The theoretical framework of this thesis focuses on the socio-spatial processes which can be observed and documented in the formation of urban poor housing and settlements in relation to the roles played by key actors in a society. These actors include the 'regulators', 'producers', and 'users' of the built environment defined by Madanipour (2006). Taking actors as a starting point, this research aims to contextualise the socio-political, socio-economic, and socio-cultural processes in low income housing and settlements evident in developing countries. To do so, this thesis attempts to abstract urban realities from the critical analysis of the multi-step transitional phases of housing from informal to formal status; the incremental construction of urban poor housing; the hypothetical evolution of urban poor housing; and, the progressive development of urban settlements. In order to achieve the aims of this research, the detailed research methodology is discussed in the following chapter. Building on the strength of social constructionism, the formation of subjected built environment is analysed in political, economic and cultural contexts.

PART B: Case Study: Davao City, Philippines

Chapter 6: Research Methodology

6.1 Introduction

This research was motivated by concerns about the perceived limitations of traditional approaches to the provision of socialised housing in developing countries. I have argued that these approaches emanate from a paradigm which tends to view the housing crisis in an objective way. The traditional approach to the provision of socialised housing, whether it is delivered by the government or the private sector, often fails to recognise the potential contributions of the urban poor, treating them as passive beneficiaries rather than active agents in the provision of shelter. This thesis posits that the urban poor, who, initially, can only afford to live in informal settlements have the ability to provide and improve their housing status in due course in an incremental manner. Thus, this thesis aims to show how the urban poor undergo a series of housing transitions to improve their housing to achieve formal status, and how they provide their own shelter through incremental construction and progressive development of their settlements. In the previous chapter, I argued that a 'positivist' approach is mostly employed by housing researchers with reference to the work of McNelis (2014). Positivism was linked to the ideological tendencies of concerned governments to implement traditional housing policies and programmes which are problematized in this thesis. Accordingly, I argue that there is a need for further research that provides insight into the phenomenon of housing for low income households: housing is understood to be socially constructed. Thus, the postmodern paradigm of 'social constructionism' (Jacobs, Kemeny & Manzi 2004b; Lund 2011; Travers 2004) is adopted to provide a clear understanding of a dynamic and complex urban phenomenon which is widespread in developing countries. In order to address the research questions and to achieve the aims and objectives set out in the introduction, this chapter presents in detail the research methodology employed for this research project.

6.2 Research paradigm and strategy

This thesis is informed by the postmodern paradigm of 'social constructionism'[1] and applies this to interpret the socio-spatial processes which shape housing and settlements for the low income sector in developing countries. This approach developed from a critical attitude towards

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[1] The application of social constructionism in housing research is also found in the publications of Gurney (1999); Clapman, Franklin and Saugeres (2000); Jacobs and Manzi (2000); Somerville and Bengtsson (2002); and, Fopp (2008).

traditional housing policies and programmes[2] and serves as a guide to explore the phenomenon of low income housing common to cities in developing countries. Acknowledging scholarship which examines low income settlements in developing countries, particularly in relation to the political, economic and social dimensions which determine the provision of socialised housing, this research employs a case study as the main strategy to examine low income housing from the disciplinary perspective of architecture and urban design. The analysis of this case study is informed by quantitative and qualitative data gathered during fieldwork in the study area. The cases presented in the succeeding chapters examine individual households and housing settlements of the lower income sector in Davao City, on the southern island of Mindanao in the Philippines. This site and the research method are introduced below.

Figure 6-1. Location of case study area

6.3   Case study area: Davao City, Philippines

This research was conducted in the Philippines, a country with a population of 92.34 million in 2010 and an annual growth rate of 1.90 per cent, based on data released by the National Statistics Office (NSO) (2012) when the study commenced.[3] This case study was conducted in Davao City, located one thousand kilometres south of the capital Manila (Figure 6-1). The NSO (2012) reports that of the 33 highly urbanised cities in the country, Davao is the only city outside the National Capital Region with a population exceeding one million people. In 2012, the total

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[2] The hypothesis of this thesis is presented in Chapter 1, Section 3.

[3] This thesis project was conceptualised in 2012, accordingly 2010 Philippine population data was used. The Philippine population based on the 2015 census is 100.98 million, reported by the Philippine Statistics Authority (PSA) (2016).

population of Davao City was 1.45 million and it has increased to 1.63 million (PSA 2016) during the course of this research project. Like other major cities in the country, it has experienced significant immigration of impoverished people, mostly from nearby regions in Mindanao, who have settled in precarious informal settlements. Typically, then, housing provision is one of the major issues in local urban development and the city has been selected as an appropriate case for this research which has not been the subject of prior scholarship.

6.4   Fieldwork

Fieldwork was conducted from February to April 2014 following the protocols approved by The University of Adelaide Human Research Ethics Committee (HREC, January 2014). During this period I examined a total of 74 household cases in 11 settlements. The selection of settlements and representative household cases was based on a selection of low income settlements that were identified in the area and refined based on recommendations from both government housing agencies and NGOs, who also coordinated access to the study areas. Selected cases, therefore, include recipients of assistance through government housing programmes and from NGOs, and cases of self-help housing as well as squatter settlements. Hypothetically, the selected sites comprise a range of different housing types from informal to formal.[4] Finally, the selection of study sites was also mediated by their accessibility where safety and security could be ensured. The household names presented in this paper were used with the formal consent of the survey participants,[5] for the purpose of academic research, only, without any legal consequence.

6.5   Urban settlement and household cases[6]

Arroyo Compound, Matina Crossing

The Arroyo Compound is composed of a federated homeowners' association who are currently informal settlers. These settlers are in the process of organising themselves to avail housing assistance from the government and NGOs. The settlement site is located five kilometres west of the city centre (Figure 6-2). Landownership of the site is under litigation. In addition, the site is located on the floodplain of a creek which presents significant threats to the inhabitants of the site. Given the location, the status of tenure and the risks posed, the site was chosen as a sample of typical squatter settlement (Figure 6-3). The 19 household cases covered by this

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[4] Preliminarily, this refers to housing markets and submarkets defined by Lim (1987), cited in the research proposal and the introduction to this thesis.

[5] In the HREC documentation the term 'participant' is used to refer to the interviewees. The terms 'respondent' and 'householder' are also used in this thesis.

[6] See Appendix A, for detailed list and coding of urban settlement and household cases.

study belong to different homeowners' associations, and most of them took advantage of assistance from an NGO, the Homeless People's Federation Philippines – Philippine Action for Community-led Shelter Initiatives, Inc. (HPFP-PACSII). This NGO was instrumental to the researcher's access to the households in this squatter settlement.

Figure 6-2. Location and site of Arroyo Compound

Figure 6-3. Informal housing in Arroyo Compound (left); and, site location along creek (right)

Kobbler Settlement, Ilang

The Kobbler Settlement[7] was first established as an informal settlement in 2003 when a group of urban poor families who had previously settled in the city centre invaded the area. The site is located approximately 16 kilometres northeast of the city centre (Figure 6-4). It has a total land area of 24 hectares composed of consolidated land parcels, which was intended to be the location of an export processing zone development project which is now defunct. Legal ownership of some land parcels is under litigation and most of the land parcels are under the

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[7] The Kobbler Settlement was a case study in a pilot study, preceding this thesis, conducted by the researcher (Malaque III 2013).

management of commercial banks. The settlement has at least 2,000 registered urban poor households in 12 federated homeowners' associations. The 11 household cases examined in this study belong to different associations. Each household is in the process of legalising their squatter land with support from the government and NGOs. The orderly blocks and the alignment of the residential lots in the Kobbler settlement indicates that the settlement is in the process of achieving formalisation, which was one of the primary reasons for choosing this settlement as a sample case (Figure 6-5).
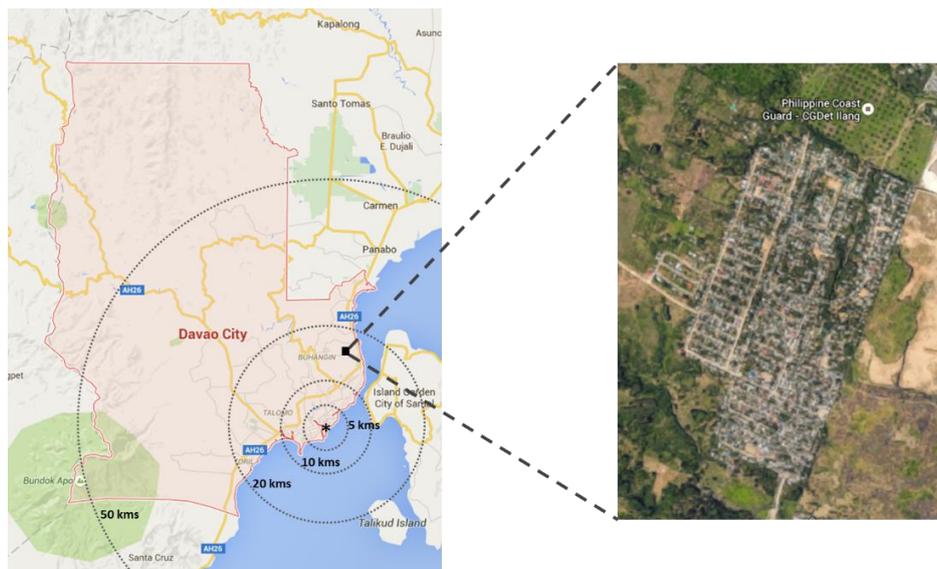
Figure 6-4. Location and site of Kobbler Settlement

Figure 6-5. Orderly residential lots and regular alignment in Kobbler Settlement

Peace Avenue, Bangkal

The Peace Avenue homeowners' association was organised to avail the Land Tenure Assistance Programme (LTAP)[8] implemented by the National Housing Authority (NHA), in 2000. The programme beneficiaries were informal settlers in the same site, and took advantage of the

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[8] LTAP is the NHA's own programme modelled on the Community Mortgage Programme.

government programme to process legal ownership of their squatter land.[9] The site is located approximately seven kilometres west of the city centre (Figure 6-6). It has a total land area of half a hectare, accommodating 36 residential lots with different lot sizes and irregular lot configurations (Figures 6-7 and 6-8). The four household cases examined in this study sought tenure assistance from the government programme, with house construction done in an incremental self-help manner.
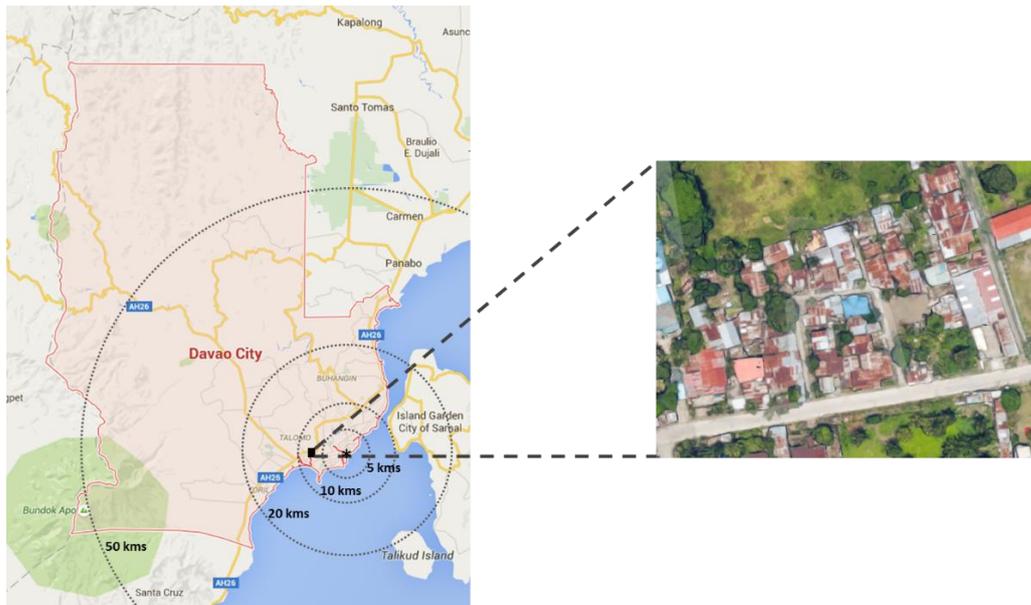
Figure 6-6. Location and site of Peace Avenue settlement

Figure 6-7. Incremental improvements in Peace Avenue settlement

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[9] This is a sample settlement case of an 'on-site' LTAP project provided by the government implemented by the NHA.
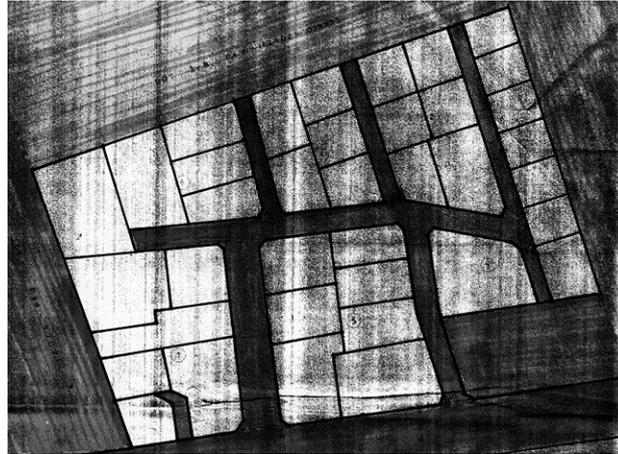
Figure 6-8. Peace Avenue settlement site development plan[10]

Matina Aplaya Shanghai Village, Matina Aplaya

The Matina Aplaya Shanghai Village homeowners' association was organised to access the Community Mortgage Programme (CMP)[11] of the government implemented by National Home Mortgage Finance Corporation, in 1993. In this example of a CMP project, the NHA served as the originator, which is the basis for the choice of this settlement for the case study. The site was formerly a squatter settlement located approximately 5 kilometres west of the city centre (Figure 6-9). The eight household cases covered in this study belong to the 195 urban poor household beneficiaries of this CMP project who are now in the process of legalising their squatter land. They constructed the houses by themselves in an incremental self-help manner (Figure 6-10).
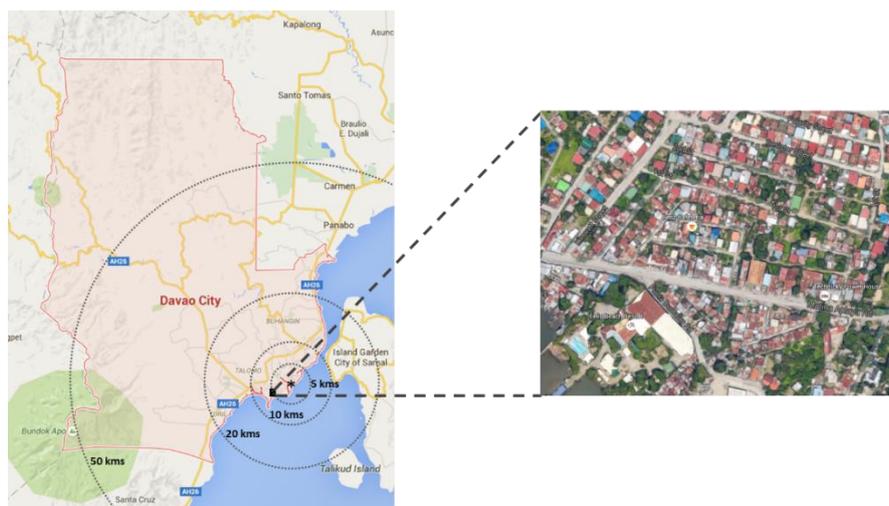
Figure 6-9. Location and site of Matina Aplaya Shanghai Village

[10] Source: National Housing Authority
[11] CMP is discussed in Chapter 4.

Figure 6-10. Matina Aplaya Shanghai Village, beneficiary of CMP

Toril II, Lubogan, Toril

The Toril II settlement homeowners' association was organised to avail the sites and services programme implemented by NHA, in 1988. The site is located approximately 18 kilometres west of the city centre (Figure 6-11). This sites and services project benefits 237 urban poor households who were either squatters in the same site, or from neighbouring areas, who moved to avail the programme. For example, one the three household cases covered by this study was a squatter in the public market area who moved to the site during the programme's implementation. The urban poor households benefit from the provision of serviced residential lots from the programme, while the construction of their houses was done by themselves in an incremental self-help manner (Figure 6-12).

Figure 6-11. Location and site of Toril II settlement

Figure 6-12. Toril II settlement, beneficiary of sites and services programme

Piapi I, Quezon Boulevard

The Piapi I settlement homeowners' association was organised to avail the slum upgrading programme implemented by NHA, in 1981. The site is located in the city centre, which was a squatter settlement located along the shoreline which expanded towards the former mangroves area (Figure 6-13). This slum upgrading project benefits 428 urban poor households who were squatters on the same site. The nine household cases covered by this study availed the improvement of their settlement site and legalise their squatter land, while the construction of their houses was undertaken by themselves in an incremental self-help manner (Figure 6-14).

Figure 6-13. Location and site of Piapi I settlement

Figure 6-14. Piapi I settlement, beneficiary of slum upgrading programme

Los Amigos Relocation Site, Los Amigos

The Los Amigos Relocation Site[12] project started in 2009. It was intended to provide serviced residential lots for the urban poor who had been relocated due to the demolition of their dwellings and to relocate people who had been living in flood prone areas. It is located approximately 22 kilometres northwest of the city centre along the Bukidnon-Davao highway (Figure 6-15). The site, including Phases 1 and 2, has a total land area of 22.1 hectares covering a total of 839 units of residential lots with individual lot areas from 80 square metres to 115 square metres. The three households examined in this study were beneficiaries of housing construction assistance provided by the NGO, HPFP-PACSII (Figure 6-16).
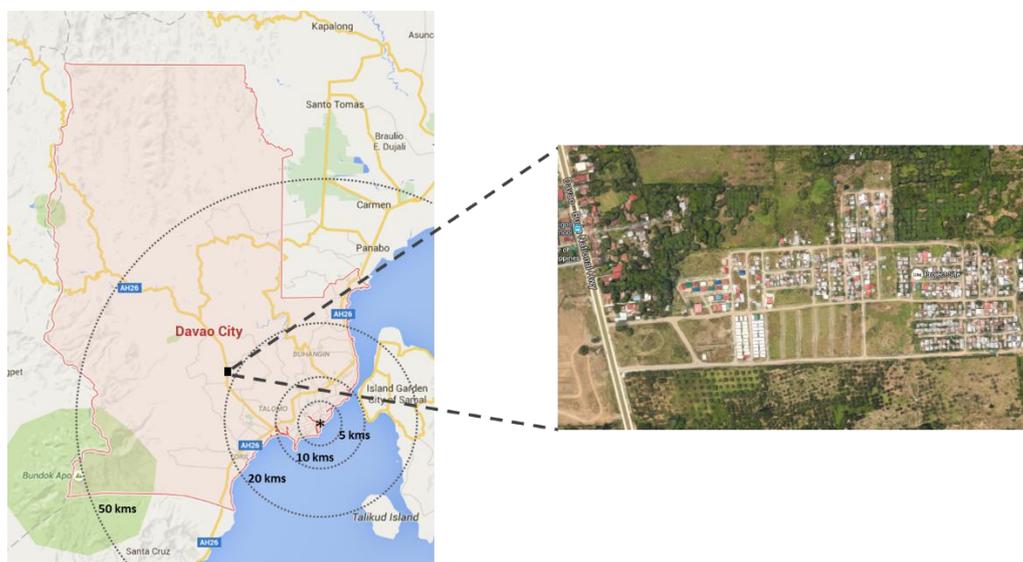
Figure 6-15. Location and site of Los Amigos Relocation Site

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[12] Officially registered as 'Fuente De Los Amigos Homes' under the administration of the city government's Housing and Homesite Division, Office of the City Planning and Development Coordinator.

Figure 6-16. Beneficiaries of assistance from HPFP-PACSII in Los Amigos Relocation Site

Tibungco Relocation Site, Tibungco

The Tibungco Relocation Site project was initiated in 1997 by the city government. The project targeted households who were affected by demolition resulting from infrastructure development projects in the area. Housing assistance from the city government included the provision of serviced residential lots and the initial construction of core houses. The site is located approximately 18 kilometres northeast of the city centre (Figure 6-17). The Phase 1 site, where the household cases are located, has a land area of 20 hectares including a total of 1,361 units of 80 square metre-residential lots (Figures 6-18 and 6-19). The six household cases chosen for this study house families who had previously settled in a former garbage dumpsite at the fringe of the city centre. They became beneficiaries of the relocation project when the dumpsite was closed to make way for a road development project.

Figure 6-17. Location and site of Tibungco Relocation Site

Figure 6-18. Underdeveloped infrastructure and houses in Tibungco Relocation Site
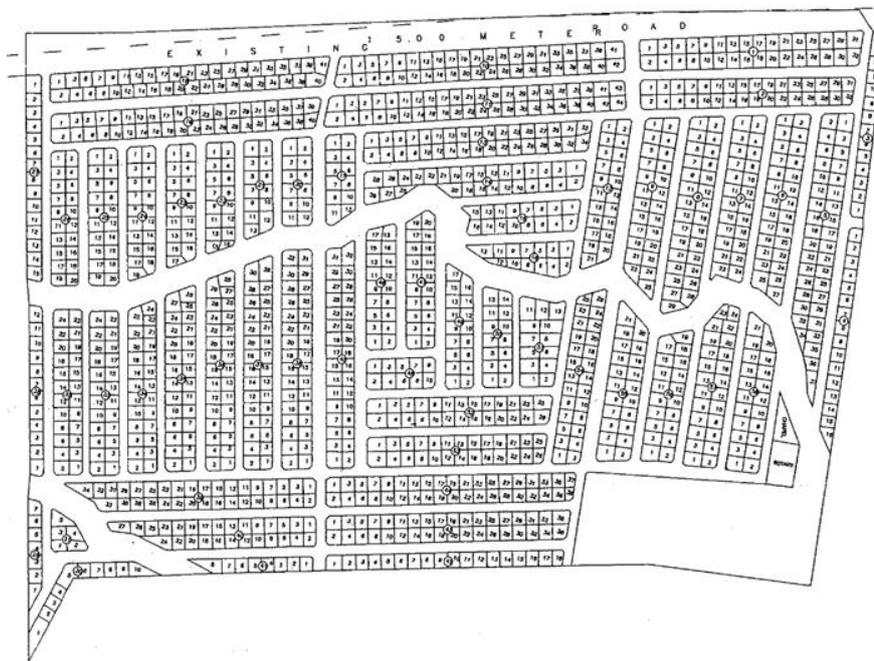
Figure 6-19. Tibungco Relocation Site Phase 1 site development plan[13]

Association of Differently Abled Persons, Indangan

The Association of Differently Abled Persons (ADAP) was organised to avail the LTAP project implemented by the NHA in a newly developed site, specifically to assist people with physical disabilities, in 2003.[14] The site is located approximately 16 kilometres north of the city centre (Figure 6-20). It has a total land area of 0.9 hectare, accommodating 75 residential lots with an average lot area of 72 square metres. The three household cases covered by this study were provided with residential lots from the government programme. Construction of the houses was assisted by the NGO, Habitat for Humanity (Figure 6-21).

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[13] Source: Housing and Homesite Division, Office of the City Planning and Development Coordinator, City of Davao
[14] This is a sample settlement case of an 'off-site' LTAP project provided by the government and implemented by the NHA, for people with physical disabilities.

Figure 6-20. Location and site of Association of Differently Abled Persons

Figure 6-21. Typical house model by Habitat for Humanity in ADAP settlement

Green Prairie Homes, Toril

The Green Prairie homeowners' association was organised to avail the LTAP project implemented by the NHA in a newly developed site, in 2000.[15] The site is located approximately 18 kilometres west of the city centre (Figure 6-22). It has a total land area of 3.6 hectares, accommodating 188 residential lots with a minimum lot area of 120 square metres and maximum of 163 square metres (Figure 6-23). The four household cases covered in this study availed provision of residential lots from the government programme. House construction were done by the urban poor beneficiaries without external financial support.

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[15] This is another sample settlement case of an 'off-site' LTAP project of the government implemented by the NHA.

Figure 6-22. Location and site of Green Prairie Homes

Figure 6-23. Underdeveloped site in Green Prairie Homes settlement

Kadayawan Homes, Bangkal

The Kadayawan Homes is a completed housing development project by the government implemented by NHA as a joint venture with a private developer, Kisan Lu, in 1994. The site is located approximately seven kilometres west of the city centre (Figure 6-24). This project provides completed socialised and economic housing units for those who qualify for housing loans, generally, through the Home Development and Mutual Fund (known as the Pag-IBIG Fund).[16] The four household cases covered in this study are regular government employees, who belong to the 2,832 beneficiaries of this housing project. Despite the provision of the completed housing structure, the occupants expanded their homes and further refurbishments were made (Figure 6-25).

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[16] See, Chapter 3, Section 3 of this thesis.
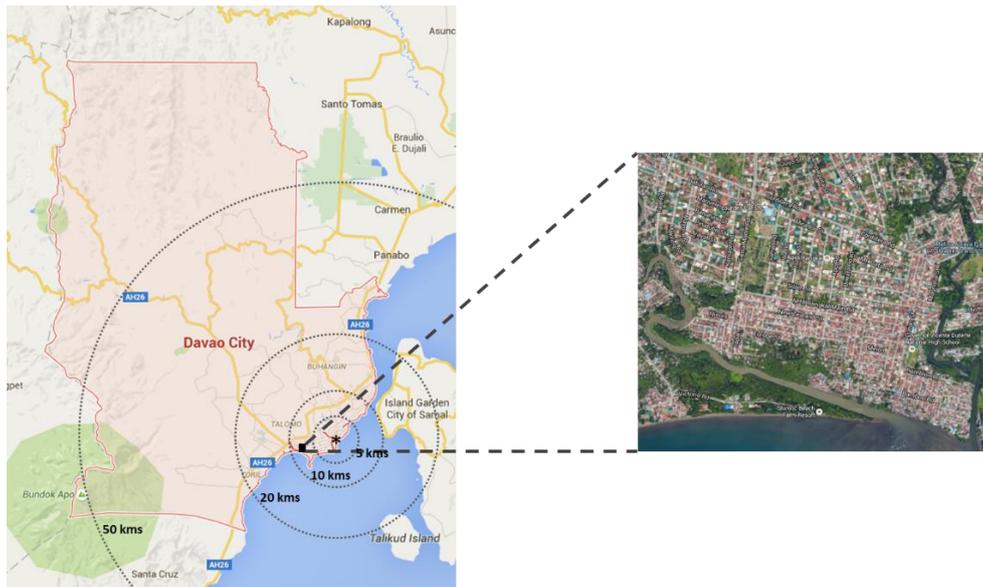
Figure 6-24. Location and site of Kadayawan Homes settlement

Figure 6-25. Refurbished houses and fully developed site in Kadayawan Homes settlement

6.6   Research methods[17]

6.6.1   Data collection

The primary data was collected during fieldwork in Davao City, Philippines, conducted from February to April 2014. Secondary data such as the profile of the homeowners' associations and the site development maps were sourced from unpublished data of the government agencies and the NGOs which assisted with the fieldwork. The full details of these agencies and the NGOs are listed in Appendix B.

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[17] This research project was guided by the two editions of 'Architectural Research Methods' by Groat and Wang (2002, 2013), specifically, the use of case study as research strategy. Furthermore, during the writing stage, the recently published book, 'Research Methods for Architecture' by Lucas (2016) was also read to enhance research knowledge, specifically, the use of fieldwork as data collection tactic, and analysis and interpretation of qualitative data.

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Access to settlements and household cases

Primarily, the selection of the housing settlements was based on the criteria presented in Section 4 of this Chapter. Furthermore, the choice of settlements was finalised based on recommendations by the relevant government housing agencies or NGOs who assisted the researcher's access to the settlements. Household respondents were selected based on the recommendations and guidance of the officers of the relevant homeowners' association, and the availability of qualified residents to be survey respondents.[18] The number of household cases in each settlement depended on the size and homogeneity or heterogeneity of the settlement. Settlements with households benefiting from the same assistance from the government and NGO were considered to be homogenous, thus including a smaller number of household cases (e.g. Kadayawan Homes). In contrast, larger settlement with diverse households benefiting from assistance from various government agencies and NGOs were considered to be heterogeneous. As such, a greater number of household cases were considered (e.g. Kobbler Settlement). To minimise any security risks, the actual fieldwork was conducted within a maximum period of two hours in a settlement site. Security risks related to visiting informal settlement sites include theft (bag snatching), illegal drug trade, gang wars or riots, among others. At the end of the fieldwork period, a total of 74 households in 11 settlements were surveyed and validated as cases for this thesis project (Table 6.1).

Table 6.1. List of settlements and number of household cases

Code	Name	Number of household cases	Recommended and assisted by:
A	Arroyo Compound	19	HPFP-PACSII* (NGO)
B	Kobbler Settlement	11	PCUP** (Government)
C	Peace Avenue	4	NHA*** (Government)
D	Matina Aplaya Shanghai Village	8	NHA (Government)
E	Toril II	3	NHA (Government)
F	Piapi I	9	NHA (Government)
G	Los Amigos Relocation Site	3	HPFP-PACSII (NGO)
H	Tibungco Relocation Site	6	Davao City Government****
I	Association of Differently Abled Persons	3	NHA (Government)
J	Green Prairie Homes	4	NHA (Government)
K	Kadayawan Homes	4	NHA (Government)

* Homeless People's Federation Philippines – Philippine Action for Community-led Shelter Initiatives, Inc.
** Philippine Commission for the Urban Poor
*** National Housing Authority
**** Through its Housing and Homesite Division, Office of the City Planning and Development Coordinator

[18] Access and choice of settlements and households, and qualification of survey respondents strictly followed the protocols approved by The University of Adelaide Human Research Ethics Committee (January 2014).

Personal interview

Face-to-face interviews were conducted with qualified household respondents using the survey questionnaire (Appendix C) designed by the researcher and approved by the HREC. Initially, the background of the research project was explained to respondents using a participant information sheet, and consents were formally sought (individual consent forms were signed by the participants and they are included in Appendix D). In most cases, the research project was explained, and the survey questions were asked in the local dialect, however, there was no need to translate the forms to Filipino language (or local dialect) because the English language is used as the medium of instruction and in legal documents in the Philippines. As much as possible, face-to-face interviews were actually conducted in the presence of government housing agents or NGO staff, or the relevant homeowners' association officer.

Sketching of floor plans and photo documentation

House plans were documented during the fieldwork comprising detailed measurements and notes (Figure 6-26). In addition, housing forms and structures were documented with photographs. Sketching, photographic documentation, and access into private rooms of the households was only done with further consent from the survey participants.
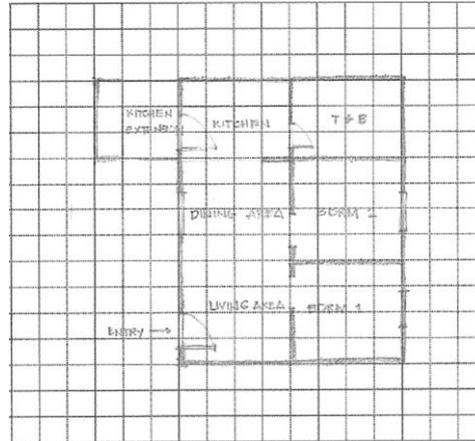
Figure 6-26. Sample fieldwork sketching of floor plans

Key participant interview

Key participant interviews were conducted with qualified officers representing government housing agencies and NGOs using specifically designed survey questionnaires.[19] The same procedure was adhered to in the conduct of interviews with household participants, the background to the research project was explained using the participant information sheet, and

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[19] Despite having the same format, there were slight variations to the questions asked of the government housing agents compared to the NGO representatives (see Appendices E and F).

consents were formally obtained using a consent form. The English language was used in the interview, and in the discussions, because the participants were all well-educated professionals.

6.6.2   *Data coding and analysis*

Coding of settlement and household cases

The eleven housing settlements chosen for the case study were coded with upper case letters from A to K hypothetically arranged from informal to formal,[20] based on preliminary observations. The seventy-four household cases were coded with numbers from one (01) to 74 (see Appendix A). Household cases in each settlement were arranged in alphabetical order according to the family name of the householder. For example, the Abarquez family in the Arroyo Compound was coded as A01, while the Palacio family in Kadayawan Homes was coded as K74.

Classification of households

Building on Lim's (1987) classification of housing markets, the variables used to classify the selected households were the legality of land occupancy and the construction of the houses in relation to the compliance with the building code. Accordingly, the regular or formal housing market consists of units occupied by 'household with legal title to the land and building, and the unit meets the building codes and other government specifications' (Lim 1987, p. 178). In contrast, a squatter housing market 'violates both the legality of land occupancy and physical standards' (Lim 1987, p. 178). However, due to the complex urban phenomenon observed in the Philippine setting in general, and in Davao City in particular, the bivariate data analysis and variables used by Lim (1987) were assumed to be too simple to interpret and organise the household cases. Thus, this study employed cluster analysis, a multivariate data analysis tactic, to classify the household cases. Extending Lim's (1987) study, the variables used in this cluster analysis included the following: 1) approval of building permit; 2) participant's view of whether the building is built in accordance to the building code; 3) researcher's assessment of whether the building is built in accordance to the building code; 4) participant's claim on the legality of land ownership; 5) approval of site development permit; and, 6) researcher's assessment on

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[20] At one end of the classification range, the Arroyo Compound is an informal settlement. In contrast, Kadayawan Homes is an example of a formal settlement. However, the range from informal to formal settlements were subjected to further analysis explained in the following Sections of this Chapter, and presented and discussed in Chapters 7, 8 and 9.

the completeness of sites and services.[21] Household cases were classified according to a hierarchical cluster analysis using IBM SPSS Statistics 21 software.

Description of classified households

Cross-tabulation of data and variables was used to describe the different types of households. The description was based on the pattern of commonality of information from variables used in the cluster analysis. In addition, further information about the selected settlements was also considered in the analysis. This included the history and formation of the settlement, the government housing programme implemented, the type of assistance from NGO, and the various initiatives by the urban poor themselves.

Analysis of movement of households from one housing type to another

It was hypothesised that the urban poor who preliminarily live in an informal settlement will have the opportunity to either stay in the same settlement and improve their housing status, or move to an affordable settlement site of a better quality. In order to explore this hypothesis, the movement of households from one housing type to another was analysed based on the following information about their previous settlement: 1) location of settlement; 2) approval of building permit of the previous house; 3) construction of previous house in accordance with the building code; 4) approval of site development permit; and, 5) completeness of the site and services. In addition, the date when the household moved and the reasons for moving to the present settlement were considered.

Analysis of incremental housing construction and progressive development of settlements

The incremental construction of urban poor housing was preliminarily analysed based on the accounts of the interview respondents with regards to their initial living spaces, preceding the present status of their housing unit. Furthermore, this was related to the initial construction and the improvements to the housing structures, preceding the present form of housing units. This analysis of the history of the housing unit considered the housing developments, the agents of housing provision[22] and the building materials and the methods of construction. In order to forecast the future development housing structures, the interview respondents' aspirations, preferences and future plans were further considered in the analysis (Figure 6-27). Household cases were grouped in accordance to the respective housing types where they belong,

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[21] In addition to the Building Code, rules and standards for development of socialised and economic housing in the Philippines is promulgated in *Batas Pambansa* (BP) 220. For the complete document of BP 220, see, http://www.chanrobles.com/bataspambansa/bataspambansablg220.html#.V5MD9Lh97IU.

[22] This includes the government, NGO, or personal initiative of the urban poor, among others.

regardless of the settlement in which they were located. The aggregate incremental housing construction, the present housing status, and the preference and the future plans of the survey respondents, were further used to analyse and illustrate the hypothetical evolution of the household and the progressive development of the settlements (Figure 6-28).
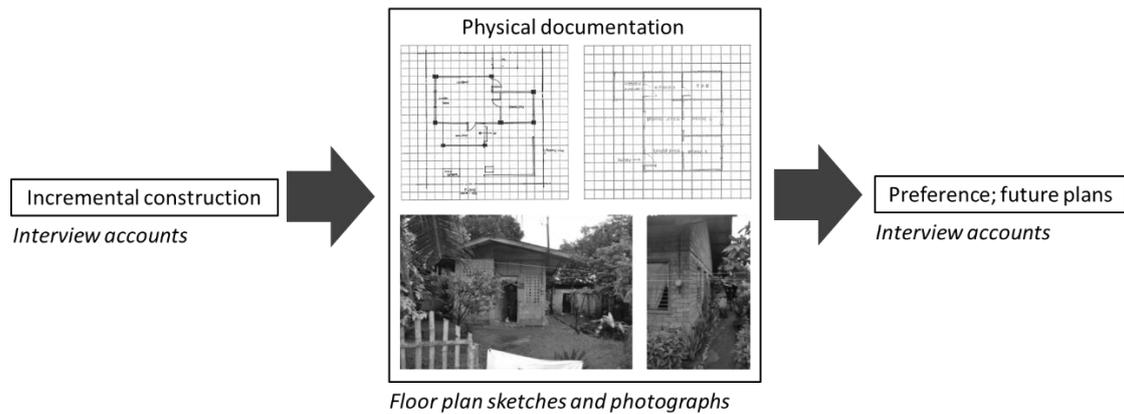
Figure 6-27. Incremental construction, present status, and future development of housing
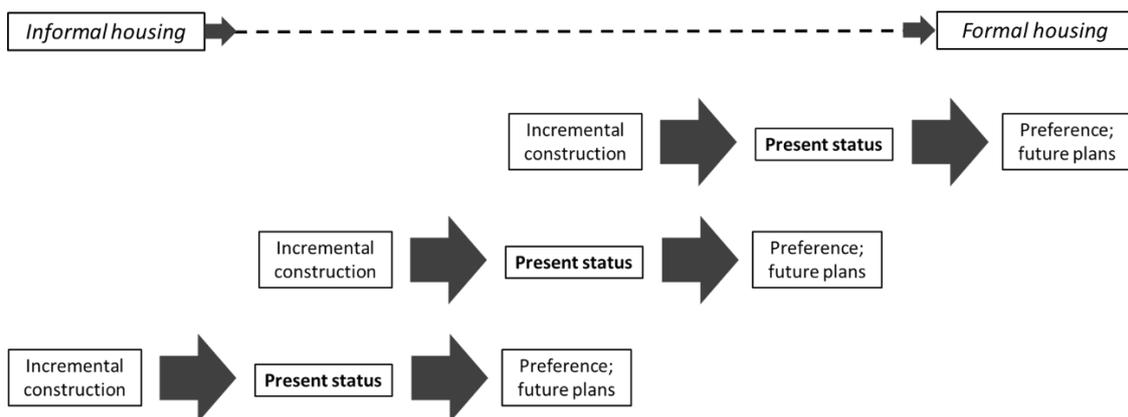
Figure 6-28. Analysis of housing evolution and progressive development of settlements

6.6.3 Research results presentation, discussion, and synthesis

The research results are presented in the succeeding chapters. In Chapter 7, the classification of the households is presented in a dendrogram from cluster analysis, a graphical output from IBM SPSS Statistics 21 software. The description of the different household types and the movement of the inhabitants from one housing type to another is presented in the same chapter. In Chapter 8, the provision of living spaces and the incremental construction of housing is presented in a descriptive format. This is followed by a presentation of representative housing structures according to the housing types. A total of 22 household cases were chosen and presented with their floor plans and photographs. This is supported by a brief description of the present status of the respective housing structures. Furthermore, the housing preferences and

the future plans of the survey respondents are presented in the same chapter, in a descriptive format. Given the parameters and certainty which defines a formal household, these are discussed first followed by the discussion of the types where the legality of the households in increasingly tenuous, hence, the cases are ordered and discussed from 'formal' to 'informal'.

The discussion of the research results in relation to the major concepts and theories presented thus far in this thesis is presented in Chapter 9. Primarily, the discussion focuses on the multi-step transition of housing, which explains how a member of the low-income sector who initially settled in an informal settlement undergoes a process of improving the formality of their shelter, in the same settlement site or in another location. Furthermore, the discussion is centred on household cases situated in progressive settlements. This refers to settlements which started as informal and which are in the process of increasing formalisation: Arroyo Compound, Kobbler Settlement, Peace Avenue, Matina Aplaya Shanghai Village, Toril II, and Piapi I settlements. Looking at the level of individual household cases, the discussion focuses on the incremental housing construction, which precedes a discussion of the evolution of urban poor housing. Considering the overall settlements, the discussion focuses on the progressive development of these urban settlements. Finally, the major results and discussions are synthesised in the context of socio-spatial processes in built environment.

6.7   Research ethics

The application for ethics approval for this study was submitted in September 2013. It was anticipated that this would be defined as a low risk ethics application. However, due to the major earthquake on the island of Bohol on 15 October 2013, followed by Typhoon Haiyan on 8 November 2013, and the security risks related to the nature of squatter settlements in the case study area, including bag or mobile phone snatching, among others mentioned in Section 6 of this Chapter, the application was treated as a high-risk application that was tabled for review and discussion by the Human Research Ethics Committee of the University. The Committee finally approved the ethics application in 13 January 2014 (Appendix G). The approved protocols were strictly followed in the actual fieldwork from February to April 2014. There were no major issues, except that there were some survey respondents, who despite their cooperation, hesitated to sign the consent form due to concerns about the legal implications. This matter was resolved with the help of government agents and NGO staff who assisted with access to the urban poor settlements and households.

Chapter 7: Urban Households and their Transition from Informal to Formal Status

7.1   Introduction

Housing in the lower income sector in developing countries is characterised by progressive development. Contrary to the case in advanced and industrialised countries, the urbanisation process in developing countries is more dynamic in nature, which includes various housing and settlement categories ranging from informal to formal types. In a preliminary study conducted in Davao City, Philippines (Malaque III 2013),[1] a case study of one informal settlement indicated an apparent transition to improve the formality of the settlement in terms of the housing structure and land tenure. However, this phenomenon has not received sufficient attention and housing policies and programmes may fail because of misunderstanding on the complexities of this dynamic urban phenomenon. Thus, this phenomenon needs to be further studied, thus, this chapter will explore the lower income household cases selected for this study, classify them into different types, and survey how the inhabitants move from one type to another. The movement of inhabitants towards ownership of a formal housing type characterises the transition of urban households from informal to formal status. The preliminary results of this research project about the classification of urban households and their transition from informal to formal status were presented in the 40th IAHS World Congress on Housing (Malaque III, Bartsch & Scriver 2014).[2] Furthermore, the details of the case study and results are discussed in the following sections.

7.2   Classification of urban households

Urban households selected for this case study were examined and classified into different types. These households were chosen to represent various cases which hypothetically represent different types of housing in transition from informal to formal status. The classification of households was achieved based on a hierarchical cluster analysis using IBM SPSS Statistics 21 software. The variables used in this cluster analysis included the following: 1) approval of building permit; 2) participant's (inhabitant's)[3] view of whether the building was built in accordance with the building code; 3) researcher's assessment of whether the building was built in accordance with the building code; 4) participant's (inhabitant's) claim on the legality of land ownership; 5) approval of the site development permit; and, 6) researcher's

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[1] For copy of the full paper, see, Appendix H.
[2] For copy of the full paper, see, Appendix I.
[3] 'Participant' is the term used in documentation prepared in accordance with the University of Adelaide Human Research Ethics Committee.

assessment of the completeness of the site and services. As a result of the cluster analysis, a dendrogram was generated. Based on the dendrogram, five types of urban households were identified and are described in the following section.
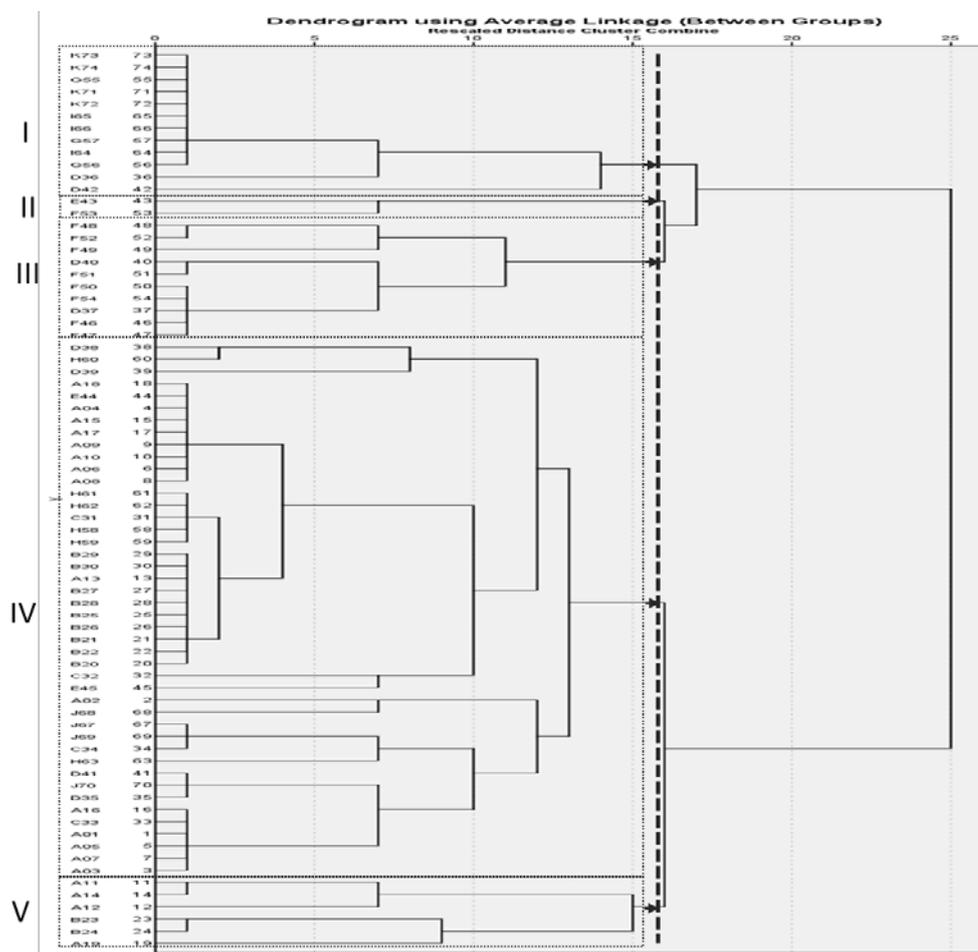
Figure 7-1. Dendrogram from Cluster Analysis using IBM SPSS Statistics 21[4]

7.3 Description of five urban household types

The different types of urban households identified in the cluster analysis were described using a qualitative method using cross-tabulation of data and variables. The description presented in the following subsections is based on the pattern of commonality of information from the variables used in the cluster analysis. Among other variables, further information about the settlement under study was also considered in the analysis. This includes the history and formation of the settlement, the government housing programme implemented, the type of assistance from an NGO, and various initiatives by the urban poor themselves. The household types are discussed from 'formal' (Type I) to 'informal' (Type V) based on the

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[4] For a full list of classified households per type, see, Appendix J.

decision that the households presented under the classification of 'formal' are the least ambiguous in terms of the status of construction and the status of tenure.

Table 7-1. The five urban household types and their brief descriptions

Urban household type	Description
Type I - 'Formal' household	- Qualified beneficiary of formal housing loans (e.g. Pag-ibig Fund) - Beneficiary of completed housing programme by the government implemented by the NHA - Beneficiary of land tenure assistance from the government (e.g. Resettlement site, CMP, LTAP) - Beneficiary of assistance from NGO on house construction (e.g. Homeless-PACSII, Habitat for Humanity)
Type II - 'Almost formal' household	- Beneficiary of slum upgrading and sites and services programmes by the government implemented by the NHA - Householder can afford to refurbish the house towards becoming formal housing unit
Type III - 'Semi-formal' household	- Beneficiary of slum upgrading and sites and services programmes by the government implemented by the NHA - Beneficiary of land tenure assistance from the government (e.g. CMP) - Self-help housing unit built not in accordance to standards of the building code - Housing unit with building materials dilapidated over time
Type IV - 'In-transition informal' household	- Informal housing unit with householder applying to benefit land tenure assistance from the government (e.g. CMP, LTAP) - Non-paying beneficiary of government resettlement site - Inhabitant of settlement in process for formalisation with government and NGO assistance - Beneficiary of government housing projects with undeveloped sites and services
Type V - 'Informal' household	- Informal settler illegally occupying the land - Self-help housing unit far from being built in accordance to standards of the building code - Inhabitant of settlement with undeveloped sites and services

7.3.1   Type I – 'Formal' household

This type of urban household includes those with secure land tenure and houses built in accordance with the building code. Primarily, security of land tenure is based on the ownership of the land title. Alternatively, certification from a national or local government housing agency on the legal occupation of the programme beneficiaries is considered as evidence for secured

tenure. On the other hand, the formality of the building structure is evident on the award of the building permit and construction of the building in accordance with the standards of the code. Household cases which belong to Type I are presented in the following paragraphs.

Firstly, all four household cases in Kadayawan Homes were classified under Type I household. At the time of the interviews, the heads of the households were regular employees of the National Housing Agency (NHA). Like other employees of key housing agencies, they were privileged to benefit from housing assistance from the government. Consequently, as members of the Home Development Mutual Fund also known as the Pag-IBIG Fund, they qualified to access formal housing loans for the purchase of completed housing units. Kadayawan Homes is a fully developed social housing project provided by the national government and implemented by the NHA in partnership with a private developer.[5]

Secondly, all three household cases in the Association of Differently Abled Persons (ADAP) were classified under the Type I household. Contrary to the employment status of those in Kadayawan Homes, the residents in ADAP belong to the urban poor sector with household heads or members who have physical disabilities. This socialised housing project is assisted by the NHA for the acquisition of land through its Land Tenure Assistance Programme (LTAP). In addition to this assistance from the national government, the construction of their houses is assisted by Habitat for Humanity NGO. The delivery of housing units with complete utilities was based on the design standards of the Habitat for Humanity programme using permanent materials such as concrete interlocking blocks for walls and corrugated galvanised iron sheets for roofs. Part of the building material cost was supported by private donors and other civic organisations. Moreover, the labour cost was partly covered by sweat equity from the beneficiaries and voluntary support from other community based organisations. Completion of the land development was achieved on an incremental basis from earmarked funds from the government.

Thirdly, all three household cases in the Los Amigos Relocation Site were classified under Type I household. The members of these households were listed as qualified urban poor beneficiaries of a relocation site provided by the city government, known as Los Amigos. While the provision of land was assisted by the city government,[6] the construction of their houses was assisted by

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[5] NHA's implemented housing programmes covered by this thesis were discussed during a key participant interview with Rosario Camarillo (24 March 2014).

[6] The provision of relocation sites by the city government of Davao was discussed during a key participant interview with Roy Ryan II Rigor (31 March 2014).

an NGO, the Homeless People's Federation Philippines, Inc. - Philippine Action for Community-led Shelter Initiatives, Inc. (HPFPI-PACSII).[7] As in the case of the Habitat for Humanity assistance in ADAP, the delivery of housing units with complete utilities was based on the design standards specified by the technical staff of HPFPI-PACSII. However, in this case, locally produced compressed earth block was used as a permanent material for walls. Unlike in ADAP where sweat equity was required from the beneficiary, the HPFPI-PACSII assistance in Los Amigos for the direct cost of materials and labour was loaned to the beneficiary at a minimal interest rate.

Lastly, two out of eight household cases in the Matina Aplaya Shanghai Village were classified under the Type I household. The residents of these households were once informal settlers when they first settled in the same area. They became beneficiaries of the national government's Community Mortgage Programme (CMP).[8] Consequently, when the ownership of the land was formalised through CMP, they are able to improve the construction of their houses over time through self-help initiatives. Considering the present formal status of their land and housing structure, they belong to the formal household type.

7.3.2 Type II – 'Almost formal' household

This type of urban household includes those with secure land tenure, however, the houses require further improvements to comply with the building code. The residents of the households classified under this type were once informal settlers and became beneficiaries of slum upgrading and sites and services programmes popular since in the 1970s. Following the formalisation of land ownership, they are able to improve their housing structure on an incremental basis. Two household cases which belong to Type II are presented in the following paragraph.

Firstly, one household case from Toril II is classified under Type II household. The residents of this household were relocated to the present site in 1989 after their squatter settlement near the public market was demolished. Secondly, another one household case in Piapi I is also classified under this type. The residents of this household were pioneers when the same housing site was formed as a squatter settlement in the 1960s. Both the Toril II and Piapi I settlements were recipients of the national government's site and services and slum upgrading

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[7] HPFPI-PACSII's housing assistance covered by this thesis was discussed during a key participant interview with Janeth Mandin (14 March 2014).

[8] Implementation of CMP in Davao City was discussed during a key participant interview with Ronaldo Saco (7 April 2014).

programmes, which were both implemented by the NHA. As stated in the previous paragraph, this further explains that after these beneficiaries completed their payments for the lots and awarded land titles, they are able to continue upgrading their houses on an incremental basis through self-help initiatives. However, because the building was not yet fully compliant with the building code, they can only be classified as a Type II household.

7.3.3 Type III – 'Semi-formal' household

This type of urban household includes those which were in the process of formalising their security of tenure. While in process, they may have secured land tenure however the houses are not built in accordance to the building code or they have become dilapidated over time. Thus, urban settlements with this type of household has the characteristics of a slum. Household cases which belong to Type III are presented in the following paragraphs.

Firstly, eight out of nine household cases in Piapi I are classified under Type III household. As explained in the single Type II household case presented above, Piapi I was originally a squatter settlement that was legalised through a slum upgrading programme. However, the eight households which are classified under this type have structures which are still far from meeting the building code, or they have become dilapidated over time due to the temporary nature of the materials used. Secondly, two out of eight household cases in the Matina Aplaya Shanghai Village are classified under this type. As explained in the two Type I household cases previously presented, the Matina Aplaya Shanghai Village was a recipient of CMP to assist the formalisation of ownership of the squatter land. However, the four households which are classified under this type are still far from being characterised as formal housing. While both settlements benefited different programmes which were implemented respectively, these national government initiatives enabled the urban poor to upgrade their security of land tenure. Household beneficiaries who are covered by this case study and who belong to this type are still in the process of paying for their land prior to the receipt of land titles. At the same time, they are also in the process of upgrading their houses through self-help housing initiatives. They are classified under the Type III household accordingly.

7.3.4 Type IV – 'In-transition informal' household

This type of urban household includes those people living in informal settlements but who are in the process of upgrading their status to a more formal type. Some settlements with this type of household may appear to be a squatter site. However, further investigation of the initiatives of the inhabitants revealed that they are already starting to organise themselves to negotiate for

the purchase of the land, or to avail government programme and assistance from an NGO. This initiative provides a small degree of security of tenure for the informal settlers. On the other hand, some settlements with the same type of household may appear better than a squatter site because they have received government assistance such as a relocation site. However, further investigation revealed that the inhabitants have fear of eviction because they have not paid responsibly, thus, they lack security of tenure. Groups of household cases which belong to Type IV are presented in the following paragraphs.

Firstly, a major group of household cases in the Arroyo Compound and the Kobbler Settlement were classified under Type IV household. These two urban settlements appear to be informal which is evident in terms of their house construction and the site development status. However, the inhabitants are organising themselves in order to negotiate the purchase of their squatter land from the legal owners. Apart from this, they are also undertaking initiatives to avail government programmes for the improvement of their security of land tenure and the development of site and services. The organisation of these households is mostly assisted by NGOs. For example, households in Arroyo Compound which are covered by this case study are assisted by the HPFPI-PACSII. Both settlements include federated homeowners' associations. However, each association manages themselves independently. Hence, each of them are receiving various forms of assistance from the government and/or NGO depending on the efficiency of the leadership and the efficacy of the network.

Secondly, four out of eight household cases in the Matina Aplaya Shanghai Village were classified under Type IV household. These household cases have the same physical characteristics as those in squatter settlements. They are different compared to those more formal household cases classified in Types I and III of the same settlement. As mentioned above, the Matina Aplaya Shanghai Village is a recipient of CMP. Despite the informal physical appearance of household cases classified under this type, the continuous repayments by the beneficiaries to maintain good standing with the government programme provides them secured land tenure.

Thirdly, two out of three household cases in Toril II were classified under Type IV household. As mentioned previously, Toril II is a recipient of a sites and services programme provided by the government. One household case under this type appears to be more informal compared to another more formal Type II household in the same settlement. Despite its informal physical appearance, the security of tenure is maintained by continuously paying for the government

assistance. On the other hand, the other household case classified under this type may appear to be more substantial physically, like those in the Type III household. However, the house was built on a site that was not designated as a residential lot, thus, the inhabitant is not eligible for government assistance. The same inhabitant is one of the pioneers of the original squatter settlement but the location of their house is within an area planned for road expansion. The area is not yet developed for its intended use so the inhabitant remains without security of tenure.

Fourthly, all four household cases in Peace Avenue and another four household cases in the Green Prairie Homes were classified under Type IV household. These two urban settlements are recipients of the government's new Land Tenure Assistance Programme (LTAP) that is modelled on the CMP implemented by the NHA. The former settlement was an example of an on-site project while the latter was an example of an off-site project. In the case of Peace Avenue, the settlement still has remnants of once being a squatter site with minor developments. In the case of Green Prairie Homes, the allotments were well planned as this was a new site but there is a lack of site development. The beneficiaries of LTAP in these two settlements are still in the process of paying for the purchase of the land, thus, they do not presently have a fully developed site and services.

Lastly, all six household cases in Tibungco Relocation Site were classified under Type IV household. These urban poor inhabitants were previous squatters from different areas in the city centre and became beneficiaries of a city government's relocation site in Tibungco. The settlement is complete with site development but being a planned relocation site, the residential environment is better in contrast to a squatter area. The physical appearance of the households covered by this case study in Tibungco Relocation Site may look more formal than those cases in Arroyo Compound and Kobbler Settlement but the beneficiaries are not paying for their land and core housing units. At present, these beneficiaries may live in a less-developed dwelling but within a better quality site. However, they face the danger of eviction at any time, no better than when they were once squatters.

In summary, Type IV household includes cases that may appear informal but are in transition towards achieving a more formal status because of the initiatives of the inhabitants to organise themselves to improve their security of tenure. On the other hand, this household type also includes those cases that may lack security of tenure but the houses are in transition to become a more formal building structure.

7.3.5   Type V – 'Informal' household

This type of urban household includes those which were illegally occupying land with an undeveloped site and a lack of services. In addition, makeshift houses were self-built by the inhabitants which do not comply with the building code. The urban poor inhabitants will first access the land individually or as a group. In some cases, a group of squatters were allowed to stay by claimants of land despite the fact that the legal ownership is in dispute. Some individuals accessed the squatter site by paying a minimal amount to the caretaker of the vacant land. Alternatively, secondary squatter invaders purchased rights from the original claimants of residential plots. In the absence of legal documents, site development and building permits cannot be granted. This results in the production of a precarious squatter environment in the city. Household cases which belong to Type V are presented in the following paragraph.

Firstly, four out of nineteen household cases in the Arroyo Compound and secondly, two out of eighteen household cases in the Kobbler Settlement were classified under Type V household. Despite the initiatives of other urban poor inhabitants in the same settlements and assistance from the NGO as explained in the cases above, these households remain informal for various reasons. One reason is the lack of financial capacity to build better housing units. Hence, squatting becomes the urban poor's alternative for shelter in the city. In some cases, some urban poor inhabitants hesitate to participate in the initiatives of the homeowner's association towards improvement of their security of tenure. Due to the informality of land ownership, the incompleteness of the sites and services, and the temporary nature of housing structures which are far from meeting the building code standards, these household cases can be classified as the informal household type.

7.4   Movement of inhabitants from one household type to another

The inhabitants of urban households examined in this case study were hypothesised to have been moving from one type to another.[9] Their mobility might have been influenced by various social factors and especially economic status. For example, a new urban poor migrant to the city will likely live in an informal settlement as the only means of affordable shelter. In the long run, the same urban inhabitant will have an opportunity to either stay in the same settlement but with improved housing status, or move to better housing development site when they are financially able. In order to explore this hypothesis, the movement of households from one type

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[9] Intra-city migration to squatter settlements in Mexico City is explored by Ward (1976a). Furthermore, residential movement among the poor, in three Latin American cities: Bogota (Colombia), Mexico City (Mexico) and Valencia (Venezuela), is explored by Gilbert and Ward (1982).

to another was analysed based on the following information about their previous settlement: 1) location of settlement; 2) approval of building permit of the previous house; 3) construction of previous house in accordance to the building code; 4) approval of site development permit; and, 5) completeness of the site and services. Furthermore, the date when the household moved and the reasons for moving to the new settlement were included. The results of this analysis are presented in the following subsections.

7.4.1   Towards Type I – 'Formal' household

Urban household cases classified under Type I mostly came from less formal housing units. Moreover, three out of twelve household cases under this type were from housing units with the same formal status elsewhere but the householder preferred to transfer to upgrade their living environment. The movement of urban inhabitants towards Type I household is explained in the following paragraphs.

All four cases in Kadayawan Homes belong to the Type I household. As explained previously, they were privileged to secure formal housing loans. Two of them already settled in the same formal household type in other sites but moved to the new housing development site for various reasons. In the case of the Brion family, the new settlement provided them with a bigger housing unit and allotment. In comparison, the Gomez family was only renting in their previous residence. They took advantage of the programme as NHA employees to own a completed formal housing unit. The Brion and Gomez families moved to the Kadayawan Homes settlement in 2002 and 1992, respectively. In another case, the Palacio family came from a Type II household. The family moved to the present residence in 1993 to find a more suitable environment to raise their growing children. Lastly, in the case of the Jayo family who came from a Type III household, it was their privilege to move to a formal housing type in 2004. The household head is a regular NHA employee who was eligible for the programme and access to a formal housing loan as member of the Pag-IBIG Fund.

All three cases in ADAP belong to Type I household but each of them came from different household types. Firstly, in the case of the Dalida family, they formerly settled in the same formal household type in Sultan Kudarat, a province located in the south-western part of the island of Mindanao. The interview respondent, Emma, and her husband moved to Davao City in 2002 because they were invited by their children to join them. They were eligible to own a formal housing unit in this settlement because one of their children had a physical disability. Secondly, in the case of the Cawaling couple who both suffer from physical disabilities, they came from a

Type II household in the city centre and moved to their present residence to own a formal housing unit and separate from their parents in a multi-family dwelling. Lastly, in the case of the De La Cruz family, they were renting in a Type III household and moved to their present residence to own a formal housing unit and stop paying rents. All three household cases moved to the ADAP settlement in 2006. As explained above, this housing settlement is the recipient of both government programme and NGO assistance for people with physical disabilities.

Two out of eight cases in Matina Aplaya Shanghai Village belong to Type I household. Both of them came from Type III household in different locations. In the case of the Nacorda family, they came from Tagum City situated 55 kilometres north east of Davao City and moved to their present residence in 1976 to look for employment. In comparison, the Rafales family came from a nearby residential zone and moved in to their present residence in 2008 because the previous house was owned by the company where the household head had worked before. As explained previously, these two households initially lived in this settlement informally and were then able to improve their status due to the government's assistance for land ownership coupled with the inhabitants' self-help housing initiatives.

All three cases in the Los Amigos Relocation Site belong to Type I household. All of them came from Type V household in different locations in Davao City and moved to the present settlement for various reasons. Firstly, the Botoy family moved to their present residence in search of independence from their previous multi-family household, to own a formal housing unit. Secondly, the Sapid family moved to their present residence because their previous squatter settlement was situated in an estuary that was prone to flooding and heavily polluted. Lastly, the Diansay family moved to their present residence because their previous squatter settlement in another location was also prone to flooding and they sought to own a safe formal housing unit. As explained previously, this housing settlement is a city government relocation site and the households covered by this case study are recent beneficiaries of NGO assistance for house construction. Thus, they were eligible to move in to a formal housing unit as recently as 2014.

In summary, urban households covered by this case study, which were able to move in to formal housing include those with regular employment who were eligible to access formal housing loans; beneficiaries of housing programmes by both government and NGOs; and, those who preferred to live in a house and allotment of their own in an environment that represented an improvement to their prior residence.

7.4.2   Towards Type II – 'Almost formal' household

The two urban household cases classified under Type II came from informal housing units. The movement of these urban inhabitants towards Type II household is explained in the following paragraph.

Firstly, one out three cases in Toril II belongs to Type II household. This is the case of the Amad family who formerly lived in a Type V household. Their squatter settlement, situated adjacent to a public market, was demolished because of the expansion of the market buildings. For this reason, they were relocated to their present settlement site in 1989. Secondly, one out nine cases in Piapi I belongs to Type II household. This is the case of the Sereno family who moved to the present settlement site in the 1960s because of the demolition of their former house that can be classified as Type IV located in the city centre. As explained previously, these two households may have started living in their present settlements with a less formal household type. However, they were able to upgrade their status because of government assistance to achieve land ownership and site development and inhabitants' self-help housing initiatives.

In summary, urban households covered by this case study, which were able to move in to Type II housing, include those who were evicted from their previous squatter settlement. Consequently, when they relocated to their present settlement they became beneficiaries of the government's programme that led to formalisation of their housing status, and especially land ownership.

7.4.3   Towards Type III – 'Semi-formal' household

Almost all urban household cases classified under Type III came from informal housing units. Only one of the ten household cases under this type was from the same Type III housing located outside of Davao City. The movement of these urban inhabitants towards the Type III household are explained in the following paragraphs.

Eight out of nine cases in Piapi I belong to the Type III household. Firstly, four of these household cases were original settlers at the same site when it was still a squatter settlement in the 1960s and 1970s. This is the case of the Panis, Palma-Gil, and Albios families who have been living in the same site since birth. In a separate case of the Anticamara family, this household formerly lived in an adjacent squatter neighbourhood. When their house was destroyed by fire they moved to their present settlement site in 1985. Even if these Type III households did not move from one location to another, because their previous housing had informal status, they were considered to come from Type V households. Secondly, two other

Type III households moved to Piapi I when the informal settlement was in transition towards formalisation. During this period the national government was in the process of implementing the slum improvement project. In the case of the Talin family, they were able to purchase rights from an original squatter inhabitant in the late 1970s. Eventually, they moved to their present residence to separate from their parents and have their own dwelling. In another case of the Aboy family, the interview respondent Venancio moved to Piapi I when he got married in the early 1980s because their present dwelling was owned by his wife. These two Type III households have improved their informal housing - at the same site - thus, they are considered to come from Type IV households. Thirdly, one Type III household case in Piapi I came from the same type but from outside Davao City. This is the case of the Linasa family who came from Davao Oriental, a province located in the south-eastern part of Mindanao. Lastly, one interview respondent refused to give the details of the previous residence, hence, there is not enough information about the movement of this inhabitant in this case.

Two out of eight cases in the Matina Aplaya Shanghai Village were classified under the Type III household. Both cases came from Type IV household but from different locations. One case, the Domingo family, came from another urban poor settlement within Davao City and moved to the present settlement in 1992 to access affordable housing. In another case, the Manlapus family came from Compostela Valley, another province adjacent Davao Oriental. This family migrated to Davao City because the household head (the father) worked as a driver and new work was available in Davao City. The Matina Aplaya Shanghai Village was an informal settlement that offered affordable housing for new urban migrants like the Manlapas family. However, the whole settlement is in the process of achieving formalisation due to the government programme including the CMP.

In summary, the urban households considered in this case study, which were able to move to Type III housing, included families who formerly lived in informal settlements and were able to improve the status of their housing in the same settlement by slum upgrading and CMP programmes. This also includes households who came from outside of Davao City and moved to the city for employment. It is likely that, for new urban migrants, Type III housing was the most affordable shelter in the city. The urban inhabitants covered by this case study may have accessed their present settlement as an original squatter occupant or purchased directly from the original inhabitant, but they expressed the hope that their housing could be formalised through government programmes and self-help housing initiatives.

7.4.4   Towards Type IV – 'In-transition informal' household

The Type IV household included more than half of the total number of cases covered by this study. Forty four out of 74 household cases were classified according to this type. These households were situated in seven out of 11 urban settlements where the survey was conducted. Most of the urban inhabitants came from informal housing before they moved to their present household type that is in transition from being informal towards improving its status. Moreover, some of them came from the same Type IV household from other places. However, curiously there are a few cases of households which have downgraded from Types I, II and III households to Type IV. The movement of these urban inhabitants towards a Type IV household, including the reasons for of downgrading from better housing units, is explained in the following paragraphs. Because of the number of households and settlement cases under this type, the movement is discussed in relation to specific settlements.

a) Arroyo Compound

Fifteen out of nineteen cases in Arroyo Compound belonged to the Type IV household. Some of them came from informal housing types. Moreover, a few came from the same Type IV housing as in the cases above. However, there are a few households which came from better housing units but the families chose to downgrade their status by moving to Type IV. The movement of these urban inhabitants towards Type IV household is explained in the following paragraphs.

Firstly, seven out of 15 Type IV households in Arroyo Compound came from informal housing units. For example, in the case of the two Tano families, they were evicted from their previous residence near the city centre in 2005 due to their informal status further highlighting the vulnerability of these low-income groups. The family of the mother, Lolita, moved to the Arroyo Compound in the same year. Eventually, she invited the family of her daughter Merlinda to join them in 2006. In the case of the Manawatan family, following a verbal agreement with one of the claimants of the land, Mr. Arroyo, they were able to settle in the area. Furthermore, one last example is the case of the Albos family who formerly lived in another squatter settlement near the area. As in the other cases, this family moved to Arroyo Compound for similar reasons. Despite being in the same informal housing, they speculated that they could legally own the land and formalise their housing in the future within this settlement.

Secondly, three out of the 15 Type IV households in the Arroyo Compound moved from the same housing type from other places. In the case of the Magdura family, the interview

respondent, Luchie, said that they previously lived in a multi-family dwelling owned by his uncle located in the suburb of Davao City. In 2005, they moved to their present residence to establish their own dwelling. Another case is the Abarquez family who came from the province of Davao del Sur. When they moved to Davao City in 2008 for employment opportunities, they settled in their present settlement. The same movement was evident in the case of the Agan family who came from Davao Oriental; they had no other settlement to choose from when they moved to Davao City in 2013, even though the Arroyo Compound had flooded two years before they moved there.

Lastly, four out of the 15 Type IV households in the Arroyo Compound came from better housing units but downgraded to their present status. In the case of the Berizo family, they previously lived in Type III housing located near the city centre where they also run a neighbourhood variety store as their source of income. However, the increasing rent resulted in to poor business profits. Accordingly, they moved to their present residence in 2013. In another case, the Avendaño family formerly lived in Type II housing located near their present settlement. However, despite living in a better housing type, they did not own the house they lived in. Thus, in 2005, they joined an NGO initiative that organised a group of urban poor to settle in the Arroyo Compound. They speculated that this initiative would give them an opportunity to access housing programmes which would lead towards legal ownership of land and formalisation of their housing and settlement. The other two other cases came from Type I households. These included the cases of the Osa family who moved to the present settlement in 2007, and the Manalang family who moved in 2011. The two households were renting formal housing units but when they could no longer afford to pay the increasing rents, they downgraded their housing status by moving to the Arroyo Compound. Despite downgrading their housing status, these households speculated that in due course they would stand a better chance to legally own the squatter land and formalise their housing status in the future. This goal can be achieved because of a government programme that will assist with land tenure, institutional support from NGOs, and self-help initiatives by the urban poor themselves.

b) Kobbler Settlement

Nine out of 11 cases in the Kobbler Settlement belong to Type IV household. A third of these households came from an informal housing type. Another household came from the same housing type in another location. Furthermore, the rest of the cases are those who lived in more formal housing units prior but downgraded their status by moving to the Type IV household. The

movement of these urban inhabitants towards Type IV household are explained in the following paragraphs.

Firstly, three out of the nine Type IV households in the Kobbler Settlement came from informal housing units. In the case of the Baluit family, they were evicted from their former squatter area along a major highway due to a road widening project. They moved to their present residence in 2003 when they learnt of the newly formed settlement by word of mouth. Another case is the Nierva family who formerly lived in a squatter settlement in the industrial zone. They moved to the Kobbler Settlement in 2005 and occupied a lot to establish a house in the hope that they might become permanent settlers in the future. In addition, the Baluit family, who formerly rented a house in squatter area near the estuary of a major river in the city, decided to stop renting in the downtown area and move to their present settlement in 2005 to start their own dwelling. All these three households speculated that despite starting their dwellings as informal units in the Kobbler Settlement, they anticipated a better opportunity to legalise the ownership of land and to formalise their housing and settlement in the future.

Secondly, the lone case in the Kobbler Settlement that came from the same Type IV household was the Balote family. This household formerly rented a house in a slum area of the commercial district in the city centre. The family moved to their present residence in 2004 so that they would no longer have to raise money for the monthly rental payments.

Lastly, five out of the nine Type IV households in the Kobbler Settlement downgraded their housing status. In the case of the Wagas family, they were formerly renting a Type III housing unit near the industrial zone of the city and moved to their present residence in 2007. In the case of the Sarona family, who were also renting a Type II housing unit near the commercial zone of the city, they chose to move to their present residence in 2004. Like the Wagas family, the Sarona family also moved to the Kobbler Settlement to access free housing so that they would not need to raise money for the monthly rental payments. On the other hand, the Apocasas family, like the Sarona family, came from Type II households. However, the former came from the capital municipality of the province of Compostela Valley. This family moved to Davao City in 2003 because the children started studying at the university. For this family, it was more desirable to live in the Kobbler Settlement despite the fact that it was a less formal housing unit as long as they could avoid paying high rent in the city centre. Furthermore, the two other cases who came from Type I households were the Rabara family who moved to the Kobbler Settlement in 2003 and the Sobretodo family who also moved to the same settlement in 2004.

Mariano Rabara Jr., the survey participant in behalf of the Rabara family, was a tenant in a shared room in the city centre. He joined the pioneering inhabitants in the Kobbler Settlement to start his own dwelling unit. In another case of the Sobretodo family who wanted to avoid paying monthly rents in a formal housing unit, the family purchased rights from an original settler in the settlement. As in the case of households in the Arroyo compound, the inhabitants in the Kobbler Settlement were also speculating that their housing and settlement might be formalised in the future.

c) Tibungco Relocation Site

All six cases in the Tibungco Relocation Site belong to Type IV households. Half of them came from informal housing types. The other half came from the same Type IV housing. The movement of these urban inhabitants towards Type IV household are explained in the following paragraphs.

Firstly, the three household cases in Tibungco Relocation Site which came from an informal housing type were the Ogates, Palma-Gill, and Medilo families who moved from different places in Davao City. The Ogates family were formerly living in the old garbage dumpsite called Smokey Mountain at the fringe of the city. The Palma-Gil family lived in a house that was demolished in a squatter area adjacent to a public market at the city centre. The Medilo family was also living in an informal settlement in a residential zone. These three informal households were listed as beneficiaries of the city government's relocation site and moved to their present settlement at the same time in 1997.

Secondly, the three household cases which were considered to come from the same Type IV housing were the Dadong, Lastima, and Olivo families. These three households were family members of the pioneering beneficiaries of the Tibungco Relocation Site and started to establish their own separate dwelling in the same settlement with their young families. In the case of the Dadong family, the interview respondent, Nanette, is the daughter of Julieta who was also the interview respondent for the Ogates family mentioned in the previous paragraph. When Nanette got married and had a baby in 2011, they extended a separate dwelling unit from the parents' house, in the same lot, for independence and privacy. In another case, the Lastima family separated in 2009 from the parents' house of Anafie, who was the interview respondent, which iwa located in another block because it was already overcrowded. At present, they live in an extended separate dwelling unit at the back of her husband's parents' house. Furthermore, in the case of the Olivo family, they were allowed by the parents to live in the same house and lot

in 2004 when they had their own family. The parents who were the original beneficiaries of the relocation site are now living in another informal settlement near the city centre and considered to be an absentee claimant of the lot in the relocation site. Given that these householders were living in the same settlement before having their own households, they are considered to come from the same Type IV housing.

The Tibungco Relocation Site is a less developed housing settlement than those previously discussed. However, it has a better physical environment than the other Type IV types. However, the beneficiaries of the relocation site were not paying for their housing to the city government, thus they do not have security of tenure due to their fear of being evicted at any time. This is the same uncertainty they experienced when they were once living in informal settlements. However, these inhabitants were willing to make payments to the city government so that they can legally own the core house and lot and to enable incremental construction to complete their dwellings. Most of the inhabitants in this settlement earn their livelihood as scavengers because they were once scavengers in a closed dump site. Their livelihood includes the collection, buying and selling of recyclables, and or employment in the city government's solid waste management services.

d) Matina Aplaya Shanghai Village

Four out of the eight cases in the Matina Aplaya Shanghai Village belong to the Type IV household. Only one of these cases came from informal housing type. The rest of the cases came from the same housing type from the same settlement or from other locations. The movement of these urban inhabitants towards Type IV household are explained below.

Firstly, the lone case in the Matina Aplaya Shanghai Village that came from an informal housing type was the Caro family. This household came from the rural fringe district of Davao City and moved to the present settlement in 1988 to be nearer the city for better employment opportunities. Secondly, the three households which came from the same Type IV housing units were the Mendoza, Palma, and Mora families. The Mendoza family came from the countryside and moved to Davao City in the 1960s for better employment opportunities. Similarly, the Palma family, who came from the province of Bukidnon situated north of Davao City moved in 1991 for better employment opportunities and settled in the present settlement to own a house and lot aided by a government programme like the CMP. In the case of the Mora family, the interview respondent, Eddie, had been in the same site since birth. He inherited the place from his parents

and he is in the process of formalising the ownership of the land. Accordingly, he is considered to come from the same housing type.

e) Peace Avenue

All four cases in Peace Avenue belong to Type IV households. One of these household cases came from an informal housing unit. The remainder came from the same housing type but in different locations. The movement of these urban inhabitants towards Type IV household are explained in the following paragraph.

Firstly, the lone case in Peace Avenue that came from an informal housing type was the San Nicolas family. This household came from General Santos City situated some 150 kilometres south west of Davao City. They moved to their present residence in 2008 for improved livelihood opportunities. Secondly, the three household cases which came from the same Type IV housing units were the Abellana, Ramirez, and Tibalgo families. The Abellana family came from the rural fringe district of the city. They moved to the present settlement to temporarily replace the brother of the interview respondent, Gregoria, who moved to Manila in 1995. Eventually, Gregoria became the beneficiary of the LTAP implemented by the NHA in this settlement. Another case is the Ramirez family who also came from the rural fringe district and moved to Peace Avenue in 1996 because it was nearer to the place of work and school for their children. Furthermore, the Tibalgo family who came from the province of Surigao del Norte situated in the northernmost tip of the island of Mindanao moved to Davao City to live in the settlement in 1990 for improved employment opportunities. In addition to regular employment and small scale business activities, most of the inhabitants in Peace Avenue have seasonal livelihood opportunity as contractual sprayers and harvesters of mango fruit tree farms.

f) Green Prairie

All four cases in Green Prairie belong to Type IV households. Three of these household cases came from informal housing units. There was only one case that came from the same housing type but in a different location. The movement of these urban inhabitants towards Type IV household are explained below.

Firstly, the three household cases which came from informal housing units are the Flores, Pepecan, and Rico families. The Flores family who formerly lived in an informal settlement nearby moved to Green Prairie in 1999 to access the LTAP implemented by the NHA and to own a legal dwelling unit. This household was one of the pioneer members of the homeowners'

association that accessed the housing programme. Later in 2012, two other families who also came from informal housing units joined the homeowners' association in Green Prairie. In the case of the Pepecan family who came from the countryside, their reason for moving was to be nearer to their place of work. On the other hand, the Rico who formerly lived in the area adjacent to the housing site moved because their previous house and lot was sold to support the financial needs of their sick family members. Secondly, the lone case in Green Prairie that came from Type IV housing unit was the Flores family who originally came from Cebu. The household head had transferred his work assignment to Davao City in 1999 and accessed the housing programme in this settlement as one of the pioneer beneficiaries.

e) Toril II

Two out of three cases in Toril II belong to Type IV households. The Nicdao family originally came from the countryside of the island of Leyte. The interview respondent, Gilda, said that they moved to their present settlement in 1990 to join the family of her brother in Davao City. On the other hand, there is no enough information on the movement of the Panudaranau family to their present residence. They settled in Toril II to live in a small Muslim community. This settlement is a beneficiary of the site and services programme implemented by the NHA.

In summary, urban households covered by this case study, which were able to move to Type IV housing, included those who came from informal housing units who might have been evicted from their squatter dwellings or were listed as beneficiaries of the government's housing programme. These also includes households who came from the same Type IV housing units from other places within and beyond Davao City. For those who came from informal housing types, they moved to Type IV as a first step to upgrade their status towards a more formal one. In addition, for those who came from the same housing type, they hoped to improve their status in their present settlements because of government programmes that provided assistance to secure land tenure such as the CMP and LTAP. On the other hand, it was noted that several household cases from more formal housing types downgraded their status by moving to Type IV. These families were tenants in more formal housing units and chose to move to less formal settlements to avoid paying rent. Despite downgrading their status, they achieved a way of living in a dwelling unit of their own where they would have a better opportunity to formalise the ownership of the land and housing structure in the future. This speculation is possible in the Type IV settlement that is described above as informal housing in-transition whereby the

inhabitants organised themselves as a legitimate homeowners' association to access government programmes and assistance from NGOs.

7.4.5   Towards Type V – 'Informal' household

All six cases which were classified as informal households came from more formal housing types but downgraded their status by moving to their present residence. These household cases can be found in the Arroyo Compound and the Kobbler Settlement. The movement of these urban inhabitants towards Type V households are explained in the following paragraphs.

Four out of nineteen cases in the Arroyo Compound belong to Type V household. All of them had downgraded their status by moving to their present informal housing. Firstly, in the case of the Truya family who formerly rented Type II housing near the public market at the centre of the city, moved in 2005 to own their dwelling unit in this informal settlement. Secondly, two other Type V households in this settlement came from Type III housing units. These are the Masayon and Namata families. The Masayon family were renters in a residential area near the commercial centre of the city. They moved to their present informal housing in 2006 to stop paying rent and to live in a dwelling unit of their own. The Namata family came from Butuan, situated in the northern part of the island of Mindanao. The interview respondent, Alin, was invited by the family of his brother to join them and they moved to Davao City in 2006. Lastly, the lone household case that came from Type IV housing is the Patcho family who came from Cotabato situated some 100 kilometres west of Davao City. They moved in 2002 in response to an invitation of the family of a sister. Both the Namata and Patcho families' primary reason of settling in Davao City was to increase their opportunities for employment. Consequently, these families could only afford to live in informal settlements like the Arroyo Compound.

Two out of 11 cases in the Kobbler Settlement belong to Type V household. Both of them had downgraded their status by moving from Type IV to their present informal housing. These are the cases of the Duron and Lamanilao families who were renting in informal settlements near the commercial and industrial districts of the city. They moved to their present residence in 2003 when the settlement was newly formed with the same aim to live in dwelling units which were rent free.

In summary, Type V households covered by this case study came from Types II, III, and IV which are more formal households. This means that they downgraded their shelter conditions from living in physically better housing units to move to informal ones. These households can be found in the Arroyo Compound and the Kobbler Settlement which were hypothetically chosen

to represent informal settlement cases. They were once renters and most of their reason in moving to informal settlements is to avoid paying rents in their previous dwelling. Despite living in physically worse housing and settlement conditions, for them it is their way to live in a house and lot of their own. These households maintain that in due course they can improve their security of land tenure and incrementally upgrade their housing units. This mentality is based on the cases of those households which upgraded their housing and settlement through government programmes, NGO assistance, and self-help initiatives.

7.5   Discussion

The case study covers 74 households in 11 urban settlements within the political boundary of Davao City, Philippines. Primarily, the settlements were chosen to hypothetically represent different range of developments from informal to formal status. Upon further exploration of the different cases, the settlements composition was varied. To begin with, the discussion will reflect on the significance of exploring 74 urban households and how they were classified into different types. Furthermore, the following discussion will deal with the significant movements of households from one type to another in the effort to achieve ownership of more formal housing.

Urban household in this case study is defined to represent both the inhabitants and the physical housing environment. The inhabitants comprise individuals, couples or families including nuclear families and extended families living in the dwelling unit during the study period. Qualitative information gathered in the survey was closely related to the personality of the respondent who could be the household head or any senior household member present during the interview. Hence, the information such as their behaviour and preference in housing provision which they gave is considered to represent their individual household cases. On the other hand, the physical housing environment refers to the status of the dwelling unit's structure and site development. The classifications identified in this study may refer to the entire household or to the housing alone as the physical component.

The variables used to classify the urban households were initially based on Lim's (1987) definition and structure of housing submarkets. The classification criteria included the legality of land occupancy, compliance with the government's minimum standards for housing structure, and tenure status as an owner or tenant. However, in order to better fit to the local conditions of the study area, this research applied a more complex set of criteria to classify the households into different types. For example, it was observed that the application and approval of building permits in some settlements were not fully implemented. In addition, there was a lack of

monitoring by the local authorities on the implementation of the building code on the construction of houses. Thus, contrary to the conventional paradigm of defining the formality which is based on meeting the government's minimum standards, this case study treats 'formality' in the following manner. The interview respondent's view of whether the building was built in accordance to the code was considered as one of the variables. This is in addition to the reference to the building permit document. The qualitative information from the respondent is balanced by the researcher's technical evaluation of the house. In addition, the evidence of legal title is not treated as the only basis for the formality of land tenure and ownership. Primarily, the claim of the respondents is considered. This is supported with any data which may be land title, other forms of de facto documents, or simply the word from a local politician, claimant on the ownership of land, or legal land owner. For some cases, purchasing rights from original squatter inhabitants or receipt of government assistance for land tenure was the basis of the respondent's claim of a certain level of security or formality of land ownership. Moreover, the two other variables included the site development permit and the researcher's technical evaluation of the completeness of the site and services. Lim's criterion on the inhabitant's tenure status of being owner or renter is not included as variables in the classification. However, this variable is considered in the later analysis when the movement of urban inhabitants from one household type to another is surveyed.

Lim's (1987) model of housing markets identified eight submarkets for housing. This means that the urban poor are classified as either owners or tenants of regular, invasion, slum, and squatter housing markets. In comparison, this case study classifies the urban households to five different types. Further exploration of the description of each type reveals that there is a continuum of categories ranging from formal (Type I), almost formal (Type II), semi-formal (Type III), in-transition informal (Type IV), to informal (Type V) households. Burgess (1985), on the other hand, classified urban settlements based on legal criteria. In comparison with Lim's housing market structure, Burgess' classification includes the legal settlement that is equivalent to the formal housing market; the pirate settlement that may include the invasion and slum housing markets; and, the squatter settlement or housing market. In the range of continuum categories that this study classified, one extreme is the formal household type that is identical to what is referred to as legal settlement or regular housing market. The other extreme is the informal household type that is identical to what is referred to as squatter settlement or housing market.

Lim's (1987) model further hypothesises that a homeless street sleeper may enter first in the housing market as a tenant in the squatter market who will then undergo a multistep transition

in the series of housing submarkets towards ending as an owner in a regular market. A parallel claim is seen in this case study by the movement of inhabitants from one household type to another which is influenced by various social factors. This phenomenon is observed in two ways. One way is when urban inhabitants will transfer from one housing type to another in different locations. Another way is when informal housing types in the same location and settlement will transcend to more formal status in the course of its development. The latter is implied by Burgess' (1985, p. 296) view based on a genetic principle which means that informal settlement in the course of its development moves progressively to become pirate and end as legal settlement.

7.6   Conclusion

This chapter examined urban household cases which were classified into five different types to understand how their inhabitants moved from one type to another. In reference to the cases presented in the previous sections, the dynamic multistep transition in the provision of housing for the urban poor in a developing country may be illustrated in the following sample scenario. Renters in formal housing type downgraded their status by moving to informal settlements to avoid paying rent. These informal inhabitants may transfer to more formal housing types in other settlements. Another option is that they may live in the same informal settlements and improve their housing status in the course of its development by accessing government programme, NGO assistance, or through their own personal and collective initiatives. Therefore, the multistep transition phenomenon is not only viewed as how the urban poor move from one housing type to another but also how their informal housing will evolve into formal ones. Legal ownership of formal housing units is the ultimate goal in every shelter provision programme. The hypothetical evolution of urban poor housing that may have started as a simple shack and end as a permanent structure needs to be explored. Hence, the incremental construction of houses and progressive development of urban settlements is the focus of discussion in the succeeding chapter.

Chapter 8: Provision and Incremental Construction of Housing in the Low-Income Sector

8.1   Introduction

In this case study, urban households were classified into a continuum of categories from formal to informal. Five household types are identified. The term household is used in the presentation of results and discussion in the previous chapter. This term literally associates the inhabitants and the physical housing structure together. The agency of the inhabitants in either moving from one household type to another in different places or making changes to an informal household to create a more formal type in the same place is the main focus of discussion in the previous chapter. Given that the inhabitants and their housing structure cannot be separated, the use of the term household is an appropriate fit for the discussion. When the different households (or urban settlements)[1] were viewed based on the dynamic genetic principle posited by Burgess (Burgess 1985), it was hypothesised that informal types progressively develop to become formal ones in the course of their development. The initiative of the inhabitants to fulfil their basic needs for shelter in relation to the different needs is reflected in the physical condition of their dwellings. For this reason, the physical environment of the different household types identified in the previous chapter requires further examination. Further investigation of the progressive nature of the different housing types in the lower income sector is the focus of this chapter. The presentation and discussion of research results include the following: self-help provision of living spaces; incremental construction and present status of housing units; and, the inhabitants' preferences and plans for their dwellings. Preliminary research results about self-help provision and incremental construction of housing were presented in the 49th International Conference of the Architectural Science Association (Malaque III, Bartsch & Scriver 2015).[2] In this chapter, the term housing is used to associate the different household types in order to emphasise the physical phenomenon of shelter provision.

8.2   Self-help provision of living spaces

The provision of living spaces in urban poor housing is progressive over the course of its development. The dwelling unit may have started as a core house but more living spaces are added later depending on the need and preference of the inhabitants. The core house may be delivered through a government programme or NGO assistance, or provided by the inhabitants themselves. Government and NGO assisted housing provision assured that core or completed

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[1] Burgess (1985), subjected urban settlements as cases in his study.
[2] For copy of the full paper, see, Appendix K.

housing units were constructed based on minimum standards. However, for self-help housing especially in informal settlements, there may be a lack of compliance with the building code. Despite the initial form of shelter provision, the addition of further living spaces, evident in the incremental construction of houses, was the main agent of progressive development observed within the settlements. To further understand this phenomenon, significant cases are discussed in this section which represent the different housing types and urban settlements.

Type I housing includes those that were delivered as completed units and those that were developed by the inhabitants from less formal types. Houses in Kadayawan Homes were provided as completed housing units implemented by the National Housing Authority (NHA) in partnership with a private developer. Model houses have floor areas of 40, 42, and 45 square metres. The earlier models were constructed as a core house with an open plan while the later models were provided with interior wall partitions for two bedrooms. In the case of the Gomez house, for example, it began as a 42 square metre core house. In addition to the basic living, dining, kitchen, and toilet and bath areas, interior wall partitions were installed to define the two bedrooms. In addition, extensions were done to build two more bedrooms and a neighbourhood store for selling rice. The house at present has a total floor area of at least 80 square metres. In other settlements, houses in the site of the Association of Differently Abled Persons (ADAP) and the Los Amigos Relocation Site which were built with assistance from NGOs. The houses were designed following the technical standards of their respective NGOs and building permits were applied before they were constructed. In ADAP, the standardised housing model has a floor area of 32 square metres with an open plan. Minimal improvements were added by the housing beneficiaries such as installations of interior wall partitions for the bedrooms and other required spaces. In the case of the De la Cruz house, for example, the kitchen was relocated to the back of the house and a neighbourhood variety store and tailoring shop were added. It now has a total floor area of at least 36 square metres. The standardised houses in the Los Amigos Relocation Site have a floor area of 20 square metres. Given that they are still new, it is understandable that no extensions were observed at present. Contrary to the cases mentioned in this paragraph, houses in the Matina Aplaya Shanghai Village were initially and incrementally built by the inhabitants themselves. They were informal housing units which have now become a more formal type. In the case of the Nacorda house, for example, it started with at least 40 square metres of floor area that included the basic living, dining, kitchen, toilet and bath, and two bedrooms. Later, an additional bedroom was added making the total floor area

approximately 60 square metres. Additional living spaces in all of these cases were provided by the inhabitants themselves as self-help initiatives.

Type II housing includes those which transcended from informal status to become more formal. Being beneficiaries of slum upgrading and sites and services programmes, the inhabitants were able to upgrade their housing units after they became the legal owners of their residential lots. In the case of the Amad house in Toril II settlement, the dwelling unit initially comprised a floor area of 20 square metres with an open plan combining living and dining areas. The same space also served as a sleeping area at night time. Eventually, the house was extended to encompass a total floor area of 40 square metres. Presently, this includes separated rooms for living and dining, kitchen, toilet and bath, two bedrooms, and a neighbourhood variety store. In another case of the Sereno house in Piapi I settlement, the dwelling unit started with a floor area of 76 square metres. Initially, this comprised spaces for living, dining, kitchen, toilet and bath, and a bedroom. Eventually, two bedrooms were added, resulting in a total floor area of 118 square metres at present. Initial provision and the incremental addition of living spaces in these two Type II cases were initiated by the inhabitants themselves.

Type III housing includes those with inhabitants who are still in the process of formalising the ownership of their residential lots. Households which belong to this type are beneficiaries of the Community Mortgage Programme (CMP) and slum upgrading programme provided by the government. Payments for land and processing of land title were the priorities for the inhabitants. Hence, their dwelling units are still not compliant with a minimum standard. As a consequence, their settlements have some characteristics of a slum. In the case of the Domingo house in the Matina Aplaya Shanghai Village, for example, the dwelling unit was initially a simple shack with a bedroom space. Eventually, basic spaces including spaces for living, dining, kitchen, toilet and bath, and two bedrooms were incrementally added with the help of the community organisation and personal initiatives. The house has a total floor area of at least 60 square metres at present. In another settlement like the case of the Albios house in Piapi I, the dwelling unit started as an open plan with a floor area of 12 square metres. Eventually, the same living spaces enumerated in the Domingo house were added making a total floor area of 46 square metres at present. In the case of the Linasa house in the same settlement, the initial dwelling unit was a core house that includes living, kitchen, and separate toilet and bath with a floor area of 42 square metres. Eventually, the total floor area of the house was increased to include a dining area and a bedroom. Initial provision and incremental addition of living spaces of these two sample Type III cases in Piapi I were done by the inhabitants themselves as self-

help initiatives, except for the Linasa household that benefited from assistance from the government for the core house unit.

Type IV housing included a group which may appear physically informal but the inhabitants are already organising themselves to negotiate for purchase of the squatter land or to access government assistance for land tenure. This group includes informal settlements which may have minimal assistance from the government but receive apparent assistance from NGO. In the case of the Albos house in the Arroyo Compound, for example, the NGO is the main agency in the initial provision of a 60 square metre lot. Eventually, the informal dwelling unit was self-built by the inhabitants with the basic living spaces presently occupying the entire lot. The householder was also capitalising on a minimal loan amount from the NGO for the construction of their informal dwelling unit. In another case of the Wagas house in the Kobbler Settlement, for example, the initial dwelling unit started as a simple shack with an approximate floor area of seven square metres. Eventually, during the incremental construction of the house, basic spaces were added to include living, dining, toilet and bath, a bedroom, and dirty kitchen at the backyard. The dwelling unit at present has a total floor area of 30 square metres. The initial provision and the incremental addition of living spaces in this case of the Kobbler Settlement were completed by the inhabitant in a self-help manner. However, their homeowners' association benefited from NGO assistance in organisational matters, such as building expertise and financial and administrative matters, in order for the association to run independently.

Another group of houses in the Type IV classification were in informal settlements with inhabitants who were beneficiaries of government assistance to formalise land tenure. It was observed that, houses which belong to this group appear to be informal but it was noted that the government was in process of implementing its programmes such as the Land Tenure Assistance Programme (LTAP), CMP, and site and services. The LTAP is either implemented on the same site where an informal settlement is formed (on-site), or in another new site (off-site) developed for an association of urban poor beneficiaries. An example of an on-site LTAP beneficiary is the case of the Abellana house in the Peace Avenue settlement. The dwelling unit started with a floor area of around 100 square metres with complete living spaces. However, the same condition remains at present because the householder is still in the process of paying for the land. An example of off-site LTAP beneficiary is the case of the Flores (Irenica) house in the Green Prairie settlement. The house started as a makeshift temporary dwelling unit with a total floor area of 40 square metres. Eventually, completed living spaces are added with two bedrooms and a neighbourhood variety store optimising the 120 square metre lot area. Another

case is the Mendoza house in the Matina Aplaya Shanghai Village that was the beneficiary of the CMP. As a squatter site, the house began as a simple shack with a bedroom space and a makeshift toilet. Eventually, complete spaces including living, dining, kitchen, toilet and bath, and two bedrooms were added to create a total floor area of 100 square metres at present. Another case is the Nicdao house in the Toril II settlement which was the beneficiary of site and services programme. The house started with a floor area of 18 square metres with an open plan to serve as living and dining spaces during the day and a sleeping space at night time. Eventually, the house was completed with basic living spaces with two bedrooms and a neighbourhood variety store. It has a total floor area of 45 square metres at present. Initial provision and incremental addition of living spaces in the cases mentioned in this paragraph resulted from the inhabitants' self-help initiatives.

Another group of Type IV housing was situated in a relocation site that may appear physically better because it was a planned development project by the local government. However, the householders have the same fear of eviction as informal settlers who have not paid for the land and the core house unit to the local housing agency. This is the case of the households covered by this study in the Tibungco Relocation Site. All the houses in this relocation site started as core houses with a floor area of 20 square metres. This covers an open plan for living, dining, and bed space with a separate kitchen and bathroom situated in the backyard. In the case of the Ogates house, for example, interior wall partitions were eventually installed to define the two bedrooms and extensions were made for the kitchen and a service area. The dwelling unit has a total floor area of at least 30 square metres at present. In the same lot, the Dadong house was built as a semi-detached unit to the parent house of the Ogates family. The Dadong house as a separate unit is an open plan with a floor area of 12 square metres for the basic living spaces but shares a toilet and bath with the parent house. Initial provisions of core housing units in this relocation site were provided by the local government. The incremental additions of living spaces were done by the housing beneficiaries with temporary building materials used due to the lack of secure tenure.

Type V housing includes those with inhabitants who are illegally occupying lands with houses that were not built in accordance with the building code. These cases are situated in the Arroyo Compound and the Kobbler Settlement. In the case of the Truya house in the Arroyo Compound, for example, the dwelling unit started as a core house including a bathroom with a floor area of 12 square metres. Eventually, basic living spaces were added including living, dining, kitchen, toilet and bath, and bedroom. The house has a total floor area of 35 square metres at present.

In another case of the Lamanilao house in Kobbler Settlement, the dwelling unit started as a simple shack with a floor area of around six square metres. Eventually the house was completed with basic living spaces with two bedrooms and a bathroom with a total floor area of 36 square metres at present. In the absence of any government or NGO assistance, the initial provision and incremental addition of living spaces in these cases were facilitated through the inhabitants' self-help initiatives.

8.3   Incremental construction of housing units

The incremental construction of houses in lower income urban settlements is the physical evidence of the progressive self-help provision of living spaces by the inhabitants. In relation to the progressive provision of living spaces by the inhabitants presented in the previous section, the following discussion will focus on the description of the building materials used and the methods of construction applied in the incremental construction of the housing units. This further illustrates the transformation of the housing structure that may have started informally as a simple shack built with lightweight materials in the process of transformation to a more formal and permanent type.

Type I housing units are built in accordance with the building code with permanent materials and standardised construction methods. This is evident in completed housing units provided by the NHA such as in the case of Kadayawan Homes. Standardised model houses were built with a concrete structure, and timber trusses and galvanised iron sheets for roofing. In the case of the Gomez house, the same permanent materials were used except that steel trusses were installed for the roof in the expansion of the house to accommodate the additional living spaces. In addition, timber frames and plywood boards were installed as interior partitions for the bedrooms because the type of housing unit belongs to the earlier models with an open plan. In NGO assisted housing provision such as in ADAP and the Los Amigos Relocation Site, the incremental construction of the houses are minimal at the moment thereby maintaining the formal appearance of the building structure. On the other hand, the incremental construction of houses in progressive settlements such as in the Matina Aplaya Shanghai Village is more complex. In the case of the Nacorda house, for example, the initial dwelling unit – when the settlement was informal – was made of rejected lumber and other light weight building materials. In the course of its development, however, cement was poured for the ground floor, and the concrete structure and galvanised iron sheet roofing were used in the incremental construction to accommodate the addition of and other required living spaces. Hence, the house at present was built to meet the minimum standards of the building code. Houses may have been delivered

as completed housing units within the formal housing market or evolved from informal types. However, it is interesting to note how the security of tenure is directly related to the formality of the incremental construction. In the case of Kadayawan Homes, the inhabitants invested in permanent building materials in the expansion of their dwellings as owners of formal housing units. As in the case of the Nacorda house in the Matina Aplaya Shanghai Village, as an example of progressive development, the inhabitant was able to formalise the dwelling unit when secure land tenure was achieved with government assistance.

Type II housing units incrementally improve to be more formal structures in the course of progressive development in their respective settlements. This is evident in the case of the Amad house in the Toril II settlement. When the Amad family moved to the settlement, their house was made of coconut lumber and hard wood for the structures, and galvanised iron sheets for the roofing. Incrementally, deteriorating temporary building materials were replaced with concrete and other more durable materials in the addition of required living spaces and the expansion of the house. In the case of the Sereno house in Piapi I settlement, the initial dwelling unit was built like the traditional countryside hut made of hardwood. In the incremental extension of the house, concrete was used for the main structure; concrete hollow blocks were used for the walls; and, galvanised iron sheets were installed for the roofing. The inhabitants of these housing units were able to focus on refurbishing their dwellings when they completed the payment for the land and received the legal land title through government programmes. Their respective settlements progressively developed following the initial provision of site and services, and slum upgrading programmes by the government.

Type III housing units covered in this case study were situated in settlements which were beneficiaries of government land tenure assistance programmes. The inhabitants of these housing units are still in the process of focusing on payments for the land to achieve legal ownership of title, thus, they have limited funds to refurbish the house or to replace deteriorating building materials. This is evident in the case of the Domingo house in Matina Aplaya Shanghai Village that was the beneficiary of the CMP. The initial dwelling unit, when the settlement was informal, was built like a tent made of wood, coconut tree lumber, bamboo, and other light weight building materials. In the incremental construction of the house such as the addition of rooms, more permanent building materials such as concrete hollow block and plywood were installed. The same incremental housing condition was also observed in Piapi I settlement. In the case of the Albios house, for example, the initial dwelling comprised a timber structure with thatched palm roof. During the expansion of the house, an upper floor was added with the toilet and bath

integrated into the building structure. Eventually, the deteriorated timber building structure was replaced with concrete. At present, other parts of the house are still built of timber but the entire roof is already installed with galvanised iron sheets. Despite the replacement of temporary building materials with better ones, the housing units under this type still do not comply with the minimum standards of the building code thereby displaying the physical characteristics of a slum.

Type IV housing units include groups which may appear physically informal given their location in spontaneous settlements. However, they are described as transitional because the inhabitants are already starting to organise themselves to attain a certain degree of security. This motivates them to invest further in the incremental construction of their informal dwelling. This phenomenon is evident in the case of the Wagas house in the Kobbler Settlement. In 2004 when the inhabitant moved to this newly formed informal settlement, the initial dwelling unit comprised a simple shack made of lightweight materials. Eventually two years later, all lightweight materials were replaced with a timber structure. In the following year, concrete was poured in the ground floor for the living room. During the incremental addition of bedrooms and other required living spaces, concrete hollow blocks were installed for the walls. At present, the house structure is made partly of concrete and timber with galvanised iron sheets for the roofing. In most cases, the homeowners' association in informal settlements is assisted by an NGO. A certain degree of security due to institutional support from the NGO motivates the inhabitants to invest in more permanent building materials to be used in the construction of their informal dwellings. In the case of the Albos house in the Arroyo Compound, for example, more permanent building materials such as concrete and steel are used. The purchase of these building materials was made possible due to financial assistance offered by an NGO for the urban poor beneficiaries in the informal settlement.

Another group of Type IV housing units are situated in former informal settlements which are beneficiaries of land tenure assistance programmes by the government. These government programmes influenced the inhabitants to invest in more permanent building materials in the incremental construction of their houses. This is evident in Peace Avenue that is beneficiary of on-site LTAP. In the case of the Abellana house for example, the initial dwelling unit started as traditional hut made of lightweight materials such as timber and bamboo structures. Eventually when the inhabitant accessed government assistance, in 2004, the house was refurbished with a concrete structure and galvanised iron sheet roofing, which is evident at present. The same phenomenon is also observed in the Green Prairie settlement that is the beneficiary of off-site

LTAP. In the case of the Flores (Irenica) house, for example, the new site provided under the government programme motivated the beneficiary to refurbish the dwelling unit with more durable building materials. The house began as a makeshift dwelling unit made of a coconut lumber frame and plastic sheeting or cladding. Incrementally it is replaced with the same permanent building materials used in the Abellana house. Furthermore, the same process was observed in the Mendoza house in the Matina Aplaya Shanghai Village that was the beneficiary of the CMP. The light weight building materials of the initial informal dwelling unit were replaced with concrete, steel, and galvanised iron sheets. These household cases illustrate examples of how the inhabitants were motivated to invest in more permanent building materials when they gained a certain degree of security due to government programmes. On the contrary, a group of Type IV housing units situated in the Tibungco Relocation Site were using light weight building materials in the incremental improvement of their dwelling units despite the fact that the standardised core house structures were made of concrete. In the case of the Dadong house, for example, light weight building materials such as bamboo and recycled galvanised iron sheets were used in the construction of the dwelling unit that was attached to the parent Ogates house. The parent house remains the same core house model provided by the local government that was made of permanent building materials. The housing beneficiaries in this relocation site were not paying their dues to the local housing agency, thus, they lack a certain degree of security to invest in more permanent incremental construction of their dwellings.

Type V housing units are situated in informal settlements with makeshift dwellings far from being built to pass the minimum standards of the building code. These dwelling units may have started as a simple shack for the core house but eventually the inhabitants incrementally improved the structure to accommodate new living spaces. This is evident in the case of the Truya house in the Arroyo Compound. The initial dwelling unit was made of light weight building materials with thatched palm roofing. Eventually in the incremental construction of the house, the ground floor was poured with concrete; the walls were replaced with timber frames and plywood; and, the roof was installed with galvanised iron sheets. A similar case was also found in the Lamanilao house in the Kobbler Settlement. In 2003 when the informal settlement was newly formed, the initial dwelling unit was a simple shack made of lightweight materials. Six years later, the house was extended. The lower part of the exterior wall was made of concrete hollow blocks. The upper half of the exterior wall was made of a timber frame structure and covered with fibre cement boards. After a year, the same construction methods and building materials were used in the addition of another bedroom, of which it remains as it is at present. The informality of

these households is defined both in terms of the informal status of their construction and the illegal occupation of the land.

8.4   Housing structure of five urban household types

The cases presented in the previous sections illustrate the progressive addition of living spaces to meet the growing needs of the inhabitants thereby contributing to the incremental construction of their dwelling units. This is evident not only in informal housing by the urban poor in informal settlements but also in regular housing market for the lower income sector where completed social housing units are delivered. How this progressive housing phenomenon contributed to the existing conditions of the different housing types needs to be further explored. Thus, this section will present the selected cases of housing structures of the five urban household types. Twenty-two significant cases out of the 74 households covered by this study are chosen to represent the different types. Sixteen of these selected cases are situated in progressive urban settlements.

8.4.1   Type I – 'Formal' household

Gomez house, Kadayawan Homes

Figure 8-1. Gomez house floor plans and present photograph

The Gomez house was a core house constructed in a completed socialised housing subdivision. When the inhabitant occupied the house, wall partitions were installed making it a typical two-bedroom house. After series of expansion, presently, the house (made of permanent building materials) has four bedrooms and extended dining and kitchen areas (Figure 8-1).

Dalida house, ADAP
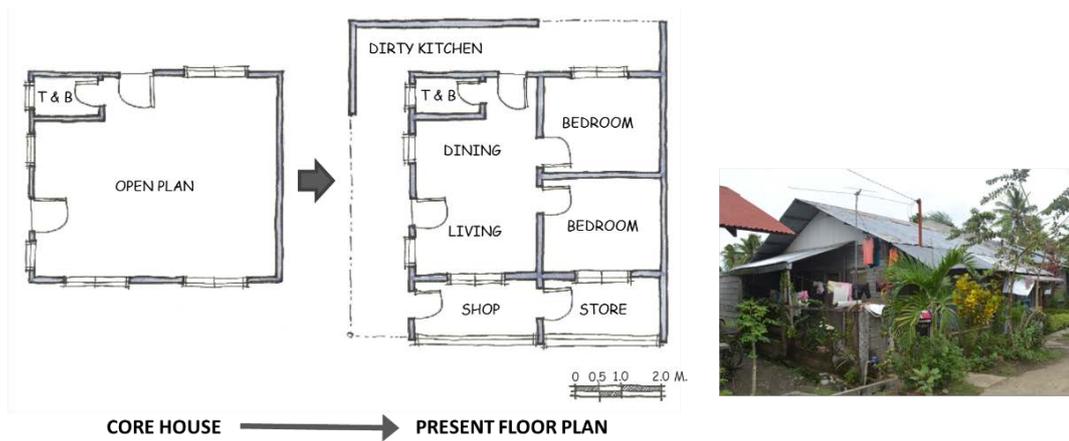
Figure 8-2. Dalida house floor plans and present photograph

The Dalida house was a standard core house constructed by the NGO Habitat for Humanity. When the inhabitant occupied the house, wall partitions were installed making it a typical two-bedroom house. Minor additions were made to accommodate a tailor shop and a small neighbourhood variety store at the front, and a dirty kitchen at the back. (Figure 8-2).

Diansay, Los Amigos Relocation Site

Figure 8-3. Diansay house floor plans and present photograph

The Diansay house was a standard core house constructed by Homeless People's Federation Philippines, Inc. - Philippine Action for Community-led Shelter Initiatives, Inc. (HPFPI-PACSII) NGO. Recently, the inhabitant installed wall partitions making it a typical two-bedroom house with an extended veranda at the side (Figure 8-3).

Nacorda house, Matina Aplaya Shanghai Village
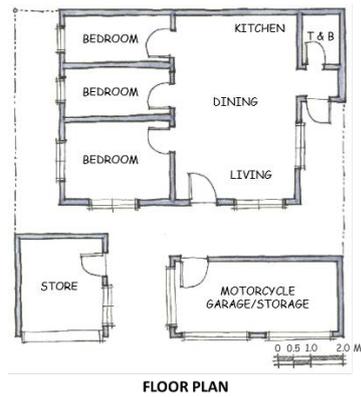
Figure 8-4. Nacorda house present floor plan and photograph

The Nacorda house started as a typical squatter housing unit.[3] After series of incremental construction, the house made of permanent building materials is now complete with three bedrooms, and additional neighbourhood variety store and motorcycle garage at the front (Figure 8-4).

Rafales house, Matina Aplaya Shanghai Village
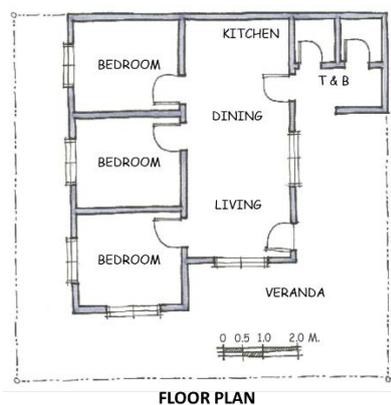
Figure 8-5. Rafales house present floor plan and photograph

Tha Rafales house started as a typical squatter housing unit. After series of incremental construction, the house made of permanent building materials is now complete with three bedrooms (Figure 8-5).

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[3] Typically, squatter housing unit is a simple shack made of recycled materials.

8.4.2 Type II – 'Almost formal' household

Sereno house, Piapi I

Figure 8-6. Sereno house present floor plan and photograph

The Sereno house started as a typical squatter housing unit. After a series of incremental construction, the house is now a two-storey multi-family structure. The interview respondent, who is the patriarch of the family, is living in the extended unit as shown in Figure 8-6. Part of the house is made of permanent building materials. However, it is noted that some parts of the house structure deteriorated over time.

Amad house, Toril II

Figure 8-7. Amad house present floor plan and photograph

The Amad house started as an open plan when the inhabitant moved in the area to access the government's sites and services programme. After a series of incremental steps, the house (made of concrete and timber) is now a typical two-storey structure (Figure 8-7).

8.4.3   Type III – 'Semi-formal' household

Albios house, Piapi I

Figure 8-8. Albios house floor plans and present photograph

The Albios house started as a typical squatter housing unit. After a series of incremental steps, the house was converted to a two-storey structure with the two bedrooms at second floor. It is noted that the permanent building materials used, including concrete and timber deteriorated over time (Figure 8-8).

Linasa house, Piapi I
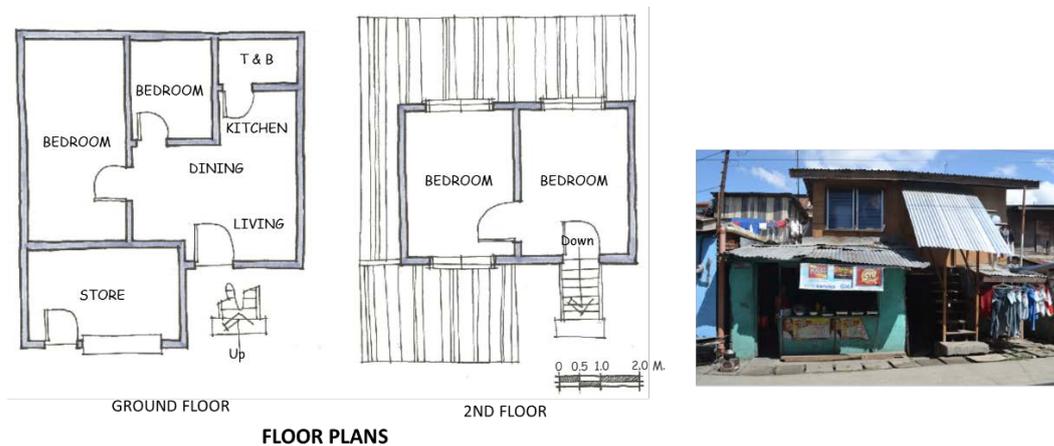
Figure 8-9. Linasa house present floor plans and photograph

The Linasa house started as a typical squatter housing unit. After a series of incremental steps, the house was converted to a two storey structure comprising a total of four bedrooms, with a neighbourhood variety store at the front. The majority of the house structure is made of light weight building materials. Some parts are constructed with permanent building materials such as concrete, it is noted, they have deteriorated over time (Figure 8-9).

Talin house, Piapi I
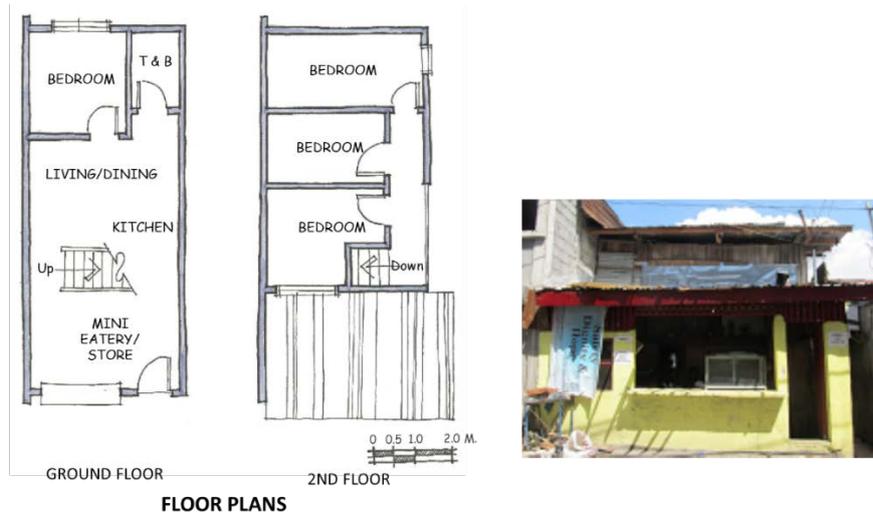
Figure 8-10. Talin house present floor plans and photograph

The Talin house started as a typical squatter housing unit. After a series of incremental steps, the house was converted to a two storey structure comprising a total of four bedrooms, with a small eatery (or café) at the front. Similar to the situation of the Linasa house in the same settlement, most of the house structure comprised light weight building materials. Some parts were constructed from permanent building materials such as concrete, it is noted, they deteriorated over time (Figure 8-10).

Domingo house, Matina Aplaya Shanghai Village
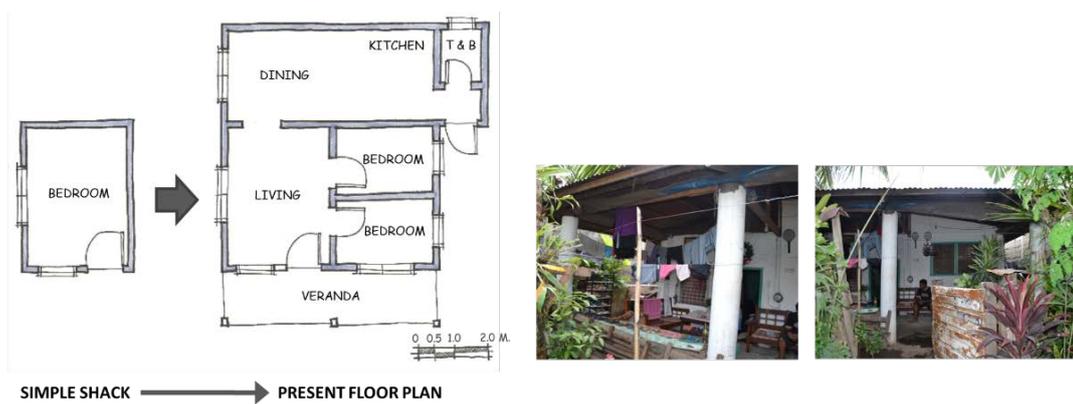
Figure 8-11. Domingo house floor plans and present photographs

The Domingo house started as a typical squatter housing unit for bedroom only. After series of incremental steps, it was converted to a typical two bedroom house. Permanent building materials were used, however, some parts of the house are unfinished (Figure 8-11).

8.4.4   Type IV – 'In-transition informal' household

Ogates and Dadong houses, Tibungco Relocation Site
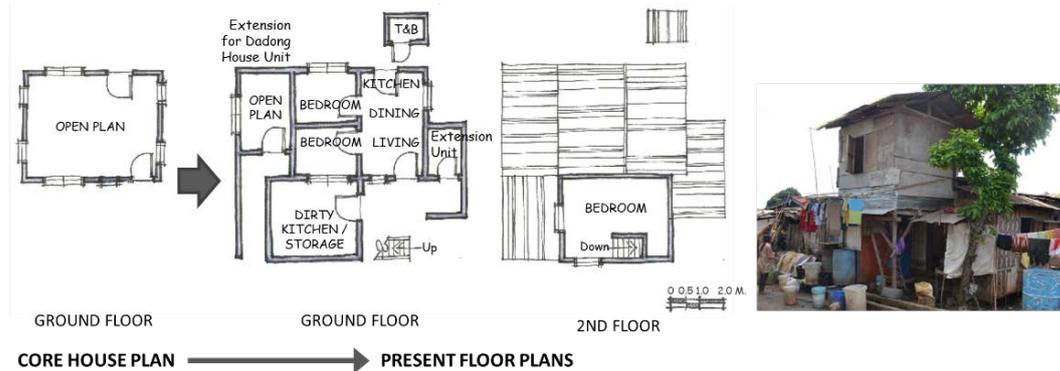
Figure 8-12. Ogates main house and Dadong extension floor plans and present photograph

The Ogates house presented in Figure 8-12 was a standard core housing unit provided by the city government in this relocation site (Figure 8-13.a). When the eldest daughter, Nanette Dadong, was married, an extension unit at the back was extended for independence and privacy (Figure 8-13.b). Further incremental construction of the main house included a dirty kitchen and an elevated room at the front. The core house was made of concrete hollow blocks. However, the extensions were made of recycled building materials converting it into an informal housing unit (Figure 8-13.c).

Figure 8-13. Typical core house (a); Dadong extension unit (b); and, Ogates main house (c)

Flores (Irenica) house, Green Prairie

The Flores (Irenica) house was constructed as a typical two bedroom house. A neighbourhood variety store is placed and operated at the front. The house was already built with permanent building materials (Figure 8-14).

Figure 8-14. Flores (Irenica) house present floor plan and photographs

Abarquez house, Arroyo Compound

Figure 8-15. Abarquez house present floor plans and photograph

The Abarquez house started as a typical squatter housing unit. After a series of incremental steps, it was converted into a two storey structure. The house, aside from being unfinished, is made of light weight materials, thus, characterised as informal housing (Figure 8-15).

Albos house, Arroyo Compound
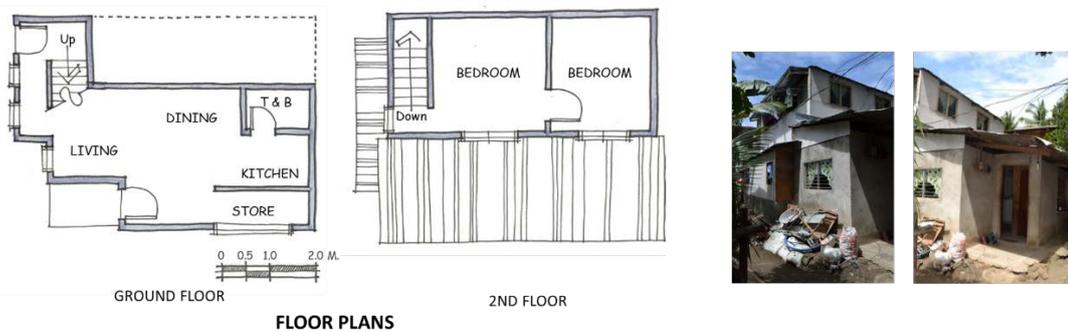
Figure 8-16. Albos house floor plans and present photographs

The Albos house started as a typical squatter housing unit. After a series of incremental steps, it was converted to a two storey structure. The lower structure of the house is made of concrete structure. However, light weight building materials are used for the upper part, thus, this continues to be characterised as informal housing (Figure 8-16).

Agan house, Arroyo Compound
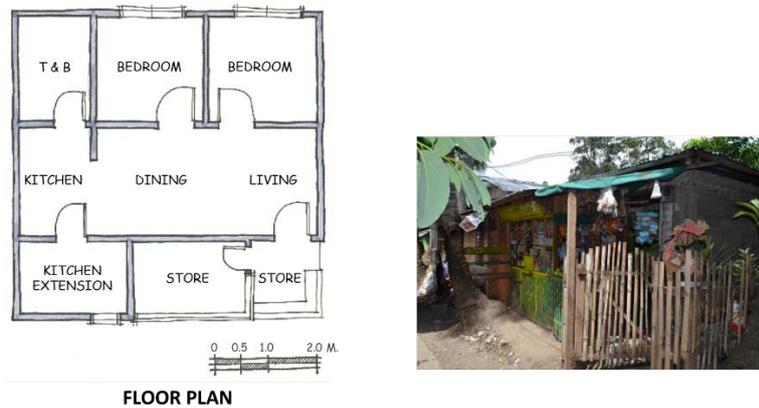
Figure 8-17. Agan house floor plan and present photograph

Tha Agan house was initially a typical squatter housing unit. After a series of incremental steps, it was converted to a typical two bedroom house. A kitchen extension and neighbourhood variety store were extended at the front. Concrete hollow blocks were used as the main structure of the house. However, it is noted that light weight building materials were used in the extensions (Figure 8-17).

Rabara house, Kobbler Settlement

Figure 8-18. Rabara house floor plan and present photograph

The Rabara house started as an open plan traditional hut made of local materials. The house was renovated as a two bedroom house with an elevated roof and ceiling heights to

accommodate the future addition of a loft (or mezzanine floor). The house is mainly made of local materials such as bamboo (Figure 8-18).

Wagas house, Kobbler Settlement
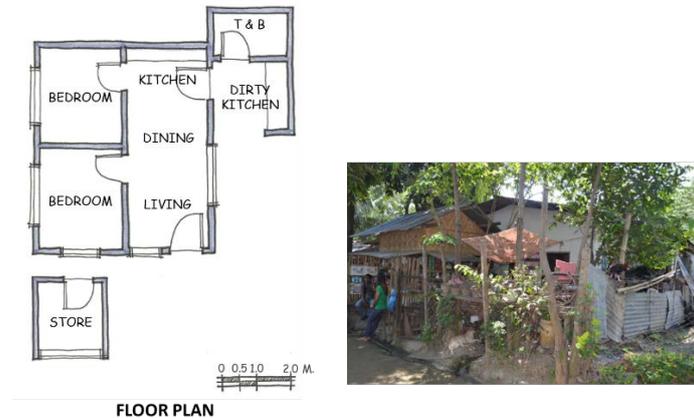
Figure 8-19. Wagas house present floor plan and photograph

The Wagas house started as a typical squatter housing unit. After a series of incremental steps, it was converted to a typical two bedroom house. While the floor and some parts of the house are made of concrete, however, most are made of light weight building materials (Figure 8-19).

Abellana house, Peace Avenue

Figure 8-20. Abellana house present floor plan and photographs

The Abellana house started as an open plan occupying the entire lot area. Eventually, wall partitions were installed to define the bedroom, kitchen, and toilet and bath. The structure was made of unfinished concrete hollow blocks (Figure 8-20).

8.4.5 Type V – 'Informal' household

Truya house, Arroyo Compound
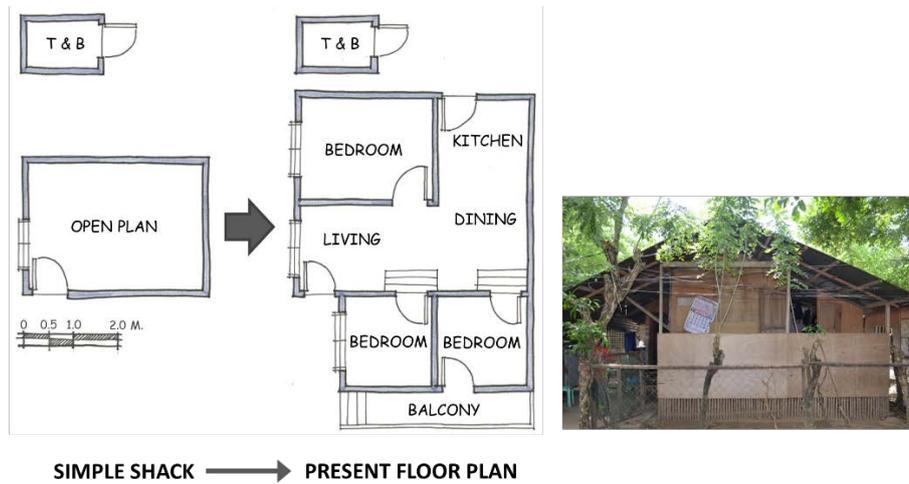
Figure 8-21. Truya house floor plans and present photograph

The Truya house begun as an open plan simple shack, typical of a squatter housing unit. Incrementally, the house was expanded to comprise a total of three bedrooms and other living spaces. The structure remained to be built with light weight building materials, mainly, substandard plywood sheets (Figure 8-21).

Lamanilao house, Kobbler Settlement
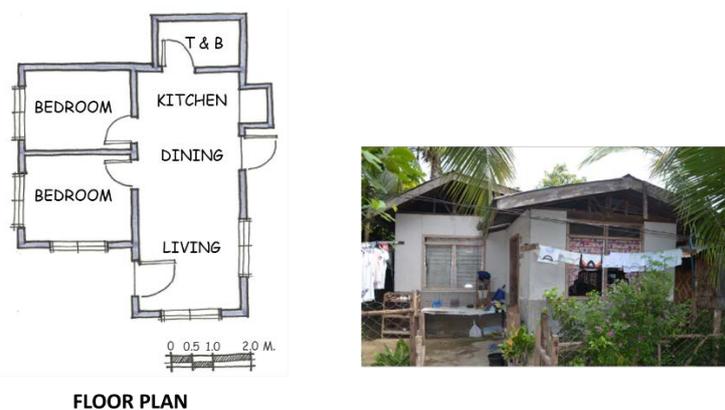
Figure 8-22. Lamanilao house floor plans and present photograph

The Lamanilao house started as an open plan simple shack, typical of a squatter housing unit. Incrementally, the house was expanded making it a typical two bedroom house. The main structure was made of substandard fibre cement boards and wood. Concrete was only used in some parts of the houses including the floor (Figure 8-22).

8.5   Housing preference of urban inhabitants

The existing conditions of housing in the lower income sector is expected to progress based on the preference of the inhabitants. In the process, further incremental construction of the dwelling units is based on the financial capability of the inhabitants at a certain period of time in relation to the degree of security of tenure. The different housing types identified in this case study are in a range of continuum categories from informal to formal. Furthermore, it has been demonstrated that less formal types become more formal in the process of their progressive development. In order to provide further insight into this observed phenomenon of the progressive development of housing, this section will discuss the preferences and future plans of the inhabitants for their respective dwelling units.

Type I housing units are formal in nature in terms of building construction. However, the inhabitants are still in the process of satisfying their growing needs and preferences for dwelling. Even in cases where completed housing units are provided, the end users have their own preference and aspirations for dwelling. In the case of Kadayawan Homes, for example, the Gomez family preferred a two storey house with bedrooms at the upper floor. Similarly, the Jayo family, in the same settlement, preferred bigger, individual rooms for their growing children. For another reason, these households planned to construct an upper level of their respective houses because their settlement site was prone to flooding. In cases of formal housing units in progressive settlements such as the Matina Aplaya Shanghai Village, the inhabitants continue to plan for future improvements to their respective dwellings despite the fact that they have already achieved formal status after a series of incremental changes. In the case of the Nacorda family for example, they plan to add an upper floor to their house with individual rooms for the children and bigger living spaces at the ground floor. In the case of the Rafales family, in the same settlement, they may be satisfied with their one storey house at the moment, but they too would prefer larger living spaces. On the other hand, in the cases of NGO assisted housing units in government provided settlement sites, the housing beneficiaries are satisfied at the moment with their respective dwellings. In the case of the De la Cruz family in ADAP, they will remain satisfied with their present housing as long as their facilities are designed to meet the needs of people with physical disabilities. In the case of the households in the Los Amigos Relocation Site covered by this study, they are currently satisfied with their new dwelling units. This is because their house was constructed based on the result of a series of workshops provided by the NGO that supported them. The participatory exercise assisted the housing beneficiaries to identify what they really needed in relation to what they could afford. Thus, the

housing units provided to them meet their present satisfaction. Despite whether housing is achieved via the provision of completed, formal housing units or achieved through incremental construction, most of the inhabitants in Type I housing continue to plan for further development of their dwellings to respond their own needs and preferences.

Type II housing units are in the process of transformation to achieve formal construction of the dwellings. At this point when raw land is fully paid for and legal ownership of title is achieved, the inhabitants focus their finances on the incremental construction of their houses to meet the minimum standards. In the case of the Amad family in Toril II settlement, for example, they prefer bigger living areas with separate dining areas. The family plans to renovate their kitchen as soon as possible. The Amad family has only one child, and there is no apparent indication that the building is constructed to accommodate a two storey structure, unlike the case of the Sereno house that is of the same type but situated in Piapi I settlement. The Sereno house is a two storey structure and presently occupied as multi-family dwelling. By the appearance of the structure alone, it is understood that the Sereno family aspire to refurbish and make their two storey house permanent. With the present condition of their dwelling units, they only need a few more refurbishments and the building structures will comply with the standards for formal housing.

Type III housing units have deteriorated over time being because the inhabitants of these dwellings are focusing on the payments for the land and processing of legal ownership of the titles. Despite concentrating on land tenure rather than on building construction, this does not impede the inhabitants' preference for better housing and plans for future refurbishments of their dwellings. In the case of the Domingo family in the Matina Aplaya Shanghai Village, for example, they prefer a two storey house with bigger living areas and plan for a major renovation when they have the financial capacity to build. The same preference is evident with the Albios and Talin families in Piapi I settlement, it is apparent in their present housing structure that they have plans for a two storey building. Both these families favour bedrooms on the upper floor while all other living spaces will be at the ground floor. In the future renovations, the Talin family plan to convert the front part of their house to a small neighbourhood restaurant. These housing units may appear dilapidated at present but it is expected that further incremental construction of the building will continue in due course when legal land ownership is achieved.

Type IV housing units include groups which appear informal in nature and are situated in spontaneous settlements. However, with a certain degree of security achieved for the time

being, the inhabitants' preference for dwelling is apparent in the present incremental construction of their houses. In the cases of the Abarquez and Albos families in the Arroyo Compound, for example, their preference for two storey housing is evident in the recent incremental addition of an upper floor of their present dwellings which is made of temporary construction materials. The Abarquez family is currently satisfied with the present condition of their dwelling unit, however, the Albos family has immediate plans to expand their house to meet their preference for bigger living spaces and additional rooms. On the other hand, the Agan house within the same settlement is a single storey building at present but the family has plans to construct an additional floor in the future. For the time being, the Agan family are satisfied with small living spaces in their present house as long as they can immediately refurbish the temporary kitchen with a concrete floor. The same housing condition is also found in the Kobbler Settement. In the case of the Rabarra, family for example, they prefer to have complete living spaces with individual rooms despite their present informal dwelling status. It is apparent in the present construction of their house that the roof and ceiling height was elevated higher in preparation for an attic in the future. In the case of the Wagas family, in the same settlement, they were satisfied with the present plan and design of their house. However, they plan to replace the temporary construction materials such as timber with more permanent ones such as concrete. These households situated in spontaneous settlements hope to construct their dwelling units to meet their growing needs and preferences as soon as they attain more secure land tenure.

The inhabitants of another group of Type IV housing units who were beneficiaries of land tenure assistance programmes from the government have different views with regards to their present needs and preferences. In the case of the Abellana family in the Peace Avenue settlement who have been the beneficiaries of on-site LTAP, for example, they have no plans to improve their house at present due to their lack of money to finance the construction. Similarly, the Flores (Irenica) family in the Green Prairie settlement who benefitted from off-site LTAP, are satisfied with the present condition of their house with complete and functional basic living spaces. This is also the case for the Caro and Mendoza families in the Matina Aplaya Shanghai Village who are beneficiaries of the CMP. They prefer to be provided with the basic living spaces and are satisfied with their housing conditions at the moment. The Caro family expressed their future plans to pay the whole amount of their residential lot in order to gain the legal land title. These beneficiaries of land tenure assistance programmes are presently focusing on the payments for the land rather than on construction of their houses, thus they are just satisfied with the present

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condition of their dwellings. On the contrary, the beneficiaries of the local government's relocation site in Tibungco who are not paying their dues do not have plans to further improve their houses. They may have their own preference for dwellings but they do not own the residential lot and core house and therefore they lack security. For this reason, it impedes their plans to invest in permanent materials for the incremental construction of their houses. It is important to note how the housing cases presented above show how the degree of security of tenure influences the plans of the inhabitants in relation to their needs and preferences for dwellings.

Type V housing units are situated in spontaneous settlements. Despite being informal in nature both in terms of house construction and security of tenure, the inhabitants have their respective needs and preferences for dwellings. In the case of the Lamanilao family in the Kobbler Settlement for example, they prefer to live in a two bedroom house complete with other livings spaces similar to those constructed in completed housing subdivisions. Given that the inhabitants have just initiated their self-built housing, it is expected that more spaces will be added. This is evident in spontaneous settlements such as the Arroyo Compound. In the cases of the Patcho and Truya families – with no bedroom and one bedroom respectively – they both plan to add more bedrooms in the incremental construction of their informal dwellings. In addition, the Truya family's immediate plan is to begin to legalise ownership of their land. In the case of the Namata family situated in the same settlement, the family's plan for the incremental construction of their house is to make it a two storey structure for their safety because their site is prone to flooding. The inhabitants of these informal housing units prefer to build with durable materials for the incremental construction of their dwellings. However, it is not feasible for them to realise this preference for the time being because of their limited financial capability and the present status of land tenure.

8.6   Discussion
The progressive nature of urban housing in the lower income sector and specifically the quality of construction in a case of a city in a developing country is explored in this chapter. Firstly, the progressive provision of living spaces based on the growing needs of the inhabitants is shown as one of the agents of this housing phenomenon. Secondly, the physical nature of the progressive housing is evident in the incremental construction of dwellings. The incremental construction of the house to accommodate the required additional living spaces is influenced by the degree of security of tenure. Even in cases of completed formal housing units, additions of living spaces are completed by the inhabitants themselves. If there is secure tenure as in the

case of households in Kadayawan Homes, the incremental expansion of the house structure is built in accordance with the minimum standards thereby maintaining its formal status. On the contrary, if there is a lack of secure tenure as in the case of households in the Tibungco Relocation Site, the expansion of the house is done informally despite the initial provision of the standardised core housing units.

This phenomenon is further observed in cases of housing units in progressive urban settlements which began as informal types. In informal settlements, housing units are initially made of light weight building materials. Eventually, the house is upgraded using more permanent building materials and standardised construction methods when the inhabitant gains a certain degree of security. This is the point in the course of development that informal housing units are in transition towards a more formal status. Over time, the house deteriorated contributing to the slum conditions of the settlement. Ironically, this is evident in settlements like Piapi I and the Matina Aplaya Shanghai Village settlements which are beneficiaries of land tenure assistance programmes from the government. Because of the limited financial capability, the beneficiaries' priorities are on the payments for the land and the processing of legal titles rather than investment in formal, permanent structures. However, as soon as legal land ownership is attained, the inhabitant will be able to refurbish the house incrementally until it becomes a permanent structure built in accordance with the building code. This is how the Sereno house in Piapi I and the Amad house in Toril II settlement, which are Type II housing units progressively, have attained almost formal status. Apart from these cases, this is similar to the Nacorda and Rafales houses in Matina Aplaya Shanghai Village which are Type I housing units which have finally achieved formal status.

The progressive addition of living spaces and the incremental construction of dwelling units made by the inhabitants themselves contributed to the present condition of the different housing types. The degree of formality in both land tenure and building construction defines the housing type according to a certain stage of development. In this case study, the status of development is represented in the five identified housing types in a continuum categories from formal to informal. In each case, the different types are a result of the agency of the inhabitants to meet their growing needs for living spaces. This is in relation to their financial capability, the status of land tenure, and other opportunities such as assistance from the government and NGOs. Thus, the culture of self-help housing is instrumental to the progressive formation of the settlement in particular, and to the urban fabric of the city, especially in a developing country.

Further investigation of the needs, preferences, and plans of the inhabitants indicates the future plans for the incremental construction of their present housing structure. Even in Type I housing units which have already achieved formal status, the inhabitants continue to plan for further incremental construction of their dwellings to satisfy their growing needs. Completed housing units for the lower income sector are delivered typically in one storey house models with only two bedrooms making them affordable in the beneficiary market. This pragmatic provision of shelter may meet the affordability level of targeted housing beneficiaries, however, it is expected that it is not enough to satisfy the growing needs and preferences of the inhabitants. Within limited residential lots, the best plan to renovate the house is to add an upper level to increase the area for living spaces and to relocate the bedrooms at the upper floor for privacy. Evident in the future plans of the Gomez and Jayo families in Kadayawan Homes, it is foreseen that their respective houses will become two storey structures in the future. In addition, the inhabitants in this settlement generally prefer two storey structures after they experienced flooding in the area. In progressive settlements, the realisation of inhabitants' plans depends on the status of land tenure or ownership. In Type II housing units, complete formalisation of the housing structure is closer to achieve since the inhabitants who are already legal land owners can focus their investments on the refurbishment of the house. The Sereno house as an example is already built as a two storey structure at this stage of development. On the other hand, the Amad house in another settlement, of the same housing type, is expected to remain a one storey structure with bigger living areas due to the personal preference of the owner.

Inhabitants of housing units in settlements which may appear as slums maintain their own needs and preferences for their dwellings despite their present status. Apparent in Type III housing units is the physical deterioration of the building structures. This is because the beneficiary inhabitants are prioritising the payments for the land rather than incremental refurbishment of the building. Most of the cases in Piapi I which belong to this type are presently built as two storey structures. In another case of the Domingo family in Matina Aplaya Shanghai Village, even if their present dwelling is a one storey structure, they plan to add a second storey when they have the financial capability. This house has a neighbourhood variety store at the front for commercial purposes. Similarly, the Talin house in Piapi I has a small neighbourhood restaurant at the front. Both families who operated micro business activities in these neighbourhoods plan to maintain the same space for commercial use when they renovate their respective houses in the future. A similar situation was found in the case of inhabitants in Type IV housing units who were beneficiaries of land tenure assistance programmes provided by the government.

Beneficiaries of LTAP in the Peace Avenue settlement and CMP in the Matina Aplaya Shanghai Village explained that they have no plans at the moment for the improvement of their houses due to financial constraints. Paying for the whole amount of land in order to own the legal title is their first priority, as in the case of the Caro family in Matina Aplaya Shanghai Village. As soon as legal ownership of land is achieved by these families, it is foreseen that their less formal housing units will transcend into formal ones in due course.

Informal housing is the alternative for the urban poor to have a shelter of their own in the city. The informal settlers may be new migrants to the city or those who cannot afford rent in more formal housing types and choose to live in informal settlements. Despite the precarious conditions in spontaneous settlements, the inhabitants of informal housing units maintain their own needs and preferences for dwellings. In the first place, it is their preference to live in informal housing units and settlements with high speculation where they can formalise the land tenure in the future through government programmes such as CMP and LTAP. The temporary nature of houses in Type V informal housing units is relative to both the financial capability and the land tenure status of the informal settlers. In the absence of secure land tenure, the inhabitants may be satisfied with the temporary nature of their dwellings. This is evident in the case of the Agan family in the Arroyo Compound who are satisfied with their present housing condition as long they can immediately refurbish their temporary kitchen. At a certain point in time when these informal inhabitants gain a certain degree of security, the incremental construction of their houses implies their preference for the dwellings. In the cases of the Type IV housing units, the Abarquez and Albos houses in the Arroyo Compound, for example, revealed that the inhabitants prefer two storey structures. Further, the inhabitants' future plan to formalise the construction of their houses is influenced by government programmes and support from NGO which provides them a certain degree of security.

This discussion on the progressive nature of housing in the lower income sector in Davao City, Philippines, further confirms Burgess' (1985) hypothesis. Based on a genetic principle, a squatter settlement will eventually become a legal settlement after all the requirements are accomplished in due course. This hypothesis at settlement level is further articulated in detail as illustrated in the cases of incremental construction of housing units presented in this chapter. Phases of incremental construction according to Greene and Rojas (2008) started with access to land, followed by construction of a basic nucleus, and continued through the incremental improvement of the dwellings. The incremental construction of urban poor housing to become formal structures is directly related to the status of land tenure. The degree of security of tenure

and the behaviour of inhabitants to achieve legal land ownership influenced the degree of formality of the housing structure in the course of development. This is because parallel to the progressive development of housing structures the inhabitants also undergo a series of tenure categories from informal to formal. The case study furthers confirms Payne's (2001) claim that there is a continuum of tenure categories that range in different levels of security. This means that a pavement dweller who has no security of tenure will undergo a series of tenure categories until s/he becomes a freehold owner as the ultimate legal tenure category. In other words, the series of continuum tenure categories in settlements in the cities of developing countries is parallel to the progressive nature of urban poor housing.

8.7 Conclusion

The agency of the people in the lower income sector to satisfy their own need for shelter is reflected in the culture of self-help housing. This progressive housing phenomenon is clear when the classified continuum of categories of housing types is considered as a progression from informal (Type V) to formal (Type I). Notably, the phenomenon is clearly illustrated by focusing on cases in progressive settlements by connecting the housing conditions of each type that represents a certain period of development to the next more formal category. The present housing condition presented in each category is considered as a result of an incremental construction process that is foreseen to continue to develop based on the future plans of inhabitants. This means that the informal housing as an initial form of shelter of the urban poor will eventually evolve into more formal structures in the course of its development in relation to various social factors. This phenomenon will start when a simple shack dwelling initially transforms into a complete informal housing structure situated in an informal settlement. In time when the informal group of inhabitants organise themselves to negotiate for the purchase of squatter land, or benefit from government programmes or NGO assistance, a certain degree of security is attained. This influenced the inhabitant of an informal housing unit to invest in the incremental construction of the building. Dilapidation of the housing structure is noted in the course of development when the inhabitant is focusing on the payment of land to achieve legal ownership. In time, when formal land tenure is achieved, the inhabitants further invest in the incremental refurbishment of the house to achieve a more formal structure. Despite achieving formal status, the inhabitant further plans for incremental construction of the house until it satisfies the needs and preferences of the end-user. Thus, in due course, the dwelling unit is characterised as a permanent residential building that may be a one storey or a two storey structure.

Chapter 9:   Socio-Spatial Processes in Housing and Urban Settlements

9.1   Introduction

Traditional housing policies emanated from a paradigm that sees the social world in an objective way. For instance, the evidence-based policy approach that remains dominant is based on the modernist positivist paradigm. Positivism, in its application in the field of housing, maintains that 'social processes can be measured and described, findings presented and recommendations made which can ameliorate, if not solve, social problems' (Travers 2004, p. 15). Housing problems, taken as self-evident in nature, led to solutions that were implemented based on the ideology of the government concerned. In the case of developing countries, successful models[1] from developed countries were readily adopted. In most cases, rational methods were employed to identify and solve housing problems, rather than looking at the interactions between actors in the society and their influence on the formation of the built environment. For example, the statistical computation of housing gaps was used as the basis for the implementation of housing programmes and the release of funds from governments and international funding agencies. In turn, rather than purely viewing housing with its objective condition, a post-modernist 'social constructionism' paradigm emerged to provide richer and more sociologically informed analysis of the phenomenon (Jacobs, Kemeny & Manzi 2004b).

The purely quantitative identification of housing needs and the technical proposals to fill-in the gaps in housing provision have proven to be unsuccessful in cases with unstable political and economic conditions. In the Philippines for example, the greater engagement in housing provision of the Marcos regime in the 1970s, following the principles of the social welfare state, failed to provide housing to the massive low income population. With excessive government expenditures, Marcos' unprecedented government initiative was only criticised as an instrument for political publicity and opportunities for corruption, rather than meaningful strategies for poverty alleviation (Shatkin 2004). The shift towards a neo-liberal market oriented policy in the 1980s widened the role of the economic sector in housing provision. Shelter provision then, was viewed as marketable opportunities for the financial sector to actively participate. Parallel to this view, Lim (1987) classified housing into different markets and submarkets, and argued for the 'multi-step transition' that the urban poor undergo in the series of housing submarkets until they become an owner of formal housing in the end. However, despite Lim's (1987) argument, completed housing units were delivered with mortgage systems extended to the low income

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[1] For example, the 'one-step regularisation model' (Lim 1987), among others, can be traced to successful models in Western countries which have been discussed earlier in the first three sections of Chapter 1.

population. This approach has met with success in developed countries, but this approach has mostly failed when it has been adopted by countries with unpredictable economies. Supposed to be a meaningful poverty alleviation strategy where housing finance is extended to the low-income sector, but this solution only created more problems such as bringing the urban poor into debt crisis. As a consequence of inaccessible and unaffordable housing due to failures in both political and economic forces, the urban poor have no choice but to live in informal settlements where they can provide their own means of shelter.

The implementation of housing programmes, like the design of housing based purely on technical and creative processes often results in a failure from the social point of view. In reference to Madanipour's (1996) point of view regarding the design of urban spaces, this failure is due to the lack of recognition of the socio-spatial process. The urban environment can be understood in its socio-spatial context 'as it is rooted in political, economic and cultural processes and involves a number of agencies interacting with socio-spatial structures' (Madanipour 1996, p. xi). Moreover, in his recent work, Madanipour (2006) emphasises the complex roles of regulators, producers, and users in the formation of the built environment. Despite the fact that the discipline of urban design, as in the discipline of architecture, typically engaged in the design of the formal built environment, it does not mean that the discipline cannot be involved in the area of informal built environments. Urban design as a discipline is popularly defined as the meeting point between architecture and social science, which serves as a lens to view the socio-spatial process in the built environment. Thus, this thesis has attempted to apply a certain point of view, such as that from Madanipour's (1996, 2006), to the context of the informal built environment mostly found in developing countries. In the search for environmental sustainability, the Philippine Agenda (PA) 21[2] acknowledges the role of government, business, and civil society as key actors for sustainability. This is parallel to the socio-political, socio-economic, and socio-cultural factors which are key elements in the socio-spatial processes in urban environments. These factors reflected in the acts of the regulators, producers, and users are the bases of discussion on the socio-spatial processes in low income housing and settlements covered by this case study.

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[2] PA 21 is the Philippines' commitment to the historic Earth Summit in 1992, and is the country's blueprint for sustainable development.
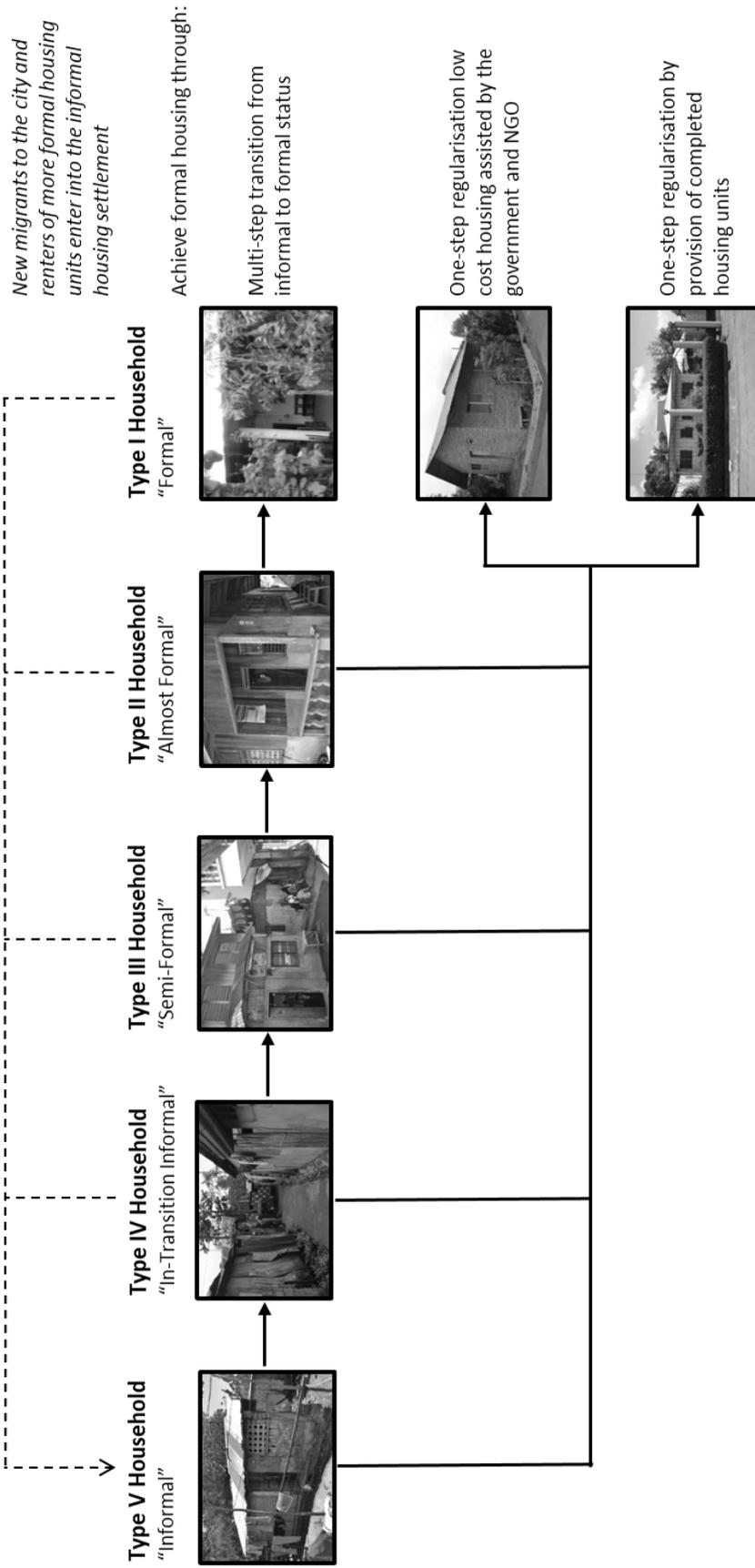
Figure 9-1. Movement of urban households and the multi-step transition in housing provision

New migrants to the city and renters of more formal housing units enter into the informal housing settlement

Achieve formal housing through:

Multi-step transition from informal to formal status

One-step regularisation low cost housing assisted by the government and NGO

One-step regularisation by provision of completed housing units

Type V Household
"Informal"

Type IV Household
"In-Transition Informal"

Type III Household
"Semi-Formal"

Type II Household
"Almost Formal"

Type I Household
"Formal"

The ultimate goal of people who choose to migrate to the city is to live in decent shelter with secure tenure. However, for the urban poor who cannot afford to access formal housing they have no choice but to live in precarious squatter settlements. For the benefit of the underprivileged people living in informal settlements, this case study found three ways to own formal housing units (Figure 9-1). Firstly, through a multi-step transition in housing provision beginning with life in an informal settlement before they eventually become owners of formal housing units in due course. Secondly, through a one-step regularisation process whereby low cost housing is provided by both the government in terms of the provision of land and site development and NGOs in house construction. Thirdly, through traditional one-step regularisation resulting from the provision of completed housing units directly sold or mortgaged to eligible beneficiaries in the formal housing market. In the case of multi-step transition in housing, it tends to happen in two ways: firstly, informal inhabitants transfer from one housing type to another in different locations; and secondly, informal inhabitants live permanently in the same location and proceed to formalise their housing status in the course of development. It is interesting to note how informal housing units in the same location undergo a series of transitions until they attain formal status in due course. In the context of socio-spatial processes in housing and urban settlements, this phenomenon of multi-step transition of housing from informal to formal status is first discussed in the succeeding section.

9.2   Multi-step transition of housing from informal to formal status

The multi-step transition in the provision of housing in the low-income sector was first acknowledged in the 1960s by John Turner and his writing has served as a significant point of reference for this thesis. Parallel to the work of Abrams (1964) who recognised the contribution of self-help housing in informal settlements in the modern world , Turner (1967, 1968b) viewed the progressive form of development and the architecture of squatter settlement as an important alternative to housing provision in developing countries. Turner's ideology was then adopted with the implementation of sites and services and *in situ* slum upgrading schemes. These promising housing programmes in the 1970s led by the World Bank were once viewed as unsustainable in developing countries condition due to their reliance on high government subsidies. Moreover, when a market oriented policy approach gained momentum in the 1980s, housing was then viewed as a segment of markets and submarkets. In reference to the work of Lim (1987), eight housing submarkets are identified considering the legality of land and housing structure, and the tenure status of the inhabitant being an owner or a renter. As an alternative to the 'one-step regularisation model' that originated from developed countries, Lim further

presents the 'multi-step transition model'. This model hypothesises that the urban poor normally have to undergo a multi-step transition through the different housing submarkets, from living in squatter settlements to becoming an owner of formal housing through a process of improving the economic status and quality of life in the city. This means that a homeless street sleeper may first enter the housing market as a tenant in a squatter housing market and eventually end as an owner in a regular housing market after undergoing transitions through the series of housing submarkets.

This thesis explored the low-income households in various urban settlements to reveal that the housing status ranges from informal to formal in terms of the legality of land tenure and the quality of the housing structure. The case study identified five types of housing presented in Chapter 7. Further analysis on the description of identified housing types revealed the contiguous categories ranging from 'informal' (Type V), 'in-transition informal' (Type IV), 'semi-formal' (Type III), 'almost formal' (Type II), to 'formal' (Type I). Parallel to Lim's (1987) hypothesis, the phenomenon of multi-step transition of housing in the case of Davao City, Philippines, is discussed in the following paragraph.

The urban poor who could be new migrants in the city or who can no longer afford to pay rent in better housing units first dwell in 'informal' (Type V) housing in squatter settlements. They may be illegally occupying the land and living in precarious housing conditions, but they believe that it is their initial way to have a house and a lot of their own. This speculation is based on the fact that the urban poor can avail pro-poor housing initiatives from the government and NGOs. Consequently, the urban poor households organise themselves firstly to negotiate the purchase of their squatter land or to seek government housing programmes and assistance from NGOs. This initiative by the urban poor themselves to gain a certain degree of security is the first step that the 'informal' (Type V) housing transcends to 'in-transition informal' (Type IV) housing. One example is to approach the Community Mortgage Programme provided by the government, with assistance from an NGO. In other proven cases, organised urban poor associations capitalised on the previously implemented *in situ* slum upgrading and sites and services programmes which provided positive impacts to both tenure status of residents and physical development of settlements. Eventually, along with improving the security of tenure and progressive development of sites, the urban poor incrementally upgrade their houses by replacing temporary building materials with durable materials in a self-help manner. At this point in the course of development, the 'almost formal' (Type III) housing is attained. In the long run, if the land is fully paid for by urban poor beneficiaries, the houses are further refurbished to become 'almost

formal' (Type II) housing, which eventually end as 'formal' (Type I) housing in due course when built in accordance with the standards of the building code.

The multi-step transition of housing as a physical phenomenon manifests the socio-economic condition of the urban poor in particular. Despite, in the context of urban poverty, the urban poor thrive living in the city whereby the process of improving their living status is reflected in the physical improvement of their dwellings. Considered more broadly, the aggregated phenomenon of multi-step transition of housing reflects the economic status of the city with developing economies. In relation to the socio-political process that defines the security of tenure, the multi-step transition of housing evident in progressive urban settlements is parallel to Payne's (2001) claim for the contiguous ten tenure categories that range in different levels of security. This ranged from being a pavement dweller to becoming a freehold owner as the ultimate legal tenure category. Therefore, the multi-step transition in housing can be illustrated by how the urban poor undergo transitions through the series of eight housing submarkets in the view of Lim (1987); through the series of ten tenure categories in the view of Payne (2001); and, through the series of five different housing types defined by this case study. Similar to the views of Abrams and Turner in the 1960s, the socio-cultural process of self-help housing and progressive urban development is manifested in the multi-step transition of housing in this study. Understanding these socio-spatial processes reflected in the multi-step transition of housing may provide better interventions that best fit in the developments and needs of developing countries in the twenty-first century.

9.3   Incremental construction of urban poor housing

The previous section sees the urban phenomenon in developing countries from the point of view of housing provision as a dynamic process in contrast to the conventional, static one-step production of housing. The multi-step transition in housing provision in relation to various social factors illustrates how informal housing units in *in situ* progressive urban settlements attained formal housing status in due course. Progressing towards formal housing and secure tenure, the incremental construction of urban poor housing structure is also observed. Acknowledging the same urban phenomenon viewed in the previous section and demonstrating it in the specific case of Davao City, this section discusses the incremental construction of houses from the point of view of form and process of architectural construction. In reference to the three phases of incremental construction defined by Greene and Rojas (2008), that begins with access to land, this section relates its discussion to the succeeding two phases, the construction of a basic nucleus and the incremental improvement of dwellings covered by this case study.

The incremental construction of urban poor housing demonstrated in this case study begins with the construction of 'informal' (Type V) housing made of light weight and temporary building materials mainly located in informal settlements. In most cases, makeshift dwellings were made of discarded timber or coconut tree lumber for structures, substandard plywood for walls and partitions, and recycled galvanised iron sheets for roofs. In some cases, they were mixed with indigenous light building materials such as bamboo and thatched palm leaves. Unless there was an indication that the inhabitants initiated towards formalising land tenure or the receipt of assistance from the government or NGOs, the housing remained temporary in nature. However, when the inhabitant gained a certain degree of security, the housing was upgraded to 'in-transition informal' (Type IV) through the replacement of dilapidated building materials with more permanent ones and standardised method of construction. In most cases, dilapidated wooden structures were replaced with concrete, and walls and partitions were reconstructed with concrete hollow blocks. This study has shown that this is the point in the course of development that incremental improvement of housing was aligned with an increase in the degree of security.

The role of security of tenure is becoming more visible at this point of development. In the case study, the increment in security was manifested primarily, by the organisation of informal householders to negotiate for the purchase of their squatter land, to seek assistance from NGOs, or to capitalise on government housing programmes. The housing units may appear informal, but the degree of security gained by the inhabitants at this point in time motivated them to invest in the physical improvement of their houses. In some cases, permanent building materials such as cement and steel bars were purchased with minimal loan amounts provided by NGOs to urban poor beneficiaries. In addition to installation of more permanent building materials, the urban poor's investment in housing is also achieved by the incremental addition of rooms needed for the growing needs of the household. Apparently, at this point in time, the 'in-transition informal' (Type IV) housing transcended to 'semi-formal' (Type III).

When the urban poor became beneficiaries of land tenure assistance from the government, their limited financial resources were prioritised for the payment of land and the application for legal land titles. In progressive settlements where most of these housing types are found, it is observed that the neighbourhoods appear physically as slum condition because the inhabitants are in the process of focusing on the payment for the land, not on financing the incremental improvement of their houses. However, when legal land ownership was attained, the inhabitants were able to refurbish their houses incrementally until they became permanent structures compliant with the building code. In all cases, the main structures of the house were made of

concrete, walls and partitions were made of cement-finished concrete hollow blocks, and roofs were installed with steel structures and painted galvanised iron sheets. Eventually, the 'semi-formal' (Type III) housing transcended to 'almost formal' (Type II). Furthermore, with permanent building materials fully installed and finished, the 'formal' (Type I) housing status was achieved.

	Type V	Type IV	Type III	Type II	Type I
	'Informal'	'In-transition informal'	'Semi-formal'	'Almost formal'	'Formal'
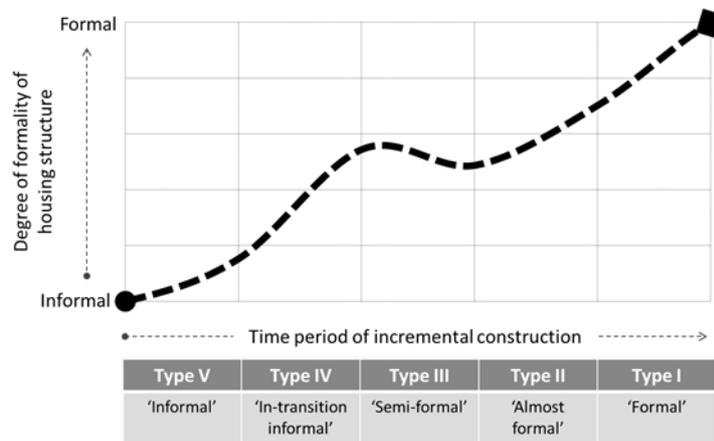
Figure 9-2. Degree of formality and incremental construction of urban poor housing

The phenomenon of incremental construction of urban poor housing found in the case study is interpreted in a qualitative graph correlating the degree of formality of housing structure with the time period of incremental construction (Figure 9-2). The time period is represented by the multi-step transition of housing from 'informal' (Type V) to 'formal' (Type I) housing. The curve in the graph is plotted based on the interpretation of qualitative information, to reveal the socio-political process of legal land ownership that defines security of tenure reflected in the incremental architectural construction of urban poor housing. With ownership of legal land title as the ultimate goal, the urban poor went through transitions in a series of contiguous tenure categories well-discussed with the phenomenon of multi-step transition in housing in the previous section. On the other hand, in this section, various tenure categories range from informal to formal (or illegal to legal) physically materialised in the incremental improvement in the degree of formality of housing structure. The incremental construction of low-income housing started when the urban poor lived in squatter settlements with no security of tenure. Despite the precarious condition, the informal inhabitants of informal housing units speculated that they can formalise land ownership in time through pro-poor housing policy and programmes by the government, and assistance from NGOs. With the increase in security, the urban poor inhabitants were encouraged to invest in the incremental improvement of their houses, thus, there is an upward movement of the curve in the graph. At a certain point in the course of development, the incremental construction of housing structure might be halted because this time, the urban poor

beneficiaries were in the process of paying for the land. However, once secure tenure was attained, the degree of formality of housing structure continuously moved upward until it became formal, permanent housing.

Further understanding of the socio-political process, in the early stages of incremental construction is influenced by the government's pro-poor housing policy approach. This is influenced by the participatory trend in policy making widening the role of NGOs in the empowerment and development of communities, most specifically in the low-income sector. In terms of socio-economic process, the incremental construction of housing found in low-income settlements reflects the material expression of the economic status of the urban poor as they strive to live in the city. The incremental architecture of the urban poor over the course of development is the concrete evidence of their economic status at a certain point of time, from living in squatter settlements, to improving the security of tenure, and finally, to owning permanent formal housing. This phenomenon also reflects the culture of self-help housing earlier acknowledged by Abrams and Turner in the 1960s. In the same way, this indicates the socio-cultural process in urban poor housing parallel to the definition of vernacular architecture by notable theorists in the field. As an architecture by non-professionals, like vernacular architecture, informal architecture in spontaneous settlements is also built based on inherited knowledge, collective wisdom, and social experiences which comprise generally accepted norms (Oliver 1990). The incremental construction of housing, in the same manner, is characterised as transitional society in the process of evolving from one mode of production to another (Stea & Turan 1990). In the twenty-first century, Vellinga (2006, p. 88) identifies squatter settlements as one of the categories in the field of vernacular architecture. Parallel to Asquith's (2006, p. 129) view of the vernacular as constantly evolving and reacting to changes in the communities, the incremental construction of housing manifest the dynamic socio-cultural processes in urban poor settlements. The early stages of incremental construction created by the urban poor, discussed in this section, may seem disordered because the inhabitants were in the process of paying for the land to achieve legal ownership. However, these socio-spatial processes evident in the incremental construction of urban poor housing offer valuable lessons for interventions that might be best suited to progressive settlements, contrary to traditional approaches to slum clearance and demolition, or the one-step regularisation model.
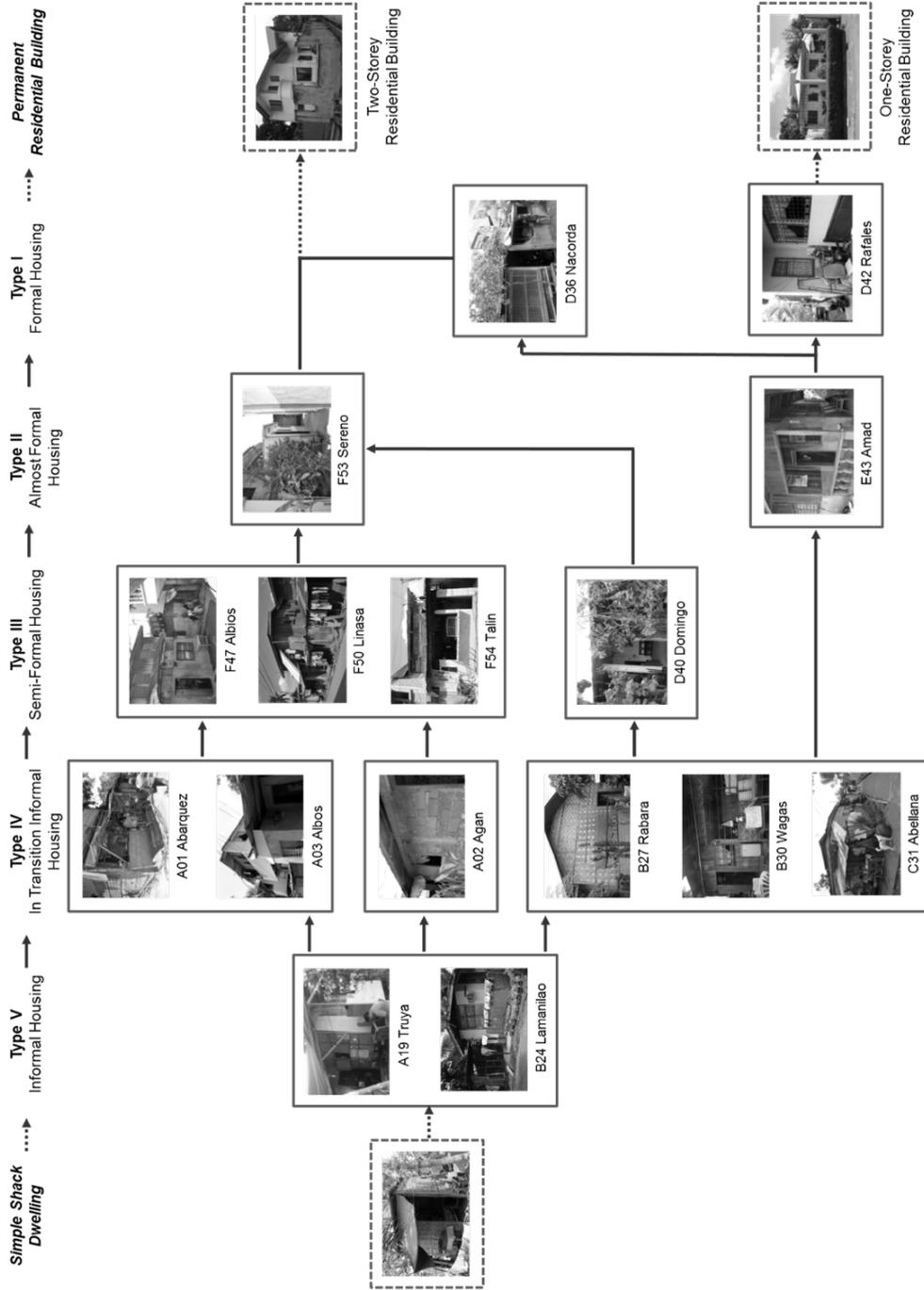
Figure 9.3. Evolution of housing from simple shack dwelling to permanent residential building

9.4   Evolution of urban poor housing

The housing phenomenon which characterises the low-income sector in a case of a city in a developing country is presented in detail in Chapters 7 and 8. In the two previous sections of this Chapter, the urban housing phenomenon is discussed with the concept of 'multi-step transition' from the point of view of housing provision; and, with the concept of 'incremental construction' from the point of view of architecture. Further elevating the view of this same phenomenon to attempt a higher level of theory-building, a conceptual or theoretical level on evolution of urban poor housing is evident.[3] The evolution is illustrated from the time when homeless people build their fundamental shelter, to undergoing transitions in the different housing types from informal to formal, and to finally owning houses that contribute to the permanent urban landscape (Figure 9-3). Research results about the evolution of housing and discussion in relation to socio-spatial processes in low-income settlements were presented in the 50th International Conference of the Architectural Science Association (Malaque III, Bartsch & Scriver 2016).[4]

The urban poor begin to provide their own shelter by assembling shacks to mark their invasion of the squatter land. These shelters are interpreted by Turner as the first stage of the incremental construction process (Kellet & Napier 1995, p. 8). As the preliminary form of self-help shelter provision by the urban poor themselves, from these simple shacks, the 'informal' (Type V) housing defined by this study first evolves. Makeshift shacks were usually made of recycled materials. Despite lasting a very short time, this ephemeral architecture manifests the urban poor's need for housing of their own to enjoy the 'first freedom' as it is defined by Turner (1968b), wherein the squatter community welcomes anyone to join the association as long as there is enough land available. Thus, the temporary nature of a shack is an architectural statement that demonstrates the urban poor's participation in the creation of new community, despite the informality. Once inhabitants are identified as part of a squatter community, with assigned lots, their shacks eventually evolve to 'informal' (Type V) housing, which is the case of the Lamanilao house (Figure 9-4) in the Kobbler settlement. When the Lamanilao household joined the invasion in 2003, their shack was built of recycled materials measuring 2.40 metres square, a floor area defined by two standard pieces of plywood (typically 1200 x 2400 mm). Extensions to the house and installation of better building materials such as substandard fibre cement boards were completed in 2006. This was followed by the addition of another bedroom in 2010, as the

[3] It is beyond the scope of this research to build new housing theory. Thus, the discussion of findings with the concept of 'evolution' of urban poor housing is more of hypothetical in nature.
[4] For copy of the full paper, see, Appendix L.

house appeared during the fieldwork in 2014. In terms of their future plans, the Lamanilao family preferred to live in a two-bedroom house complete with all living spaces like those constructed and sold in completed housing subdivision projects.
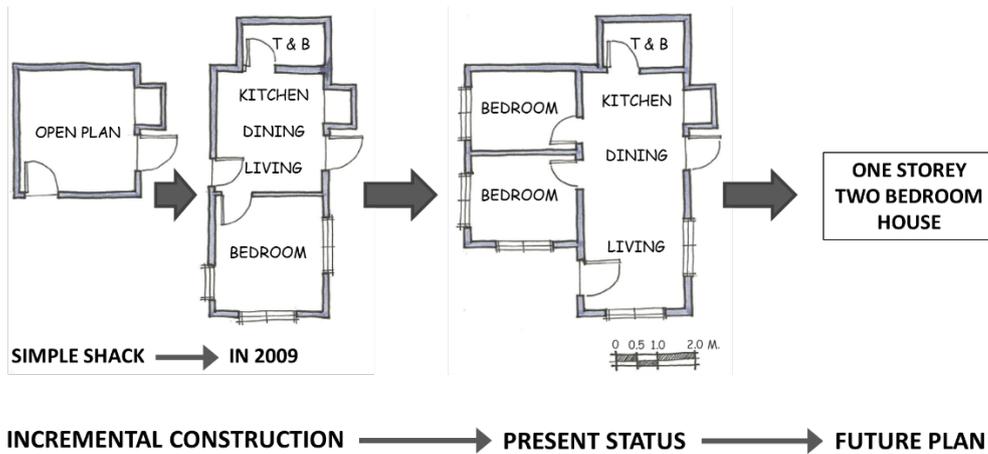
Figure 9-4. Evolution of the Lamanilao house
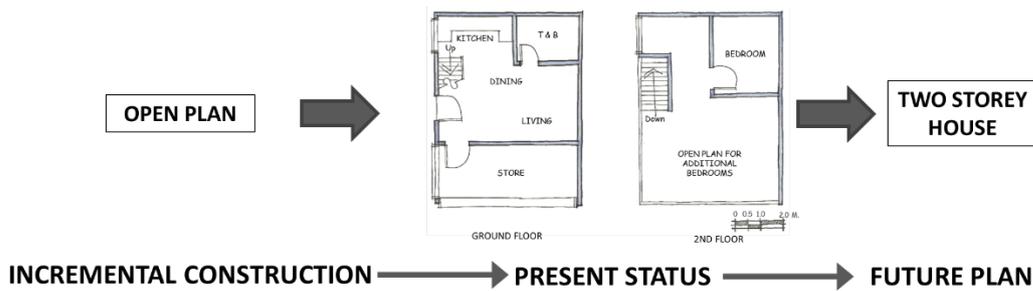
Figure 9-5. Evolution of the Abarquez house

It is noted in the previous discussions that 'informal' (Type V) housing evolved to 'in-transition informal' (Type IV) housing when the squatter inhabitants organised themselves to initiate their application and effort for security of land tenure. Eventually, 'in-transition informal' (Type IV) housing may evolve to either a one-storey or two-storey structure. This is implied in the present construction of the houses or based on the stated preference by the inhabitants during the interview process. For example, the Abarquez house (Figure 9-5) in the Arroyo Compound, began as an 'informal' (Type V) house with an open plan and toilet and bath in a 60 square metre lot. Based on its status when the fieldwork was conducted, the house was classified as 'in-transition informal' (Type IV) housing according to the classification of this study, and by the structure itself, it is anticipated that the structure will be upgraded to a two-storey house in the future. On the other hand, the Agan house (shown in Figure 9-3) of the same housing type and settlement as the Abarquez house, is currently a one-storey structure. However, with the inhabitant's stated plan to add another level, it is also expected that it will be upgraded to a two-

storey house in the future. On the contrary, there are 'in-transition informal' (Type IV) housing cases which are currently single-storey structures and will remain the same as they transcend towards 'semi-formal' (Type III) housing. For example, in the case of the Wagas house (Figure 9-6) in the Kobbler settlement, after a series of evolution and incremental improvements from 2004 to 2011, the inhabitants expressed no plans to convert their house to a two-storey structure in the future during the interview in 2014.
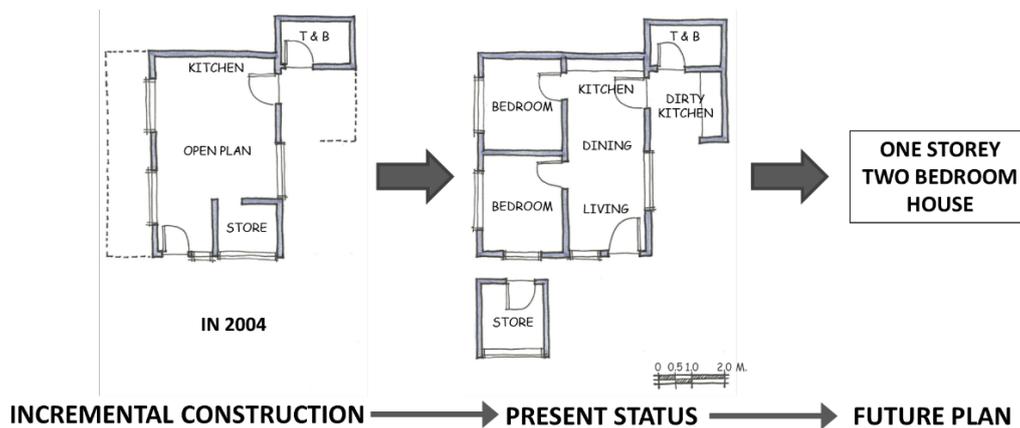
Figure 9-6. Evolution of the Wagas house
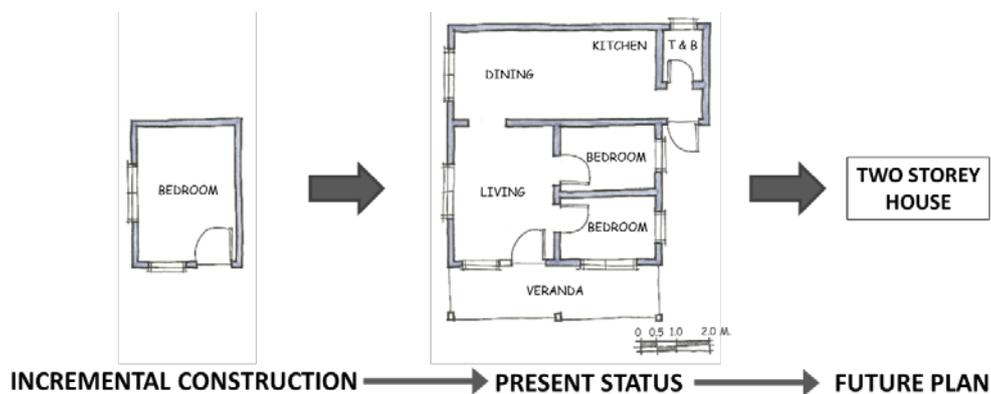
Figure 9-7. Evolution of the Domingo house

Further improvements to the security of tenure influenced the transition of 'in-transition informal' (Type IV) to 'semi-formal' (Type III) housing, in the same way as their manner of evolution towards better housing structures. For two-storey 'semi-formal' (Type III) housing units such as the Albios, Linasa, and Talin houses (shown in Figure 9-3), it is assumed that they will also be upgraded to a two-storey structure but with more permanent building materials in the future. In some cases, one-storey 'semi-formal' (Type III) housing may eventually evolve as two-storey in the future. This is exemplified with the Domingo house (Figure 9-7) in the Matina Aplaya

Shanghai Village. In which case, after the series of steps from a simple shack to a 'semi-formal' (Type III) house as it is defined in this study, the inhabitants plan for major renovations to create a two-storey building in the future.

Security of tenure underpins the evolution of urban poor housing to achieve permanence. The attainment of secure tenure may be by ownership of legal land titles after paying for the land through government assisted programmes or through direct negotiation and payment to the original private landowner. In some cases, although legal land titles are not yet owned, the regular payments for the purchase of land grants another form of secure tenure for the inhabitants. With fully secured land tenure, the 'semi-formal' (Type III) housing evolves to 'almost-formal' (Type II) housing constructed with near compliance to the standards of the building code. This phenomenon is exemplified with the cases of the Sereno house in Piapi I settlement and the Amad house in Toril II settlement, which were respectively beneficiaries of slum upgrading and sites and services programmes by the government in the 1980s. When the fieldwork was conducted in 2014 the Sereno house was classified as 'almost formal' (Type II) housing. Based on the interview with of the household head, the house began as an informal structurewhen their present settlement was a squatter site in the 1960s. It went through a series of steps from purely self-help housing until they benefited from land tenure assistance from the government. Currently, the house is a two-storey multi-family dwelling. The original household head, also the interview respondent, and his wife, are currently living in a housing unit which is part of the entire two-storey house which is occupied by the families of their children. On the other hand, the same 'almost formal' (Type II) housing, the Amad house (Figure 9-8) began with a 20 square metre plan when the inhabitants moved to this settlement in 1989. The house was completed with all living spaces, including two bedrooms in a total floor area of 40 square metres, when the fieldwork was conducted. The Amad family, being a small household only plans for bigger living area and a separate dining with an improved kitchen. Contrary to the case of the Sereno house which is currently a two-storey structure, the Amad house is expected to remain a single-storey structure in the future when it becomes a permanent house.

'Formal' (Type I) housing is attained when both land tenure and building structure are legal. At this point in the course of development, the house that is built in accordance to the standards of the building code may already be a permanent architecture, or still in the process of evolving further to meet the preference of its inhabitants. The housing cases covered by this study in progressive settlements, despite being classified as 'formal' (Type I) housing, have the same classification and description as those built in completed housing subdivision projects, and are

foreseen to evolve further from their current status. Based from a preference and future plans of the inhabitants, for the single-storey structure, this may become a two-storey structure in the future. For those which remains with the same building structure, further refurbishment means the addition of rooms with high quality building materials and finishes, making the house a permanent architecture. In the case of the Nacorda house in the Matina Aplaya Shanghai Village, classified as 'formal' (Type I) housing in this study, it went through series of steps from being an informal housing when the inhabitants moved in 1976, at a time when the present site was a squatter settlement. The house was initially built in a self-help manner by the inhabitants themselves with some assistance from the community. Until the inhabitants became beneficiaries of the government's Community Mortgage Programme, the house was classified under its current status when the fieldwork was conducted in 2014. Despite attaining 'formal' (Type I) housing status, the Nacorda family preferred bigger living spaces with individual rooms for their growing children and planned for the addition of another floor. This means that the house is expected to be a two-storey building in the future. On the other hand, the Rafales house, of the same housing type and settlement with the Nacorda house, will retain its current structural form as a single-storey house, except for further improvement of the finishes. This house went through a series of steps until it attained its current status, however, painting and other finishing were still underway when the fieldwork was conducted.
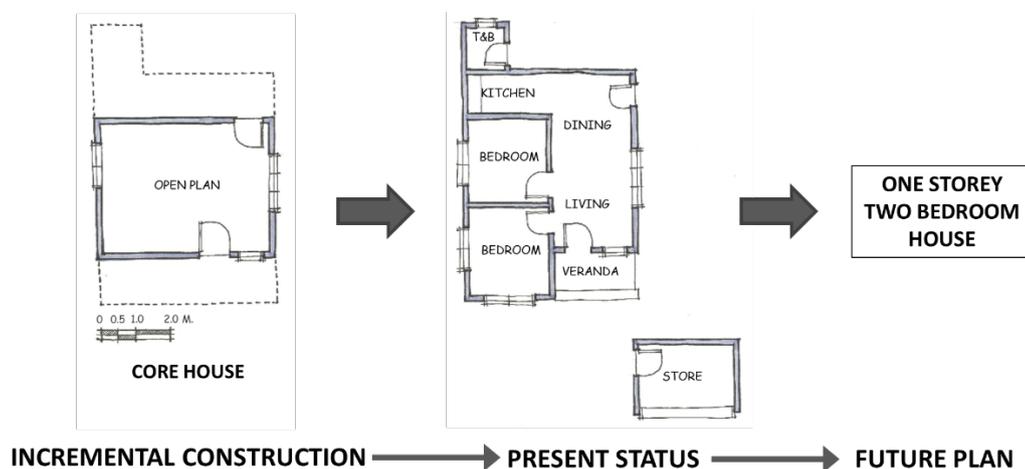
Figure 9-8. Evolution of the Amad house

The evolution of urban poor housing from a simple shack to a permanent residential building hypothesised at the beginning of this study is demonstrated in this section. The analysis of various housing cases significantly representing the different housing types from informal to formal in progressive urban settlements reveals a series of *in situ* multi-step transitions; the house itself went through a series of incremental construction stages. In each household, the

interview respondent was asked to briefly describe the family's housing preference and future plans for the house. This qualitative data derived from the accounts of the interview respondents reveals the further evolution of their houses as they evolve to become a more formal type, or achieve the status of permanent architecture. The evolution of urban poor housing is demonstrated in the way the architecture of houses from different housing types transforms from one physical form to another in the course of development. This dynamic spatial process found in progressive urban settlements reflects the various social factors apparent in developing countries. The socio-spatial processes affecting the formation of progressive housing environment were discussed with the concepts of 'multi-step transition' and 'incremental construction' of urban poor housing. In turn, housing evolves from its temporary construction to become formal architecture and a valid part of the permanent urban landscape.

9.5   Progressive development of urban settlements

The low income urban settlements in Davao City, Philippines, examined in this study were chosen to cover a variety of cases ranging from informal to formal status. The formality or informality of chosen urban settlements for the study were primarily considered based by their physical characteristics when the actual fieldwork was conducted in 2014. Other factors such as tenure and housing assistance from the government and NGOs were secondarily regarded because they were expected to influence the transitions from informal to formal status of urban poor housing and settlements. Due to the nature of slum and squatter sites, access to the chosen settlements was also based on recommendations of government housing agencies and NGOs (acknowledging the safety and security of the researcher and the assistants). This means, that the research since the actual fieldwork was conducted is exploratory in nature. Despite the literature defining variables to identify the formality or informality of housing and settlements[5], the formalities of land occupancy based from ownership of legal land titles and housing structure based from building code standards were not enough. For this reason, other qualitative variables were considered in the classification of housing cases reported in Chapter 7. These include the respondents' claims to the legality of land occupancy supported with any basis other than land title, and the respondents' and researcher's own assessment of the formality of the building structure and site development other than government standards. The multi-variate classification of low-income households resulted in the identification of five different contiguous housing types from 'informal' (Type V) to 'formal' (Type I). Counting on the number

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[5] For example, see Lim (1987) on classification of housing submarkets based on legalities of land occupancy and physical characteristics of land and housing structure.

of cases respective to each housing type per settlement, this further exploration revealed the status of the settlements and their position in the multi-step transition from informal to formal status. Mapping all the cases of urban settlements examined in this study, represents the progressive development of urban settlements. This is illustrated in Figure 9-9. In the figure, the numbers represent the housing cases respective to each housing type per settlement. The contiguity of settlement cases from informal to formal status reveals the progressive nature of urban settlements in the case of a city in a developing country. Research results about the progressive development of urban settlements and discussion in relation to empowerment of the urban poor to achieve secure tenure were published in the Passive Low Energy Architecture 2017 Edinburgh Conference (Malaque III, Bartsch & Scriver 2017).[6]

This study documented the current status of 74 low income housing in 11 urban settlements, which were chosen to cover a variety of cases from formal to informal status. For the purpose of studying the phenomenon of progressive development of urban settlements, the discussion focuses on 58 housing cases in seven progressive settlements (Figure 9-9). Contrary to planned settlements, progressive settlements are those which were inhabited by informal settlers who then became recipients of land tenure assistance from the government, or processed negotiation for purchase of their squatter land from the legal land owner, which are assumed to continuously develop over time. Contrary to observing the progressive development of a single urban settlement in a long span of time, from its informal formation towards attaining formal status, the cases presented in this study serve as snapshots of varying housing and settlement status taken at one time in 2014. Mapping the respective types of housing cases in each settlement as shown in Figure 9-9, animates the dynamic progressive development of urban settlements in the case of Davao City, Philippines. This phenomenon is parallel to the 'multi-step transition'; 'incremental construction'; and, 'hypothetical evolution' of urban poor housing discussed in the previous sections by focusing on the architecture of housing. For further exploration, this section focuses on the dynamic urban phenomenon from the wider point of view of settlement formation.

The progressive development of urban settlements began with the formation of informal settlements. The settlement sites where 'informal' (Type V) housing are located, are characterised with undeveloped sites with lack of basic services. In this study, it is evident in the Arroyo Compound and the Kobbler settlement sites.[7] In the same informal settlements, the

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[6] For copy of the full paper, see, Appendix M.
[7] For photographs of Arroyo Compound and Kobbler settlement sites, see, Figures 6-3 and 6-5, respectively.

'in-transition informal' (Type IV) housing are also located. With the same physical characteristics, the difference between the two housing types is that the householders of the latter are in the process of organising themselves to initiate improvement of land tenure.
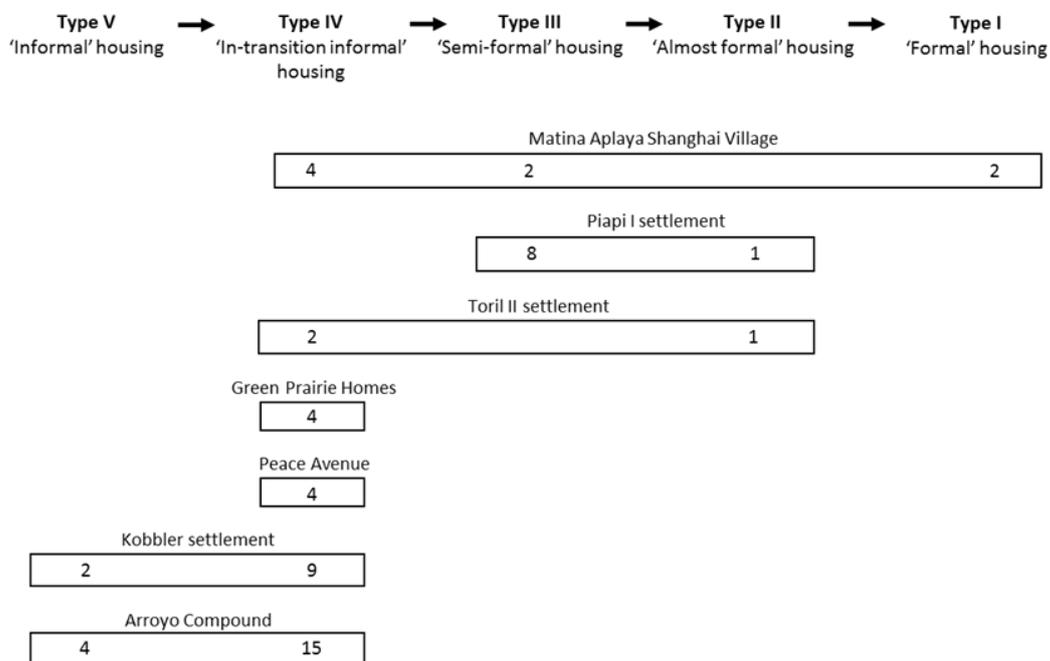
Figure 9 9. Progressive development of urban settlements

The organisation of informal householders played an important role in the progressive development of their settlements. Among other requirements, the organisation must be legally accredited by an appropriate agency such as the Presidential Commission for the Urban Poor (PCUP)[8] in order to be eligible for the government programme. In this study, there were two settlement cases which purely situates 'in-transition' (Type IV) housing. These are the Peace Avenue and Green Prairie Homes settlement sites which were beneficiaries of Land Tenure Assistance Programme (LTAP)[9]. The former is an example of 'on-site' while the latter is an example of 'off-site' LTAP project implementations. For the 'on-site' project in Peace Avenue, the progressive development of sites and services is starting to be noticed. The irregularity of the allotments reflects its initial formation as a squatter site.[10] The inhabitants of these settlements recently subscribed to the government programme in 2000, which helped them to

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[8] Pursuant to Executive Order No. 82 dated 8 December 1986, PCUP as the direct link of the urban poor to the government is mandated to accredit legitimate urban poor organisations. The accreditation is one of the requirements to avail government assistance such as the Community Mortgage Programme (CMP).
[9] LTAP is the most recent government programmes for improvement of land tenure solely implemented by the National Housing Authority based from successful techniques of the CMP.
[10] For photograph and Google satellite image of Peace Avenue settlement site, see, Figures 6-7 and 6-6, respectively.

gain a little increase in their security. With a long way to pay for the land in order to own legal titles, at the moment, they are still holding some fear of eviction at any point in time if they fail to continuously pay their rent.

The urban settlements covered by this case study, with inhabitants who had been beneficiaries of government assistance on land tenure, had progressively developed towards more formal status. For example, inhabitants in Toril II settlement had been recipients of sites and services implemented by the National Housing Authority (NHA) since 1988. As far as this study is concerned, two out three household cases are in 'in-transition' (Type IV) housing while the other one already progressed to an 'almost formal' (Type II) housing. On the other hand, the Matina Aplaya Shanghai Village, with inhabitants who had been recipients of the Community Mortgage Programme (CMP) since 1993, progressed further with varied housing types from 'in-transition informal' (Type IV) to 'formal' (Type I) as shown in Figure 9-12. Four out of eight household cases are currently in 'in-transition' (Type IV) housing; two are in 'semi-formal' (Type III) housing; and, two are in 'formal' (Type I) housing. These settlement sites were former squatter areas which progressively developed *in situ*, mainly because of government assistance for the formalisation of land tenure. In the case of these two settlements, the government programmes being implemented were the sites and services and the CMP.

Type IV
In-transition Informal Housing
(D39 Mora house)

Type III
Semi-formal Housing
(D40 Domingo house)

Type I
Formal Housing
(D42 Rafales house)

Figure 9-10. Various housing types in Matina Aplaya Shanghai Village

The earlier the implementation of tenure assistance from the government, the greater the urban settlement progressed. For example, in the case of Piapi I settlement, its inhabitants had been recipients of slum upgrading programme implemented by the NHA since 1981. Currently, eight out of nine of its household cases covered by this study are in 'semi-formal' (Type III) housing as shown in Figure 9-9. Piapi I settlement is more advanced in comparison with Toril II and the Matina Aplaya Shanghai Village settlements with beneficiaries of land tenure assistance by the government in the later dates. Most of the household cases in Toril II and the Matina Aplaya Shanghai Village settlements are in 'in-transition' (Type IV) housing, which are behind in

comparison with cases in the Piapi I settlement because their respective government programmes were implemented later in 1988 and in 1993. In reference to the discussion on 'incremental construction' of urban poor housing, the Piapi I settlement is mostly characterised by 'semi-formal' (Type III) housing, and physically appears as a slum with building structures that have become dilapidated over time. This is because the inhabitants are prioritising their investment in the improvement of land tenure rather than the incremental construction of their house. It was noted that once the inhabitants gained security of tenure, the formalisation of housing structures followed. The ultimate form of tenure security is ownership of the legal land title. However, in some cases, full security is attained by continuous payments of dues for the purchase of land through stable land tenure assistance programmes such as the CMP. This is the case of Nacorda and Rafales households in the Matina Aplaya Shanghai Village. Despite the fact that the inhabitant beneficiaries were in the process of paying dues for the purchase of the land, with their confidence to pay in full and own legal titles in due time, they were also able to refurbish their houses in accordance to the standards of the building code. Thus, these households are in 'formal' (Type I) housing which marks the end goal of progressive urban settlements characterised by formal status in terms of land tenure and housing structures.

9.6 Social factors and their influence on housing provision

Housing environment is not only the result of both creative and technical processes. In an informal housing settlement, the built environment created and settled by the urban poor themselves is importantly a social rather than merely a physical environment. In the search for sustainable development, articulated in the Philippine Agenda 21 document, the role of government, business, and civil society as key actors for sustainability of the environment is acknowledged. From the perspective of urban design, Madanipour (2006) translates them as regulators, producers, and users of built environment. Following the same framework, the social processes and their influence on housing provision in the low income sector undertaken in this case study are discussed in terms of socio-political, socio-economic, and socio-cultural processes.

9.6.1 Socio-political

 The socio-political process in housing provision reflects the act of the regulators. Viewing their role in urban design, Madanipour (2006, p. 174) mainly identifies the regulators as 'the government and its role in regulating the economy, which in the urban development process is mainly reflected in planning'. In the area of shelter provision for the low income population, the act of the regulators is manifested in the implementation of housing programmes. In Chapter 3

on the discussion of housing policy and programmes, it was noted that the Philippines is influenced by various international trends and ideologies in policy making. In addition to the major political shift in the country following the 1986 People Power revolution, it is interesting to note the historical development of housing provision, most especially in the low income sector, from a socio-political point of view.

Notable government housing initiatives in the Philippines were initiated during the Martial Law regime of President Marcos in the 1970s. The creation of the NHA and the adoption of slum upgrading and sites and services schemes were indicators of how the country's urban governance was influenced by the World Bank's interest at that time and inspired by Turner's school of thought. In this case study, these programmes played an important role in providing land tenure assistance to the informal inhabitants. In the discussion of incremental construction of housing and progressive development of settlements, it was observed that improvement of land tenure was the forerunner of the formal construction of houses and the physical development of the settlement site. For example, the Piapi I and Toril II settlements examined in this study, which were recipients of earlier slum upgrading and sites and services programmes, were able to progress formally as indicated by the presence of 'almost formal' (Type II) housing units and developed site infrastructures. Contrary to the centralised programme implementation of the Marcos regime, the land tenure assistance initiative became more participatory in nature in the post-People Power revolution period. The community-based CMP programme aimed to legalise land ownership by purchasing the squatter land from legal land owner, or alternatively, relocating the informal inhabitants to another site, encouraged the participation of NGOsto act as originators on behalf of the urban poor community beneficiaries. This shift was timely when the concept of 'enablement',[11] emerged as an international trend in the late 1980s. Furthermore, decentralised urban governance is indicated by legislation of the 1991 Local Government Code, and pro-poor housing policies were mandated by the 1997 Urban Development and Housing Act. It goes without saying, that the current socio-spatial processes in low income housing settlements manifested by active participation of the NGOs and empowered self-help initiatives of the inhabitants themselves are reflective of the current socio-political development in the Philippines.

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[11] Accordingly, the role of the state is to prescribe legislative supports to mobilise resources of the private sector, NGOs, community-based organisations, and households (Takahashi 2009, p. 113).

9.6.2 Socio-economic

The socio-economic process in housing provision reflects the act of the producers. Viewing their role in urban design, Madanipour (2006, p. 174) identifies the producers as 'those who build the city, predominantly developers and their financiers and team professionals, including designers and construction companies'. However, in the context of informal urban development, the urban poor themselves are the main producers demonstrated in self-help housing schemes found in progressive urban settlements. The urban poor, who mostly relied on transient urban labour[12] and other forms of informal income (Figure 9-11), were not qualified to access formal housing loans offered by banks and other finance and credit institutions. For this reason, they formed themselves into community savings organisations, which then, for example, provided the foundation for the organisation of the Homeless People's Federation Philippines (HPFP). In the 1990s, the HPFP originated in the dumpsites of Payatas, Quezon City, to bring together low-income housing groups. Recently, the Federation is active in 17 cities throughout the country with a documented total savings of US$ 987,844.[13]

Figure 9-11. Example of informal source of livelihood found in traditional public market

The community savings organisation offers micro credits or small loans to its members, which is the source to finance the incremental construction of housing units. In this case study, some of the informal inhabitants in the Arroyo Compound were recipients of financial assistance from the HPFP and its associated NGO, the Philippine Action for Community-led Shelter Initiatives, Inc. This is the case for the Albos house where the beneficiary was able to purchase more permanent building materials because of the financial assistance offered by the NGO. Despite the location in an informal settlement, the house, is thus classified as 'in-transition informal'

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[12] For example, the urban poor may work as skilled or non-skilled labourers in construction projects, whose work tenure is not permanent based on the span of the project or while their skills are still needed.

[13] The case of HPFP is documented in the works of the Vincentian Missionaries Development Foundation (2001); Yu and Karaos (2004); Teodoro and Co (2009); Carcellar and others (2011); and, Papeleras and others (2012).

(Type IV) housing. At the household level, the status of incremental construction of urban poor housing is the concrete indicator of the economic status of its inhabitant. In the settlement level as aggregate of households, the status of the progressive development of urban settlement is the concrete indicator of status of the local area and its part in the entire economic scenario of the city. Furthermore, the NGO's institutional role in urban poor housing provision brought the design professionals and civic organisations to offer technical support, labour, and sweat equity in the construction of houses in traditional Filipino *bayanihan* manner. It goes without saying that this case study of urban poor housing in the informal environment of the Philippines provides new insights to redefine the producers of built environment.

9.6.3   Socio-cultural

The socio-cultural process in housing provision reflects the act of the users. Viewing their role in urban design, Madanipour (2006, p. 174) refers to this broad category as the 'urban society'. In this case study, they are referred as the low income population, or the urban poor who lived in informal settlements and strived to improve their housing status until they achieved permanent architecture. The progressive form of low income housing provision observed manifests the cultural expression of self-help housing at a household level, which is extended at community level as organised self-help initiatives. In the Philippine setting, the traditional *bayanihan* spirit visually translated with 'people-carrying-a-house' promotes a unique culture of citizen participation in the provision of urban poor housing and the formation of low income settlements. *Bayanihan* was traditionally celebrated when a family who wanted to move their house offered a party to friends and neighbours who gathered to carry the house to its new site. Today, the festivities associated with the *bayanihan* tradition is reflected in the agency participation of all stakeholders in housing provision including the NGO, professional and civic groups, and community-based organisations. Currently, this unique Filipino tradition is being treated in many ways. Firstly, it is being institutionalised in the organisation of Philippine-based NGO such as the *Gawad Kalinga* (Odivilas & Odivilas 2015; Santos-Delgado 2009).[14] Secondly, it is being integrated in the implementation of foreign funded projects such as the upgrading programme of the Asian Coalition for Community Action in Baseco site in Metro Manila (Galuszka 2014). Thirdly, from the international perspective, it is seen as important component in the enhancement of social capital (Labonne & Chase 2009, 2011).

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[14] Furthermore, *Gawad Kalinga*'s operations in Davao City were discussed during a key participant interview with Rene Rieta (14 April 2014).

The Filipino *bayanihan* tradition further enhanced the organisational capability of community-based low income groups. For example, beyond savings as a main strategy in the organisation of the urban poor federation like the HPFP, the community-based savings initiative means not only a financial tool but also a social mechanism to build a network of communities. This cultural trait empowering the organisation of urban poor communities in the Philippine setting played an important role in the multi-step transition of housing. It has been discussed that the organisation of informal inhabitants to negotiate for the purchase of their squatter land, or to avail government or NGO assistance, is the first indicator of a multi-step transition from 'informal' (Type V) to 'in-transition informal (Type IV) housing. With the same transition when the informal inhabitants incrementally gain security of tenure, the incremental construction of houses start by replacing temporary building materials with better ones and standardised method of construction. In the preceding discussions on the socio-political and socio-economic processes, it is noted that the government's role in housing provision moved away from being the provider and the producers of built environment is being redefined, now referring to the urban poor themselves with institutional support from NGO. With the increasing role of culture in urban poor housing provision, it goes without saying that the socio-cultural factor must be given more value in policy making and programme implementation.

Chapter 10:   Synthesis

10.1   Summary and conclusion

In the context of unprecedented urbanisation coupled with widespread urban poverty in the developing world there is a pressing need for alternative, sustainable housing options for the urban poor. Focusing on the case of Davao City, Philippines, this case study, which is informed by rigorous fieldwork, has demonstrated a multi-step transition process in the provision of housing for the urban poor and an incremental construction process observed from the discipline of architecture. Furthermore, I have demonstrated the hypothesis that a simple shack eventually evolves to become 'formal' architecture that complies with the building code where legal tenure is attained. This multi-step transition process, in turn, leads to the progressive development of urban settlements. These parallel observations are not actually new. They were implied, not least: in the well-cited works of Turner whose scholarship was informed by his studies in the squatter settlements of Lima, Peru, in the 1960s; in the work of Lim (1987) where housing was viewed in terms of markets and submarkets; in the publication of Payne (2001) who presented a series of tenure categories with varying degrees of security; and, in the work of Greene and Rojas (2008) who defined three phases of incremental construction. What makes the findings of this case study unique is that this current phenomenon observed in this case of Davao City emerges in relation to, and enhanced by, specific developments in housing policy in the Philippines, and with the urban poor's proactive response to government intervention.

In the context of a pro-poor urban development and housing policy championed in the Philippines,[1] and the localised implementation of development programmes,[2] the urban poor speculates to live in informal settlements, with the aspiration to own a house and a lot of their own, for which they can attain legal tenure in the course of development. Although informal housing has long been viewed in a negative sense within traditional paradigms of architecture and urban design, this study shows it must be viewed, instead, as the most affordable and accessible type of shelter for the urban poor. Importantly, the study reveals that informal housing is often the first step in a multi-step transition process which precedes incremental construction, the evolution of permanent housing, and the progressive development of settlements. As Rudofsky passionately argued in his case for vernacular environment built by the people for the people (1964, 1977),[3] the housing phenomenon in low income settlements is in transition

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[1] Referring to the 1992 Urban Development and Housing Act.
[2] As mandated by the 1991 Local Government Code.
[3] The pioneering works of Rudofsky (1964; 1977) are cited in Kellet and Napier (1995, p. 10).

evolving from one form of production to another. This phenomenon needs to be better understood such that more appropriate policies and interventions can be applied in the provision of, or support for, low-income housing. It is noted that the Philippine government, in its recent housing policy approach, moved away from being a provider to focus its responsibility as a regulatory body. This recent trend in policy making has widened to be more inclusive of the participation of all agencies in housing provision, most importantly the institutional role of NGOs in empowering communities at grassroots level. Consequently, in the context of informal urbanisation, the urban poor as key stakeholders and beneficiaries, can be recognised as the main producer of the built environment. Accordingly, with the shift in the role of the government as a regulator, housing provision is now centred on the people who have the capacity to build and to provide their own shelter. In the twenty-first century with half of the world's population living in urban areas, which will only increase, the role of the people must be given more value in housing provision and the formation of the urban environment, most especially in developing countries which are rich in human resources.

10.2   Recommendations

This thesis was formulated on a critique of the failure of both the government (social welfare state policy) and the market sector (neo liberal market oriented policy) to provide a sustainable form of housing for householders in the low-income sector in developing countries. Thus, this thesis sought to explore the phenomenon of incremental housing and progressive development in low-income settlements. Despite the focus on the agency of the urban poor in the provision of their own shelter, due to perceived failures of the government and market sector, this study has proven that all actors in the provision of housing from the government through to the urban poor at the grassroots level have the potential to make a valuable contribution. For example, reiterating the discussion in the previous section, the government can focus its main role as regulator and provide assistance on improvement of tenure which was proven to be effective. The financial sector, including banks and other financing institutions, may continue to play its existing role, however, there is a need to accommodate the financial needs of the urban poor with flexible terms. Therefore, this thesis recommends a progressive policy framework that accommodates an integrated approach to housing provision, where the agency of the people and their supporting organisations (NGOs and homeowners' associations) will be given opportunities to participate in the provision of housing and formation of urban environment, settled by the society, themselves. One specific example, is to amend existing zoning regulations to accommodate 'progressive residential zones', following the principle of a multi-

step regularisation model, as a viable alternative to development zones which adhere to the principles of one-step regularisation model. Another specific recommendation, is to adopt the principle of inclusive or multi-faceted developments in urban planning, where low-income settlements can progressively develop alongside medium to high end developments.

10.3   Direction for further research

It is beyond the scope of this thesis to make concrete policy recommendations for housing and urban development, however, it is recommended that further policy research is conducted in line with governance in the Philippines. This recommendation is timely given the recent installation of the new President, Rodrigo Duterte, the former mayor of Davao City, in relation to his important policy agenda on the relocation of informal settlers (Sabillo 2016) and his advocacy for constitutional amendments to the Philippine government (Cayabyab 2016). In the context of scholarship on housing provision and formation of built environment, it is also recommended that quantitative research on the evolution of urban poor housing and the progressive development of low-income settlements should be conducted. Quantitative research methods to be employed may include computer modelling of housing structures and mapping of settlement formation along courses of incremental construction and progressive development. In this way, the subjected urban phenomenon in this thesis will be further abstracted scientifically, thereby, further contributing towards the development of new housing policies and new theoretical frameworks to interpret and facilitate housing for the urban poor with a view to more sustainable approaches to urban development where policy, politics and people all have a vital role to play.

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Appendix A. List and coding of urban settlement and household cases

Settlement		Household	
Code	Name	Code	Name
A	Arroyo Compund, Matina Crossing	01	Abarquez, Luisa C
A	Arroyo Compund, Matina Crossing	02	Agan, Marilyn
A	Arroyo Compund, Matina Crossing	03	Albos, Analyn
A	Arroyo Compund, Matina Crossing	04	Avendaño, Ernesto Jr L
A	Arroyo Compund, Matina Crossing	05	Berizo, Melania
A	Arroyo Compund, Matina Crossing	06	Castillo, Milagros D
A	Arroyo Compund, Matina Crossing	07	Celeste, Marialyn
A	Arroyo Compund, Matina Crossing	08	Magdura, Luchie
A	Arroyo Compund, Matina Crossing	09	Manalang, Marichu
A	Arroyo Compund, Matina Crossing	10	Manawatan, Rubencio T
A	Arroyo Compund, Matina Crossing	11	Masayon, Nevilla
A	Arroyo Compund, Matina Crossing	12	Namata, Alin E
A	Arroyo Compund, Matina Crossing	13	Osa, Ermelina
A	Arroyo Compund, Matina Crossing	14	Patcho, Virginia
A	Arroyo Compund, Matina Crossing	15	Puzon, Dorothy
A	Arroyo Compund, Matina Crossing	16	Taleon, Merymae
A	Arroyo Compund, Matina Crossing	17	Tano, Lolita P
A	Arroyo Compund, Matina Crossing	18	Tano, Merlinda
A	Arroyo Compund, Matina Crossing	19	Truya, Ramil
B	Kobbler Settlement, Ilang	20	Apocasas, Eduardo
B	Kobbler Settlement, Ilang	21	Balote, Miguela
B	Kobbler Settlement, Ilang	22	Baluit, Felipe
B	Kobbler Settlement, Ilang	23	Duron, Roland
B	Kobbler Settlement, Ilang	24	Lamanilao, Leonora
B	Kobbler Settlement, Ilang	25	Llemot family
B	Kobbler Settlement, Ilang	26	Nierva, Jennifer S
B	Kobbler Settlement, Ilang	27	Rabara, Mariano Jr B
B	Kobbler Settlement, Ilang	28	Sarona, Susan
B	Kobbler Settlement, Ilang	29	Sobretodo, Marlit
B	Kobbler Settlement, Ilang	30	Wagas, Dionesia
C	Peace Avenue, Bangkal	31	Abellana, Gregoria
C	Peace Avenue, Bangkal	32	Ramirez, Wilma C
C	Peace Avenue, Bangkal	33	San Nicolas, Victoria
C	Peace Avenue, Bangkal	34	Tibalgo, Adan
D	Matina Aplaya Shanghai Village, Matina Aplaya	35	Caro, Emerita
D	Matina Aplaya Shanghai Village, Matina Aplaya	36	Nacorda, Virginia
D	Matina Aplaya Shanghai Village, Matina Aplaya	37	Manlapus, Isabel
D	Matina Aplaya Shanghai Village, Matina Aplaya	38	Mendoza, Estrella
D	Matina Aplaya Shanghai Village, Matina Aplaya	39	Mora, Eddie B
D	Matina Aplaya Shanghai Village, Matina Aplaya	40	Domingo, Eliza C

Settlement		Household	
Code	Name	Code	Name
D	Matina Aplaya Shanghai Village, Matina Aplaya	41	Palma, Jairic C
D	Matina Aplaya Shanghai Village, Matina Aplaya	42	Rafales, Luciana M
E	Toril II, Lubogan, Toril	43	Amad, Danilo
E	Toril II, Lubogan, Toril	44	Nicdao, Gilda
E	Toril II, Lubogan, Toril	45	Panudaranau, Sanaoray
F	Piapi I, Quezon Boulevard	46	Aboy, Venancio
F	Piapi I, Quezon Boulevard	47	Albios, Josephine
F	Piapi I, Quezon Boulevard	48	Anticamara, Henie T
F	Piapi I, Quezon Boulevard	49	Clarin, Joseph
F	Piapi I, Quezon Boulevard	50	Linasa, Elmo Cervantes
F	Piapi I, Quezon Boulevard	51	Palma-Gil, Christian Paul
F	Piapi I, Quezon Boulevard	52	Panis, Lina
F	Piapi I, Quezon Boulevard	53	Sereno, Orlando
F	Piapi I, Quezon Boulevard	54	Talin, Yolanda
G	Los Amigos Relocation Site, Los Amigos	55	Botoy, Blesel D
G	Los Amigos Relocation Site, Los Amigos	56	Diansay, Crisgenes
G	Los Amigos Relocation Site, Los Amigos	57	Sapid, Ryan Jake
H	Tibungco Relocation Site, Tibungco	58	Dadong, Nanette O
H	Tibungco Relocation Site, Tibungco	59	Lastima, Anafie
H	Tibungco Relocation Site, Tibungco	60	Medilo, Estrella
H	Tibungco Relocation Site, Tibungco	61	Ogates, Julieta
H	Tibungco Relocation Site, Tibungco	62	Olivo, Ayris
H	Tibungco Relocation Site, Tibungco	63	Palma-Gil, Noralyn
I	Association of Differently Abled Persons, Indangan	64	Cawaling, Milona
I	Association of Differently Abled Persons, Indangan	65	Dalida, Emma P
I	Association of Differently Abled Persons, Indangan	66	Dela Cruz, Josephine
J	Green Praire Homes, Toril	67	Flores, Irenica H
J	Green Praire Homes, Toril	68	Flores, Isabelita
J	Green Praire Homes, Toril	69	Pepecan, Avelina L
J	Green Praire Homes, Toril	70	Rico, Olivia
K	Kadayawan Homes, Bangkal	71	Brion, Shirley Mercedes S
K	Kadayawan Homes, Bangkal	72	Gomez, Concepcion M
K	Kadayawan Homes, Bangkal	73	Jayo, Richael V
K	Kadayawan Homes, Bangkal	74	Palacio, Amalia D

Appendix B. Government housing agencies and NGOs who assisted the fieldwork

Government Housing Agencies		
Name	Recommended settlements	Number of household cases
Philippine Commission for the Urban Poor (PCUP)	Kobbler Settlement	11
National Housing Authority (NHA)	Peace Avenue	4
	Matina Aplaya Shanghai Village	8
	Toril II	3
	Piapi I	9
	Association of Differently Abled Persons	3
	Green Prairie Homes	4
	Kadayawan Homes	4
City Government of Davao	Tibungco Relocation Site	6
NGO		
Name	Recommended settlements	Number of household cases
Homeless People's Federation Philippines – Philippine Action for Community-led Shelter Initiatives, Inc. (HPFP-PACSII)	Arroyo Compound	19
	Los Amigos Relocation Site	3

Appendix C. Survey questions for urban settlement inhabitants

1. Respondent's personal background
1.1 Name (optional) …………………………………………………..2 Age ……………………..
1.3 Gender □ Male □ Female
1.4 Civil Status □ Single □ Married □ Widowed □ Divorced
1.5 Occupation or Source of Income/Livelihood ………………………………………………..
1.6 Estimated Income □ Daily □ Weekly □ Monthly Amount in Philippine Pesos…………

2. Assessment of the physical built environment
2.1 Assessment of house design and construction
    2.1.1 Number of people living in the house …………………………………………………
    2.1.2 Household composition □ Single or nuclear family □Multi/extended family
    2.1.3 Does the building have a building permit? □ Yes □ No □ In-process
      If yes, state the date when it was granted ……………………………………………
    2.1.4 Based on the view of the respondent, is the house built in accordance with the
    building code? □ Yes □ No □ Not Sure
2.1.5 Does the inhabitant have other concerns about the construction of house? □ Yes □ No
      If Yes, please enumerate …………………………………………………………………

2.2 Assessment of land tenure, site development and services
    2.2.1 Ownership of the land □ Legal □ Illegal
      If legal, what document serves as the basis …………………………………………
      If illegal, is it in-process for legalisation? □ Yes □ No
    2.2.2 Is the inhabitant an: □ Owner □ Renter □ Other special arrangement ……………
    2.2.3 Does the settlement have a development permit? □ Yes □ No □ In-process
      If yes, state the date when it was granted …………………………………………
    2.2.4 Based on the view of the respondent, is the site complete with infrastructure and
    services? □ Yes □ No □ Not Sure
    2.2.5 Does the inhabitant have other concerns about the provision of infrastructure and
services? □ Yes □ No If Yes, please enumerate …………………………………..

3. Movement of the inhabitant from one type of settlement to another
3.1 Information about the previous settlement
    3.1.1 Where did the inhabitant settle previously? …………………………………………..
    3.1.2 Did the house have a building permit? □ Yes □ No
    3.1.3 Was the house built in accordance with the building code? □ Yes □ No
    3.1.4 Did the settlement have a development permit? □ Yes □ No
    3.1.5 Was the site development complete with infrastructure and services? □ Yes □ No
3.2 Information about the movement
    3.2.1 When did the inhabitant move to the present settlement? …………………………….
    3.2.2 What were the reasons for moving to the new settlement? …………………………….

3.3 Information about the future plans of the inhabitant

   3.3.1 What are the plans for the improvement of the house? ………………………………

   3.3.2 What are the plans to improve the security of tenure of land and site development? ………………………………………………………………………………………

   3.3.3 Will approval be obtained for any changes/alterations?   □ Yes   □ Not necessary

4. Living and community spaces provided

4.1 Information about the living spaces provided in the house

   4.1.1 During the initial stage, what are the living spaces that were provided?

      □ Living □ Dining □ Kitchen □ Toilet & Bath □ Bedroom/s: No. of bedroom/s…….

      □ Others ………………………………………………………………………………....

      Estimated total floor area ……………………… square metres

   4.1.2 Who were the agents in the provision of initial living spaces?

      □ Government   □ NGO   □ Private sector   □ Civic/professional organisation

      □ Community organisation   □ Personal initiative   □ Other ………………………

   4.1.3 At present status, are there living spaces that were added and provided?

      □ Yes   □ None

       If yes, what are they?

      □ Living □ Dining □ Kitchen □ Toilet & Bath □ Bedroom/s: No. of bedroom/s………

      □ Others ………………………………………………………………………………......

      Estimated total floor area ………………………. square metres

   4.1.4 Who were the agents in the provision of additional living spaces?

      □ Government   □ NGO   □ Private sector   □ Civic/professional organisation

      □ Community organisation   □ Personal initiative   □ Other ………………………

4.2 Information about the community spaces provided in the settlement

   4.2.1 During the initial stage, what were the public facilities provided? (e.g. Basketball court, etc.)

       Please enumerate ……………………………………………………………………………

   4.2.2 Who were the agents in the provision of initial public facilities?

      □ Government   □ NGO   □ Private sector   □ Civic/professional organisation

      □ Community organisation   □ Personal initiative   □ Other ………………………

   4.2.3 At present, what are the public facilities that are added? (e.g. Basketball court, etc.)

       Please enumerate ……………………………………………………………………………..

   4.2.4 Who are the agents in the provision of additional public facilities?

      □ Government   □ NGO   □ Private sector   □ Civic/professional organisation

      □ Community organisation   □ Personal initiative   □ Other …………………………

4.3 Information about inhabitant's preference for dwelling and community spaces

   4.3.1 What are the domestic living spaces preferred by the inhabitant for their house?

      …………………………………………………………………………………………

   4.3.2 How will these domestic living spaces be planned and designed?

      …………………………………………………………………………………………

   4.3.3 What are the public facilities preferred by the inhabitant for their settlement?

      …………………………………………………………………………………………

4.3.4 How will these public facilities be planned and designed?

……………………………………………………………………………………………

5. Incremental construction of urban poor housing *(to be supported with physical documentation)*

5.1During the initial stage, what were the building materials and methods of construction?

…………………………………………………………………………………………….

5.2 What were the incremental improvements made to the house?

……………………………………………………………………………………………

5.3 At present status, what are the building materials and methods of construction applied?

…………………………………………………………………………………………….

6. Other comments by the inhabitant on any other aspect of the built

environment ………………………………………………………………………………

7. Researcher's independent assessment on the housing and settlement

7.1 Is the house built in accordance with the building code?　　□ Yes　　□ No

Comments ……………………………………………………………………………………

7.2 Is the site complete with infrastructure and services?　　　□ Yes　　□ No

Comments ……………………………………………………………………………………

8. Physical documentation of the house

8.1 Floor plan sketch

8.2 Elevation and other architectural and structural details to be taken by photographs

Appendix D. Sample signed consent form

THE UNIVERSITY
of ADELAIDE
AUSTRALIA
School of Architecture and
Built Environment

CONSENT FORM

1. I have read the attached Information Sheet and agree to take part in the following research project:

Title:	A Study of Housing Provision and Settlement in Davao City, Philippines
Ethics Approval Number:	H-2013-091

2. I have had the project, so far as it affects me, fully explained to my satisfaction by the research worker. My consent is given freely.

3. Although I understand the purpose of the research project it has also been explained that involvement may not be of any benefit to me.

4. I agree that I will be identified and my personal results will be divulged in the thesis manuscript and publications.　　　　　Yes ☑　　No ☐

5. I understand that I am free to withdraw from the project at any time.

6. I agree to the interview being audio recorded.　　　　　Yes ☐　　No ☐

7. I am aware that I should keep a copy of this Consent Form, when completed, and the attached Information Sheet.

Participant to complete:

Name:　　　　　　　.. Signature: ..　　　　　.....Date: 12 Mar 2014

Researcher/Witness to complete:

I Isidoro Malaque III have described the nature to　　　　.........
the nature of the interview to be carried out. In my opinion he/she understood the explanation.

Signature of interviewer: ....　　　　　........... Date: 12 Mar 2014

Appendix E. Interview questions for officers in government housing agencies

1. Personal background
1.1 Name of person interviewed……………………………………………………on………………………
1.2 Position in the government …………………………………………………………………………..
1.3 Government institution……………………………………………………………………………….
1.4 Address…………………………………………………………………………………………………
1.5 Gender: ....Male   ………………Female
1.6 How long have you worked for this institution? ....
1.7 How long have been in your present position? …………………………………………………….

2. The following questions are about the housing programmes delivered by your agency
2.1 Does your office serve the national or local government? …………………………………………..
2.2 What is the basic function of your agency in the delivery of housing? ………………………………
2.3 Please identify the government housing programmes delivered by your agency:
        …………………………………………………………………………………………………
2.4 Out of these housing programmes, which do you believe is the most significant programme?
        …………………………………………………………………………………………………

3. The following questions will focus on the most significant housing programme in your opinion
3.1 What are the policies that serve as the bases in implementing the housing programme?
        …………………………………………………………………………………………………
3.2 Does the implementation of this programme is derived from a publicly announced political
decision?   ……………… Yes   …………….. No
        If Yes, please explain further …………………………………………………………………
        …………………………………………………………………………………………………
3.3 What is the source/s of funds for the implementation of the housing programme?
        …………….. Foreign aid/loan
        …………….. National government
        …………….. Local government
        …………….. Private funds
        ……………..... Other, please list ………………………………………………………………….
3.4 Is there an expected contribution and responsibility from the beneficiaries?
        ……………… Yes   …………….. None
        If Yes, what is it?
        ……………… Money: How much? ………………………………………………………….
        ……………… Amortization or repayment:
                …..Monthly ….. Quarterly ….. Annual: How much? ……………………………….
                How many years to pay? ………………………………………………………………
        ……………… Sweat equity: What is the minimum requirement? ………………………………...
        ……………… Other, please enumerate …………………………………………………………
3.5 Is there an expected contribution from the NGO in the implementation of the programme?
        ……………… Yes   …………….. None
        If Yes, please enumerate ………………………………………………………………………
        …………………………………………………………………………………………………..
3.6 What are the criteria in identifying an urban poor beneficiary? ……………………………………
        Please rank your answer above from number 1 as the most important eligibility criterion.

3.7 During the planning and design, were the urban poor involved or given a chance to participate?

……………… Yes ……………. No

If Yes, what participatory activities were conducted:

……………... Workshop

……………... Public consultation

………………Other, please specify ……………………………………………………………….

If No, who is responsible for the planning and design?

……………… Government planners, architects and engineers

……………… Private planners, architects and engineers

……………… Foreign consultants

……………… Volunteer professional organisations

………………Other, please specify ……………………………………………………………….

3.8 Is the housing programme planned and design based on the cultural practices of the beneficiaries?

……………… Yes ……………. No

If Yes, what practices and how are they taken into account? …………………………………………

4. The following questions are about your personal evaluation of the housing programme

4.1 Are you personally involved in the implementation of the housing programme?

……………… Yes ……………. No

If Yes, proceed to the following question.

If No, jump to question 4.3.

In the following questions 4.2 and 4.3, you may choose not to answer them.

4.2 What are your challenges and experiences in dealing with the following key players:

4.2.1 Elected government officials or politicians ………………………………………………………….

4.2.2 Appointed officials in government agencies …………………………………………………………..

4.2.3 Staff in government implementing agencies …………………………………………………………..

4.2.4 Urban poor housing beneficiaries …………………………………………………………………

4.2.5 NGOs …………………………………………………………………………………………

4.2.6 Private sector (financiers, builders and suppliers) …………………………………………………..

4.2.7 Others: …………………………………………………………………………………………..

4.3 What evaluations have been made about the success/failures of the housing programme?

………

………

5. Do you have another housing programme that you want to add in this interview?

……………… Yes, Give the name of the programme ………………..

……………… No

If Yes, repeat the interview from question 3.

If No, end the interview.

Appendix F. Interview questions for officers in NGO sector

1. Personal background
1.1 Name of person interviewed…………………………………………………….on………………………
1.2 Position in the NGO …………………………………………………………………………………………..
1.3 NGO institution……………………………………………………………………………………………………
1.4 Address………
1.5 Gender: ....Male   ………………Female
1.6 How long have you worked in the NGO? ....
1.7 How long have been in your present position? ………………………………………………………….

2. The following questions are about the urban poor housing projects delivered by your NGO institution
2.1 Does your NGO a local, national or international organisation? ………………………………………….
2.2 What is the basic function or involvement of your NGO institution? …………………………………….
2.3 Please identify the urban poor housing projects delivered by your NGO institution:
…….
2.4 Out of these housing projects, which do you believe is the most significant project?
………………………………………………………………………………………………………

3. The following questions will focus on the most significant housing project in your opinion
3.1 What are the influences that serve as the bases in implementing the housing project?
………………………………………………………………………………………………………
3.2 Does the implementation of this project is derived from any personal or organisational influence?
……………… Yes   …………….. No
If Yes, who is this person or institution? Please explain further …………………………………….
3.3 What is the source/s of funds for the implementation of the housing programme?
…………….. Foreign aid/loan
…………….. National government
…………….. Local government
…………….. Private funds
……………..... Other, please list ………………………………………………………………………..
3.4 Is there an expected contribution and responsibility from the urban poor beneficiaries?
……………… Yes   …………….. None
If Yes, what is it?
……………… Money: How much? ……………………………………………………………………
……………… Amortization or repayment:
…..Monthly ….. Quarterly ….. Annual: How much? ………………………………….
How many years to pay? ………………………………………………………………..
……………… Sweat equity: What is the minimum requirement? …………………………………..
……………… Other, please enumerate ………………………………………………………………..
3.5 Is there an expected contribution from the government in the implementation of the project?
……………… Yes   …………….. None
If Yes, please enumerate ……………………………………………………………………………………
3.6 What are the criteria in identifying an urban poor beneficiary? …………………………………………….
Please rank your answer above from number 1 as the most important eligibility criterion.
3.7 During the planning and design, were the urban poor participated or given a chance to participate?
……………… Yes   …………….. No

If Yes, what participatory activities were conducted:

……………... Workshop

……………... Public consultation

………………Other, please specify …………………………………………………………………….

If No, who is responsible for the planning and design?

……………… Government planners, architects and engineers

……………… Private planners, architects and engineers

……………… Foreign consultants

……………… Volunteer professional organisations

………………Other, please specify …………………………………………………………………….

3.8 Is the housing project planned and design based on the cultural practices of the beneficiaries?

……………… Yes   …………….. No

If Yes, what practices and how are they taken into account? ……………………………………

4. The following questions are about your personal evaluation of the housing project implementation

4.1 Are you personally involve in the implementation of the housing project?

……………… Yes   …………….. No

If Yes, proceed to the following question.

If No, jump to question 4.3.

In the following questions 4.2 and 4.3, you may choose not to answer them.

4.2 What are your challenges or experiences in dealing with the following key players:

4.2.1 Elected government officials or politicians ………………………………………………………….

4.2.2 Appointed officials in government agencies …………………………………………………………...

4.2.3 Staff in government implementing agencies …………………………………………………………..

4.2.4 Urban poor housing beneficiaries ………………………………………………………………………

4.2.5 NGOs ……………………………………………………………………………………………………

4.2.6 Private sector (financiers, builders and suppliers) …………………………………………………..

4.2.7 Others: …………………………………………………………………………………………………..

4.3 What evaluations have been made about the success/failures of the housing programme?

……..

5. Do you have another housing project that you want to add in this interview?

……………… Yes, Give the name of the project ………………...

……………… No

If Yes, repeat the interview from question 3.

If No, end the interview.

Appendix G. Human Research Ethics Committee approval

THE UNIVERSITY
of **ADELAIDE**

RESEARCH BRANCH
OFFICE OF RESEARCH ETHICS, COMPLIANCE AND
INTEGRITY

SABINE SCHREIBER
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CRICOS Provider Number 00123M

13 January 2014

Dr K Bartsch
Architecture

Dear Dr K Bartsch

PROJECT NO: **H-2013-091**
A study of housing provision and settlement in Davao City, Philippines

I write to advise you that the Human Research Ethics Committee has approved the above project. Please refer to the enclosed endorsement sheet for further details and conditions that may be applicable to this approval. Ethics approval is granted for a period of three years subject to satisfactory annual progress reporting. Ethics approval may be extended subject to submission of a satisfactory ethics renewal report prior to expiry.

The ethics expiry date for this project is: 31 January 2017

Where possible, participants taking part in the study should be given a copy of the Information Sheet and the signed Consent Form to retain.

Please note that any changes to the project which might affect its continued ethical acceptability will invalidate the project's approval. In such cases an amended protocol must be submitted to the Committee for further approval. It is a condition of approval that you immediately report anything which might warrant review of ethical approval including (a) serious or unexpected adverse effects on participants (b) proposed changes in the protocol; and (c) unforeseen events that might affect continued ethical acceptability of the project. It is also a condition of approval that you inform the Committee, giving reasons, if the project is discontinued before the expected date of completion.

A reporting form for the annual progress report, project completion and ethics renewal report is available from the website at http://www.adelaide.edu.au/ethics/human/guidelines/reporting/

Yours sincerely

Dr John Semmler
Convenor
Human Research Ethics Committee

THE UNIVERSITY
of **ADELAIDE**

RESEARCH BRANCH
OFFICE OF RESEARCH ETHICS, COMPLIANCE AND
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CRICOS Provider Number 00123M

Applicant: Dr K Bartsch

School: Architecture

Project Title: *A study of housing provision and settlement in Davao City, Philippines*

THE UNIVERSITY OF ADELAIDE HUMAN RESEARCH ETHICS COMMITTEE

Project No: **H-2013-091**   RM No: 0000017752

APPROVED for the period until: **31 January 2017**

Thank you for the responses dated 18.12.13 and 6.1.14 to the matters raised by the Committee. It is noted that this study will be conducted by Isidoro Malaque III, Phd Candidate.

Refer also to the accompanying letter setting out requirements applying to approval.

Dr John Semmler   Date: 9 January 2014
Convenor
Human Research Ethics Committee

Appendix H. 39th IAHS World Congress on Housing conference paper

FROM INFORMAL TO PIRATE URBAN SETTLEMENT: A CASE IN DAVAO CITY, PHILIPPINES

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Abstract

Housing policies and programmes in developing countries assume to replicate the dominant mode of housing provision in advanced industrialised countries described as instant development. This conventional housing strategy fails to recognise the progressive development of urban settlement and the transition that the urban poor will undergo in the different housing submarkets, which is evident in developing country situation. The aim of this paper is to discuss and present the incremental construction of the dwelling units and the initial steps in the transition of an informal settlement into becoming a pirate settlement in Davao City, Philippines. The case study focuses on Kobbler Settlement that is a federated urban poor settlement that includes 12 homeowners' associations. Kobbler was established as informal settlement in 2003 when most of the urban poor residents settled in to avoid paying high rents in the city centre. Some settlers were also invited by their relatives and friends to join them in the new settlement. The pioneering occupants accessed the land through an informal negotiation with a caretaker. Some occupants who settled later acquired their lots through purchase of rights from original occupants. Initial dwellings were mostly constructed as simple shacks and huts using organic building materials, and were replaced later with more permanent materials. Homeowners' associations are assisted by non-governmental organisations for their organisational capacity to improve their security of land tenure by availing community mortgage financing or by negotiating with the legal landowner for purchase of the land. There may be complexities in terms of legality of the occupancy of land and the status of the houses in Kobbler settlement. However, there is an apparent indication that the informal settlement is in transition to becoming a pirate settlement, which is the initial step to becoming a legal settlement in due time. The initiatives of the urban poor and non-governmental organisations which may need regulatory actions from the government may be considered in the formulation of shelter strategies. In this way, it is hoped to achieve a more feasible housing policies and programmes better fit for developing countries.

1. Introduction

The increasing urban population threatens the sustainability of the environment of cities in developing countries. In addition, the urbanisation of poverty is evident in the lives of the urban poor in squatter settlements. Due to lack of affordable housing, the urban poor insisted to live in squatter settlements in the urban area where they can easily access their livelihood. Because their informal settlements are unplanned, this phenomenon is viewed negatively and modern planning methods fail to recognise the dynamic transition that an urban settlement will undergo from one stage of development to another.

Recognising that the urban poor play an important role in a developing economy, many governments attempt to provide shelter for the urban poor population. However, governments in developing countries misunderstand how the urban economy works and fail to implement the right housing policies and programmes [1]. Moreover, these housing policies and programmes assume to replicate the dominant mode of housing provision in advanced industrialised coun-

tries described as 'instant development' [2]. This is also referred as 'one-step regularisation model' that is a norm to transfer households from the informal settlement into a legal settlement in a single step [3]. In a market oriented housing policy, this is also referred as 'product approach' where housing is delivered complete to the homeowners through a sophisticated system in the housing market [4]. These mentioned approaches toward feasible delivery of housing may be successful in developed countries, but they may not necessarily fit in developing countries like the Philippines. Thus, there is a need to understand the underlying phenomenon and the actions of key players on the provision of housing for the urban poor in order to formulate a more feasible housing policy.

2. Progressive Development of Urban Settlements

Progressive form of urban development is a phenomenon in developing countries. This argument is implied in several academic publications. Lim [5] presents the 'multi-step transition model' as an alternative to the 'one-step regularisation model'. Lim argues that the urban poor normally have to undergo a multi-step transition through the different housing submarkets from living in a squatter settlement into becoming an owner of a dwelling in a legal settlement. This transition goes with the different stages that the urban poor will also undergo while improving their economic and living status in the city. In terms of security of tenure, Payne [6] claims that there is a continuum of tenure categories that range in different levels of security. The categories cover the tenure status of the urban poor from being a pavement dweller to becoming a freehold owner as the ultimate legal tenure category. Burgess [7] on the other hand on his classification of urban settlements based on genetic principle hypothesises that a squatter settlement will eventually develop into a pirate settlement. This transition happens when the organised homeowners' association will negotiate with the legal landowner for purchase of the rights of landownership. This pirate settlement later will end up as legal settlement after all legal requirements are complied. Legal requirements also include the finishing of housing structures and site development in compliance to building codes, zoning, and other urban development regulations. To illustrate the incremental housing phenomenon, Greene and Rojas [8] describes it as process-based in nature with three phases. It starts with access to land for residential use, which is followed by construction of a basic habitable nucleus, and end up with incremental improvement of dwellings. Supporting the progressive form of urban development and the incremental construction of urban poor dwellings through an enabling strategy may contribute to solving the housing problem in cities of developing economies. In order to apply this theoretical view in the local Philippine setting, thus, the aim of this paper is to present and discuss a squatter settlement in Davao City that is in the process of becoming a pirate settlement.

3. Case Study
3.1. Research Methodology

The case study was conducted in an urban poor settlement that covers a wide area and includes federated homeowners' associations of urban poor, thus the fieldwork can be done in one place. The fieldwork was conducted in periodic visits to the settlement for two months from January to February 2012. Access to the urban poor settlement was in coordination with the local government authorities and officers of the homeowners' associations. Out of 12 urban poor homeowners' associations in the settlement, the interviews were conducted in the three associations that include Mountain Breeze, United Neighbourhood, and Hidden Ville. For the individual cases, semi-structured personal interviews were facilitated to at least 30 households. The basic qualitative variables in the interview schedule include the respondents'

previous residence and tenure status, the year and their reasons for inhabiting in the new settlement, the initial and incremental construction of their dwellings, and other important information that were included during the discussion. Photographs and sketches were taken for physical documentation of the houses. Relevant secondary data related to the formation of the settlement and other homeowners' associations were also collected. The aim of the fieldwork was to gather qualitative data to describe a case on the transformation of an informal settlement into a pirate settlement. This means that the number of respondents on this paper does not necessarily be statistically representative to the entire population of the urban poor settlement.

3.2. The Study Area: Davao City, Philippines

The Philippines is an archipelago located in Southeast Asia. The National Statistics Office (NSO) reports that the Philippine population as of 2010 is 92.34 million with an annual growth rate of 1.90 per cent. Davao City as the case study area of this paper is located in Southern Mindanao Region. NSO also reports that out of 33 highly urbanised cities, Davao City is the only city outside the National Capital Region with a population that surpassed one million. It has a total population of 1.45 million, and like any other cities in the country, Davao City is migrated by urban poor migrants who settled in slum and squatter settlements.

There are numerous housing programmes aimed to provide shelter for the urban poor in Davao City as attempts to solve the housing problem. As example, there are reported relocation sites provided by the city government. This includes the Panacan Relocation Site located 13 kilometres from the city centre, Tibungco Resettlement Area located 18 kilometres from the city centre, and Mintal Relocation Area located 14 kilometres from the city centre [9]. In our concluded research on the assessment of shelter provision for the lower income sector in the cities of Davao, Samal and Panabo and municipality of Sta. Cruz [10, 11], we found that access to land through lot acquisition is mostly assisted by both local government units and national government housing agencies. The physical housing stock is mostly provided by the urban poor beneficiaries themselves. This self-help initiative and ingenuity of the urban poor is supported by non-governmental organisations (NGO), and the provision of site and services were done in phases through the lobbying of organised homeowners association for limited assistance from the government. In Davao City case, there are housing initiatives for the urban poor supported by NGOs. Teodoro and Co [12] report the involvement of the Homeless People's Federation of the Philippines. Luansang, Boonmahathanakorn and Domingo-Price [13] and the VMSDFI Manila [14] also mention the same involvements by the NGOs that are involved in urban poor housing. Despite of these initiatives from the government and NGOs, the urban poor housing problem in Davao City needs further attention. In order to better understand the progressive development of urban poor housing and settlement, this paper deals on the case of Kobbler Settlement that is a squatter settlement in Davao City which is in the process of becoming a pirate settlement.

3.3. The Kobbler Settlement

Kobbler Settlement was established in 2003 as an informal settlement when a group of families who lived in the city centre moved into the area. It is located in a sprawling suburban area adjacent to the industrial zone approximately 15 kilometres from the city centre in the northeast direction. Its political boundaries belong to Barangay Ilang, Bunawan District, Davao City. It has a total land area of 24 hectares. The site is supposed to be the location of a defunct export processing zone development project. The area is composed of consolidated land parcels. Land ownerships of some land parcels are under litigation and most of

them are under the management of commercial banks. There are at least 2,000 registered households under 12 federated homeowners' associations. Each association is responsible for maintaining the membership by implementing its own rules and regulations, and collecting monthly dues for their savings. These savings are mainly intended to initially fund for the purchase of the land should the negotiation with the landowner is finalised. However while negotiations are in process, the savings are also used to fund for lot surveys, initial setting up of utilities, processing of documents, and other related legal expenses.

3.4. The Urban Poor Households

This paper covers the interviews with at least 30 households who belong to at least three homeowners associations that include Mountain Breeze, United Neighbourhood, and Hidden Ville. The respondents in this case study includes from those pioneers in 2003 up to those who later settled in 2010. Most of these residents previously settled in slums and squatter areas in Agdao district and in some other places in the city centre. Almost all of them were previous renter in a slum or in a squatter dwelling, or an owner of a squatter dwelling unit. The Planas Family is the only respondent who originally came from the country's capital in Manila, who settled as one of the pioneers in Kobbler in 2003 when they learned about this new settlement from their relatives in Davao City. The Apocasas Family and Araquil Family came from Nabunturan, Compostela Valley and Butuan City, respectively. These two other families came from another province and city in Mindanao, who decided to settle for good in Davao City. The Apocasas family own a farm property in Compostela Valley, however, they live in Davao City because their children are studying in college. For them, to settle in Kobbler will avoid them from paying high rent for an accommodation in the city centre.

The main reason why many families moved to Kobbler Settlement is to avoid paying high rent in the city centre. It is because most of them are landless urban poor residents, and that their only way to access shelter in the city is by renting in a slum or squatter dwelling unit. One of them is couple in Cajoles Family who are already old enough to work. Since they cannot afford to pay a rent anymore, they decided to settle for free in Kobbler. Most of the residents were also invited by friends or relatives to settle with them in Kobbler. Some of them were convinced that this will be their opportunity to start and establish a house of their own without the burden of raising funds for high equity in the case of mortgage or long-term loans. Others consider their new found shelter as an investment for their children in the future, and found it as a more peaceful and cleaner neighbourhood than their previous settlement in the city centre. The Ababat Family who runs a small grocery store at the front of their house found the area promising for their business ventures. Some of the respondent families moved in the new settlement because their previous one was already short of space for their growing children. Some were also affected by urban developments, thus they need to transfer to another place.

3.5. The Urban Poor Dwellings

The new settlers in Kobbler Settlement accessed the land in several informal ways. The Baluit Family as one of the pioneers who settled in 2003 accessed the land through a caretaker but they do not have the knowledge who really owns the land. There was no mention if the Baluit Family paid an amount to a caretaker, but the Planas Family who is also a pioneer accessed their lot for free. Both of the families occupied a lot with an area of 100 square metres each. In the same year, the Ababat Family who foresees a business opportunity in the new settlement purchased two adjoining lots from original occupants for a total amount of 16,000 Philippine pesos. The Nierva Family who settled later in 2005 also purchased a lot from an original occupant for a lower amount of 2,500 Philippine pesos. In 2006, the Pondar

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Family occupied an area that they described as grassland and paid an amount of 500 Philippine pesos to a caretaker for an 80 square metre lot. Initial access to land is done through negotiation with a caretaker who is supposed to secure the area from invasion of squatters. There are some new settlers who accessed the land for free, but for those who paid their lots, there was no fix amount that a caretaker collects from them.

The area of individual lots varies which depend on the preference of the settlers. A new settler can choose for an 80 square metre or a 100 square metre lot. Those who choose the 100 square metre lot area preferred for more spaces. However, for those who preferred the lesser 80 square metre lot area were already considering the amount they need to raise should the purchase of the land from the legal owner will be done. There are settlers who acquired two adjoining lots and most of them acquired the lots by purchasing the rights of the original occupants.

Most of the initial dwelling units are simple shacks that measure eight feet by eight feet or eight feet by ten feet. These layouts follow the four feet by eight feet plywood sheet that is used as standard module in building the structure. Coco lumber from the main trunk of coconut tree is used as the basic structural material as substitute for the hardwood. In addition to plywood sheet, bamboo slat material is also used for walls because it provides both privacy and natural ventilation. Thatched palm leaves are mainly used as roofing material, but there are some settlers who believe that using corrugated galvanised iron sheet at the start means a worthy investment. In the case of the Rabara Family, when the settlement started in 2003, they only set up a simple hut made of bamboo and thatched palm leaves to qualify for membership to the homeowners' association but they did not settled the house until the following year. In contrast, the Ababat Family who intended to run a business in the new settlement already invested a bigger house with small grocery store in front. Like this family, there are also several households that are not included as respondents of this survey in Kobbler Settlement whose houses are already made to be more permanent. They are also operating businesses such as selling basic construction materials and hardware, clothing, foods, and other basic commodities.

In the construction of initial dwelling units, most of the simple shacks and huts similar to traditional vernacular houses in rural areas in the Philippines include only a single interior space for living and dining that also serves as bedroom during night time. Usually a small makeshift kitchen is located at the back of the house. Makeshift toilet and bath is located in a remote place at the backyard, and in some instances this is shared by a group of neighbours who also share for the installation of the pipeline and payment of water bills. Eventually, there were incremental improvement of these simple shacks and huts based on the needs and preference of the occupants in relation to their capacity to purchase building materials and pay for the labour.

The incremental improvement of the houses includes the addition of rooms and the replacement of rotted original organic building materials. Bamboo, coco lumber, and plywood sheet as organic materials easily decay due to constant exposure of the elements and termite attacks. Usually, the initial replacement for the original material in the exterior walls is concrete hollow block, of which the finishing with plain cement may be done later. In the interior partition walls, fibre cement board which is more durable is used to replace plywood sheet. Selected cases of incremental construction of dwelling units in Kobbler Settlement are presented in the following paragraphs.

In the case of the Wagas Family, they started with an eight feet by ten feet simple shack in 2003 combining bedroom and storage. In 2004, they added a small store to start a micro business. In 2006, their house was already made fully of wood, and in 2007, the flooring was poured with

concrete. In 2008, they added a more permanent kitchen, and in 2011, they started the filing of concrete hollow blocks for an additional bedroom.

In the case of the Duron Family, they started with an eight feet by ten feet simple shack combining living and kitchen when they first settled in 2003. It was made of bamboo slat and coco lumber at first. In 2004, they were able to build a house fully made of wood. Five years after in 2009, the lower half of the exterior walls were replaced with concrete hollow blocks. Finally two years after in 2011, all of the walls were replaced with concrete hollow blocks with plain cement finish.

In the case of the Lamanilao Family, in 2003 they started with an eight feet by eight feet simple shack combining living, bedroom, and kitchen. It was until in 2009 that they made the lower half of the exterior wall in concrete hollow blocks and the upper half in fibre cement board. In 2010, they added another bedroom and replaced all walls with plain cement finished concrete hollow blocks, which they claim that their house already looks like those in housing subdivision projects.

In the case of the Rabara Family who started constructing their simple hut in 2003 reoriented their house when they settled in 2004 due to realignment of lots. In 2006, the flooring was poured with concrete and the ceiling height was raised in preparation for an attic or a mezzanine floor. In 2007, the filing of concrete hollow blocks was started to replace the original walling material, and in 2008, a more permanent toilet was constructed at the back of the house.

In the case of the Sobretodo Family, they started a skeleton structure for their house in 2004. After a year in 2005, they added a living room with concrete flooring, and in 2006, they constructed a more permanent kitchen. In 2011, they added a pig pen at the backyard wishing that with their household piggery business, they can make their house fully concrete.

The cases presented in this section may not necessarily be representative to the entire household population in Kobbler Settlement. However, they relatively share similar cases with the rest of the household respondents of the survey in particular, and to the entire settlement in general.

4. Discussion

The squatting phenomenon in Davao City as presented in the case of Kobbler Settlement is relatively similar to the cases in other major cities in the Philippines. Thirkell [15] on his study in Cebu City reveals that most people enter the informal housing market by entering into informal agreements with the landowner or a caretaker, purchase of rights from the former occupant of the land, and encroachment on marginal areas. In the case of Kobbler, the area which is once a productive farmland was supposed to be converted into an export processing zone. However, since the development was not implemented and the economic interests of the landowners and other investors fail, the site becomes an abandoned and marginal land making it attractive for squatters to settle in. Homeowners' associations with the assistance of NGOs operating in the area believe that legal landowners on some land parcels are open for negotiation for purchase of the land. In the case of Overhills homeowners' association in Kobbler, they are supported by Mindanao Land Foundation which is an NGO that is known as originator of Community Mortgage Program (CMP) projects in Mindanao. The CMP is a shelter financing programme designed to allow informal settlers of undivided tract of land to acquire from the legal landowner through community mortgage [16]. In the process, the informal settlers have to organise themselves as community association in order to avail a loan through CMP. One of the homeowners' association's responsibilities with the assistance of the NGO is to manage the savings of its members for the negotiation and purchase of the land, and for the processing of required documents. The bureaucratic procedure and the list of required

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documents to avail a CMP loan is so complex [17] in such a way that there are cases that the landowners themselves will conduct direct negotiations with the occupants of the land. This becoming complicated system mixing the formal and informal procedures in land acquisition is a characteristic that is similar to what Burgess [18] referred as one of the problems in the classification of urban settlements. Nevertheless, this transition to improve the security of land tenure is the first step of Turner's [19] 'progressive development'. In this way, the development of community facilities and adequate dwelling units can be better implemented even in an incremental process as long as there is no more fear of possible eviction and demolition.

5. Conclusion

The development of urban poor dwelling units in Kobbler Settlement follows the incremental construction of simple shacks and huts that eventually improved into a more compliant housing structure to the standards set by the building code. Most of the houses are constructed with semi-permanent building materials at present. However, it is hoped that in due time these structures will eventually improve in the future as the economic status of their occupants will also improve. The settlement is only 10 years old. However, the progressive forms of development in the area and the initiatives of the urban poor with the assistance of the NGO are indicators that such informal settlement is in the process of improving itself. Kobbler Settlement is in the process of forming into a pirate settlement that is a transition towards becoming a legal settlement. In reality, some land parcels are under litigation that makes the situation more complicated. However, by recognising the de facto arrangement on the occupancy of land by the urban poor is an initial step for the provision of adequate shelter.

The failure of housing policies and programmes for the urban poor in developing countries that are copied from developed countries is due to lack of understanding of the underlying social phenomenon in informal settlements. Thus, the initiatives and ingenuity of the urban poor and NGOs as demonstrated in the case of Kobbler Settlement may be recognised in the formulation of housing policy and programmes. On the other hand, there may be a need for regulations to be enacted by government agencies which have the statutory authority towards providing adequate shelter for the people and sustainable form of urban environment.

In the case of Kobbler Settlement, the site and its adjacent lots if ever they are feasible may be declared as a zone of progressive residential development. In this way, the local government and other key housing agencies will have the authority to impose a more flexible set of standards on residential and urban development. Turner [20] acknowledges the existence of three freedoms exercised by the squatters in the formation of their informal settlements. These are the freedom to select members in the formation of their community, the freedom to budget one's own resources for the construction of their dwellings, and the freedom to shape their dwelling environment based on their own need and preference. The new laws and regulations may be open to these freedoms in order to empower the urban poor and other key players in housing. In this way, it is hoped to achieve a more feasible strategy for the provision of housing for the lower income sector in developing countries such as the Philippines.

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Acknowledgements

Appendix I. 40th IAHS World Congress on Housing conference paper

TYPOLOGY OF URBAN HOUSEHOLDS AND THEIR TRANSITION FROM INFORMAL TO FORMAL STATUS

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Abstract *Housing phenomenon in the lower income sector in developing countries is characterized by progressive development. However, housing policies and programmes may fail because of misunderstandings of the transition of households from informal to formal status over time. The aim of this paper is to explore lower income household cases in Davao City, Philippines, classify them into different types, and to describe how they may transform from one type to a more formal status. The indicators for classification of households are the formality of building structure, and the formality of land development and the security of tenure. The variables used in the cluster analysis include the following: 1) approval of building permit; 2) respondent's view of whether the building is built in accordance to the building code; 3) researcher's assessment of whether the building is built in accordance with the building code; 4) respondent's claim on the legality of land ownership; 5) approval of site development permit; and, 6) researcher's assessment of the completeness of site and services. As a result, five types of households are identified as follows: Type I household (formal housing); Type II household (almost formal housing); Type III household (semi-formal housing); Type IV household (in transition from being purely informal housing); and, Type V household (informal housing). Further analysis on how the individual households moved from one type to another reveals that there may be three ways to achieve formal housing status. Firstly, through a multi-step transition from informal to formal over time. Secondly, one-step regularisation by provision of low cost housing units with assistance from the government for land development and security of tenure, and participation of NGOs on housing construction. Thirdly, one-step regularisation by provision of completed housing units. The one-step regularisation model for provision of formal housing may work in developed countries. However, the multi-step transition of households and the progressive development of urban settlements constitute viable low income housing alternatives that should inform efficient and sustainable housing policies and programmes for developing countries.*

1. INTRODUCTION

Housing phenomenon in the lower income sector in developing countries is characterized by progressive development. This phenomenon is discussed in an earlier paper by the principal author [1] where an informal settlement in Davao City, Philippines, underwent transition to become a pirate settlement. This transition is an initial step to achieve legal settlement [2]. However, conventional housing policies often over simplify the provision of shelter for low income households by implementing solutions that are often based on successful practices of industrialised countries. This means that housing policies and programmes may fail due to misunderstandings of the complexities of urban phenomenon that are particular to developing countries like the Philippines. Thus, the aim of this paper is to explore specific cases of lower income urban households, classify them into different types, and describe how they may undergo transition from an informal shelter to a more formal status.

2. CASE STUDY AREA

The case study was conducted in Davao City, Philippines, and it is part of a larger research project. However, unlike Malaque's earlier paper [3] that presented the case of Kobbler Settlement alone, this paper covers various forms of urban settlements within Davao City. The choice of settlements and the recruitment of households to participate in the case study was conducted in the following manner: 1) households recommended by government housing agency and/or NGO; 2) households which included recipients of housing programmes by the government and/or assistance from NGO; 3) cases of self-help housing and settlements; 4) various cases which hypothetically represent the different forms of housing in transition from informal to formal; 5) sites where the safety and security of the researcher and assistants could be ensured; and, 6) accessibility of the sites for fieldwork. Furthermore, the field work protocols including the conduct of interviews and household surveys was approved by The University of Adelaide Human Research Ethics Committee. The fieldwork was conducted from February to April 2013 and data pertaining to a total of 74 household cases in 11 urban settlements was recorded (see Table 1).

	Settlements	Number of
Code	Name and Location in Davao City	Household Cases
A	Arroyo Compound, Matina Crossing	19
B	Kobbler Settlement, Ilang	11
C	Peace Avenue, Bangkal	4
D	MatinaAplaya Shanghai Village, MatinaAplaya	8
E	Toril II, Lubogan, Toril	3
F	Piapi I, Quezon Boulevard	9
G	Los Amigos Relocation Site, Los Amigos	3
H	Tibungco Relocation Site, Tibungco	6
I	Association of Differently Abled Person, Indangan	3
J	Green Prairie Homes, Toril	4
K	Kadayawan Homes, Bangkal	4
Total	11	74

Table 1. List of urban settlements and number of household cases

The number of household cases per settlement was decided during the fieldwork. This selection depended on the scale of urban settlement, heterogeneity or homogeneity of households in a settlement, and availability of qualified respondents to participate in the interview. Qualified respondents should have been living in the settlement for at least six months and must be a senior member of the family, preferably, the head of the household. For example, the number of household cases in the Arroyo Compound and the Kobbler Settlement are greater than the others because they are large settlements and contain several homeowners' associations with different support structures (e.g. NGO, government, or combinations) and characteristics; in effect the number of households selected captures the diversity of the settlement.

3. CLASSIFICATION OF URBAN HOUSEHOLDS

Hierarchical cluster analysis using IBM SPSS Statistics 21 software was used to classify the 74 urban households into different types. The variables used in the cluster analysis include the following: 1) approval of building permit; 2) respondent's view of whether the building is built in accordance to the building code; 3) researcher's assessment of whether the building is built in accordance with the building code; 4) respondent's claim on the legality of land ownership; 5) approval of site development permit; and, 6) researcher's assessment on the completeness of site and services. As a result, five types of urban households were identified (see Figure 1), which are described in the following section.


Figure 1.Dendrogram from Cluster Analysis using IBM SPSS Statistics 21

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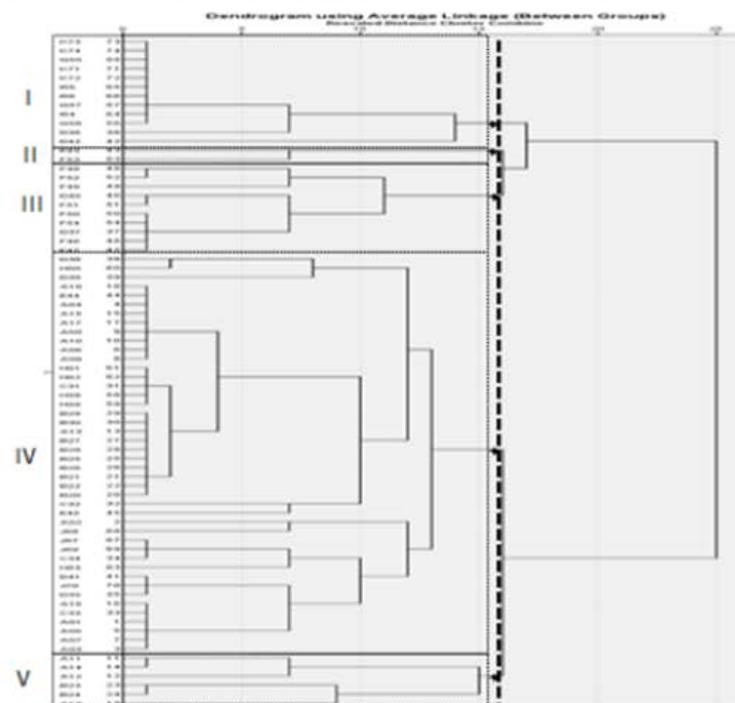
4. DESCRIPTION OF FIVE URBAN HOUSEHOLD TYPES

Qualitative methodology by cross cross-tabulation of data and description on the basis of the commonality of information was used to describe the five different urban household types. Among other variables, further information about the settlements was also considered in the analysis. This information includes the history and formation of the settlement, government housing programmes that were implemented, the type of assistance from NGOs, and various initiatives by the urban poor themselves. As a result, the five urban household types are presented in the following subsections.

4.1. Type I - "Formal" Household

This type includes households with secured land tenure and houses built in accordance to the building code. Household cases in Kadayawan Homes belong to this type. The head of these households have regular employment. Being members of the Home Development Mutual Fund also known as Pag-IBIG Fund, they are qualified to access formal housing loans for the purchase of completed housing units. In addition, household cases in the Los Amigos Relocation Site and the Association of Differently Abled Persons belong to this type. Contrary to the employment status of those in Kadayawan Homes, these households belong to the urban poor sector and people with physical disabilities. These qualified urban poor beneficiaries who are covered by this case study are assisted by the city government by providing them land in a relocation site in the case of Los Amigos Relocation Site. In the same way, those in the Association of Differently Abled Persons are assisted by the National Housing Authority (NHA) for the acquisition of land through its Land Tenure Assistance Programme (LTAP). While they are assisted by both local and national government programmes to access land respectively, the construction of their houses is assisted by NGOs. The former are assisted by the Homeless People's Federation Philippines, Inc. and Philippine Action for Community-led Shelter Initiatives, Inc. (HPFPI-PACSII), while the latter are assisted by Habitat for Humanity. Lastly, two households in Matina Aplaya Shanghai Village also belong to this type. They may be former informal settlers but after they formalised the ownership of their land through the national government's Community Mortgage Programme (CMP), they are able to formalise the construction of their houses over time through self-help housing initiatives.

4.2. Type II - "Almost Formal" Household

This type includes households with secured land tenure, however, their houses require further improvements to comply with the building code. A household case from Toril II and another one from Piapi I belong to this type. The one from Toril II was relocated to the present site in 1989 after the squatter settlement was demolished. The other one in Piapi I once lived as informal settler in the present site. Piapi I was a squatter site formed in the 1960s. Both settlements are recipients of the national government's site and services and slum upgrading programmes, respectively implemented by the NHA. These households are able to continue upgrading their houses after they have completed payments for their lots and been awarded land titles.

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4.3. Type III - "Semi-Formal" Household

This type includes households which may have secured land tenure. However, their houses are not built in accordance with the building code or they have become dilapidated over time. Most of the households in Piapi I and a couple in Matina Aplaya Shanghai Village belong to this type. As stated in the previous subsection, Piapi I is a former squatter settlement that was legalised through the slum upgrading programme. In comparison, Matina Aplaya Shanghai Village, also a former squatter settlement, is a recipient of the national government's CMP programme. While both programmes are implemented differently, these initiatives by the national government assist in the upgrading of the security of land tenure of the urban poor beneficiaries. Households which are covered by this case study and belong to this type are still in the process of paying for their land prior to the receipt of land titles. At the same time, they are also in the process of upgrading their houses through self-help housing initiatives.

4.4. Type IV - "In-Transition Informal" Household

This type includes groups of households living in informal settlements, which are in the process of upgrading their status towards a more formal type. One group that belongs to this type includes most of the household cases in Arroyo Compound and Kobbler Settlement. These two urban settlements appear physically informal in terms of their house construction and site and services. However, the urban poor households are already organising themselves in order to negotiate the purchase of their squatter land from the legal owners. Apart from this, they are also undertaking initiatives to avail government programmes for the improvement of security of land tenure and development of site and services. The organisation of these households is assisted by NGOs. For example, households in Arroyo Compound which are covered by this case study are assisted by the HPFPI-PACSII. Another group that belongs to Type IV includes most household cases in Matina Aplaya Shanghai Village, Toril II, and Peace Avenue. These former informal settlements have on-going CMP, site and services, and LTAP programmes by the national government. The programme beneficiaries are presently focusing on the payment for the purchase of the land, thus they have undeveloped site and services at present. Similarly, households in Green Prairie Homes are beneficiaries of the LTAP programme that is implemented in a new site. Finally, another group that belongs to Type IV includes households in Tibungco Relocation Site, which are covered by this case study. These households are former squatters from different areas in the city centre and became beneficiaries of a city government's relocation site. However, these beneficiaries are not paying for their land and core housing units. They may now live in a less-developed but a better site, however, they face the danger of eviction at any time as they had when they were squatters.

4.5. Type V - "Informal" Household

This type includes households which are illegally occupying land with undeveloped site and lack of services, and with self-built houses which are not in accordance with the building code. Some of the houses in Arroyo Compound and Kobbler Settlement belong

to this type. Despite the initiatives of other households in these settlements and assistance from NGOs as reported above, there are households which remain informal for various reasons. One reason is a lack of financial capacity to access better housing units thus squatting becomes the urban poor's alternative for shelter in the city.

5. MOVEMENT OF HOUSEHOLDS FROM ONE TYPE TO ANOTHER

The movement of households from one type to another was analysed based on the following information about their previous settlement: 1) location of settlement; 2) approval of building permit of the previous house; 3) construction of previous house in accordance with the building code; 4) approval of site development permit; and, 5) completeness of site and services. Furthermore, the date when the household moved and the reasons for moving to the new settlement were included. The results of this analysis are presented in the following subsections.

5.1. Towards Type I - "Formal" Household

Type I households came from less formal or from formal housing units but preferred to transfer to better living environments. Household cases in Kadayawan Homes were privileged to obtain formal housing loans. Consequently, some of them who came from the same formal household type in other sites moved to bigger houses and lots in a housing subdivision that was considered suitable to raise their growing children. In other situations, all household cases in Los Amigos Relocation Site which are covered by this case study came from informal settlements. These households are urban poor beneficiaries of the city government's relocation site and assistance from NGO. For this reason, they were privileged to move into formal housing units. In another situation, household cases in the Association of Differently Abled Persons were formerly living in Types II and III households. The same situation with the previous case, these households were able to move in formal housing units because of government programme and NGO assistance. Contrary to the cases of previously presented households which formalised their housing in a single step, a couple of Type I households in Matina Aplaya Shanghai Village once lived in Type III households. The first came from another city and moved in Davao City to look for employment, while the other one once lived in a house offered by the company where he worked before. They were informal settlers when they relocated to their present settlement. However, they were able to formalise their housing units through government assistance for land ownership and self-help initiative for house construction in multi-step transitions.

5.2. Towards Type II - "Almost Formal" Household

Type II households covered by this case study originally came from informal settlements. A household case from Toril II was formerly living as squatter in a public market. Due to expansion of the public market, their houses were demolished and they were relocated in the present settlement site in 1989. In another case, a household in Piapi I also moved in the present settlement site because of demolition of their former house in the city centre. However, they lived as informal settlers when Piapi I settlement was started as squatter site in

the 1960s. These two households may have started living in their present settlements with less formal household type but they were able to upgrade their status because of government programmes and self-help housing initiatives.

5.3. Towards Type III - "Semi-Formal" Household

Type III households mostly came from informal settlements. Most of the households who are in Piapi I are original settlers or have been living in the same site since birth. These respondents claim that they were once living in informal households since Piapi I was once a squatter settlement. In another situation, a couple of households in Piapi I came from Type IV household in other urban poor settlements in Davao City. They moved in the present settlement lately by purchasing rights from the original squatters and continue the process of legalisation under the government's slum upgrading programme. In the case of two households in Matina Aplaya Shanghai Village, both of them came from Type IV households. The one came from another urban poor settlement in Davao City while the other one came from another province. All of the households in Piapi I and Matina Aplaya Shanghai Village which are covered by this case study were able to upgrade their status because of government programmes and self-help housing initiatives.

5.4. Towards Type IV - "In-Transition Informal" Household

Type IV households include different groups which either came from informal settlements or once lived in more formal housing units but downgraded by moving to less formal types. The majority of these households came from informal settlements, some of them came from the same Type IV households, and a few of them came from more formal housing units. A group of households in Arroyo Compound and Kobbler Settlement are considered to come from informal household types because these two informal settlements are in the process of legalisation. The same on-site upgrading situation can also be found in the case of Peace Avenue, Matina Aplaya Shanghai Village, and Toril II settlements. The organised urban poor households in these settlements are in the process of obtaining the legalisation of their land through government and NGO assistance. This kind of initiative is an indicator that these households are in transition despite the fact that they appear physically informal. In another case, most households which are covered by this case study in Tibungco Relocation Site came from informal settlements. They once lived in different squatter settlements in the city centre and became beneficiaries of the city government's relocation site. Some of them were once scavengers in garbage dump site that was closed. When they are living in their present relocation site, they earn their livelihood in the same garbage related business. These include collection, buying, and selling of recyclables, and being employed in the city government's solid waste management services. The other group which came from the same Type IV households are mostly from other settlements in and outside Davao City. They settled in their present settlements as their only way to access shelter in the city where they can find employment opportunities. Finally, the other group which downgraded from more formal housing to Type IV households are also from other settlements in and outside Davao City. Mostly, these households were once renters of more formal housing units and preferred to move to informal settlements to avoid paying rents. They may have downgraded their housing

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units to informal ones, however, they maintain that it is their way to live in a house and lot that they will own and thus lead to a more formal status in due course.

5.5. Towards Type V - "Informal" Household

Type V households covered by this case study came from Types II, III, and IV which are more formal households. This means that they downgraded their shelter conditions from living in physically better housing units to move to informal ones. These households can be found in Arroyo Compound and Kobbler Settlement which were hypothetically chosen to represent informal settlement cases. They were once renters and most of their reason in moving to informal settlements is to avoid paying rents in their previous dwelling. Despite living in physically worse housing and settlement conditions, for them it is their way to live in a house and lot of their own. These households maintain that in due course they can improve their security of land tenure and incrementally upgrade their housing units. This way of thinking is based on the cases of those households which upgraded their housing and settlement through government programmes, NGO assistance, and self-help initiatives.

6. DISCUSSION

Traditional housing policies are based on the following approaches. Firstly, provision of housing based on identified gaps between demand and supply. Secondly, strict enforcement of building codes with raised standards. Thirdly, eradication of squatter settlements through demolition and eviction. Fourthly, control of rents, land costs and building materials by the government [4]. However, these superficial initiatives often complicate the housing problems because they do not consider the progressive form of development in developing countries as observed by Turner [5],[6]. The same phenomenon of progressive development as observed by Turner in the 1960s in Lima, Peru, can also be found in the case of Davao City, Philippines. In reference to the cases presented in the previous sections, the transition of an informal settlement to a more formal one is the subject of discussion in the next paragraph.

The urban poor who could be new migrants in the city or who can no longer afford to pay rent in better housing units will settle in informal settlements as their only access to affordable shelter. They may be illegally occupying land and live in self-built housing which does not comply with the building code, however, they believe that it is a way to own a house and lot that may transcend into a formal type in due course. Consequently, the urban poor households in informal settlements will organise themselves in order to negotiate the purchase of their squatter land or seek government programmes and assistance from NGOs. This phenomenon can be observed in Arroyo Compound and Kobbler Settlement which are composed of federated urban poor associations. This initiative by the people themselves is an initial step towards improving the security of land tenure. One way is to approach the CMP programme that is a successful example to legalise the ownership of squatter lands. Thus, CMP became the model of other programmes such as LTAP that is lately implemented by the NHA and localised CMP projects by local government units. In addition, previously implemented slum upgrading

and site and services programmes also provide positive impacts to both tenure status of residents and physical development of settlements. Parallel to improving the security of land tenure and progressive development of sites, the urban poor incrementally upgrade their houses. The incremental construction will be through self-help housing initiatives by the urban poor themselves or benefiting assistance from NGOs. Eventually when the urban poor beneficiaries paid for the land in full and received land titles, they can focus on upgrading the construction of their houses in accordance with the building code. A few household cases in Toril II, Piapi I, and Matina Aplaya Shanghai Village are successful examples of this case being beneficiaries of the national government's site and services, slum upgrading, and CMP programmes. Hence, formal housing can be achieved in due course through various multi-step transitions which originate from informal status.

Housing policies and programmes are aimed to provide decent shelter that is based on modern standards. Socialised housing projects for the lower income sector by the welfare states in the 1970s relied on high government subsidies. Eventually in the 1980s, state policies shifted from a welfare to an enterprise approach based on free-market economy [7]. However, both welfare and market-oriented state policies failed to provide sustainable forms of housing provision for the urban poor in developing countries. Thus, a more decentralised and participatory housing initiatives emerged in the late 1980s and early 1990s. In the Philippines, this was influenced by the popular People Power revolution in 1986. The major landmark in the country's new governance is the institution of the 1987 Constitution that takes explicit stands on issues related to urban poverty alleviation [8]. The new Constitution became the basis for legislations of the Local Government Code of 1991 and the Urban Development and Housing Act of 1992 [9]. These two major forms of legislation integrate people's participation in urban development. Furthermore, they redefined the roles of government agencies, urban poor communities, and mediating groups such as NGOs [10]. The study shows that the agencies of the government, NGO, and the urban poor played important roles in the multi-step transition of housing from informal to formal status in many ways. Thus, the implementation of housing programmes needs to take account on the various contributions of all stakeholders in housing provision, especially given the ingenuity and resourcefulness of the householders in the communities within which they live.

7. CONCLUSION

Housing provision initiatives are aimed to provide formal housing that is legal in terms of land ownership and construction of houses in accordance with the building code. This study concludes that there may be three ways to own formal housing units. Firstly, it is observed that the urban poor undergo multi-step transitions from living in informal settlements to become owners of formal housing units in due course. Secondly, it is achieved through one-step regularisation of informal urban poor households which are beneficiaries of low cost housing with assistance from both the government on provision of land and NGOs for house construction. Thirdly, it is achieved through one-step regularisation by provision of completed housing units for eligible beneficiaries of formal housing loans or to be sold in the formal housing market. The one-step regularisation

model for the provision of formal housing may work in developed countries. However, it is observed that informal households transcend into more formal status over time in the case of developing countries. Informal settlements are now considered as the "slum of hope" according to emerging views on urban development [11],[12]. Therefore, the consideration of the multi-step transitions of households and the progressive development of urban settlements can be alternatives towards efficient and sustainable housing policies and programmes for developing countries.

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Appendix J. List of classified households per type

Type I 'Formal' Households		
Code	Household Family Name	Settlement
D36	Nacorda	Matina Aplaya Shanghai Village
D42	Rafales	Matina Aplaya Shanghai Village
G55	Botoy	Los Amigos Relocation Site
G56	Diansay	Los Amigos Relocation Site
G57	Sapid	Los Amigos Relocation Site
I64	Cawaling	Association of Differently Abled Persons
I65	Dalida	Association of Differently Abled Persons
I66	De la Cruz	Association of Differently Abled Persons
K71	Brion	Kadayawan Homes
K72	Gomez	Kadayawan Homes
K73	Jayo	Kadayawan Homes
K74	Palacio	Kadayawan Homes
Type II 'Almost Formal' Households		
Code	Household Family Name	Settlement
E43	Amad	Toril II
F53	Sereno	Piapi I
Type III 'Semi Formal' Households		
Code	Household Family Name	Settlement
D37	Manlapus	Matina Aplaya Shanghai Village
D40	Domingo	Matina Aplaya Shanghai Village
F46	Aboy	Piapi I
F47	Albios	Piapi I
F48	Anticamara	Piapi I
F49	Clarin	Piapi I
F50	Linasa	Piapi I
F51	Palma Gil	Piapi I
F52	Panis	Piapi I
F54	Talin	Piapi I
Type IV 'In-Transition Informal' Households		
Code	Household Family Name	Settlement
A01	Abarquez	Arroyo Compound
A02	Agan	Arroyo Compound
A03	Albos	Arroyo Compound
A04	Avendaño	Arroyo Compound
A05	Berizo	Arroyo Compound
A06	Castillo	Arroyo Compound
A07	Celeste	Arroyo Compound
A08	Magdura	Arroyo Compound
A09	Manalang	Arroyo Compound
A10	Manawatan	Arroyo Compound
A13	Osa	Arroyo Compound
A15	Puzon	Arroyo Compound
A16	Taleon	Arroyo Compound
A17	Tano L	Arroyo Compound
A18	Tano M	Arroyo Compound
B20	Apocasas	Kobbler Settlement
B21	Balote	Kobbler Settlement
B22	Baluit	Kobbler Settlement

Type IV 'In-Transition Informal' Households		
Code	Household Family Name	Settlement
B25	Llemot	Kobbler Settlement
B26	Nierva	Kobbler Settlement
B27	Rabara	Kobbler Settlement
B28	Sarona	Kobbler Settlement
B29	Sobretodo	Kobbler Settlement
B30	Wagas	Kobbler Settlement
C31	Abellana	Peace Avenue
C32	Ramirez	Peace Avenue
C33	San Nicholas	Peace Avenue
C34	Tibalgo	Peace Avenue
D35	Caro	Matina Aplaya Shanghai Village
D38	Mendoza	Matina Aplaya Shanghai Village
D39	Mora	Matina Aplaya Shanghai Village
D41	Palma	Matina Aplaya Shanghai Village
E44	Nicdao	Toril II
E45	Panudaranau	Toril II
H58	Dadong	Tibungco Relocation Site
H59	Lastima	Tibungco Relocation Site
H60	Medilo	Tibungco Relocation Site
H61	Ogates	Tibungco Relocation Site
H62	Olivo	Tibungco Relocation Site
H63	Palma-Gil	Tibungco Relocation Site
J67	Flores	Green Prairie Homes
J68	Fores	Green Prairie Homes
J69	Pepecan	Green Prairie Homes
J70	Rico	Green Prairie Homes
Type V 'Informal' Households		
Code	Household Family Name	Settlement
A11	Masayon	Arroyo Compound
A12	Namata	Arroyo Compound
A14	Patcho	Arroyo Compound
A19	Truya	Arroyo Compound
B23	Duron	Kobbler Settlement
B24	Lamanilao	Kobbler Settlement

Appendix K. 49th International Conference of the Architectural Science

Association paper

Learning from informal settlements: provision and incremental construction of housing for the urban poor in Davao City, Philippines

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Abstract: The incremental construction of housing for the urban poor is the main agent of progressive development in developing countries. Low income households in Davao City, Philippines, were classified into five different types from informal to formal housing. The aim of this paper is to explore the incremental construction of different housing types in the course of their development. Fieldwork revealed that the degree of security of tenure was directly related to the stages of incremental construction. For example, a simple dwelling in an informal settlement was upgraded with permanent building materials and standard methods of construction when the inhabitants' degree of security improved. Over time, the physical condition of the house deteriorated when the inhabitants focused on payment for the land. Eventually, the completion of the house (defined here as a formal structure) coincided with legal ownership of the land. This typical incremental building pattern in informal environments, built by the urban poor, requires detailed understanding in order to provide effective housing interventions, and concomitant policy decisions, which are both appropriate and sustainable in developing countries.

Keywords: Incremental construction; informal settlements; Philippines; self-help housing.

1. Background to the study

This paper maintains that the incremental construction of housing in the lower income sector is the main agent of progressive urban development in developing countries. The link between self-help housing and the progressive development of urban settlements has been acknowledged since the 1960s. Turner (1967), most notably, cultivated appreciation for the unique opportunities that squatter settlements offered the urban poor to build their own housing in stages, as resources permitted. 'The freedom to shape one's own environment', observed by Turner (1968), is how an informal dwelling could begin as a shack and end up as a permanent house occupied by its original settlers or its settlers'

children. Turner's theories, which emerged from his experience in the squatter settlements of Lima, Peru, were influential world-wide. Relatively direct reflections, for example, were the 'sites and services' tactic for supporting and managing self-build housing, and the new policy of *in-situ* slum upgrading advocated by the World Bank in the 1970s (Pugh, 2000). Despite the further radical shift in housing policy to market oriented approaches to procurement, that was widely evident by the 1980s, Turner's view towards squatter settlements continues to be influential in the works of recent urban scholars such as Kellet and Napier (1995), Pugh (2000), Payne (2006), and Rahman (2011), among others.

The practice of incremental housing construction (for example, the phases defined by Greene and Rojas, 2008) by the inhabitants of squatter settlements is often overlooked by professional architects and urban planners. But informal architecture such as that found in present-day slums and squatter settlements has always been a feature of urbanising civilisations. 'Throughout history,' as Kellet and Napier (1995, p. 8) claim, '...the poor have constructed their dwellings around the urban centres of the rich and powerful'. The same urban phenomenon can be observed at present especially in the case of developing countries. However, the difference in today's scenario is the scale of activity. Following Turner's influence, Kellet and Napier (1995) examine the relationship between squatter settlements and the qualities of vernacular architecture defined by primary theorists in the field. For instance, squatter settlements, like vernacular environments, are traditionally constructed rather than academically inspired. They respond to local culture and mediate environmental extremes (Rapoport, 1988). This kind of settlement houses the ordinary activities of the common people (Lawrence, 1982). Informal architecture in squatter settlements is also built based on inherited knowledge, collective wisdom, and social experiences which comprise generally accepted norms (Oliver, 1990). Finally, it is characterised as a transitional society in the process of evolving from one mode of production to another (Stea and Turan, 1990).

The theoretical implications of these earlier observations of parallels between squatter settlements and vernacular architecture are made clearer in more recent literature. Vellinga (2006, p. 88) for instance, includes squatter settlements as one of the categories of building that tends to be ignored in the field of vernacular architecture studies. Despite the fact that vernacular architecture still comprises the majority of buildings in the twenty-first century, it remains marginal in the purview of most design professionals and policy makers. Building on the work of the influential interpreter of vernacular, Paul Oliver, Asquith and Vellinga (2006) emphasise the value of learning from traditional knowledge, skill, and expertise to create appropriate and sustainable built environments. Furthermore according to Asquith (2006, p. 129), 'once the vernacular is seen not as static building form, but as constantly evolving, reacting to changes in the communities that shaped its form, it will become higher on the agenda in architectural education'. In turn, sustainable human settlements can be informed by understanding of the vernacular environment from the perspective of human ecology (Lawrence, 2006). Lawrence (2006), reflecting on his studies of human habitats in the Alpine region of Switzerland, observes that societies can use legislation, behavioural rules, and socially agreed conventions reflected in their practices to ensure sustenance over many generations. Further referring to the translation of sustainable development into policies and practices by Dodds (2000, in Lawrence, 2006), Lawrence (2006) recommends that citizen participation is an integral component in the construction of settlements and one of the basic principles for professional practice.

Citizen participation is critical to house billions of people, which is a great challenge for urban planners and policy makers in the twenty-first century. Like Lawrence, Payne (2006) also places value on citizen participation in his study of initiatives by the urban poor in informal settlements in India and Turkey. He explores how people from different backgrounds have evolved rational and ingenious

solutions to meet their need for shelter. Payne is also influenced by the work of Oliver, Turner, Rapoport, and others engaged in the fields of housing, spatial organisation and the role of communities. For Payne, the ingenuity of the urban poor in providing their own shelter can provide lessons for professionals to address the issues of housing and urban development (Payne, 2006), most especially in developing countries. Furthermore in the study of the vernacular, Rapoport (2006) proposes to move from a natural history stage to a problem-oriented stage. This makes it possible to regard vernacular environments, including spontaneous informal settlements considered in this paper, as a laboratory of the wide range of human responses to various factors affecting their way of living. Housing and settlements for the urban poor in developing countries are affected by government initiatives and other processes such as the responses of the people to an urban policy, or their participation in the implementation of a housing programme. One way of understanding this phenomenon is from the point of view of the vernacular that motivates a dynamic and detailed understanding of the changing characteristics of informal settlements which remain an urban reality in the twenty-first century.

With its roots in the early works of Abrams (1964) and Turner (1968), the study of self-help provision and incremental construction of urban poor housing in informal settlements enjoyed a renewal in the work of later urban scholars including Payne in Delhi, India and Ankara, Turkey, in the 1970s (Payne, 2006), and Kellet in Santa Maria, Colombia, in the 1990s (Kellet, 1999; 2005). Now in the early twenty-first century, informal settlements are better recognised as a dynamic urban phenomenon that is important to understand as developing countries strive for sustainability, not least in the construction and operation of the built environment. Pugh (2000), for example, emphasises the resource and labour efficiency in the production of informal architecture in squatter settlements. Moreover, Rahman (2011, p. 144) argues that self-built incremental in-situ upgrading of informal settlements is 'a form of affordable and hence sustainable housing for the low-income groups in the developing countries'. Informal settlements in general share the same characteristics. Primarily, they are independently conceived and constructed by the occupants themselves. Secondly, occupation and construction activities take place simultaneously. Finally, such settlements are 'in a process of dynamic change and demonstrate considerable ingenuity and creativity within limited resource constraints' (Kellet, 2005, p. 22). To build on these observations and findings, this housing construction pattern in informal environments requires detailed understanding in order to provide effective housing interventions, and concomitant policy decisions, which are more appropriate and sustainable in developing countries.

2. Aims and objectives

This paper argues that the transition to formal architecture coincides with the legalisation of land tenure and improvements to sites and services. This argument is informed by a pilot study of one informal settlement in Davao City, Philippines, which was undergoing transition towards a more formal status (Malaque III, 2013). A subsequent study of 74 households in 11 settlements, in the same city, revealed that urban households can be classified into different types in a range of contiguous categories from informal to formal housing. Within the range of different housing categories, it was also observed how householders moved from one type to another until they became owners of formal housing (Malaque III et al., 2014). This multi-step transition process tended to happen in two ways. Firstly, an inhabitant moved from one housing 'step' to another in a different location. This trend is similar to the multi-step transition model defined by Lim (1987). This is an established paradigm whereby a household undergoes a multi-step transition through different housing submarkets (specifically in different locations) to improve their quality of life and shelter. Secondly, an informal housing unit in a progressive urban

settlement was upgraded to become a formal housing unit in the same location. This trend, also a form of the multi-step transition process, enables the inhabitants and their children to progress towards formal housing and secure tenure in the same location. This phenomenon is more reflective of the culture found in *in-situ* progressive urban development. Thus, the incremental construction of urban poor housing and its increasing formalisation *in-situ* merits further exploration.

The aim of this paper, then, is to explore the incremental construction of different housing types in the course of their development. Specifically, it will: present the five different housing types identified in the previous paper (Malaque III *et al.*, 2014); investigate the construction of housing units over the course of their development; and, discuss the incremental status of housing units in relation to the formalisation of land tenure and improvements to sites and services. This physical phenomenon is analysed and discussed in relation to various government programmes, NGO assistance, and self-help initiatives by the inhabitants themselves.

3. The study area

This study was conducted in the progressive city of Davao, Philippines, located a thousand kilometres south of Manila. The Philippine population reported by the National Statistics Office (NSO) (2012) was 92.34 million in 2010 with an annual growth rate of 1.90 per cent. In the case of Davao City, the NSO (2012) reports that of the 33 highly urbanised cities in the country, it is the only city outside the National Capital Region that has a population of more than one million. In 2012, Davao City's total population was 1.45 million. Like other major cities in the country, it has experienced significant immigration of impoverished people who have settled in precarious informal settlements. Typically, then, housing provision is one of the major issues in local urban development. In an attempt to solve the housing problems, there are some government programmes and NGO assistance aimed to provide shelter for the urban poor (Malaque III *et al.*, 2006). Despite these initiatives from the government and NGOs, urban poor housing in Davao City demands further attention because of the scale of the phenomenon and the observable characteristics of progressive development *in-situ*.

4. Methodology

Data collection was conducted in accordance with fieldwork protocols approved by The University of Adelaide Human Research Ethics Committee (January 2014). Extensive fieldwork was conducted from February to April 2014, accessing a total of 74 household cases in 11 settlements. As discussed more thoroughly in a previous paper (Malaque III *et al.*, 2014), the selection of settlements and representative household cases reflected a balancing of recommendations from both government housing agencies and NGOs, who also coordinated access to study areas. Selected cases therefore include recipients of assistance through government housing programmes as well as from NGOs, and cases of self-help housing as well as progressive settlement. Hypothetically, these also cover a range of different housing types from informal to formal. Finally, the selection of study sites was also mediated by their accessibility for fieldwork where safety and security could be ensured. Household names presented in this paper were used with the formal consent of the survey participants. In the classification of 74 household cases, a method of hierarchical cluster analysis using IBM SPSS Statistics 21 software was used. Multiple variables indicating the formality of housing structure, and legality of land occupation and completeness of sites and services were applied in the classification. As a preliminary result, five different housing types were identified (see Table 1). Upon further qualitative data analysis, it was

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Davao City, Philippines

observed that these five different housing types are in contiguous categories from informal to formal housing, which are briefly described in Section 5 of this paper.

This paper explores the incremental construction of a representative sub-set of 16 of the 74 household cases examined in the larger research project. The 16 housing cases presented in Table 1 were selected from progressive urban settlements to represent the range of respective housing types identified in the previous paper. The data informing the analysis was derived from the physical documentation of housing 'steps' and interviews by the first author with householders. Qualitative variables to indicate self-help provision of living spaces and incremental construction of housing were cross-tabulated with the coded housing cases. Significant findings were based on the pattern of commonalities exhibited in the table, which is supported with physical documentation recorded through photographs and sketches. Results were validated with qualitative information from key informants in government housing agencies and NGOs pertaining to various housing programmes and assistance.

Table 1: Housing cases, settlement locations, and types.

Case number	Household name	Settlement location	Housing type
D36	Domingo	Matina Aplaya Shanghai Village	Type I – 'formal' housing
D42	Rafales	Matina Aplaya Shanghai Village	Type I – 'formal' housing
E43	Amad	Toril II settlement	Type II – 'almost formal' housing
F53	Sereno	Piapi I settlement	Type II – 'almost formal' housing
D40	Nacorda	Matina Aplaya Shanghai Village	Type III – 'semi-formal' housing
F47	Albios	Piapi I settlement	Type III – 'semi-formal' housing
F50	Linasa	Piapi I settlement	Type III – 'semi-formal' housing
F54	Talin	Piapi I settlement	Type III – 'semi-formal' housing
A01	Abarquez	Arroyo Compound	Type IV – 'in-transition informal' housing
A02	Agan	Arroyo Compound	Type IV – 'in-transition informal' housing
A03	Albos	Arroyo Compound	Type IV – 'in-transition informal' housing
B27	Rabara	Kobbler settlement	Type IV – 'in-transition informal' housing
B30	Wagas	Kobbler settlement	Type IV – 'in-transition informal' housing
C31	Abellana	Peace Avenue settlement	Type IV – 'in-transition informal' housing
A19	Truya	Arroyo Compound	Type V – 'informal' housing
B24	Lamanilao	Kobbler settlement	Type V – 'informal' housing

5. Results

This section briefly describes the five different housing types identified in the previous paper (Malaque III *et al.*, 2014). Furthermore, this section presents the selected housing cases which represent the respective housing types as the focus of this paper for analysis and discussion on the phenomenon of self-help provision and incremental construction of urban poor housing.

### 5.1. Type I - 'formal' housing

Type I housing is described as having secure land tenure, built in accordance with the building code. This type is usually delivered as completed single-detached housing units by the government and private developers. However, this type also includes dwellings that have undergone a transition from less formal types located in progressive urban settlements. Contrary to the more typical cases of completed housing units (which is the usual response to perceived housing crises by the authorities), the cases

included in this paper were initiated and developed incrementally by the inhabitants (from informal housing units to formal ones over time). For example, in the case of the Domingo house in Matina Aplaya Shanghai Village, the initial dwelling comprised approximately 40 square metres of floor area for a basic living space, a dining room, kitchen, toilet and bath, and two bedrooms. Later, an additional bedroom was added increasing the total floor area to 60 square metres (current at the time of the fieldwork in 2014). In terms of its incremental construction, the initial dwelling unit was made of discarded timber and light-weight building materials. During the course of development, cement was poured for the ground floor, and a concrete structure and galvanized iron sheet roofing was used to construct the additional rooms. The Domingo family secured legal tenure during the transition process as a beneficiary of the Community Mortgage Programme (CMP).

5.2. Type II - 'almost formal' housing

Type II housing may be described as having secure land tenure. However, it was observed that the houses needed further improvements to comply with the building code. This type includes dwellings that have undergone transition from informal housing units; they are described as 'almost formal'. For example, in the case of the Amad house in Toril II settlement (Figure 1.c), the initial floor area comprised 20 square metres with combined living and dining areas. The same space served as a sleeping area at night time. Eventually, the house was doubled to include separate living and dining areas, a kitchen, toilet and bath, and two bedrooms. A neighbourhood variety store was also included in this upgraded dwelling. When the Amad family first moved into the settlement, their house was primarily constructed of coconut-tree timber mixed with hardwood for the structure, and galvanised iron roof sheets. As a result of deterioration, temporary building materials were incrementally replaced with concrete and other more permanent materials. In addition, the living spaces were increased. The Amad family was a beneficiary of a slum upgrading programme funded by the national government, which is implemented through the National Housing Authority (NHA) that secured their tenure of the residential lot.


(a)   (b)   (c)

Figure 1: The Truya house, a Type V - 'informal' housing (a); Albos house, a Type IV - 'in-transition informal' housing (b); and, Amad house, a Type II - 'almost formal' housing (c).

5.3. Type III - 'semi-formal' housing

In the case of Type III housing, there was no compliance with the building code. A certain degree of secure land tenure was recorded. Most houses in this category had become dilapidated over time. For example, in the case of the Nacorda house in Matina Aplaya Shanghai Village, the dwelling unit was initially a simple shack comprising a bedroom. Since the late 1980s, basic spaces were added including a living room, a dining area, a kitchen, toilet and bath. Two bedrooms are added with the help of the community of homeowners and personal initiative. At the time of the fieldwork in 2014, the house had a

total floor area of at least 60 square metres. The initial dwelling unit was built like a tent made of hardwood, coconut tree timber, bamboo, and other light-weight building materials. With the addition of more rooms, more permanent building materials such as concrete hollow block and plywood were installed. The household head of the Nacorda family claimed that they were beneficiaries of a land tenure assistance programme known as the CMP. They were in the process of paying for the land.

5.4. Type IV - 'in-transition informal' housing

Type IV housing is mostly incomplete and is described, here, as informal. The fieldwork revealed that the inhabitants were in the process of upgrading their dwelling. The householders were also organising themselves to negotiate the purchase of land from legal land owners, or to seek government assistance, or assistance from NGOs. There are cases which may have minimal assistance from the government but receive assistance from an NGO. For example, in the case of the Albos house in Arroyo Compound (Figure 1.b), the NGO was the main agency which initially provided a 60 square metre lot. Consequently, the informal dwelling unit was self-built by the inhabitants. The basic living spaces currently occupy the entire lot. The householder applied for a minimal loan from the NGO for the construction of the dwelling unit. The institutional support from an NGO motivated the inhabitant to invest in permanent building materials. These were used for the construction of their informal dwelling unit. This is evident in the case of the Albos house where permanent building materials, such as concrete, were already used in the construction of some parts of the house (Figure 1.b).

Another group of Type IV housing was located in informal settlements with inhabitants who were beneficiaries of government assistance for land tenure. The houses may appear physically informal but it was noted that the government was in the process of implementing a programme similar to the CMP known as the Land Tenure Assistance Programme (LTAP). This programme was either implemented on the same site where an informal settlement was formed (*in-situ*), or on another new site (elsewhere) developed for an association of urban poor beneficiaries. An example of an *in-situ* LTAP beneficiary was the Abellana family in the Peace Avenue settlement. When their settlement was informal, the house began as a traditional hut made of light-weight building materials such as wood and bamboo. Despite this informality, the dwelling covered over 100 square metres and included all required living spaces. Eventually when the inhabitant applied to the government programme in 2004, the house was refurbished with concrete and galvanised iron sheet roofing. Despite this description given by the respondent, the fieldwork revealed that the same housing condition was evident. According to the head of the Abellana family, when the interview was conducted, they were still in the process of paying for the land.

5.5. Type V - 'informal' housing

Type V housing is described as informal, the land occupation is illegal and the site lacks services. In addition, it was apparent that houses were self-built by the inhabitants and they did not comply with the minimum standards of the building code. For example, in the case of the Truya house in Arroyo Compound (Figure 1.a), the dwelling unit started as core house including a toilet and bath with a floor area of 12 square metres. Eventually, basic spaces comprising living, dining, kitchen, toilet and bath, and bedroom are added covering an area of 35 square metres at the time of fieldwork in 2014. Initially, the dwelling unit was made of light-weight building materials including thatched palm roofing. In the incremental construction of the house, the ground floor was roughly poured with concrete, the walls

were replaced with wooden frames and plywood, and the roof was replaced with galvanised iron sheets. The present housing condition is shown in Figure 1.a. It was further noted from the personal interview that this informal household did not benefit from assistance from either the government or an NGO.

6. Analysis and discussion

The incremental construction of houses in low-income settlements observed here offers evidence of progressive self-help provision of living spaces. The physical documentation of the dwellings conducted during the fieldwork, together with interviews of the householders, demonstrate the different types of incremental construction evident in Davao City. It was observed that the incremental housing construction accommodated the growing needs of the inhabitants and that this was specifically influenced by the degree of security of tenure. Typically, a housing unit was initially made of light-weight building materials. Unless there was an indication of formal land tenure (with assistance from either the government or an NGO), the housing unit remained temporary in nature, evident in the Type V - 'informal' housing cases. On the other hand, the house may be upgraded using more permanent building materials and standardised construction methods when the inhabitant gains a certain degree of security. This is the point in the course of development that an informal housing unit is in transition towards a more formal status, demonstrated in the Type IV - 'in-transition informal' housing. The housing units of this type may appear informal but a certain degree of security gained by the inhabitants motivated them to invest in the physical improvement of their home. This is exemplified in the case of the Albos (Figure 1.b) and Agan houses in the Arroyo Compound. The institutional support from an NGO motivated the inhabitants to invest in permanent building materials to improve their informal dwelling. In the same way, a government programme such as LTAP influenced the inhabitants of the same housing type to invest in more permanent building materials. Other than the recent LTAP initiative, other active government land tenure assistance programmes include the CMP, conceptualised in the mid-1980s, and slum upgrading and sites and services which have their roots in the 1970s to early 1980s.

(a)   (b)
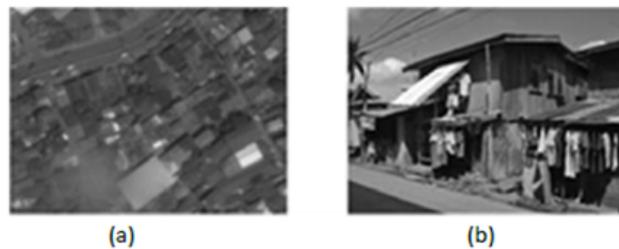
Figure 2: Google Maps satellite photo of Piapi I settlement (a); and, the Linasa housing case (b).

Examination of the progressive development of housing and settlements, revealed that the house deteriorated contributing to the slum condition of the settlement, demonstrated in the cases of Type III - 'semi-formal' housing. This case is mostly observed in settlements like Piapi I and Matina Aplaya Shanghai Village where residents are beneficiaries of government land tenure assistance programmes. As in the case of the Linasa house located in Piapi I (Figure 2), this example appears to be deteriorating due to the limited financial capability of the inhabitant. The Linasa family like other settlers in Piapi I who were beneficiaries of a sites and services programme, focused on the payment for the land and attainment of legal titles, not on further construction or building improvements. However, as soon as

legal land ownership was attained, observed in many cases of Type II and Type I, the inhabitant was able to refurbish his house incrementally until it became a permanent structure compliant with the building code. This is how the Sereno house in Piapi I settlement and the Amad house (Figure 1.c) in Toril II settlement (Type II housing units) progressively attained an 'almost formal' status. Apart from these cases, this is the same way the Domingo and Rafales houses in Matina Aplaya Shanghai Village (Type I housing units) have achieved formal status.

The phases of incremental construction began with access to land, followed by the construction of a basic nucleus, and the incremental improvement of dwelling units (Greene and Rojas, 2008). Furthermore, this study demonstrates that the incremental construction of low income housing is being influenced by the degree of security of tenure and various initiatives to achieve legal land ownership. This exemplifies Payne's (2001) claim that there is a continuum of tenure categories that range in different levels of security, which means that a pavement dweller that initially has no security will undergo a series of tenure categories to become a freehold owner as the ultimate legal tenure category. In other words, the series of contiguous tenure categories is reflected in the progressive nature of low income housing, which is physically evident in the incremental construction of houses, as observed in this study.

7. Conclusion

This study demonstrates that housing as a material expression of the status of the urban poor in progressive settlements reflects the socio-political process of legal land ownership that defines the security of tenure. The incremental construction of low-income housing started when the urban poor chose to live in informal settlements. Despite the precarious conditions, the inhabitants of informal housing units speculate that they can formalize land ownership. In the process, legal land ownership is achieved in part from government assistance for land tenure which leads to the completion of construction, when the dwelling becomes permanent and legal. In addition to assistance for land tenure, policy makers might consider this incremental construction process in the formulation of strategic housing solutions which offer an alternative to the traditional one-step regularization model that has rarely proved to be successful in developing countries. The early stages of this incremental construction process, discussed here, may seem disordered, especially when the inhabitants were in the process of paying for the land to achieve legal ownership. However, this incremental process offers valuable lessons for urban planners, architects and policy makers who must consider interventions that are best suited to progressive settlements as an alternative to traditional approaches such as slum clearance and demolition and the one-step regularization model. It is beyond the scope of this paper to offer detailed recommendations for housing policy. However, this examination of the incremental construction of housing offers important lessons about effective and sustainable housing interventions which are better suited to developing countries and the well-being of the urban poor.

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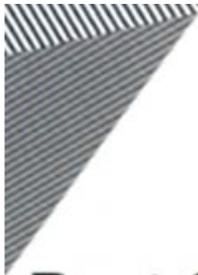
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Learning from informal settlements: provision and incremental
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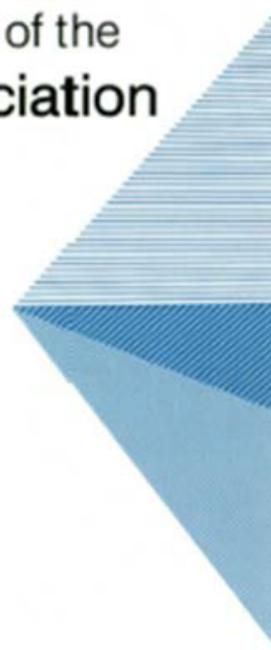
Appendix L. 50th International Conference of the Architectural Science
Association paper

Modelling the evolution of housing and socio-spatial processes in low income settlements: case of Davao City, Philippines

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Abstract: Previously, low income households in Davao City, Philippines, were classified into five different types from informal to formal housing. Furthermore, self-help provision and incremental construction of different housing types were explored in the course of their development. To further understand housing as a material expression of the status of the urban poor, and to explore socio-spatial processes in progressive settlements, the aim of this paper is to model the evolution of housing in low income settlements. Housing evolution is illustrated from the time when homeless people first built their shacks in squatter settlements, to transitions of different housing types from informal to formal, through to formal ownership of permanent houses. With formal ownership, the houses had evolved to either one-storey or two-storey permanent structures. This observed evolution of housing in low income settlements demonstrates that housing is socially constructed. From the point of view of social constructionism, the discussion of this paper emphasises the importance of political, economic and cultural factors in low income housing provision. Thus, this paper renews timely lessons about how the engagement of people in sustainable housing provision must be valued, especially in developing countries which are rich in human resources.

Keywords: Housing evolution; informal settlements; Philippines; socio-spatial processes.

1. Background to the study

The ability of the urban poor to contribute to the provision of sustainable housing, from life in informal settlements to formal ownership of housing units in the course of urban development, is valued in the works of several influential authors. 50 years ago, John Turner (1968), highlighted the importance of people as agents in self-help housing as a result of his observations in Lima, Peru. In due course, when housing was viewed as markets and submarkets in the 1980s, Lim (1987) proposed a model that illustrated a multi-step transition that the urban poor undergo through a series of housing submarkets until they became owners of formal housing. More recently Payne (2001), with his focus on land tenure,

claimed that homeless people undergo a series of tenure categories, from a pavement dweller to a freehold owner of land title. These socially rooted paradigms where emphasis is placed on the agency of the urban poor exemplify social ecological principles. However, traditional housing policy and programmes are implemented based on technical and creative methods. The aided self-help and sites and services programmes popular in the 1970s as a consequence of Turner's revolutionary ideas relied on high government subsidies. Due to limited funds, these attempts were viewed as unsustainable in developing countries. Furthermore, with the adoption of neo liberal market oriented policy in the 1980s, the market sector widened its role in housing provision. However, both attempts made by the welfare state and the market oriented policies are practised based on a traditional paradigm whereby housing is viewed as an object. From the point of view of urban design, Madanipour (1996) asserts that failures in urban design are due to the lack of recognition of socio-spatial processes in the environment. Socio-spatial processes include socio-political, socio-economic, and socio-cultural considerations respectively acted by the 'regulators', 'producers', and 'users' (Madanipour, 2006) of the built environment.

From this perspective, housing is not only the result of both creative and technical processes. In an informal housing settlement, the built environment created and inhabited by the urban poor themselves is importantly a social process and not merely a physical environment. In the ongoing pursuit of sustainable development, articulated in the Philippine Agenda 21 document, the role of government, business and civil society as key actors for sustainability of the environment is acknowledged (Philippine Council for Sustainable Development, 2012). In the discipline of urban design, Madanipour (2006) identifies regulators, producers, and users of built environment. Following this same framework, the social processes and their influence on housing provision in the low income sector identified in this paper are discussed in terms of socio-political, socio-economic and socio-cultural processes. Hence, the engagement of people is prioritised in the search for sustainable housing policies and programmes appropriate in developing countries.

2. Aims and objectives

In a preliminary study conducted in Davao City, Philippines (Malaque III, 2013), a case study of one informal settlement indicated an apparent transition to improve the formality of the settlement in terms of housing structure and land tenure. However, this phenomenon has not received sufficient attention, and housing policies and programmes continue to fail due to misunderstanding of the complexities of this dynamic urban phenomenon. Given the preliminary findings, a subsequent study of 74 households in 11 settlements, in the same city, was conducted (Malaque III et al., 2014). The study revealed that urban households can be classified into different types in a range of contiguous categories from informal to formal housing. Furthermore, a multi-step transition process was observed, which means, either an inhabitant moved from one housing type to another in a different location, or an informal housing unit in a progressive urban settlement was upgraded to become a formal housing unit in the same location. Moreover, another subsequent case analysis was conducted to explore the incremental construction of different housing types in the course of their development (Malaque III et al., 2015). Research revealed that incremental construction was a direct result of the improvement of security of tenure. For example, a simple dwelling in an informal settlement was upgraded with permanent building materials and standard methods of construction when the inhabitants' degree of security improved. Over time, the physical condition of the house deteriorated when the inhabitants focused on payment for land. Eventually, the completion of the house, defined as a formal structure, coincided with legal ownership of the land.

Despite being the subject of scholarship, this typical incremental housing pattern in informal environments, built by the urban poor, requires more detailed understanding in order to provide effective housing interventions, especially in terms of architectural design and practice, which are both appropriate and sustainable in developing countries. Thus, in order to further understand housing as a material expression of the status of the urban poor, and to explore socio-spatial processes in progressive settlements, the aim of this paper is to model the evolution of housing in low income settlements. From the point of view of socio-spatial processes, the discussion of this paper emphasises the importance of political, economic and cultural factors in housing provision.

3. The study area

This study was conducted in Davao City, Philippines, located a thousand kilometres south of Manila. This is the same study area presented in previous papers (Malaque III, 2013; Malaque III et al., 2014; 2015). Recently, the Philippine population based on the 2015 census is 100.98 million, reported by the Philippine Statistics Authority (PSA). In 2012, the population of Davao City was 1.45 million. It has increased to 1.63 million based on the 2015 census (Philippine Statistics Authority, 2016). Davao City is the only city outside the National Capital Region that has a population of more than one million. Reiterating an observation presented in previous papers, the city has experienced significant immigration of impoverished people who have settled in precarious informal settlements. Like any of the other highly urbanised cities in the country, housing provision in the low income sector is one of the major issues in the context of local urban development which highlights the need for this continued scholarship in housing research.

4. Methodology

For the current study, data collection was conducted in accordance with fieldwork protocols approved by The University of Adelaide Human Research Ethics Committee (January 2014). Extensive fieldwork was conducted from February to April 2014. The first author gained access to a total of 74 households in 11 settlements. The selection of settlements and representative household cases was discussed more thoroughly in a previous paper (Malaque III et al., 2014). In a subsequent case analysis, another previous paper (Malaque III et al., 2015) explored the incremental construction of a representative sub-set of 16 of the 74 household cases. The 16 housing cases were selected from progressive urban settlements to represent the range of respective housing types. The data informing the analysis in this paper was derived from the physical documentation of individual dwellings and interviews by the first author with householders. The incremental construction of urban poor housing was preliminarily analysed in terms of the initial construction and improvements to housing structures, preceding the present form of housing units. This analysis of the history of the individual dwellings considered the incremental developments, the agents of housing provision and the building materials and methods of construction. In order to forecast the future development of the dwellings, the interview respondents' aspirations, preferences and future plans were further considered in the analysis. The aggregate incremental housing construction, the present housing status, and the preference and the future plans of the survey respondents, were further used to analyse and demonstrate the evolution of housing in low income settlements. Finally, results and discussions were synthesised in the context of socio-spatial processes in the built environment.

5. Results: evolution of housing in low income settlements

The evolution of housing in low income settlements is illustrated from the time when homeless people build their fundamental shelter, and transitions from informal to formal housing types, to ownership which shapes the permanent urban landscape (Figure 1). The urban poor begin to provide their own shelter by assembling shacks to mark their invasion of the squatter land. As the preliminary form of self-help shelter provision by the urban poor, these simple shacks, defined as 'informal' (Type V) housing in a previous paper (Malaque III et al., 2014) mark the first stage in the process of evolution. Makeshift shacks were usually made of recycled materials. Despite their short life, this ephemeral architecture manifests the urban poor's need for housing of their own to enjoy the 'first freedom' as it is defined by Turner (1968), wherein the squatter community welcomes anyone to join the association as long as there is enough land available. Thus, the temporary nature of a shack is an architectural statement that demonstrates the urban poor's participation in the creation of new community, despite the informality. Once inhabitants are identified as part of a squatter community, with assigned lots, their shacks eventually evolve to 'informal' (Type V) housing, which is the case of the Lamanilao house (Figure 2) in the Kobbler settlement. When the Lamanilao household joined the invasion in 2003, their shack was built of recycled materials measuring 2.40 metres square, a floor area defined by two standard pieces of plywood (typically 1200 x 2400 mm). Extensions to the house and installation of better building materials such as substandard fibre cement boards were completed in 2006. This was followed by the addition of another bedroom in 2010, as the house appeared during the fieldwork in 2014. In terms of their future plans, the Lamanilao family aim to live in a two-bedroom house complete with living spaces and amenities comparable to those constructed and sold in completed housing subdivision projects.
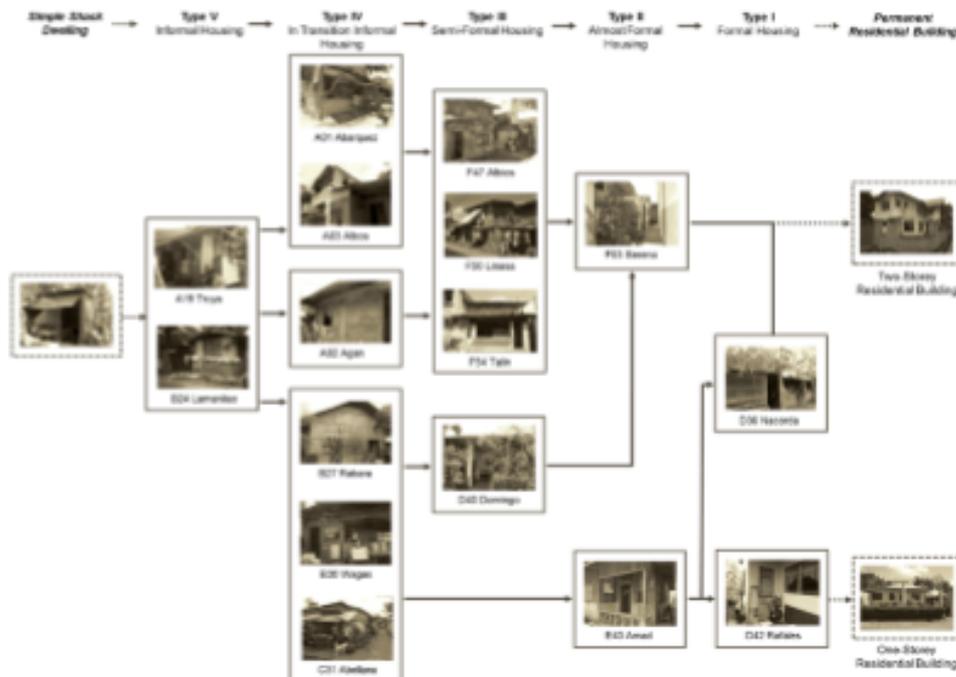

Figure 1: Evolution of simple shack dwelling to permanent residential building.
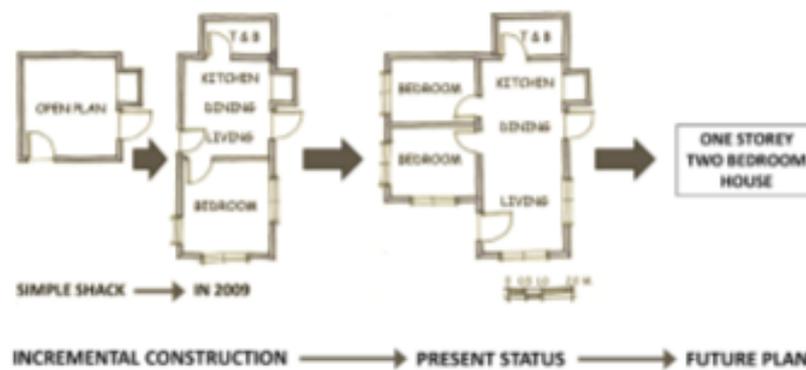
Figure 2: Evolution of the Lamanilao house.

It is noted in the previous papers (Malaque III *et al.*, 2014; 2015) that 'informal' (Type V) housing evolved to 'in-transition informal' (Type IV) housing when the squatter inhabitants organised themselves to apply for security of land tenure. Eventually, 'in-transition informal' (Type IV) housing may evolve to either a one-storey or two-storey structure. This is implied in the present construction of houses or based on the stated preferences by inhabitants during the interview process. For example, the Abarquez house (shown in Figure 1) in Arroyo Compound, began as an 'informal' (Type V) house with an open plan and toilet and bath in a 60 square metre lot. Based on its status when the fieldwork was conducted, the house was classified as 'in-transition informal' (Type IV) housing according to the classification defined by this study, and by the structure itself, it is anticipated that the structure will be upgraded to a two-storey house in the future. On the other hand, the Agan house (shown in Figure 1) of the same housing type and settlement as the Abarquez house, is currently a one-storey structure. However, with the inhabitant's stated plan to add another level, it is also expected that it will be upgraded to a two-storey house in the future. On the contrary, there are 'in-transition informal' (Type IV) housing cases which are currently single-storey structures and will remain the same as they transcend towards 'semi-formal' (Type III) housing. For example, in the case of the Wagas house (shown in Figure 1) in Kobbler settlement, after a series of evolution and incremental improvements from 2004 to 2011, the inhabitants expressed no plans to convert their house to a two-storey structure in the future during the interview in 2014.
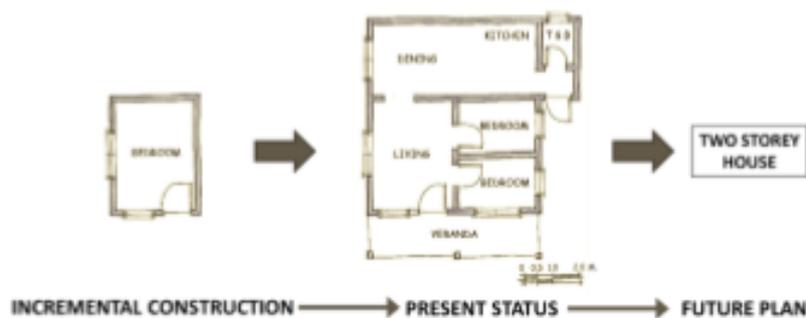

Figure 3: Evolution of the Domingo house.

Further improvements to the security of tenure influenced the transition of 'in-transition informal' (Type IV) to 'semi-formal' (Type III) housing, in the same way as their manner of evolution towards better housing structures. For two-storey 'semi-formal' (Type III) housing units such as the Albios, Linasa, and Talin houses (shown in Figure 1), it is assumed that they will also be upgraded to a two-storey structure but with more permanent building materials in the future. In some cases, one-storey 'semi-formal' (Type III) housing may eventually evolve as two-storey in the future. This is exemplified with the Domingo house (Figure 3) in Matina Aplaya Shanghai Village. In which case, after the series of steps from a simple shack to a 'semi-formal' (Type III) house as it is defined in this study, the inhabitants plan for major renovations to create a two-storey building in the future.

Security of tenure underpins the evolution of urban poor housing to achieve permanence. The attainment of secure tenure may be by ownership of legal land titles after paying for the land through government assisted programmes or through direct negotiation and payment to the original private landowner. In some cases, although legal land titles are not yet owned, the regular payments for the purchase of land grants constitute another form of secure tenure for the inhabitants. With fully secured land tenure, the 'semi-formal' (Type III) housing evolves to 'almost-formal' (Type II) housing constructed with near compliance to the standards of the building code. This phenomenon is exemplified with the cases of the Sereno house in Piapi I settlement and the Amad house in Toril II settlement, which were respectively beneficiaries of slum upgrading and sites and services programmes by the government in the 1980s. When the fieldwork was conducted in 2014 the Sereno house (shown in Figure 1) was classified as 'almost formal' (Type II) housing. Based on the interview with the head of household, the house began as an informal structure when their present settlement was a squatter site in the 1960s. It went through a series of steps from purely self-help housing until the householders benefited from land tenure assistance from the government. Currently, the house is a two-storey multi-family dwelling. The original household head, also the interview respondent, and his wife, are currently living in a housing unit which is part of the entire two-storey house which is occupied by the families of their children. On the other hand, the same 'almost formal' (Type II) housing, the Amad house (shown in Figure 1) began with a 20 square metre plan when the inhabitants moved to this settlement in 1989. The house was completed with all living spaces, including two bedrooms in a total floor area of 40 square metres, when the fieldwork was conducted. The Amad family, being a small household, only plans for a bigger living area and a separate dining with a refurbished kitchen. Contrary to the case of the Sereno house which is currently a two-storey structure, the Amad house is expected to remain a single-storey structure in the future when it becomes a permanent house.

'Formal' (Type I) housing is attained when both land tenure and building structure are legal. At this point in the course of development, the house that is built in accordance with the standards of the building code may already be a permanent architecture, or still in the process of evolving further to meet the preference of its inhabitants. The housing cases covered by this study in progressive settlements, despite being classified as 'formal' (Type I) housing, have the same classification and description as those built in completed housing subdivision projects, and are foreseen to evolve further from their current status. Based on the preference and future plans of the inhabitants, for the single-storey structure, this may become a two-storey structure in the future. For those which remain with the same building structure, further refurbishment means the addition of rooms with high quality building materials and finishes, formalising the house or establishing permanence. In the case of the Nacorda house in the Matina Aplaya Shanghai Village (shown in Figure 1), classified as 'formal' (Type I) housing in this study, it went through a series of steps from an informal house when the inhabitants moved in 1976, at a time when the present site was a squatter settlement. The house was initially built in a self-

help manner by the inhabitants with some assistance from the community. Until the inhabitants became beneficiaries of the government's Community Mortgage Programme, the house was classified under its current status when the fieldwork was conducted in 2014. Despite attaining 'formal' (Type I) housing status, the Nacorda family preferred bigger living spaces with individual rooms for their growing children and planned for the addition of another floor. This means that the house is expected to be a two-storey building in the future. On the other hand, the Rafales house (shown in Figure 1), of the same housing type and settlement with the Nacorda house, will retain its current structural form as a single-storey house, except for further improvements to the finishes. This house went through a series of steps until it attained its current status, however, painting and other finishing were still underway when the fieldwork was conducted.

6. Discussions: socio-spatial processes in low income settlements

The evolution of housing in low income settlements is demonstrated in the way the architecture of houses from different housing types transforms from one physical form to another in the course of development. This dynamic spatial process found in progressive urban settlements reflects the various social factors apparent in developing countries, which is the focus of discussion in this section.

6.1 Socio-political

The socio-political process in housing provision reflects the act of the regulators. Viewing their role in urban design, Madanipour (2006, p. 174) mainly identifies the regulators as 'the government and its role in regulating the economy, which in the urban development process is mainly reflected in planning'. In the area of shelter provision for the low income population, the act of the regulators is manifested in the implementation of housing programmes. The Philippines is influenced by various international trends and ideologies in policy making. In addition to the major political shift in the country following the 1986 People Power revolution, it is interesting to note the historical development of housing provision, most especially in the low income sector, from a socio-political point of view.

Notable government housing initiatives in the Philippines were initiated during the Martial Law regime of President Marcos in the 1970s. The creation of the NHA and the adoption of slum upgrading and sites and services schemes were indicators of how the country's urban governance was influenced by the World Bank's interest at that time and inspired by Turner's school of thought. In this study, these programmes played an important role in providing land tenure assistance to the informal inhabitants. In the discussion of incremental construction of housing and progressive development of settlements, it was observed that improvement of land tenure was the forerunner of the formal construction of houses and the physical development of the settlement site. For example, the Piapi I and Toril II settlements examined in previous papers (Malaque III et al., 2014; 2015), which were recipients of earlier slum upgrading and sites and services programmes, were able to progress formally as indicated by the presence of 'almost formal' (Type II) housing units and developed site infrastructures. Contrary to the centralised programme implementation of the Marcos regime, the land tenure assistance initiative became more participatory in nature in the post-People Power revolution period. The community-based Community Mortgage Programme aimed to legalise land ownership by purchasing the squatter land from the legal land owner, or alternatively, relocating the informal inhabitants to another site, encouraged the participation of NGOs to act as originators on behalf of the urban poor community beneficiaries. Furthermore, decentralised urban governance is indicated by legislation of the 1991 Local

Government Code, and pro-poor housing policies were mandated by the 1997 Urban Development and Housing Act. It goes without saying, that the current socio-spatial processes in low income housing settlements manifested by active participation of the NGOs and empowered self-help initiatives of the inhabitants themselves are reflective of the current socio-political development in the Philippines.

6.2. Socio-economic

The socio-economic process in housing provision reflects the act of the producers. Viewing their role in urban design, Madanipour (2006, p. 174) identifies the producers as 'those who build the city, predominantly developers and their financiers and team professionals, including designers and construction companies'. However, in the context of informal urban development, the urban poor themselves are the main producers demonstrated in self-help housing schemes found in progressive urban settlements. The urban poor, who mostly relied on transient urban labour and other forms of informal income, were not qualified to access formal housing loans offered by banks and other formal finance and credit institutions. For this reason, they formed themselves into community savings organisations, which then, for example, provided the foundation for the organisation of the Homeless People's Federation Philippines (HPFP). In the 1990s, the HPFP originated in the dumpsites of Payatas, Quezon City, to bring together low-income housing groups. Recently, the Federation is active in 17 cities throughout the country (Vincentian Missionaries Social Development Foundation Incorporated, 2001; Papeleras *et al.*, 2012).

   The community savings organisation offers micro credits or small loans to its members, which is the source to finance the incremental construction of housing units. In this study, some of the informal inhabitants in the Arroyo Compound were recipients of financial assistance from the HPFP and its associated NGO, the Philippine Action for Community-led Shelter Initiatives, Inc. This is the case for the Albos house where the beneficiary was able to purchase more permanent building materials because of the financial assistance offered by the NGO. Despite the location in an informal settlement, the house, is thus classified as 'in-transition informal' (Type IV) housing. Furthermore, the NGO's institutional role in urban poor housing provision brought the design professionals and civic organisations to offer technical support, labour and sweat equity in the construction of houses in traditional Filipino *bayanihan* manner. It goes without saying that this case study of urban poor housing in informal environments in the Philippines provides new insights to redefine the producers of the built environment.

6.3. Socio-cultural

The socio-cultural process in housing provision reflects the act of the users. Viewing their role in urban design, Madanipour (2006, p. 174) refers to this broad category as the 'urban society'. In this paper, they are referred to as the low income population, or the urban poor who lived in informal settlements and strived to improve their housing status until they achieved permanent architecture. The progressive form of low income housing provision observed manifests the cultural expression of self-help housing at a household level, which is extended at community level as organised self-help initiatives. In the Philippine setting, the traditional *bayanihan* spirit visually translated with 'people-carrying-a-house' promotes a unique culture of citizen participation in the provision of urban poor housing and the formation of low income settlements. *Bayanihan* was traditionally celebrated when a family who wanted to move their house offered a party to friends and neighbours who gathered to carry the house to its new site. Today, the festivities associated with the *bayanihan* tradition are reflected in the agency participation of all stakeholders in housing provision including the NGO, professional and civic groups,

and community-based organisations. Currently, this unique Filipino tradition is being treated in many ways. Firstly, it is being institutionalised in the organisation of Philippine-based NGOs such as the *Gawad Kalinga* (Odivilas and Odivilas, 2015; Santos-Delgado, 2009). Secondly, it is being integrated in the implementation of foreign funded projects such as the upgrading programme of the Asian Coalition for Community Action in Baseco site in Metro Manila (Galuszka, 2014). Thirdly, from the international perspective, it is seen as an important component in the enhancement of social capital (Labonne and Chase, 2009; 2011).

The Filipino *bayanihan* tradition further enhanced the organisational capability of community-based low income groups. For example, beyond savings as a main strategy in the organisation of the urban poor federation like the HPFP, the community-based savings initiative means not only a financial tool but also a social mechanism to build a network of communities. This cultural trait empowering the organisation of urban poor communities in the Philippine setting played an important role in the evolution of housing from a simple shack to become a formal permanent residential building. It has been discussed that the organisation of informal inhabitants to negotiate for the purchase of their squatter land, or to access government or NGO assistance, is the first indicator of an evolution. In the preceding discussions on socio-political and socio-economic processes, it is noted that the government's role in housing provision moved away from being the provider, and the producers of the built environment are being redefined, with reference to the urban poor with institutional support from NGOs. With the increasing role of culture in urban poor housing provision, it is evident that the socio-cultural factor must be given more value in policy making and programme implementation.

7. Conclusion

The dynamic housing phenomenon in low income settlements in a case of a city in a developing country was presented in previous papers (Malaque III *et al.*, 2014; 2015). Firstly, the phenomenon was discussed with the concept of 'multi-step transition' from the point of view of housing provision (Malaque III *et al.*, 2014); and secondly, with the concept of 'incremental construction' from the disciplinary perspective of architecture (Malaque III *et al.*, 2015). Furthermore, the 'evolution of housing', from a simple shack to a permanent residential building, is evident with the cases presented in this paper. This shows that housing in low income settlements is socially constructed, and should not be viewed as an object. With reference to the discourse on socio-spatial processes, this paper illustrates that housing, despite being provided by the urban poor themselves, is a material expression of the society where it is created, altered and permanently shaped. Although informal housing has long been viewed in a pejorative sense within traditional paradigms of architecture, urban design and planning, this study shows that it must be viewed, instead, as the most affordable and accessible type of shelter for the urban poor. Thus, it deserves attention in the discipline of architectural science, which is demonstrated in this paper. In addition to modelling the physical evolution of housing, this paper redefines the respective roles of different social actors of the built environment defined by Madanipour (1996). In the context of informal urbanisation in developing countries, the urban poor who are the users and main beneficiaries, are also defined as producers of housing and the built environment. Accordingly, with the focus on the role of the government as regulator, housing provision is now centred on the people who have the capacity to build and to provide their own shelter. The recent trend in policy making has widened the participation of all agents in housing provision, most importantly the institutional role of NGOs in empowering communities at grassroots level. These redefined roles of key actors in the formation of the built environment must be considered in architectural design and

practice. In the twenty-first century with half of the world's population living in urban areas, the role of the people must be given more value in housing provision and the formation of sustainable urban environments, most especially in developing countries which are rich in human resources.

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Appendix M. Passive Low Energy Architecture 2017 Edinburgh Conference paper

Thriving in the Slums: Progressive Development and Empowerment of the Urban Poor to Achieve Secure Tenure in the Philippines

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Abstract: Thriving cities are characterised by vigorous growth and concepts of flourishing, healthy communities. However, these concepts are not immediately connected with the living conditions in squatter settlements in developing countries. With a rapidly increasing urban population, slum dwellers in developing countries continue to occupy a vulnerable position in urban areas with fear of eviction and displacement from their livelihood. Acknowledging a range of approaches to house slum dwellers, including problematic efforts to relocate inhabitants from a squatter settlement to a regular housing market in a single step, this paper examines the circumstances which have enabled squatter settlers to achieve legal tenure and to build homes, incrementally, that are eventually compliant with the building code. Based on detailed analysis of individual homes and interviews with householders, this paper presents the findings of a comprehensive study of slum settlements in Davao City, Philippines. The progressive development of urban settlements is analysed in the context of Filipino pro-people policies, which have prioritised the rights of the urban poor and empowered them to build low income housing, enabling them to develop sustainable, secure, thriving urban settlements which are the foundation for a better future.

Keywords: Housing policy, Philippines, progressive development, secure tenure, urban poor

Introduction

Thriving cities are characterised by success and prosperity as well as vigorous growth and concepts of flourishing, vibrant, healthy communities. However, these positive themes are not immediately connected with the urban living conditions of slum dwellers in developing countries. The world's population is becoming increasingly urban, and the rapid increase is found in cities of developing countries. In 2015, the United Nations declared that 54% of the world's population lives in urban areas. While it is estimated that the figure will reach 66% by 2050, nearly 90% of this increase will be in Asia and Africa (United Nations, 2015). In this context of unprecedented urbanisation coupled with widespread urban poverty, squatting is often the only means to access affordable shelter for the urban poor. Moreover, slum dwellers in developing countries continue to occupy a vulnerable position in urban areas with fear of eviction and displacement from their livelihood. Squatter settlements are often seen as indicators of disease in a healthy city because of their perceived negative impact on the urban and ecological environment (Appadurai, 2000), as McFarlane contends 'informal settlements…remain populations outside the sphere of citizenship and notions of the clean, ordered modern city' (2008, p. 1). On the other hand, the development of informal housing

often provides an immediate solution to shelter needs of the urban poor who migrate to the city in search of a better livelihood. The recognition of self-help housing in informal environments has its roots in the 1960s evident in the work of Abrams (1964) acknowledging the role of squatters in the urbanizing world; and, in the seminal work of Turner (1968) derived from his involvement in the squatter settlements of Lima, Peru. Furthermore, in the 1970s, Ward (1976) explored squatter settlements in Mexico as a low-income housing solution. This process continues in the developing world, documented in the ongoing work of Mitlin and Satterthwaite (2004), Mukhija (2003), and others. Moreover, increasingly positive attitudes toward squatter settlements are expressed by UN-HABITAT (2008) in their case for a 'slum of hope' (in contrast to 'slums of despair' where formerly well-developed urban districts have deteriorated due to regressive economic and social activities).

Acknowledging that housing is a basic human right, governments are committed to provide shelter for the low-income sector of their respective countries. However, housing policy and programmes in developing countries, like the Philippines, are often based on models (applied with varying degrees of success) which originate in high-income countries. Defined by Lim (1987) as a 'one-step regularization model', this model is intended to relocate the urban poor from a squatter settlement to a regular housing market in a single step. Alternatively, it is also characterized as 'instant development' (Turner, 1967); or, a 'product approach' where a complete housing package is delivered through a sophisticated system in the housing market (Ferguson and Navarrete, 2003). In the Philippines, an example of this traditional approach was a major housing programme under the Marcos regime known as the *Bagong Lipunan* Improvement of Sites and Services (BLISS) conceived in the late 1970s. Intended as housing for the poor, many BLISS housing projects were completed in Metro Manila in 1983 as discussed by Abueg (1986). However, the buildings were similar to other condominiums catering to higher income earners that did not seem to match the affordability of the urban poor.

Decentralized housing and urban policies under the Marcos regime in the Philippines ended with the People Power Revolution in 1986. Consequently, the new 1987 Philippine Constitution served as a general framework for new governance which took an explicit stand on issues related to the alleviation of urban poverty. It established guiding principles on the conditions of eviction and the roles of the government, private and non-profit organizations in housing delivery and infrastructure development (Shatkin, 2007). The new Constitution became the basis for two major pieces of legislation pertinent to informal settlement, namely, the Local Government Code of 1991 and the Urban Development and Housing Act of 1992, which, according to Porio and Crisol (2004, p. 208), 'marked the departure from eviction and relocation to the adoption of a more decentralized approach towards housing and urban development'. Furthermore, these policies also integrated the participation of the urban poor in land use planning and redefined the roles of government agencies, urban poor communities and mediating groups such as NGOs. As such, they changed the performance and relationships of stakeholders in the housing sector (Porio and Crisol, 2004). Given these developments, there is a need to discuss the progressive form of urban development in relation to these recent housing and urban policies in the Philippines.

Background, aims and objectives of this paper

This paper maintains that the progressive development of urban settlements coincides with the legalisation of land tenure, and the incremental construction of housing units and improvements to sites and services. Preliminarily, this argument is informed by detailed

observation of how an informal settlement in Davao City, Philippines, underwent a transformation from an informal settlement to a more formal one (Malaque III, 2013). In a subsequent comprehensive study of 74 households in 11 settlements, in the same city, the following housing phenomena were observed based on detailed interviews with residents and *in situ* building analysis. Firstly, it was deduced that urban households can be classified into five different types in a range of contiguous categories from formal (Type I) to informal (Type V) housing, and it was observed how householders moved from one type to another until they became owners of formal housing (defined as legal tenure with construction compliant with the building code). Characterised as a multi-step transition process, one way to achieve formal housing occurred when an informal housing unit in a progressive urban settlement was upgraded to become a formal housing unit in the same location (Malaque III et al, 2014). Secondly, further examination of the phenomenon revealed that the incremental construction of housing units in a progressive urban development was a direct result of the improvement of the householder's security of tenure. This was exemplified when an informal housing unit was upgraded with better building materials and standard methods of construction when the inhabitant's degree of legal and financial security improved. Over time, it was observed that the physical condition of the house could deteriorate over time while the inhabitants focused on payment for land. However, upon achievement of legal ownership of land, the house was further refurbished to become a formal structure (Malaque III et al, 2015). Thirdly, an evolution of housing is modelled by connecting the incremental constructions of housing cases representing the range of housing types from informal to formal. This illustrated the evolution of housing from a simple shack in a squatter settlement to become permanent formal architecture; these structures comprised one- and two-storey residential buildings during the course of their development (Malaque III et al, 2015).

Despite being the subject of comprehensive scholarship, this dynamic phenomenon of housing and urban development requires further understanding to inform more effective urban planning interventions which are both appropriate and sustainable in developing countries. Thus, to further understand this dynamic phenomenon in the case of a city in a developing country, the aim of this paper is to illustrate the progressive development of this type of urban settlement. This physical phenomenon is discussed in the context of pro-people housing and urban policies, empowering the poor and enabling them to develop sustainable, secure, thriving low-income urban settlements.

The study area

The comprehensive study was conducted in Davao City, Philippines, located a thousand kilometres south of Manila. This is the same study area presented in previous papers (Malaque III, 2013; Malaque III et al, 2014; 2015; 2016). Recently, the Philippine population based on the 2015 census was 100.98 million, reported by the Philippine Statistics Authority (PSA). In 2012, the population of Davao City was 1.45 million. It has increased significantly to 1.63 million based on the 2015 census (Philippine Statistics Authority, 2016). Davao City is the only city outside the National Capital Region, also known as Metro Manila, that has a population of more than one million. Housing provision in the low-income sector is one of the major issues in the context of local urban development in Davao City which is populated by impoverished rural immigrants who have settled in precarious informal settlements. While this pattern of mobility repeats trends throughout the developing world, the continued escalation of this pattern prompts the need for this continued scholarship in housing research.

Methodology

The data, identified in previous papers (Malaque III et al, 2014; 2015; 2016), was collected from February to April 2014, in accordance with fieldwork protocols approved by The University of Adelaide Human Research Ethics Committee (January 2014). This same data informs this paper. Access to a total of 74 households in 11 settlements, and the selection of settlements and representative household cases were discussed more thoroughly in a previous paper (Malaque III et al, 2014). In subsequent case analyses, previous papers explored the incremental housing construction (Malaque III et al, 2015), and the evolution of housing (Malaque III et al, 2016), of a representative sub-set of 16 of the 74 household cases. For this purpose of studying the phenomenon of progressive development of urban settlements, the analysis focused on 58 housing cases situated in seven progressive settlements. Contrary to planned settlements, progressive settlements are those which were inhabited by informal settlers who then became recipients of land tenure assistance from the government, or processed negotiation for purchase of their squatter land from the legal land owner, which are assumed to develop continuously over time. Contrary to observing the progressive development of a single urban settlement in a long span of time, from its informal formation towards attaining formal status, the cases presented in this study serve as snapshots of varying housing and settlement status taken at one time in 2014. The progressive development of urban settlements is analysed by counting on the number of housing cases respective to each housing type per settlement. This revealed the status of settlements and their position in the multi-step transition from informal to formal status. Hence, counting and mapping the housing cases respective to different housing types in each settlement, as shown in Figure 1, animates the dynamic progressive development of urban settlements. Finally, the result is discussed in the context of recent developments in housing and urban policies in the Philippines.

Result: the progressive development of urban settlements

The progressive development of urban settlements began with the formation of informal settlements. The settlement sites where 'informal' (Type V) housing is located, are characterised with undeveloped sites which lack basic services. In this study, it is evident in the Arroyo Compound and the Kobbler settlement sites. In the same informal settlements, the 'in-transition informal' (Type IV) housing types are located. With the same physical characteristics, the difference between the two housing types is that the householders of the latter are in the process of organising themselves to initiate improvement of land tenure, thus labelled as 'in-transition informal'.

The organisation of informal householders played an important role in the progressive development of their settlements. Among other requirements, the organisation must be legally accredited by an appropriate agency, such as the Presidential Commission for the Urban Poor, to be eligible for the government programme. In this study, there were two settlement cases which were identified as 'in-transition' (Type IV) housing. These included the Peace Avenue and Green Prairie Homes settlement sites which were beneficiaries of a Land Tenure Assistance Programme (LTAP) implemented by the National Housing Authority (NHA). The former is an example of 'on-site' project implementation while the latter is an example of 'off-site' LTAP project implementations. For the 'on-site' project in Peace Avenue, the progressive development of sites and services is starting to be noticed. The irregularity of the allotments reflects its initial formation as a squatter site. The inhabitants of these

settlements recently subscribed to the government programme in 2000, which helped them to gain a small increase in their security. With a long way to pay for the land to own legal titles, at the moment, they are still holding some fear of eviction at any point in time if they fail to continuously pay for the land.

Type V	Type IV	Type III	Type II	Type I
'Informal' housing	'In-transition informal' housing	'Semi-formal' housing	'Almost formal' housing	'Formal' housing

Matina Aplaya Shanghai Village

4	2		2

Piapi I settlement

8	1

Toril II settlement

2	1

Green Prairie Homes

4

Peace Avenue

4

Kobbler settlement

2	9

Arroyo Compound

4	15
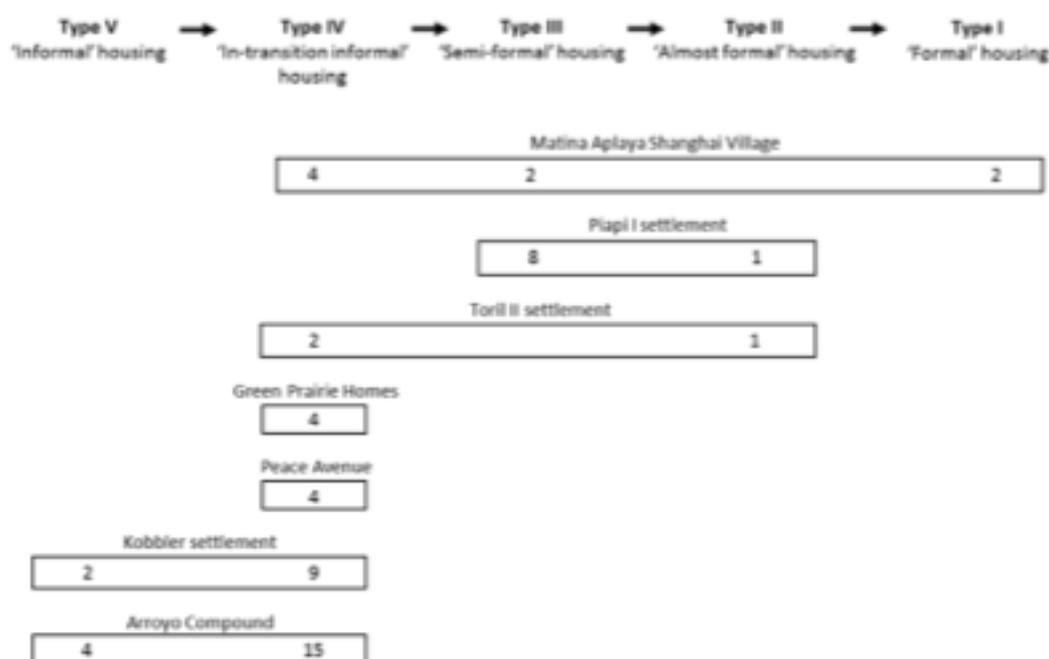
Figure 1. Progressive development of urban settlements.

The urban settlements covered by this study, with inhabitants who had been beneficiaries of government assistance for land tenure, had progressively developed towards a more formal status. For example, the inhabitants of Toril II settlement had been recipients of sites and services implemented by the NHA since 1988. As far as this study is concerned, two out three household cases are in 'in-transition' (Type IV) housing while the other one already progressed to an 'almost formal' (Type II) housing. On the other hand, the Matina Aplaya Shanghai Village, with inhabitants who had been recipients of the Community Mortgage Programme (CMP) since 1993, progressed further with varied housing types from 'in-transition informal' (Type IV) to 'formal' (Type I) as shown in Figure 1. Four out of eight household cases currently occupy 'in-transition informal' (Type IV) housing; two are in 'semi-formal' (Type III) housing; and, two are in 'formal' (Type I) housing. These settlement sites were former squatter areas which progressively developed in-situ, mainly because of government assistance for the formalisation of land tenure. In the case of these two settlements, the government programmes being implemented were the sites and services and the CMP, respectively.

The earlier the implementation of tenure assistance from the government, the greater the urban settlement progressed. For example, in the case of the Piapi I settlement, its inhabitants had been recipients of a slum upgrading programme implemented by the NHA after 1981. Currently, eight out of nine of its household cases examined in this study were classified as 'semi-formal' (Type III) housing as shown in Figure 1. The Piapi I settlement is

more advanced compared to the Toril II and the Matina Aplaya Shanghai Village settlements, with beneficiaries of land tenure assistance by the government in the later dates. Most of the household cases in the Toril II and the Matina Aplaya Shanghai Village settlements were in 'in-transition' (Type IV) housing, which were behind in comparison with cases in the Piapi I settlement because their respective government programmes were implemented later, in 1988 and in 1993. With reference to the discussion on 'incremental construction' of urban poor housing (Malaque et al, 2015), the Piapi I settlement is mostly characterised by 'semi-formal' (Type III) housing, and physically appears as a slum with building structures that have become dilapidated over time. This is because the inhabitants are prioritising their investment in the improvement of land tenure rather than the incremental construction of their houses. It was noted that once the inhabitants gained better security, the formalisation of housing structures followed. The ultimate form of tenure security was ownership of the legal land title. However, in some cases, full security was also attained by continuous payments for the purchase of land through stable land tenure assistance programmes such as the CMP. This is the case of the Nacorda and the Rafales households in Matina Aplaya Shanghai Village. Despite the fact, that the beneficiaries were in the process of paying for the purchase of their land, their confidence to pay in full and to own legal titles in due course encouraged them to refurbish their houses in accordance with the national building code. Thus, these households were classified as 'formal' (Type I) housing which marks the end goal of progressive urban settlements characterised by formal status in terms of land tenure and housing construction

Discussion

The progressive development of an urban settlement, in the case of Davao City, Philippines, was first explored in a preliminary case study conducted in the Kobbler settlement (Malaque III, 2013). The case of the Kobbler settlement coincides with the observations by Burgess (1985) that are based on genetic principles, whereby an 'illegal' settlement will eventually transform to become a 'pirate' settlement when homeowners organise themselves to improve their tenure. This means an initial impetus to achieve legal settlement status in due course. Furthermore, the comprehensive study of 74 households in 11 settlements, which was informed by rigorous fieldwork, demonstrated a multi-step transition process in the provision of housing for the urban poor (Malaque et al, 2014). Focusing on housing cases in progressive settlements, subsequent case analyses have demonstrated an incremental construction process of housing units in relation to the degree of tenure security (Malaque et al, 2015); and, an evolution of housing whereby a simple shack eventually evolves to become formal architecture that complies with the building code when legal tenure is achieved (Malaque et al, 2016). This study, focusing on 58 housing cases in seven progressive settlements, demonstrated the complete pattern of progressive development of urban settlements from informal to formal status. These parallel observations are not actually new. For example, based on critique towards 'instant development', Turner (1967) alternatively viewed low-income housing provision in developing countries as 'progressive development'; and, in his critique of a 'one-step regularisation model', Lim (1987) alternatively posited the 'multi-step transition model'. What makes the findings of this study unique is that this current phenomenon, observed in this case of Davao City, emerges in relation to, and enhanced by, specific developments in housing policy in the Philippines, and with the urban poor's proactive response to government intervention.

In the context of a pro-poor urban development and housing policy championed in the Philippines, and the localised implementation of development programmes, the urban poor speculates to live in informal settlements, with the aspiration to own a house and a lot of their own, for which they can attain legal tenure in the course of progressive development. Although informal housing in squatter settlements has long been viewed in a negative sense within traditional paradigms of architecture and urban planning, this study shows it must be viewed, instead, as the most affordable and accessible type of shelter for the urban poor. Importantly, the comprehensive study reveals that informal housing is often the first step in a multi-step transition process which precedes incremental construction, the evolution of permanent housing, and the progressive development of settlements. Thus, this study supports the emerging view towards squatter settlement as 'slum of hope' that needs to be better understood such that more appropriate policies and interventions can be applied in the provision of, or support for, low-income housing.

Conclusion

It is noted that the Philippine government, in its recent housing policy approach, moved away from being a provider to focus on its responsibility as a regulatory body. This recent trend in policy making has widened to be more inclusive of the participation of all agencies in housing provision, most importantly the institutional role of NGOs in empowering communities at a grassroots level. Consequently, in the context of informal urbanisation, the urban poor as key stakeholders and beneficiaries, can be recognised as the main producer of the built environment. Accordingly, with the shift in the role of the government as a regulator, housing provision is now centred on the people who have the capacity to build and to provide their own shelter. These recent policy developments in the Philippines have prioritised the rights of the urban poor and empowered them to build low income housing, enabling them to develop sustainable, secure, thriving urban settlements which are the foundation for a better future. Thus, this explains and relates to the progressive form of urban development. In the twenty-first century when the world's population is becoming urban, Filipino pro-poor policies which place more value on the role of the people in housing provision and the formation of the built environment are much needed, most especially in developing countries which are rich in human resources.

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