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Coupling informality with formality: Ideas for innovative housing and urban development strategy

1. Introduction

Informality today, and perhaps even more importantly in the years to come, remains to be the dominant mode of urban production in many cities of developing nations. And informal settlements for many urban dwellers are the only viable alternative for accessing land, services, job opportunities and social mobility. Yet, much of the planning and design practice in these cities disregards and/or alienates this form of urbanization. Informal settlements, which generally are referred as "slums" are often associated with unsafe, unsanitary, badly serviced living environments without security of tenure. The dominant idea which has shaped and continues to shape most non-western cities is based on the rejection of inherited patterns and knowledge and the pursuit of an irrelevant urban modernity. (Malik 2001)

Modernist housing provider model, i.e. strong public sector involvement in a centralized production of ready-made minimum-standard units for anonymous residents, was introduced both to address the problem of housing shortage in the era of rapid urbanization and to solve the problem of "slums". Conflicting views of modernist approaches have resulted in an ongoing and polarized debate: on one side, praise for its salutary delivery of the masses from unhealthy "slums"; on the other, disdain for its engagement in oppressive practices of social engineering and the eradication of traditional urban fabric. Modernist residential blocks are criticized for their lack of sensitiveness to social and cultural needs of the people (eg Holston 1989). They are also criticized for being unaffordable, energy-demanding, and climatically unsound and being rigid (e.g. Correa 1985). The dissatisfaction with modernist housing solutions has motivated reconsideration of traditional methods of housing production and more increasingly in recent years many studies are being directed to understanding the production and functioning of informal settlements.

While there had been few attempts to couple informality and formality, they have emphasized only one aspect – that of the moral and entrepreneurial capacity of the urban poor in informal housing environments. Exploring informality both from theoretic and design point of view the study intends to observantly investigate physical and social qualities of informal settlements in terms of their capacity to accommodate hierarchically and temporally defined needs of the dwellers. The paper presents a part of an ongoing doctoral research which explores what values for residents are inherent in 'modern' and 'traditional' types of housing and what the concepts 'formal' and 'informal' mean in connection to production, use and management of housing. The objective is to create knowledge for possible coordination and synergies between these poles.

The paper reviews literature on the concepts 'formal' and 'informal' particularly in urban planning and development fields. It also uses empirical evidences from own study of the ongoing large scale condominium housing program of Addis Ababa and cases from other African

countries to sketch the first drafts of ideas for a housing and urban development model for African cities.

2. The concepts 'formal' and 'informal'

There is a growing interest in academia, in recent years, to understand the relationship between 'the informal' (as in informal economy or informal sector and informal settlement) and formal mechanisms applied to control or manage it. With so much unintended and failed results of formalization processes at hand, the focus in very recent years seems to be even more directed at understanding the 'informal' so that ideas for integrating the formal and the informal could be worked out. Discussion on this area have been enriched considerably by the literature of the past two decades on (self) organization of common property regimes by Ostrom, and by the push in some policy circles to extend property rights to groups of individuals who do not currently 'enjoy' such rights as advocated by De Soto. In development studies, discussions about formality and informality have often revolved around issues of property rights where the value of secure tenure is and its link to poverty alleviation is emphasized or to governance where multi-layered governance system is emphasized (Ostrom et. al 2006)

From the mass of alternative uses of the terms and alternative characterizations of the concepts in academic and policy discourses, Ostrom et.al (eds. 2006) highlight two strands that could serve as ' initial entry to a framework for capturing the many definitions that abound in the literature':
(1) The notion of 'informal' as being outside the reach of different levels and mechanisms of official governance and 'formal' as being reachable by these mechanisms
(2) The other strand which the authors consider is important in shaping policy discourses regards nature of organization where the 'informal' is identified with 'lacking structure' and the 'formal' with 'structured'.
And in light of this and in light of conceptual and empirical advances, the authors argue, the two dimensions – the reach of official governance and the degree of structuring - 'need to be further specified and made precise' and 'a more nuanced approach needs to be developed' which is what this paper attempts to do. Arguing against the tendency to associate 'informal' with 'unstructured' and 'chaotic' and arguing against the formal-informal dualism that dominates discourses and the practice, the authors suggest what they consider to be a more fruitful option – 'the informal-formal continuum' – which we will attempt to present briefly in the next section.

In the architecture discourse, the notions of 'formality' and 'informality' are largely associated with two broadly defined forms of urban development. Different forms of spontaneous settlements, all types of illegal occupations, invasions, and squatter settlements are generally identified as informal (Hutchison ed 2010:268), the 'formal' is then considered as that which is planned through rational processes and under legal institutional frameworks. (Caves 2005:130) Landscape of "slums", squatter settlements, and pavement dwellings, each governed by different forms of regulation, negotiation, and political barter are all considered as the spatial expression of the informal city (Hutchison ed 2010:421). Despite the immense similarities between them, a number of differences could be identified between each of these types of settlements in the way each is formed, their physical and social conditions, legal conditions they exist in and the kind of population they accommodate. It is possible, thus, to estimate how the gross identification of these settlements as 'informal' in discourses could lead to inappropriate policy measures.

It is, for example, argued in Hutchison (ed. 2010:268) that 'slums generally emerge from similar necessities: to find shelter and to survive amid the lack of resources, scarcity of land, and the external threats'. And because of their similar 'dynamic of growth', they present 'similar spatial morphology.' However, this spatial resemblance could be misleading; 'slums evolving from different social and cultural backgrounds present great diversity, which could be better understood regarding dwellers' socialization patterns, political organizations, and their beliefs about the future.'

Characteristics of informal settlements are generally referred to as exhibiting similar features such as: (1) lack of land tenure security; (2) lack of basic infrastructure (3) predominance of physically sub-standard dwellings; and (4) locations that are not in compliance with land use regulations and are often not suitable for development (e.g. hillsides, wetlands, flood plains). 'Favelas' of Brazil, 'Gecekondu' in Turkey, 'katchi abadis' in Pakistan, 'kampungs' in Indonesia, 'bidonvilles' in former French colonies. (Caves 2005:139)

Other features common to many but perhaps not for all informal settlements include overcrowding, houses with high variations in types and quality of construction and employing local building materials, design and technology, mostly situated on unsuitable land; the majority of the structures provide accommodation on a room-by-room basis, the majority of dweller being of low incomes and living as tenants in a single room, predominantly engaged in informal economic activities, built incrementally and on self-help basis and with informal finance arrangements; poor or lack of infrastructure services; other dimensions of informal settlements include; presence of small-scale and large-scale landlords; composed of heterogeneous urban population; rental accommodation being the most common form of tenancy. (Mushumbusi 2011) Above all these settlements offer an affordable alternative for shelter for many poor households.

In light of these and based on the strands Ostrom et.al (2006) provided as summaries of current discourses on the subjects 'formal' and 'informal', the following remarks could be given in attempt to frame our discussion of informal housing practices:

(1) In the first strand in Ostrom et.al, (eds. 2006) 'informality' and 'formality' are defined in terms of their relation with the government or legal institution. Furthermore, the discourse as captured in this strand mainly focus on the soft existence of 'informal' structures in terms of their accessibility to government control which imply that soft measures such as legalization or some form of registration could fix the "informality problem". In practice however, policies and measures taken towards the 'informal' demonstrate a much radical attitude that assumes hard and intolerable existence. Furthermore, studies have shown that such measures are not often sufficient in improving conditions in and with informal settlements.

In a study in Cape Town that attempts to assess the community's response to a formal housing provided to them by the state, it is shown how post-development community problems continues when the poor community is provided with services in the context of weak collective capacity and in the absence of grassroots organization (Lemanski 2008). Alan Gillbert (2002) in his study of a legalized self-help settlement in Bogota finds that home ownership in the self-help suburb offered little in the way of capital accumulation and concludes that 'alleged benefits of legalization' which De Soto argues for are 'less a panaceas than a populist dream'. This 'conventional wisdom of titling' which became popular after De Soto's famous publication *"The Mystery of Capital", 2000,* was bought by many international agencies and policy makers. Empirical evidences, however, showed different results that the theory was challenged by many

for its failure to estimate the fate of that large number of tenants living in informal settlements (eg. Payne 2008, Elias 2008). Elias (2008) in his doctoral study of urban upgrading in tenant-dominated inner-city settlements in Addis Ababa shows that 'neither the theories that assert the non-responsiveness of tenants nor the ones that emphasize the sole role of tenure security explain the reality and the needs of tenant-dominated settlements'. He shows that relationship among improved property rights, legal frameworks and grassroots organizations are more central in both stimulating tenants' responses and 'curbing uncontrolled spatial transformations.' Tenant-dominance in informal settlements is not particular to Addis Ababa and is in fact one of the most common features of informal settlements in many other countries as tenancy in extended housing units provides income that forms the livelihood of many poor families in such settlements.

(2) The second strand defines informality in terms of its own internal organization. The multi-faceted problems and basic infrastructural and service lacks in informal settlements would make such independent and targeted focus on such settlements relevant. However, characterization of the 'informal' as 'disorganized', is conceptually unsound and could led to policy disasters as the state may sought to provide 'structures' where none was presumed to exist before.

The usefulness of the formal-informal dichotomy has constantly been debated in the field of economics, leading to a reconsideration of the conceptual and empirical basis of the formal-informal divide, and the assessment of its policy implications. (Ostrom et.al, eds. 2006) There are empirical evidences in literature suggesting that characterizing urban economies and housing settlements in dualistic terms (as formal/informal) is too simplistic and can marginalize large groups of people in the informal sector and living in informal settlements. Reports after reports have shown the immense contributions of the informal sector to productivity and wealth of cities, and informal settlements in providing viable alternative to shelter low income citizens.

The boundary between the formal and informal housing and economic is even more blurred by the overlapping co-existence of both formal and informal conditions across the sectors. For example, not everyone living in informal housing settlements holds an informal sector job. Thus it would be necessary to find a more developed strand of analysis that demonstrates the complex interactions between 'formal' and 'informal' in a more realistic and academic manner.

3. Formal-Informal continuum

Assessing the dichotomy in the development discourse and the unconstructive result it has brought about, Ostrom et.al (2006) present what they consider a 'fruitful' option – a 'formal-informal continuum'. By this, the authors imply the continuum between relatively high and relatively low levels of reach of official governance mechanisms which should be "decided on case by case basis by taking into account the self-governing structures that communities are capable of producing within or without the reach of official structures." Range of interventions directed towards 'the informal sector' spans between those that extend the net of government interventions into areas where they have not gone before and those that try to withdraw an intervention that already exists. The authors, based on their review of empirical studies conclude that no simple rule exists that increasing or decreasing 'formalization' necessarily improves or worsens the well-being of the poor or welfare of society at large. That is a fundamental finding

and a blow to current urban and housing development policies and practices as they are largely based on the assumption that 'formalization' improves living conditions.

More interesting to see for us in this study is then how this understanding of the relationship between the formal and the informal as a 'continuum' could re-frame discussions and ways of analyzing housing environments. The work presented in this paper could be seen as an exercise to apply this new perception to study and understand cities.

As lessons from the empirical studies they documented in their literature, Ostrom et. al (2006) in their conclusion suggest: (1) multi-level governance system instead of an either-or choice between centralization and decentralization, (2) a balance between 'formal' interventions and 'informal' practices, (3) interventions tailored to the capacity of the structure, (4) intervention that has multiple back-up services in terms of information, courts, large-scale contexts, social capital, etc., (5) testing the current formalization is working or not by measuring the extent to which people are willing to be within the net.

In light of these recommendations the following remarks could be given in relation to informal housing practices:
The recommendations highlight key aspects that a functioning urban environment or system would require. A multi-level governance system rather than a choice between centralized and decentralized system acknowledges the importance of scale and efficiency. Scale in this context has both spatial and or organizational dimensions. Balancing the formal and the informal recognizing and capitalizing on complementarities between the formal and informal. It also assumes an objective compromise for constructive outcomes rather than encouraging imposition of one on the other or one attempting to replace the other. Interventions tailored to capacity give recognition to qualities in informalities instead of alienating or undermining them. Ideas of multiple back-up services and ideas about testing and measuring could be seen as ways to maintain existing qualities while minimizing unintended consequences which many rational planning procedures never seem to give thought of. However, it should be noted here that we do not assume that the five recommendations which the authors gave in a different context are entirely applicable to the context of 'formal' and 'informal' housing which this paper is dealing with. Nor do we think that they are complete.

Most of these ideas that emerge from Ostrom's (2006) 'formal-informal continuum' are well captured in in a diagram (figure 1) Mushumubusi (2011) in his doctoral study on *Formal and Informal Practices for Affordable Urban Housing* in Dar es Salaam presents 'to show the complementary nature of the formal and informal practices.'
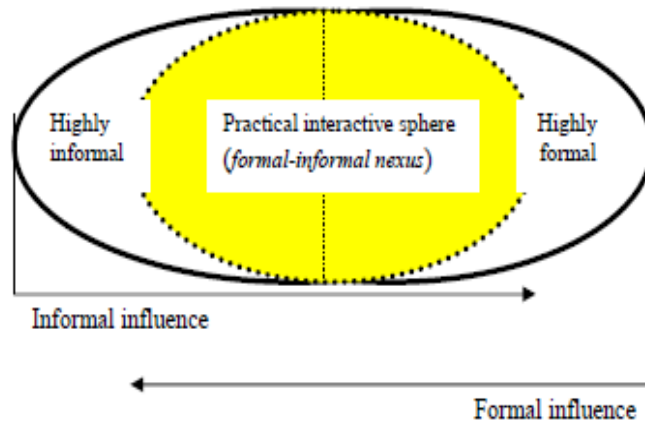
Figure 1 Conceptualization of Formal-Informal elements in a process
Source: Mushumbusi 2011:22
He discusses:

> *Two extreme cases are presented in the figure with their disadvantages if there are no complimentary practices. On the one extreme case where there is total formality the system may tend to be rigid and counterproductive. On the other extreme case where there is total informality the system may tend to be chaotic and counterproductive as well. The two extreme cases are illustrative of inherent shortfalls within each system. This suggests a blend of the two practices, considering historical, geographical, economic, societal, cultural, and technological factors. The inner zone of figure 1 would represent the practical interactive sphere. Therefore, the formal/informal binary may be useful to illustrate the particular way in which one exists within the other.*

4. Qualities in informal settlements

In recent architectural discourses there seems to be a growing focus of peripheral explorations in informal architecture and urbanism. The dissatisfaction with modernist housing solutions has motivated reconsideration of traditional methods of housing production and more increasingly in recent years many studies are being directed to understanding the production and functioning of informal settlements. The notion that informality is 'organic' and 'bottom-up' formation of the built environment seems to be something that architects are trying to understand and grasp. (Beton 2010)

Despite their multi-faceted problems that threaten them and their dwellers, informal cities have shown to favor the poor much more than a 'formal' city does. They support the livelihood of majority of citizens of cities of low income countries. But, what are those qualities in informal settlements that support the livelihood of the poor? The focus here is on those qualities which are physical and those social qualities that depend on a certain type of physical setting that is typically available in informal settlements. Formal settlements exemplified by an extreme case of modernist housing estates will be instrumental in this exploration of those qualities that are often compromised or even ignored in formalization processes. What do modernist housing estates lack that informal settlements don't? What are the qualities in informal settlements that formalization processes need to consider including for more inclusive and sustainable urban development?

Among the prominent classical texts that critically discuss modernist housing practices is Holston's *"The Modernist City: An Anthropological Critique of Brazilia",* published in 1989. In

this volume, Holston criticizes the modernist residential blocks for their absence of spatiality, social life and human scale. He shows that residents refuse to use space as intended and that many physical changes have taken place with the purpose to re-establish vernacular qualities. As more appropriate urban form solutions he points to vernacular patterns such as those found in old parts of Sao Paolo and other Brazilian towns. Holston, however, does not go further into suggesting how the new design ideas and capabilities could be modified to include qualities on the ground.

Another author who has shown how irrelevant tall apartment blocks are is the Indian architect Charles Correa. Particularly in his influential text "*The New Landscape: Urbanization in the Third World", 1989,* shows that such blocks are expensive, energy-demanding, climatically unsound, and that more indoor space is required if residents are cut off from access to outdoor spaces through living in private indoor cells at long distances from the ground. He also shows that apartment blocks are incompatible with the lifestyles of the poor, since such structures do not permit residents' self-construction efforts or incremental house extensions.

However, reproducibility and efficiency of production of formal solutions and more importantly their capacity to provide access to efficient services and amenities, among other qualities are not to be ignored.

It is interesting to note that many of those spatial qualities that are absent in formally planned housing areas are found to exist in unplanned informal settlements. This has been explored by several researchers such as Correa (1989) and Kellett & Tipple (2000). Very few attempts have been made, however, to transfer this understanding into the design of planned areas. In Ethiopia, in spite of the growing concern over the inefficiency of the ongoing modernist condominium housing developments, no such study has been made - neither about their social or environmental performance. The few studies made recently only touch upon issues of ownership, affordability of the housing units or economic capability of users or give a general evaluation of the program (UN Habitat 2007).
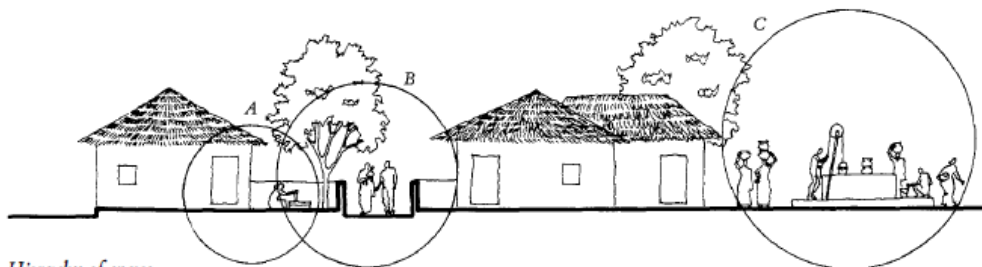
Hierarchy of spaces.
Figure 2 Hierarchy of spaces
Source: Correa 1989
Correa (1989:32) notes:

> ..*each element consists of both covered spaces and open-to-sky spaces. This fact is of fundamental significance because most developing countries are in tropical climates where essential activities can and do take place outdoors. Provided privacy is reasonably assured, cooking, sleeping, entertaining friends, children's play, etc. need not be exclusively indoor activities, but can function effectively in an open courtyard. (Correa, 1989:32)*

Studies on informal settlements (e.g. Correa 1989; Holston 1989; U-TT; Caves 2005) have highlighted the many qualities in the informal settlements such as qualities in the process of formation which involves successful layers of negotiation, appropriation and efficient utilization of spaces, innovative approaches inherent in the designing of smaller detail. Other qualities include compactness, environmental qualities, flexibility of design and use of spaces, hierarchy and flow of spaces, diversity of spaces for specialized and temporal uses, diversity of housing in terms of size, architecture and methods and materials of construction; they are human scale with their low-rise building typology and they are built by the dwellers and thus more accurately provide to their needs. Informal settlements due to the temporary nature of their physical structure and the loose or absence of legal limitations provide flexible environments to allow continuous process of transformation which is done to adapt to changing ways of life. The flexibility of informal settlements gives them resilience to changing economic conditions such as during the current economic crises (U-TT). Social qualities include social and economic mix of residents they accommodate, rich network of social interactions among residents and thus high social capital and above all bottom-up resourcing is the rule for their formation and continued existence. The 'bottom-up resourcing rule' they operate in, gives rise to a 'self-fueling system operating across multiple scales – a trickle-up urban ecology that reframes the very discourse on sustainability.'

The built environment does more than providing shelter. For example, dwelling helps provide privacy, identity, security, and additional sources of income and more. Thus, contrary to the assumptions in many large scale public housing programs, housing cannot be solely seen as a shelter that is defined by walls, the ceiling and the floor. As Correa (1989:36) argues:

> ...*many attempts at low-cost housing perceive it only as a simplistic issue of trying to pile up as many dwelling units, (as many cells) as possible on a given site, without any concern for the other spaces involved in the hierarchy. The result: environments which are inhuman, uneconomical - and quite unusable. Their planners have ignored the fundamental principle, namely, that in a warm climate - like cement, like steel - **space itself is a resource.**

Despite all such findings and useful recommendations, however, the ignorance of formal systems to recognize the potential of informal systems remains to be the reality of current practices. Qualities such as diversity and flexibility of spaces, 'social mixity' and community, are readily available in informal settlements, are what many architects and planners crave for to create in their expert works. However, informal settlements are seen as problems rather than as opportunities by a large number of these experts in the built environment field. A paradigm shift would be necessary if we should learn from them in our search for humanly, innovative and sustainable solutions. I do not intend to romanticize or argue that informal settlements constitute the ideal housing solution. Jeremy Seabrook (in Mike Davis 2006) notes:

> ..*(we) pass from one distortion - that the slums are places of crime, disease and despair - to the opposite: that they can be safely left to look after themselves.*

While programs such as self-help programs, microenterprises, community initiatives could be seen as some of the attempts to couple informality and formality in the development field, they emphasize only one aspect – that of the moral and entrepreneurial capacity of the urban poor in informal housing environments. The attempt in this study is to explore physical qualities of

informal settlements in terms of their capacity to accommodate hierarchically and temporally defined needs of the users.

5. Addis Ababa: Indigenous urban tissue & a 'modernization' misfortune

About 80% of settlements and housing units of Addis Ababa are considered "slum". The majority of these settlements are concentrated in the inner-city. About 70% of the houses located in the inner-city are kebele[1] (government) owned. The kebele houses are generally single storey chika (mud and wood construction) houses occupied by a majority of low-income tenants. (Elias 2008) The informal sector is said to employs about 51 percent of the economically active labor force. (UN-Habitat, 2009) Unconfirmed estimates suggest that of the total economically active labor force employed in the informal sector in Addis Ababa, 70 per cent are female.

As a common phenomenon informal urban development are results of land invasions and illegal occupations of territory by squatters. However, what is identified as "informal settlements" in Ethiopia largely associates and mainly constitutes Kebele housing and housings which originally were legal structures that through extensions and transformation done without permissions assumed a "semi-legal" or "illegal" status. Informality comes in layers. The conventional informal developments occur concurrently with the "devolving" formal realm slowly becoming informal in its performance. Thus comparing "informal settlements" of Addis Ababa with those of 'Gecekondu', or the 'Favelas', or to their counterparts in many African cities will not be easy.

Indigenous urban tissue
The city of Addis Ababa being the only large African city without a colonial legacy is built on an indigenous settlement structure. This urban tissue which is typified by what could best be considered as 'hetro-architecture'[2] creates an urbanity characterized by a "mixity" - as it is called in Addis Ababa - of social strata, functions, and economies. The close proximity of everything everywhere in the city makes crucial issues of survival for the large majority of poor inhabitants redundant, e.g. transport costs, ghettoization, etc. Baumeister,J & Knebel, N. (2009) in their study of 'indigenous Addis Ababa' by which they imply the larger despised and 'informal' urban fabric of the city, argue that 'the non-centralized, non-segregated, non-functionalist urban tissue of Addis Ababa' could serve as an appropriate city model for the future of the rapidly growing African metropolis. As Herbel, the scientific director of the Ethiopian Institute of Architecture, Building Construction and City Development once said, Addis is "more of a scrambled egg" while most African cities separate fairly neatly into poor and rich areas "like a sunny-side-up egg", with slums spreading out from the rim. Social mixity which indicates harmonious co-habitation of the rich and the poor, the muslim and the Christian and the ethnical majority and the minority, all in the same neighborhood can be cited as the unique character of Addis Ababa.Addis Ababa Development Plan (Oct 2002)

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[1] Kebele houses are generally single storey mud and wood constructed houses constituting approximately 70% of the housing stock in the central parts of the city. With their very low rent and their favorable location, they are the best available option for the low and lowest income households comprising the majority in the city.

[2] "Hetero-architecture" is defined in An architecture of great diversity, whose informality allows a wide range of marginalized groups to feel at home. Charles Jencks (1993) identifies Frank Gehry, Eric Owen Moss and Charles Moore as being among its visible leaders, but he suggests that 'there is also a vernacular and frank version of the same genre as well as the populist versions of Jon Jerde and Disneyland'.

Figure 2 (a) use of street space in residential area for informal business; (b) open air informal market in Mercato

Angelil & Siress (in Angelil & Hebel, 2009) in their review of Merkato[3] show how the formal and informal, as well as the commercial and the residential coexist and function harmoniously. In their word:

> "With respect to the coexistence of formal and informal frameworks, Mercato takes on the role of a key relay between rural and urban communities…it is a place where goods are sold and produced; it is likewise a place of residence social encounter, and religious worship. This programmatic blending is mirrored directly in the structure of the built fabric: market stalls are oriented outward, facing the streets, with workshops and living spaces commonly located to the rear - a socio-material diagram reflecting a spontaneous mode of bottom-up land appropriation. This ostensibly simple spatial scheme is underwritten by a complex social network that ensures the performance of the overall urban system.

Contesting the colonial ethnologists' (e.g. Michel Leiris[4]) portrayal of the otherness of Africa as its backwardness, the authors argue that the case of Addis Ababa (as seen in Merkato) shows that what appears to be backward is actually 'a forward-looking tactic of how to effectively circumvent the dictates of global capital through the implementation of communicative action in planning.'

Modernization through Condominiumization

Against such unique quality and opportunity, however, the choice of Addis Ababean planners and policy makers, like in many other African cities, has become a radical transformation of the city in the modernist planning principles. The economic and spatial divides between the rich and the poor following the economic boom that started at the dawn of the millennium embraced modernity's rationality and efficiency as a means of structuring the new city.

The city government's desire for a "clean" and "orderly" city began to show up in its hardening policies that prohibited the petty traders, street vendors, small artisans, barbers, shoeshine boys
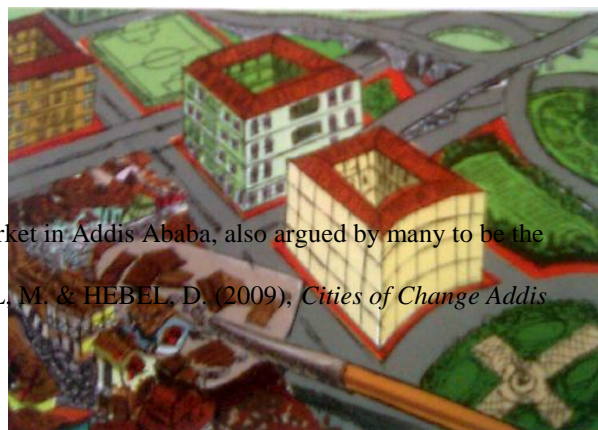

Figure 3 "Cleaning Addis" - image in pages of public journal by the city government, March 2010

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[3] Merkato is the biggest open air, mixed formal-informal market in Addis Ababa, also argued by many to be the biggest in Africa

[4] Michel Leiris, "L'Afrique fantõme (1934)," as in ANGELlL, M. & HEBEL, D. (2009), *Cities of Change Addis Ababa*,

and domestic servants from operating in public spaces. The campaign against the "informal" and the "old" was then intensified when an engineering idea for large-scale "low-cost" housing production was conceived at the 'progressive' Mayor's office. The engineering idea not only was seen as a way to materialize an old desire and vision for a "modern city" and "Diplomatic Capital of Africa" but it gave hope to "once and for all" solve the housing problem of the city.

The Grand Housing Program (GHP) (popularly known as 'condominium'[5] housing) was primarily introduced with a stated plan to address the overwhelming housing backlog which in 2004 was estimated at about 300,000 housing units but also to replace large number of dilapidated public rental houses (locally known as 'kebele' houses.) The ambitious plan also included ideas for densification and 'integrated' strategies to address multiple problems of the city such as high unemployment and low skill levels in the construction sector. Targeting low income and middle income households, the city government set itself the goal of constructing between 40,000 – 50,000 low-cost houses per year over five years. (AAHDPO, 2007) With a significant delay in the construction over the years, by Feb 2009 about 60,000 housing units have been completed of which 36,000 were transferred to owners. (AAHDPO, 2010) By 2007, the national government has scaled-up the program to cover 36 cities and the figure has grown to 59 cities in 2008 (MWUD, 2008).

Figure 4 (a) New condominium next to existing neighborhood; (b) cluster of condominium blocks at a suburb in Addis.

Though the success of the program in terms of quantity of housing it produced and the thousands of jobs it created proved be significant, result in terms of meeting the social and other urban objectives of the city were shown to be a failure. In just less than five years the city was filled with mono-functional clusters of freestanding condominium blocks that 'neglect the importance of public space as a social and economic base'. (See Figure 4) Herbel & Kifle (in Angelil & Hebel eds. 2009) in their review of the Grand Housing program of Addis Ababa note:

> *The majority of the urban poor that cannot afford to pay basic expenses for water, electricity, or garbage removal; they usually earn their income from informal and local businesses located in close proximity to their dwelling quarters. Mixed-use*

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[5]   In the Ethiopian context, as in the United States and many provinces of Canada, the term ''condominium,'' or ''condo',' refers to an apartment that the resident owns or is entitled to as opposed to one that is rented. It is generally used to refer to the form of housing tenure under the GHP programme, where each apartment unit is individually owned, while use of and access to common facilities is controlled by the association of owners that jointly represent ownership of the entire property.

neighborhoods were replaced by high-end developments and publicly funded large-scale condominium clusters. Social ties and unique combinations of different income groups within a neighborhood are jeopardized by uniform planning concepts, leading to social and spatial separation - a condition likely to worsen as migration from rural to urban areas will certainly increase within the coming years. Whether informal settlements\will be recognized as an integral part of the city's fabric and transformed instead of being destroyed remains to be seen.

This unfortunate turn and transformation of Addis Ababa is not unique to the city. Non-western cities are said to show common characteristics such as massive social dislocation, polarizing inequality, uneven distribution of resources and congestion among other things (Malik 2001). "The disparities and injustices in the social structure are reflected in the structures of these cities: wasteful modern enclaves and affluent suburbs juxtaposed with crumbling historic centers and the ever increasing slums and shanty towns often constituting" (p.2). Obviously, no city was intended to be like that, except by colonialists who for their own purpose implemented a kind of planning that divides between the "whites" and the "non-whites" and between indigenous ethnic groups.

6. Towards a formal-informal unity – a 'socio-spatial continuum' model?
It has been shown that a dualistic view about 'formal' and 'informal' in the planning discourses has fuelled the alienation and thus campaigns for elimination of informal settlements without any regard to the wealth of human and economic potential they accommodate and represent.

Our review of the highly mixed social, functional and economic structures of Addis Ababa hosted in its indigenous urban tissue reveal the presence of untapped potential in the urban fabric which architects, planners and policy makers often disregard and consider as "old" and "worn-out". Informal income-generating activities and the social networks and the physical environments that facilitate them are shown to be crucial components of an appropriate housing for disadvantaged groups and for urbanism that sustains everyday life of its citizens.

The next stage in this study which is underway and will only be partly presented in this paper intends to develop a framework that the diversity contained in the built 'informal' system could be understood. It also seeks to see how the concept 'formal-informal continuum' could inspire a usable urban and housing development model for cities of developing countries. Preliminary thought in this direction heads at a model that could be called "a socio-spatial continuum model" – a framework that reflects the actual blurred divide and overlapping co-existence of formal and informal systems in spatial terms but also capable of explaining the diversities (i.e. functional, social and economic) that span between them. The concept 'continuum' in this framework is twisted to refer the 'mosaic' like 'urban texture' which can be observed at a broader scale (see figure 5).

Key aspects of the model
Scale is one concept shown to be important in the 'continuum' perspective. Although diversity can exist as discrete, spatially delimited within 'plots', it can also exist as continua. 'Plots', defined by a combination of built and social elements, could be used to represent both of these ways to perceive the diversity that exists in the urban tissue. Changing the scale, at a fine- course

plots can be divided into constituent plots of unique attribute and at a course-scale they may combine with others to reflect continuity. Such perspective and changing levels of analysis are particularly relevant to understand a city with high 'mixity' like Addis Ababa. The purpose of changing scales is to see the degree to which the 'mixity' could be meaningfully perceived (figure 5).

Figure 5 'Urban texture' as a mosaic.

However, the mosaic should not be considered as an abstraction of the physical form, nor should 'urban texture' interpreted only in physical terms; each grain is rather meant to reflect a specific functional, social, economic or ecological attribute. Multiple maps could be used to observe the multiple attributes that co-exist at specific plot level. The risk of simplistic abstraction in such representation is to be cautioned.

In a preliminary investigation, this conceptualization showed to be useful to explain the problem with large-scale housing and development projects while also helping to visualize the qualities in "informal settlements". For example, most large-scale housing projects in the name of 'order' end up creating large, homogeneous spaces while the 'informal' built environments accommodate smaller but varied spaces and thus functions. Furthermore, because of lack of such heterogeneity, unspecialized spaces meant for multiple uses end up being no use spaces. Behind the large-scale programs is the 'city as a whole' perspective which dominated modernist thinking and planning. The major risk of such unilateral 'large-scale' thinking is failure to see smaller details that make up the sustainable whole. And by singling out housing, it ignores the

The other important element of the 'continuum' conception regards 'time' - a 'temporal quality' which in this case could be used to understand 'flexibility'. Further study is underway on this and other variables of relevance to the model.

'Informal Urbanism'
Through their architects and research practice, the Urban Think Tank (U-TT), founded in Caracas, Venezuela, the Swiss ETH Urban Design Chairs Brillembourg and Klumpner engage in what they call 'informal urbanism'. The concept is well hold in a question they raise – "do the points where urban divides fail become flashpoints of violence or can they become fertile

grounds for mixing the formal and informal?" According to them, architecture has failed to define informal urbanism and the effects on cities are thus immense. Their ambitious experimental researches stem from aims to understanding the informal city from three perspectives: (1) From a humanitarian standpoint, urban shantytowns as wracked with problems, not the least of which are poverty and a lack of support from professionals, (2) From a theoretical standpoint, informality as a complex, nonlinear system in which patterns intersect and mutate in unexpected ways and (3) From a design standpoint, the "informal" as a laboratory for the study of adaptation and innovation. They propose "an experimental research and teaching methodology that rethinks the former physical limitations of contemporary architecture and shifts the emphasis from form-driven to purpose-oriented social architecture." Evaluating how well their high end objectives are met through their research and design works, however interesting, is not the purpose of this paper. Yet, the values hold in their research is worth attention.
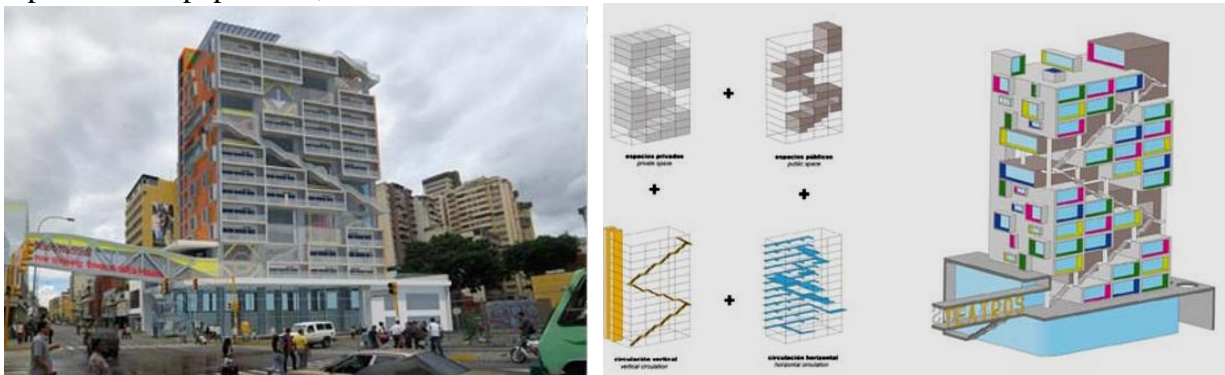

Figure 6 Adoption of a barrio typology
Source: U-TT

Some of their realized projects are praised for being "socially, economically and technically sustainable projects with innovative design" (Swedish Association of Architects). Among the innovative concepts they are working with is the adaptation of a 'barrio' typology in which streets are an extension of the home and public spaces interlace into one body. The design idea attempts to "reinvent the modernist housing type by linking residential units to flexible production spaces, which become realized as a stack of public spaces spiraling up through the building." (figure 6) The innovativeness of this design idea lies in its ability to maintain flow of public space and its hierarchically organized uses into a vertical building.

Other innovative ideas in their projects include 'open-ended' buildings which are designed to allow extensions and flexible uses by users; and 'prototyping' - building multiples to keep up with the rapid expansion of the informal city. These projects demonstrate a socially responsive and innovative architecture that attempts to integrate the formal with the informal, the social with the economic and the modern with the local. Nevertheless, the approaches employed by the U-TT's are not without spots. For example, one can see that with their focus on a much finer scale – that of a single plot or even a single building, it is likely that they miss out observing and responding to the larger context. It is unlikely that such approach would have any upgrading strategy for a larger area. The bias is visible in their concept of 'urban acupuncture' by which they mean a physical or social infrastructure consisting of small projects such as composting toilets, public spaces and new routes inserted into the existing fabric.

A renewed role of the architect

Another worth noting aspect of the U-TTs is their revision of the role of the architect. For them their projects are 'not casual projects', but 'a long-term commitment to the informal city'. Thus

in their economic approach, they expand the role of the architect, initially raising their own money to start a project, and later supplementing it with governmental funding. In 2010, about a decade since they started their adventurous journey, Brillembourg and Klumpner were awarded the Swedish 'Ruth and Ralph Erskine Award'6 for "their dedicated work aiming at improving living and social conditions for ever growing billions of poor people that inhabit the slum areas of the worlds megacities" (Swedish Association of Architects). In the words of the awarders, the architects, "through their realized projects, projects under way, exhibitions and writings have convincingly proved that architecture for the less benefitted of the world is more than a matter of design. Real change of living conditions can only be realized through social initiatives and collective endeavors in close collaboration with the local inhabitants." Their dedication, as evidenced in their economic approach and their close collaboration with local inhabitants, challenges the superiority 'status quo' of contemporary architecture and architects by showing the architect's agency as a front runner and an entrepreneur requiring a similar approach of taking initiative but also of taking risk.

The architectural profession today in many respects is far from serving the poor. Showing his frustrations Geoffrey Payne (2008) after years of his engagement in many international 'pro-poor' urban development and housing projects, once said at present and in some key respects, the architectural profession tends to be 'the fly in the ointment.' He despises the common claim by architects that they are the leaders of the built environment professions encourage them to be arrogant. Reinforced by market forces, such arrogance can isolate architects from people and context – as well as other professionals. Perhaps a renewed role - the old role of the architect as the builder is what this calls for. Charles Correa 1989:111 notes:

> *...the architect will have to act not as a 'prima donna' professional, but one who is willing to donate his energy and his ideas to society. It is a role that has a very important historic precedent. For throughout most of Asia his prototype has been the 'site mistri', an experienced mason/carpenter who helped with the design and construction of the habitat. In the small towns and villages of India, the practice continues today. Owner and 'mistri' go together to the site and with a stick scratch on the earth the outline of the building they wish to construct. There is some argument back and forth about the relative advantages of various window positions, stairways, and so forth, but the system works because both builder and user share the same aesthetics. They are both on the same side of the table! It was exactly this kind of equation that produced the great architecture of the past.*

7. Concluding remarks

Dualism in the way informality and formality are treated is evidenced in solutions that are often presented as either-or. This study argued against such dualism and sought to develop ideas for a housing strategy that recognizes and thus integrates the different qualities it the informal and formal approaches. The importance of both formal and informal linkages means that the whole is more than the sum of its parts. To this end, paying particular attention on the social and spatial aspects, the paper briefly discussed what works and what does not work in "informal" and

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6 According to the charter of the Fund the Ralph Erskine Award is an international award to be conferred upon an individual, group or organization for innovation in architecture and urban design with regard to social, ecological and aesthetic aspects. The efforts of the applicant are to have benefitted primarily the less privileged in society.

"modernist housing" environments. The notion 'formal-informal continuum' implies cities should not be "too-planned" as in modernist housing programs and or should not be "unplanned" as in over-night shacks built on environmentally sites or on public spaces.

Even though the structures and symbols of the formal and the informal have crossed, contemporary city development visions and ideas favor a city form that is divided into islands of wealth and ghettos of poverty. Recent discourse and practices in urban design attempt to place the human experience and social functioning at the center of design interventions. However, the mainstream thinking in urban development too often over-privileges economic interests and rapid delivery over social relevance.

Understanding new and innovative ideas of designing and planning housing environments should be central in future undertakings to improve living conditions for the urban poor while keeping cities competitive in the global market. The study showed that the search for innovative solutions, rather than craving for irrelevant foreign concept, should start from acknowledging the wealth of human and material resource 'informal settlements' host. Designing reforms based on informal practices not only mirrors the realities and relevance of our increasingly 'informalizing' cities as they exist today but capitalizes on the wealth of human and material resources they house.

The current global economic crisis has indicated the need for adaptable and flexible means to changing global and local conditions. Informal settlements, due to the multiple economic and housing options they provide, seem to be the most resilient to such crisis – one more reason to reconsider our attitudes towards informal settlements!

The present rapid urbanization in Africa requires an appropriate, indigenous city model. The Ethiopia's capital has the potential to become a model for· developing cities, without falling back into failed ideologies of unrestricted growth, but rather by paving the way for self-sustained and self empowered African societies. (Herbel & Angélil, 2009)

However, this unique "exportable" quality is fading away in the face of contemporary changes taking place. The large-scale projects that are replacing the indigenous urban tissue of Addis Ababa are example of the many insensitive 'formalization' engagements by many governments of developing countries. These projects by undermining and neglecting the inherent spatial patterns, disregard the practice of everyday life that urban places facilitate. Disadvantaged groups who rely on informal ways of provisioning are thus unfairly fared in the context of contemporary changes.

Planning in many urban areas in the global South adheres to outdated modernist principles (in particular, master planning and urban built forms) and that a significant gap has opened up between the current realities and future challenges of 21st century towns and cities, and the nature and use of prevailing planning systems. Imposed by colonialists, marketed as 'global' concept in post-colonial era and advocated as a means to human development by international aid organizations, modernism in Africa seems to have a high stake. African cities, after decades of autonomy from colonial imposition, continue to grow as cities with multiple dualities between the local old and the imported new, between past and present, and between tradition and modernity. As much as formalization dominates current planning policy and practice, expanding

'informalization' of cities hastened by rural-urban migration has become even more rampant reality of our time in many cities of developing countries.

A new perspective in architecture and a new or renewed role of the architect is, perhaps, what this calls for. There is much more to learn from what exists and works and the true experts are the dwellers who made it and architects more than ever need that humbleness to work with the dwellers and by so doing their relevant role as 'site mistri'.

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