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Editorial

AN EXPEDITION INTO ARCHITECTURE AND URBANISM OF THE GLOBAL SOUTH

The nations of Africa, Central and Latin America, and most of Asia are collectively known as the Global South, which includes practically 157 of a total of 184 recognized states in the world according to United Nations reports. Metaphorically, it can be argued that most of the efforts in architectural production, city planning, place making, place management, and urban development are taking place in the Global South and will continue to be so over the next several decades.

While many cities and settlements in the Global South have less developed or severely limited resources, others are growing and flourishing. Although they share similarities in terms of social, economic, and environmental challenges, it is increasingly evident that these challenges offer real opportunities for development and growth. Political turmoil, social disorder, and economic upheaval are predominant in many of the cities and settlements in the Global South. Yet, it is widely acknowledged that their societies, emerging markets, transnational practices are viewed as growth prospects which are continuously manifested in material culture, architecture, and urbanism. Within the new world order cities and settlements in the Global South have experienced dramatic transformations that instigated critical questions about regenerating and retrofitting cities, international connectivity, international attractiveness, changing housing dynamics, and the quality of urban life, among other emerging issues resulting from rapid urban development processes.

The preceding milieu calls for the importance of depicting and capturing architectural and place production of the Global South while portraying it to the academic and professional community. As part of the activities of the ‘Cluster for Research in Architecture and Urbanism of Cities in the Global South (CRAUCGS) which was established in 2014 within the Department of Architecture at the University of Strathclyde, Glasgow, this issue of Open House International addresses contexts in Africa, South America, South East Asia, and the MENA (Middle East & North African) region highlighting various developmental aspects. It includes research contributions on architecture and urbanism as they relate to housing environments comprising socially integrated housing (Chile), housing typological transformations (Senegal), mega projects and housing development (the Gulf Region), transformations in housing patterns (India), and the changing housing styles in Kathmandu Valley (Nepal). Urban qualities, livability and capitalist urbanism are addressed in the context of Freetown in Sierra Leone, Kuala Lumpur in Malaysia, and several Middle Eastern Cities. The role of planning in maintaining or degrading urban memory is addressed in the context of Cairo (Egypt). Other important contributions include various aspects of sustainability at the building scale (Iran) and at the level of user attitudes (Northern Cyprus).

Beatriz Maturana and Ralph Horne examine the issue of social integration as part of the contemporary urban policy in Chile by analysing two socially integrated housing developments. By introducing the notion of conviviality their work raises critical questions for the implementation of national policy objectives to combat the segregation of cities. In the context of Dakar, Senegal, Emilie Pinard examines the transformation of the housing typology in informal neighbourhoods on the periphery of the city. By documenting the spatial logics and factors guiding the construction of new multi-storey houses, which are significantly transforming the landscape of the city, her work offers implications for housing policies and programmes.

The work of Fodei M. Conteh and Derya Oktay presents an attempt at measuring liveability of a vibrant but overcrowded street in Freetown, Sierra Leone, and how its everyday environment works. Employing a mixed-method strategy that involves observations and interviews their work reveals that an overcrowded street space has a negative effect on the liveability and quality of urban life. In the context of the urban evolution of Cairo, Egypt, Gehan Selim offers a critical argument on how unresponsive planning practices adopted by municipalities and governments create wounds and scars in the public realm and thereby negatively influencing the memory of a city. On a different level of investigation Bukeh Asilso and Derya Oktay examine ecological citizenship in the context of Famagusta, Northern Cyprus by conducting an attitude survey of residents. The outcomes offer insights toward understanding the level of residents’ environmental worldview that may contribute to the shaping of policies relevant to sustainable planning and design. The context of the Middle East is examined in three papers selected to demonstrate different scales and disciplinary perspectives. At a geographical scale the work of M. Gamal Abdelmonem questions globalization, capitalism, neoliberal ideology and the resulting urban visions and policies manifested both in narratives and the physical environment of new centres and districts in Cairo, Beirut and emerging cities in the Gulf Region. Abdelmonem’s work concludes by arguing that the lack of the necessary hierarchy of socio-spatial systems of these cities present irrevo-
cable urban problems. At a regional scale within the Gulf Region, Wiedmann, Salama, and Ibrahim examines the emerging housing typologies and their role in redefining urban development processes. Utilising cases from the Jumeirah District in Dubai and based on official planning documents and preliminary field observation their work identifies housing development tendencies and highlight key urban planning implications. Malek and Grierson address the absence of a national framework with respect to sustainable development in Iran. Taking into account the contextual particularities of the context and building on relevant tools developed in other contexts Malek and Grierson offer a framework that will inform the development of a context-based tool while integrating Iran’s current climate change adaptation policies and priorities.

The Asian perspective is represented, in part, in three papers. Discussing the transformation in lifestyles, the work of Smita Khan and Archana Bele is based in Nagpur. It adopts a qualitative approach that encompasses examining morphological maps, non-participatory observation, and photo documentation. Their work presents a comparative analysis of three residential neighbourhoods and concludes with an argument that advocates people centricity as an imperative for sustainability. Examining the changing housing styles in the Kathmandu Valley – Nepal, Vibha Bhattarai-Upadhyay and Umi Sengupta engage in a discussion that cuts across space, time, and meaning of architecture in order to deconstruct and juxtapose tradition and modernity as represented in culture and built form. Based on qualitative inquiry the work of norsidah Ujang delves into examining the relationship between urbanities and historical urban places in the context of Kuala Lumpur, Malaysia. Offering key insights Ujang discusses the way in which such places shape the perception, emotion, and memory of the urbanites, and concludes by identifying challenges relevant to integrating the preservation of place identity into the complexity of the physical environment and the urban life.

It is clearly evident that the discourse and research findings on architecture and urbanism in the Global South that are discussed in this issue of Open House International, have gone beyond portraying this part of the world within either post-colonial urban struggle or slum challenges. In essence, the Global south offers a rich soil for debating and researching challenging and pressing issues that present themselves as timely topics on the map academic and professional interests and as important material for further inquiry and examination. The 11 contributions by 19 scholars manifest the diverse and challenging issues facing buildings, settlements, and cities of the Global South while conceiving potential solutions for addressing those challenges.

Acknowledgement

As guest editors of this special issue, we would like to acknowledge the resources and support offered by the Department of Architecture at the University of Strathclyde toward developing this volume. Thanks are due to the reviewers and contributors for their valuable work throughout the peer review process.

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INTRODUCTION

This paper is concerned with the ongoing problem of residential segregation of communities – in particular along socioeconomic lines. In this respect we take as our starting point Henry Shaftoe’s principles for convivial spaces (Shaftoe, 2008), which complement the work of urban theorists from Kevin Lynch to Jane Jacobs, and from Jan Gehl to Richard Sennett, who argue in various contexts for integrated communities (Lynch, 1960; Jacobs and Abad, 1973; Sennett, 2003; Gehl, 1987). In such conceptualisations of the city, it is street level interaction in convivial spaces that provides the essential urban fabric; it creates and maintains neighbourhoods. This interaction may be facilitated (or not) by the design of the materiality of the city, but it is the interaction itself that provides evidence of the urban fabric.

The proliferation of urban ghettos, most infamously associated with the modernist ‘vertical streets’ and mass public housing experiments of the post-war era, led to ‘sink estates’ where crime, deprivation, and decline became a stark visual expression of how not to design and provide housing. One policy goal that emerged from this was the need to find ways to integrate communities across socioeconomic lines and tenures within neighbourhoods in ‘salt and pepper’ arrangements. Side–by-side living of those in housing need with those who were on the ‘housing ladder’ into owner occupation became a policy imperative. While this imperative was based upon various and sometimes competing logics about class, wealth, access, aspiration, and so on in late capitalist, owner-occupation based economies, it remains a key concern for housing policy across the westernised world, including in Chile, where the case studies reported here are based.

In this paper, we argue that physical integration by materially interspersing a demographic mix of different socioeconomic groups within housing developments offers an incipient measure that is insufficient on its own to meet the policy goal of social integration. It does not in itself deliver inclusion, equity, or conviviality. By implication, we raise critical questions for the implementation of national policy objectives to combat the segregation of cities. The concept of assessing conviviality is proposed as a means to further understand social integration.

Henry Shaftoe claims that “conviviality is a subjective feeling, underpinned by, but not to be confused with, the actual physical state of a place” (Shaftoe, 2008). In Shaftoe’s description, social mix is just one condition among many. He makes a distinction and highlights the need to focus more on places (quality of shared spaces) than on buildings, albeit acknowledging that buildings enable these places. Shaftoe asserts that fundamental to their approach “is to mix uses together to create more integrated neighbourhoods” (Shaftoe, 2008), and not the other way around. In this regard, Shaftoe’s
principles for convivial spaces are complementary with those of the aforementioned urban theorists, Jane Jacobs et al. The question for this paper is: How can we assess and recognise convivial spaces as both social and physical expressions of social integration in a housing development (neighbourhood) that is assumed and designed to be socially integrated?

Our approach to address this question is to examine a case study of purposive attempts to deliver social integration through two new housing developments in Chile. In presenting these case studies, we first review the recent policy and design context (Section 2), before presenting the two housing developments (Casas Viejas and Villa Las Araucarias) and results of observations and interviews with householders living in these developments (Section 3). The two housing developments have been selected because they are some of the oldest housing developments built under the Socially Integrated Housing Program (SIHP). The SIHP includes a set of design guidelines that encourages the mix of housing typologies (‘salt and pepper’ arrangements) and relatively uniform aesthetics through the design guidelines to create homogeneity across the developments (Figure 1).

The two projects offer contrasting locations and size: Casas Viejas is in the capital city of Santiago with 2088 houses; Villa Las Araucarias is in regional Chile with 140 houses.

For the assessment of conviviality we used in-situ observation, documentation of built form, interviews, and surveys. Of the principles of conviviality, we focused on mixed use, quality of shared spaces, and subjective feelings and cohesion. Section 4 presents reflections and conclusions.

POLICY AND DESIGN CONTEXT

The concept of social integration has acquired a central role in public policy and debate. In Chile, the recognition of the problems generated by the social segregation of cities cuts across traditional political boundaries which has allowed for bi-partisan support for the need for public policies. The flagship policy in this space is the National Urban Development Policy: Sustainable Cities and Quality of Life NUDP, 2013. The (NUDP) as a policy instrument reflects in broad terms the aspirations of the urban theorists cited above, and (at least implicitly)

Figure 1. Top: Casas Viejas, where it is difficult to tell the difference between social and affordable housing types. Bottom Villas Las Araucarias, where social houses are two-storey and affordable one-storey level and grouped together according to their typology (Source: Authors).
promotes principles of convivial spaces to encourage social diversity and social integration. Prior to the development of this policy, the Socially Integrated Housing Program (2006) attempted to promote social integration. Officially this program has produced 12 socioeconomically mixed housing developments throughout the country since 2008.

Internationally, critics assert that while social mix is believed to improve the situation of the most disadvantaged sectors of society, redirecting subsidies to middle class housing markets actually contributes to shortage of housing stock, increasing real estate values, and making housing less accessible for the lowest-income groups (Fincher, et al., 2014, Briccoli and Cucca, 2014). Furthermore, socially integrated, or mixed housing developments, may carry inherent problems as they could create other forms of inequity and spatial segregation, which could deter innovation in regards to “urban justice” (Briccoli and Cucca, 2014). In addition, a report produced by the Australian Housing and Urban Research Institute (Pawson, et al., 2012) states that “it cannot be assumed that neighbourhood ‘re-engineering’ with the intention of drawing in middle class owner occupiers will necessarily turn out as such” (Pawson, et al., 2012).

Locally, the financial incentive offered to potential middle class residents to encourage them to live with “the poor” was criticised on ethical grounds (Brain, et al., 2007). This incentive ceased to be available to buyers early in 2015 and was replaced with another financial incentive offered to developers, as encouragement to build socially integrated housing developments.

In the context of Chile’s segregated cities, it has been argued that both this financial model and the physical location of socially integrated housing developments is determined by the neo-liberal market model and that regulation of the land market would better serve the objective of reducing segregation (Sabatini and Brain, 2008, Rodriguez and Sugranes, 2005). In a study of current housing policies in Chile, Paola Siclari asserts that “placing the poor with the less poor is a recipe that could cause greater social gaps instead of integrating” (Siclari Bravo, 2009). In either case, the implementation of this policy lacks the necessary indicators that would allow evaluation (Maturana, 2014, Siclari Bravo, 2009). In a recent positive assessment of Casas Viejas, Sabatini et al. acknowledge that “the market itself, without subsidies or special incentives, has produced socially mixed developments” (Sabatini, et al., 2014). Their study recommends to “compliment the policies that support people with others that support places” (Sabatini, et al., 2014).

Aware of the significance of these arguments, this paper focuses upon the notion of conviviality as a way to evaluate the achievements of the SIHP, with respect to the objectives of the NUDP. Conviviality is formed and reaffirmed by day-to-day practices, which may include changes initiated by residents to the morphology of the built environment and social practices that reveal the lived experience of households. We argue that this notion offers a tool and a measure that is both spatial and social in its application and its register.

The NUDP has established the significance of social integration as a tool in the sustainable development of the nation and its cities. The NUDP document states that,

“[social] segregation not only affects those who live in those segregated zones, it affects the entire population; it challenges our values and our very concept of society, hence damaging competitiveness and the sustainability of our cities” (MINVU, 2014).

An earlier government publication (MINVU and CEHU, 2009) associates social integration with physical integration, equity and conviviality. It also introduces the notion of social cohesion as a more sophisticated form of social integration (CEPAL, 2007) and “a condition for a sustainable urban development” (MINVU and CEHU, 2009). “Social cohesion purports the necessity to inscribe social integration discussions within the city dimension” (MINVU and CEHU, 2009). Likewise, the NUDP suggests that social integration ought to be tackled at neighbourhood, municipality, and city scales. It further states that, while social integration plays a role within the policy objectives, the main objectives are quality of life and sustainable cities, whereby "urban growth and transformations of our cities should be subject to the concept of sustainable development" (MINVU, 2014). Cities should be understood as “complex organisms where small actions affect the entire system” (MINVU, 2014). It is within this conceptual framework that social integration emerges as a tool to achieve the objectives of the NUDP and not an aim in itself.

What these policy documents have in common is an acknowledgment of the problems generated by social segregation in cities and an ambition to articulate the relationship between social integration, segregation, and social cohesion. What these policies do not include is how these objectives will be achieved in the neighbourhood, municipality, and the city. This is the missing link identified through this research into the SIHP program as the main part of the regulatory framework under which the first socially integrated housing projects were built.

It is important to note that while the NUDP
stresses the need for social integration in new housing developments, this should not only consider the cost of land and buildings, but “the benefits and costs for the future residents and society in general” (MINVU, 2014). Thus, the NUDP recommends building these housing developments in integrated ways, in central locations, using high quality design and finishes. Furthermore, independently of the type of government subsidy, dignified living (Salama, 2011) should be provided through design and construction that considers the future aspirations of residents and access to infrastructure, services, and transportation.

FINDINGS: CASAS VIEJAS AND VILLA LAS ARAUCARIAS

Taking conviviality as a measure of social integration, the interviews and surveys at the two developments of Casas Viejas and Villa Las Araucarias provide insights into the relationships between neighbours and within the neighbourhood. The physical changes undertaken to the built form offer an indication of the relationship between the private and the public, the individual and the collective. Of the indicators of conviviality, we focused on mixed use, quality of shared spaces, and subjective feelings and cohesion.

Mixed use

The two case studies are designed as single use housing developments with basic levels of urban infrastructure. As with all of the 12 developments under the SIHP, mixed use is neither planned nor present in any significant extent (Figure 2). As shown in Figure 3, the design of Casas Viejas (2088 houses) includes a school, health centre, and variously sized green open spaces (a park and interior squares for playgrounds). Villa Las Araucarias (140 houses) includes only a large open space (a park) with a community facility, and a sports field (Figure 4).

Both case studies are surrounded by similar single use residential housing developments. For services such as health, financial, education, and retail, residents of the case study developments must commute. The nearest urban centre to Casas Viejas is a distance of 3.5 km and from Villas Las Araucarias this is 6 km. Both housing developments are poorly serviced by public transport. These locations and single use factors within the development exacerbate the disadvantage that is inherent in the demographic mix. As noted by the survey, 57% of household in Casas Viejas and 41% in Villa Las Araucarias have a car.
It is customary in Chile for residents of low and lower-middle classes to supplement their household income through a home business, such as a milk-bar or workshop. These businesses bring a social dynamic to the street and the neighbourhood, creating connections between residents.

Seven years since construction, Casas Viejas has had home businesses distributed throughout the development (Figure 3). In this regard, it looks like any other neighbourhood in the area. After approximately the same time, Villa Las Araucarias has had virtually no home businesses functioning although there have been attempts. The absence of these in Villa Las Araucarias indicates something of the precarious social conditions in the neighbourhood and surrounding areas.

“…a gang of them came here and we had to close all doors and windows, they threw stones and broke windows. They drink silly, sing loudly, and shoot in the air. It is terrible” (Interviewee No. 3, Villa Las Araucarias).

**Quality of shared spaces**

Such social problems may not only deter small businesses, but also affect the use of open spaces and the way people perceive the connection between their house and public space.

In Villa Las Araucarias, the spatial division along the lines of demographic housing types compounds the social problems expressed in shared open spaces. In addition, there is a problem of crime and violence associated with drug trafficking throughout the local area.

The mandatory design guidelines were not followed in Villa Las Araucarias. The urban and housing design physically separates the two housing typologies (social and affordable or middle-class housing types). The only open space in the development is situated within the middle-class housing (Figure 4). Rather than integrating the two social groups, the park becomes a point of friction and dispute among residents and as a result is poorly used and maintained.

“People are argumentative here. They insist that the park is theirs …, also the community centre. There is a dispute between the ones here and the ones over there … There is only one community centre for the two groups!” (Interviewee No. 2, Villa Las Araucarias).

In contrast, it is important to note that most residents take care of the street and public space immediately in front of their houses (Figure 4). At a superficial level, Villas Las Araucarias is socially integrated in terms of the demographic mix within this neighbourhood. However, the complexity of social cohesion is not expressed or experienced in the public spaces of this development. The physical state of place in such spaces is, at this point in time, not convivial.

In Casas Viejas, the original design included a network of small open spaces each surrounded by approximately 30 houses in a cul-de-sac. Nearly all of the cul-de-sacs have been gated by residents which changes the social dynamic (Figure 5). Residents living on the main streets of the development complain that they have no access to the open spaces within the cul-de-sacs. The general state of these open spaces is good and they are well maintained. Outside the cul-de-sacs, open spaces, such as those in main streets and on the
Residents have modified the fences of their homes in Casas Viejas by increasing the size of the original fences and, in the case of Villa Las Araucarias, where the houses did not have fences, the residents have built high fences. Our study established that the permeability of fences was an indicator of the relationship between residents and within the neighbourhoods. Low permeability of fences indicates a lack of trust and conviviality and high permeability demonstrates a regard for social connection (Figure 6).

The installation of gates to cul-de-sacs and the construction and modification of fences is a common occurrence in non-integrated housing developments in their immediate surrounding areas. As such, this is not an indicator in itself of the underpinning or undermining of conviviality. Neighbours outside the cul-de-sac describe these actions and structures as “micro-segregation” (Interviewee FS1.4R, Casas Viejas). Collectively, residents within the cul-de-sacs express a feeling of security. In Villa Las Araucarias, the houses were built without fences and residents have since constructed high fences with similar range of visual permeability as in Casas Viejas (Figure 7). However, combined with an absence of home businesses operating at street level and the disuse of the single shared open space, the physical state of this place undermines conviviality.

The design of the houses and public spaces of Casas Viejas complied with the design guidelines of the SIHP and achieved a relatively homogeneous streetscape (Figure 1). The residents’ home extensions and modifications have been enacted in a haphazard and often illegal way that affects the quality and experience of the streetscape’s shared public spaces. While the compliance and enforcement of the design guidelines in the original design attempted to create social cohesion between residents, the idiosyncratic streetscape individually created by each resident expresses a low level of interaction among and between neighbours or with the authorities responsible for planning, design, and construction.

**Subjective feelings and cohesion**

From the design, scale, and resident-initiated modifications in Casas Viejas, we could assume a certain level of social cohesion amongst the two socioeconomic groups. However, this review of the program and in-situ observations of the built form is qualified by interviews and surveys with residents about their choices and levels of satisfaction. In Casas Viejas, families living in social housing tend to send their children to the municipal school within the housing development and those living in middle-class housing send their children further away to private or non-government schools. According to the surveys undertaken, there is little interaction among residents particularly in participation in local activities (Figure 8). Here, neighbour interaction could be described as superficial but generally cordial. By way of example, a resident who lived in La Pintana (one of the poorest munic.

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**Figure 5.** This shows a standard gate used in Casas Viejas to close the cul-de-sac to the outside (Source: Authors).

**Figure 6.** The diagram shows the percentage of different visual permeability of fences in Casas Viejas. In Villas Las Araucarias, the results are similar (Source: Authors).

**Figure 7.** New fences built by residents change the streetscape of the housing development in Villa Las Araucarias (Source: Authors).

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Towards Socially Integrated Housing in Chile: Assessing Conviviality Through Two Key Housing...

(Principalities in Santiago) before moving to Casas Viejas describes their interaction in the following terms:

Q: Any friendships?
A: No. Greeting, yes, of course we say hello, but more than that no.
Q: And before, when you lived in La Pintana, was it the same?
A: No, there I had my neighbours. My neighbours who I talked with, and my neighbours that looked after my plants. It was different.
Q: Why there and not here? Perhaps you have not been here long enough?
A: No, I don’t think that is the reason. I think we are just different people. (Interviewee DS40.3R, Casas Viejas)

Despite the problem of the lack of social cohesion, the interviews and surveys generally show that there are relatively high levels of satisfaction with the neighbourhood (Figure 9). This satisfaction tends to be slightly higher among social house residents, than among middle-class housing residents.

“I like living here because it is quiet. I don’t know, I feel secure here. I always wanted to live in a place like this, quiet because you see too many things outside. It was very different where I lived before” (Interviewee DS1.6R, Casas Viejas).

While Casas Viejas could be said to demonstrate better social cohesion than Villa Las Araucarias, the stigma of subsidised housing remains as a form of discrimination. The level of social cohesion in Villa Las Araucarias is represented by divisive social interaction, where neighbours from different socioeconomic groups are referred to in pejorative terms. When asked about social interaction, a resident comments:

“No, never. From the beginning they opposed us because we were ‘vulgar’ and rough; we were poverty. We were of the houses donated by the gov-

CONCLUSIONS

Through the design of Casas Viejas, we have an example of broadly distributed small public spaces that, within a single use neighbourhood, produce a paradoxical conviviality. In the urban design of Villas Las Araucarias, this basis of conviviality is undermined by a single, poorly located large open space. The two case studies offer two completely different opportunities to examine conviviality as a measure of social integration, better described as social cohesion.

The design of the houses similarly underpins and undermines the level of conviviality in each of the developments. In Casas Viejas, the attempts to create visual homogeneity between houses designed for different socioeconomic groups only prove to amplify the problems in a single use development. In Villas Las Araucarias, the blatant distinction between both the form and distribution of the two housing typologies introduces a double spatial division in the physical state of place for conviviality.

The design guidelines for the SIHP, if applied, can partially establish the qualities of public space needed as a base for conviviality. Within the limitations of a market economy and its land distribution, the capacity of housing and urban design in these socially integrated housing developments holds a potential to focus on the quality of places rather than houses. However, the single use and isolated location of these developments sets the quotidian experience of residents within a challenging context. Casas Viejas, in scale and design, holds prospects for the formation of a social fabric within its public spaces. Villas Los Araucarias, in contrasting scale and design, affords no such latency.

The enclosing, opening or grouping of houses, respectively through fences, small business-
es to the street, or the gating of street entrances to cul-de-sacs, is a response to the design intent. The latter creates a collective privatisation of public space in Casas Viejas and presents a contradictory conviviality for the neighbourhood. The conflict created by the location of the open public space in Villas Las Araucarias, appears insurmountable and the response is a two-fold abandonment by one group and a domination by the second.

The modifications of the house fences in Casa Viejas represents a social practice that responds to the faults in the urban design while maintaining a sense of neighbourhood through the permeability of these mitigating structures. In Villas Las Araucarias, a similar response to the given urban and housing design produces a similar variation in conviviality. The small businesses opened in Casa Viejas demonstrate how resident activities, initiated though need, manifest aspects of conviviality. In Villas Las Araucarias, the establishment of a base level of social cohesion is thwarted by the scale, design, and location of this development and is expressed in the inability of small home businesses and the associated daily street activity to take root.

These responses reflect the subjective feelings of place and the level of social cohesion in each of the housing developments as a measure of conviviality. In both case studies, conviviality, underpinned by the physical state of place, is confirmed and contradicted. The high levels of satisfaction with the housing and neighbourhood, particularly expressed by residents of social housing, may reflect the relative improvement in the quality of life achieved in moving to the new houses within the SIHP. These levels of satisfaction are lower, though still high, among residents of affordable (middle-class) houses for the same reasons, but with the added spatial aspect of achieving a larger house than their social housing neighbours.

It is the relationship between the house and public space where these subjective feelings are verified by the day-to-day social interaction with neighbours, in the neighbourhood, and the municipality. In addition to the varying degrees of visual distinction between housing types, the social interaction between residents in the same development is divided, socially and spatially, along socioeconomic lines.

The research methods of this investigation have afforded a critique of the Socially Integrated Housing Program (SIHP) in relation to the National Urban Development Policy (NUDP) policy objective of social integration.

The two case studies, like all developments of the SIHP, are situated on the outskirts of their respective cities and impact the segregation of cities by creating a new typology of segregation through social integration. The proportional mix of low and purportedly middle class residents used to assess social integration in the SIHP program constitutes a feeble indicator. This concept and measure of social integration does not assist in achieving the objective of the National Urban Development Policy: Sustainable Cities and Quality of Life. In the implementation of the NUDP objectives to combat the segregation of cities, assessing conviviality is proposed as a means to further social integration.

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FROM COMPOUND HOUSES TO VILLAS: THE INCREMENTAL TRANSFORMATION OF DAKAR’S URBAN LANDSCAPE.

Emilie Pinard

Abstract
This paper examines the transformation of the housing typology in informal neighbourhoods located on the periphery of Dakar, Senegal. More specifically, it documents the spatial logics and factors guiding the construction of new multi-storey houses called “villas”, which are significantly transforming the landscape of the city. Studies have thus far examined villas through the lenses of migrants’ investments and lifestyles, associating these houses with new functions and decorative elements and materials inspired by time spent abroad, with innovative ways of building and dwelling that disrupt more popular housing practices. Based upon an architectural survey of seventeen houses and the detailed stories of their construction, this paper argues that while the Senegalese villa is influenced by global networks and symbols of success, it is also deeply rooted in popular housing forms and building practices. Moreover, because house-building processes are predominantly incremental, the construction of this new house type is not limited to migrants and other privileged dwellers. Although at different speeds, most residents are building and transforming their houses according to spatial and constructive logics characteristic of villas. These results have implications for housing policies and programmes because they contribute to challenging assumptions about residential production, new housing typologies and the pivotal actors of these urban transformations.

Keywords: Incremental house construction, housing typology, villa, architecture, Senegal.

INTRODUCTION
Dakar, similar to many other African cities, has been experiencing a large construction boom over the last few years that is supported by ambitious projects of urban infrastructure and important investments at the domestic scale. In older urbanised areas and increasingly in new neighbourhoods on the periphery, the popular compound houses (concessions) are gradually being replaced by new higher and denser constructions called “villas”. Recent studies on urban growth and transformation have shown that a verticalisation process is well underway in the region (Lessault and Imbert, 2013). According to the last population and housing census in Senegal, 41.7% of Dakar’s households now live in multi-storey houses, which is an increase of 65% since the previous census in 2002. The construction of these new villas is stimulating popular imagination and raising questions about factors and consequences of this remarkable urban landscape transformation.

Authors generally explain this phenomenon by the major investments of international migrants in the housing sector, which implicitly suggests new ways of building and dwelling (Melly, 2010; Sinatti, 2009; Tall, 2009). Studies have thus far examined villas through the lenses of their new functions and decorative elements and materials, which are inspired by time spent abroad. The proliferation of specialised rooms, such as garages, shops, internal kitchens, and bathrooms, and a particular attention to façade ornamentation with balconies and expensive materials imported from Europe, are said to represent globally sourced transformations of the local domestic architecture. While these predominantly visual characteristics lead authors to suggest that a new housing typology that is more representative of migrants’ lifestyles is emerging with vertical construction, a deeper examination of its spatial organisation nuances this interpretation.

In this paper, the new houses that are built in Dakar’s periphery are closely examined, with a focus on their spatial and material characteristics. This article aims to contribute to the very limited corpus of studies dealing with contemporary housing in Senegal by providing new information about its architectural dimensions and incremental process of construction. Through a detailed building story and a comparative analysis of successive spatial configurations among houses, the main principles guiding residential construction in Dakar are highlighted. This discussion provides better insight into global and local factors that support the
housing typology transformation and demonstrates the often-neglected participation of the low-income majority to the development of the city.

THE INCREMENTAL CONSTRUCTION OF A HOUSE IN DAKAR

In many neighbourhoods of Dakar’s periphery, the intensity of construction activities and the accumulation of sand, bricks, and other materials provide the impression that each house, inhabited or not, is in a process of transformation. According to recent estimates, at least 80% of the houses in the region are built progressively, “little by little”, as funds become available (UN-Habitat, 2012). The incremental nature of residential construction constitutes an important subject of studies and debates on housing and urban transformation in the global South. Particularly since the work of Turner in Peru (1976), the literature has frequently underlined the dynamic and resilient qualities of self-built housing, insisting on the capacity of poor residents to gradually improve their living environment and socioeconomic opportunities (e.g., Canel et al., 1990; Jenkins, 2013; Kellett & Napier, 1995). However, as recent studies on migrant and middle-class building practices have shown (Melly, 2010; Mercer, 2014), gradual construction of “not-yet houses” and careful management of resources are occurring within a wide range of economic and cultural circumstances. Authors have demonstrated that focusing on these processes could be particularly useful for understanding the multiple and interrelated motivations and factors underlying the production of particular living spaces and built forms.

Incremental construction is generally understood as a non-linear process of production that involves many stops and starts and that undergoes constant adjustments. In this context, the construction of a house is a rather long-term process of interventions over the built form wherein finality is never certain (Kellett & Napier, 1995; Nielsen, 2008). Implicit in this approach to production is the idea of the active participation of the inhabitants. This participation can be physical, but studies have shown that in West African cities, it is centred on the supply and the coordination of local builders and construction resources (Canel et al., 1990). Thus, for urban dwellers, incremental construction does not simply correspond to a series of reconfigurations and changing material conditions. It also implies a dynamic involvement with available funds and labour, social networks, and revised aspirations.

In this respect, literature on self-produced housing and “everyday architecture” offers useful conceptual lenses for investigating the co-relation of material experimentation and transformation with socioeconomic factors and opportunities. Many authors who have sought to understand the house as a dynamic process have focused on dwelling, i.e., the “social processes spatialised in the home” (Osmond, 1980: 98). Authors suggest that kinship, the dynamic composition of the household, and its changing needs are closely related to the different stages of production and physical adjustment of the house, and as such, that these two dimensions can be regarded as one dynamic process of living (e.g., Carsten and Hugh-Jones, 1995). Similarly, studies of home-based enterprises note the “symbiotic relationship” between housing and home-based economic activities by examining how inhabitants are able to consolidate their house with earned incomes and, conversely, how these material improvements allow them to gain additional revenues (Kellett and Tipple, 2000).

Alongside this corpus of literature, other studies suggest that it is not only through dwelling that housing is significant; houses as “legitimate and prominent urban artifacts that have social substance and consequence” are also considered (Melly, 2010, p. 39). Although conducted in fairly different contexts, the studies of Melly (2010) and Nielsen (2008) both show that the many houses in construction at the periphery of African cities constitute strong testimony of the owners’ aspirations, their ability to prepare for their future, and thus their availability to engage with others in reciprocal relationships. Mercer (2014) similarly argues that for the houses built by middle-class owners in Ghana, the carefully selected construction materials, decorative elements, and pieces of furniture contribute to the construction of dwellers’ identities and social relations by becoming a key site for class distinction.

Studies on domestic architecture in Senegal are particularly illustrative of these two divergent ways of knowing and theorising housing construction. On the one hand, authors have mostly examined compound houses in terms of dwelling, stressing the versatility of their rooms and the importance of the courtyard as a place of social reproduction (Osmont, 1980; Sinou 1987). On the other hand, the new villas have almost exclusively been analysed through the lenses of material culture, with authors interpreting their multiple stories, specialised rooms, decorative elements, and imported materials as symbols of success and desire for urban participation (Melly, 2010; Sinatti, 2009; Tall, 2009). While these scholarly interventions have insightfully questioned the influence of global networks and flows on urban experience
and exclusion, they offer little ground to situate these new architectural features within the more general, long-term process of urban and built forms transformation. In fact, although authors mention that housing in this context is a never-ending and constantly revising process, spatial and material characteristics are seldom examined in a dynamic perspective and compared to other stages of construction or “older” housing typologies. As a consequence, the villa emerges as a new house typology that strongly transforms, or even disrupts, popular lifestyles and dwelling practices that were formerly supported by the compound house.

In this paper, it is argued that more attention to the spatial configuration of the house, particularly to its process of incremental construction, can complicate the way we understand emerging built forms such as the Senegalese villa. As Hanson (1998) suggests, by examining the spatial configuration of a house – the functions of the rooms, their location within the building, their proximity to other rooms, as well as connections between them – much can be learned about the sociocultural ideals and practices underlying the organisation and the evolution of built spaces. Rather than looking at spatial and material elements of novelty in isolation, this paper analyses particular house transformation stories, compares different processes, and identifies general patterns of spatial transformation. Such an approach provides a portrait of the decision-making process of inhabitants by exploring a larger field of factors that may influence construction, including the social and spatial consequences of previous interventions.

UNDERSTANDING BUILT FORMS: METHODOLOGICAL APPROACH

The discussion that follows builds on an in-depth study of 17 houses that have been built over the last 20 years in two different municipalities of Pikine, located on the outskirts of Dakar. Malika and Keur Massar were selected for the predominant “informality” of their urban development. Complex, but socially structured, land development regulations and accessible buying and labour arrangements allow a wide range of urban dwellers to invest in a plot of land and the construction of a house. Cases were selected for their relative differences in size, density, materiality and living conditions, on the basis of previous exploratory visits and interviews conducted with 36 owners. The diversity of the houses built in the area demonstrates the diversity of the inhabitants’ socioeconomic status and resources within the urban periphery and even within the same informal neighbourhood. The two pre-dominant housing typologies found in the Dakar region, the compound house and the villa, were present on site and included in the analysis.

Architectural surveys were conducted in combination with narrative interviews with owners and their family members, with the objective of reconstructing the history of each house and its different stages of construction. Each intervention (addition, enlargement, demolition, remodelling or subdivision of the living space) was described by the residents, as were the approximate date, rationale, and used resources. Data collected were supported and validated by schematic floor plans, observations (interruptions in construction materials and finishing, re-plastering, etc.) and satellite photographs of the area. This dynamic perspective was expected to shed new light on the logics and factors supporting the construction and transformation of the houses, regardless of how they could be identified today.

To understand how residential spaces were organized and how they were evolving, the successive spatial configurations of the houses were examined and compared with the help of justified graphs. This analytical tool was developed by Hillier and Hanson (1984) to uncover control levels that are created and maintained by the configuration of different spaces. For example, a distributive, well-connected space, such as the courtyard of a compound house, suggests a shared territory with strong social life. On the contrary, rooms with single access or that are located on a high level of “depth” suggest greater control of users’ movement and private territories. Because the use of justified graphs poses some limitations, especially when examined rooms have an irregular shape or their boundaries are ambiguous, metric measurements and isovists were employed as support for the interpretation (see Peponis & Wineman, 2002). Finally, the building density, the size of the rooms, the relation to the street, and the construction materials were also considered in the analysis, notably to allow comparisons between collected data and characteristics identified in the literature.

VARIATIONS FROM A COMPOUND HOUSE: MARIAMA’S HOUSE BUILDING STORY

Like many of Dakar’s periphery house owners, Mariama bought her 150 m² plot of land at a relatively low cost before the neighbourhood was occupied and the services had started to be implemented. As a widow with 10 young children living in her brother’s house, she felt she had to
begin the construction of a new house to “leave a future” for her family. She left her plot empty for three years before starting to transform the money she managed to save to concrete blocks. She now shares the house with seven of her children, their spouses and her 14 grandchildren.

At first glance, Mariama’s two-storey house could be identified with the new villas described in the literature: its façade is ornate with wooden-frame windows, and concrete balconies and large stairs that encroach slightly on the public space provide access to the entrance door and the commercial space located in front of the house. However, the different levels of finish on the façade reveal the owner’s current lack of resources to complete initiated construction work and more generally, an incremental process of construction (Figure 1). Over the years, through various stages of intervention, Mariama has progressively transformed her house through doubling its built surface, modifying its original layout, and adding an extra floor.

Twelve years ago, the family had moved to a simple compound house composed of two small buildings located at the periphery of the plot. The main building included three bedrooms of similar size and a fourth room, which was slightly more spacious, that was intended as a living room but was used as a bedroom for the youngest children. On the opposite side of the plot was a temporary latrine cubicle. All of the rooms were accessible from a sandy, open-air yard enclosed by a concrete wall, thus creating the simple spatial organisation with little hierarchy (Figure 2). The courtyard acted as the main “living room” of the house, whether for receiving visitors, performing domestic tasks, or undertaking economic activities. This configuration, typical of compound houses, offers what Brand (1994) calls an “economic grammar of construction”, as rooms of similar size and accessibility can easily be adapted with limited physical intervention based on the changing needs of their occupants.

The interventions that followed three years later significantly increased the built density of the house, but did not modify its spatial distributive logic. New buildings, including three bedrooms and a small kitchen, were added on the opposite side of the plot, facing the existing construction and helping to dissimulate the new concrete latrine and shower cubicle. In compound houses, latrines and kitchens are generally situated at the back of the house. This location allows for an efficient occupation of residual space in the plot, but it also accommodates the privacy norms associated with the activities taking place in these rooms (Bijl, 1974; Osmont, 1980). The kitchen often serves as a storage space for cooking equipment, and the meals prepared nearby in the courtyard should not be directly visible from the street or the entrance of the house, in order to avoid gossip associated with food (and implicitly with the income of the family) and the possible evil eye. Similarly, latrine and shower cubicles are considered private spaces and should ideally be located in an isolated area of the house, far from view.

The construction work initiated to replace the pitched roof of fibre cement panels with an accessible concrete terrace was a turning point in the transformation of the spatial organisation of the house. Because this intervention was not foreseen initially, it required considerable adjustments to the
existing buildings. Columns and concrete beams were added in the courtyard, as were inside existing walls to strengthen the already ageing structure of the house, and the new staircase had to be adapted to the restricted remaining space near the entrance. The justified graph shows that the majority of the rooms are still located on the same depth level, but the latter is higher since these transformations (Figure 2). The entrance of the house no longer opens directly to the courtyard, but rather to a small threshold created by the addition of the staircase. This vestibule efficiently limits visual and physical access inside the house, particularly to the old courtyard, which although smaller and darker, remains the principal gathering space of the family (Figure 3). This main distributive space is now fully covered, with the exception of a minimal service space of 1.3 m² near the kitchen, which inefficiently acts as a light and ventilation shaft for the ground floor. When possible, domestic activities, such as washing clothes and cooking, are relegated to this unpractical, yet more controlled, area of the house. As a result, in this soon-to-be villa, the courtyard as a gathering and service space is now divided in two different rooms, each with their own function.

Three years later, Mariama began the construction of rooms on the second floor to more adequately accommodate her children. Only the two bedrooms situated in the front, which have balconies overlooking the street, are occupied, while the unfinished rooms are used to store building materials and for sheep breeding. Each sub-group of the family, such as a son, his spouse and their children, now has its own bedroom. These interventions created space for more specialised rooms in the house. The living room is now used exclusively as a formal reception space, and the bedroom adjacent to the entrance was subdivided and converted into a shop and storage room, which is currently used to raise chickens. The small shop is the only room that possesses two distinct accesses, one from the vestibule reserved to inhabitants and the other directly from the street for clients. This particular configuration, often found in villas (Sinatti, 2009; Tall, 2009), supports the presence of economic activities in the house, while limiting the physical and visual access to its most private parts.

TOWARD COMMON PRINCIPLES OF TRANSFORMATION

Mariama’s story is illustrative of the building practices of many Senegalese owners who are progressively, albeit at different speeds, transforming their homes. A comparison of the justified graphs of the 17 studied houses at the time of their first occupation reveals the similarity of their original built configurations, despite appearing quite different today (Figure 4). Thirteen of the 17 houses originally had a spatial organisation typical of compound houses. They included a limited number of rooms, i.e., a latrine cubicle, a few bedrooms, and in some cases, a kitchen, that were all accessible from a central courtyard. The hierarchy level between public and private spaces was generally very low, as illustrated by justified graphs that only include two or three depth levels.

Of the 13 compound houses initially identified, 11 have been transformed, while only two (C and H) have maintained a state identical to the original. When their owners moved in, only two houses (X and Z) already had spatial characteristics proper to villas, including a covered distributive space and a stronger spatial hierarchy caused by the presence of transitional spaces, such as a vestibule or small service courtyards. However, at the time of data collection, these elements were found in a much larger number of houses. Some of these houses can now be classified as villas, while others are still in-between the compound house and the villa, thus supporting the idea that physical characteristics should be studied in a dynamic perspective.

These results suggest that houses in Dakar are transformed according to shared principles and that the spatial variations observed between both typologies are principally the result of different levels of densification and intervention. Consequently, compound houses and villas can be understood as two parts of a continuum: an incremental construction process that occurs more or less rapidly, depending on residents’ resources and opportunities. While studies often mention the incremental material improvement of houses, as in older areas of Dakar (Salem, 1998) or in other African cities (Jenkins, 2013; Kellett and Napier, 1995), the
cases studied in this paper also suggest other forms of consolidation, namely the specialisation and hierarchisation of living spaces. These principles can be understood as adaptations to the spatial, social, and economic transformations that have taken place in the Dakar region, especially since the economic crisis of the 1990s and its accelerated urbanisation.

In the face of uncertain times, the (often incremental) construction of a villa is indicative of the various efforts deployed by households to ensure their long-term social and economic security and to recover the investment in their homes. With current practices and norms of land subdivision, the high demand for plots of land, and the increasing prices, most buyers invest in small plots with a standard size of 150 m² or 225 m². Because such formats only allow the construction of approximately five to seven rooms on the same level, the ground floor of the houses tends to quickly become saturated. However, in most of the cases studied, interviewed owners consider that this number of rooms is sufficient to adequately accommodate all of their household members. Subsequent interventions and alterations, when they were observed, tended to be driven by the objective of making profitable use of the built space. Rooms with specialised functions are thus appearing in the

![Synthesis of the justified graphs of studied houses at the time of survey (2013) and at first occupation (Source: Author).]
house. Existing bedrooms that have the possibility of direct access to the street are converted into shops and other spaces dedicated to economic activities, while others rooms, such as bedrooms that have an en-suite bathroom, might be specifically designed and built for rental purposes. At the same time, increased built density inside the plot seems to encourage the hierarchisation of space inside the house. When the main distributive space is reduced in size, it becomes much more difficult to maintain limited visual and physical access to the sanitary cubicle and cooking area. The construction of transitional spaces then offers the occupants a better level of control over these service areas.

Notwithstanding the specialisation and the hierarchisation of living spaces, the spatial organisation of villas and other houses in transformation is characterised by a marked continuity with the distributive logic of the compound house. Such an arrangement presents significant advantages in terms of flexibility of use and modification because these rooms can be independently reallocated or transformed, without requiring additional interventions in the rest of the house (Afram and Korboe, 2009). Beyond the most visible phenomena of urban landscape verticalisation, a certain “economic grammar of construction” thus always finds its relevance in contemporary house building in Dakar.

CONCLUSION

The influence of global networks, flows of people, and resources on house construction in Dakar is difficult to deny: new shops selling imported construction materials and furniture are appearing as new neighbourhoods are developing, and images of luxury villas and model neighbourhoods (cités) are displayed in newspapers and on billboards erected across the city. These new decorative and architectural elements essentially benefit higher-income dwellers and investors who, in turn, contribute to diffuse particular ideals of material comfort and success. However, paying attention to these new visual characteristics might not be sufficient to understand the underlying logics and factors of current urban landscape transformations. In this paper, it is argued that a deeper examination of spatial organization and its evolution in time is particularly useful to highlight the principles guiding residential construction and typology transformation.

The reconstruction of the different stages of construction of the houses demonstrates that the majority first possessed a simple spatial configuration typical of compound houses and that, to different degrees and at different speeds, houses were transformed according to common principles of spatial specialisation and hierarchisation. These results indicate that the villa, which is thus far understood as a new typology inspired mainly from abroad, is also deeply rooted in local popular housing forms and building practices. Moreover, results show that the construction of these new multi-story houses is not limited to migrants and other privileged dwellers. Although at different speeds, most residents are building and transforming their houses according to spatial and constructive logics characteristic of villas.

These results have implications for housing policies and programmes as they contribute to challenging assumptions about residential production, new housing typologies, and the pivotal actors of these urban transformations. Even if migrants’ direct contribution to house construction is still unclear and has recently been questioned (Lessault et al., 2011), it raises such fascination and hope for national development, that the Senegalese government increasingly relies on foreign investments to transform the city. Over the last few years, various state agencies and programmes that facilitate construction projects, capital transfers, and investments have been created to recognise and stimulate migrants’ participation (Barro, 2008; Tall, 2009). However, little has been done to understand the construction practices of the low-income majority and to develop targeted approaches that would support their initiatives, despite the level of investments that this type of urban development actually represents in the city.

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MEASURING LIVEABILITY BY EXPLORING URBAN QUALITIES OF KISSY STREET, FREETOWN, SIERRA LEONE.

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Abstract
With increasing urbanisation in developing countries and the concomitant overcrowding on streets, serious questions remain about the liveability of inner-city residential-commercial streets. This paper contends that lively streets are not necessarily liveable streets. Liveability is defined by other criteria that take cognizance of human comfort and capabilities within living environments. Observations suggest an uneasy relationship between a crowded public space and the private residential spaces that sit next to them. The paper’s focus is to measure the liveability of a lively but overcrowded street and how its everyday use affects the physical characteristics of buildings, the activities, and the wellbeing of residents. Employing a mixed-method strategy, the study draws on observations, semi-structured interviews, and questionnaire survey of residents, shopkeepers, and street traders. The findings suggest that an overcrowded street space has a negative effect on the liveability and quality of living of residents and other users but that this is tempered by intra-dependency amongst the users and the negotiation of the rights accruing to all as individuals and as groups.

Keywords: Public Space, liveability, major streets, Freetown (Sierra Leone).

INTRODUCTION
During the last few decades, the civic importance of public spaces and the role they play in the improvement of the quality of life of citizens have been two of the areas of inquiry for researchers in the field of urbanism and on the agenda of city authorities in developed countries. In this context, streets have been rediscovered as the prime exterior spaces of the city and as intrinsic components of the urban pattern after a long period of neglect. Modernist practices saw the automobile as the ‘elixir’ of the city hence its primacy in the use of the street. Contemporary discourse and praxis, however, sees the automobile as encroaching upon the rights of pedestrians and interfering with the use of the street as a multi-use space. It has also eulogised crowded city centres and street spaces as ‘lively streets’ worth emulating elsewhere.

The authors believe that overcrowded streets in the city centres of developing countries call for a rethink. The crowding phenomenon described in this study is defined as perceptual density, one of the essential dimensions of density. Churchman (1999) has defined it as “an individual’s perception and estimate of the number of people present in a given area, the space available, and the organisation of that space” (Churchman, 1999, p. 390). Like crowding, which is a user’s psychological experience of population density, perceptual density is a subjective quality that needs to be decoupled from its objective physical condition – density (Churchman, 1999; Oktay, 2001).

The study is an empirical investigation into people’s attitudes and perceptions towards the physical characteristics, use, and management of Kissy Street (now Sani Abacha Street) in Freetown, Sierra Leone in order to understand the relationship between public and private spaces. The focus is to measure the liveability of Kissy Street with respect to how the social use and management affect the physical quality of the street and the quality of living of its residents. The object is to highlight results from this study to aid policymaking, planning, and design of sustainable street spaces for optimum social, economic, and cultural interactions.

LITERATURE REVIEW
Numerous empirical studies on urban space have hierarchised the street as the most ubiquitous public space in a city. These studies have highlighted the social, political, cultural, and economic importance of the street. Some have even decried the dangers of the street in its modern role as a space for the automobile. In an article whose title painted yet the grimmest picture of the street as a space for the automobile, “Streets Can Kill Cities: Third World Beware,” Appleyard (1983) warns developing countries about the dangers of copying ‘western’ models of street design that have been solely
built, in his words, for the automobile (Appleyard, 1983).

These studies provide valuable insights into the socio-cultural and socio-economic significance of the street and its use. However, they have not paid enough attention to densely populated streets spaces in developing nations where the street does not only act as a public space but also as an extension of the private spaces along it; it is a space for commerce, movement, play and, sometimes, a setting for uses that are otherwise restricted to the private backyard.

Understanding the Meaning and Aspects of the Street as Public Space

Generally speaking, public space is a term used to describe a compendium of spaces that include “streets, squares, public footpaths, parks and open spaces... riversides and seafronts” (Tibbalds, 1992, p. 10). But, as discussed above, the street is the most readily available of all public spaces in a city. It particularly stands out in its function as a channel for movement – vehicular and human – and as a connector between different parts of a city. However, like other public spaces, it is also a space that hosts social activities for leisure and recreation. Public spaces act as “the stage upon which the drama of communal life unfolds”, can “also [be] used for private purposes”, and “can also be the setting for activities that threaten communities, such as crime and protest” (Carr et al, 1992, p. xi-3).

These conceptions of public space emphasise the intertwining of both the physical and social and/or political aspects of public space as one bounded by buildings and one which, at the same time, necessitates human interaction and activities. Goodsell (2003) weaves this understanding of public space as “a space-time continuum for connected and interactive political discourse” (Goodsell, 2003, p. 370). Henaff et al. (2001) have identified “contestability” as essential for a space to be truly public in conjunction with three further criteria, namely openness, “human product, and theatricality” (Henaff and Strong, 2001, pp. 4-5). Therefore, a street is a public space whose functions are not limited to movement of people and cars but space for social, cultural, economic, and political interactions, whether those interactions are calm and peaceful or chaotic and conflictual.

The Street as a Place for Social, Recreational and Commercial Activities

In his paper “The Culture of the Indian Street,” Edensor (1998) has shown how a street can represent a “spatial complex”, an urban room in a continuous state of flux with diverse activities. He describes the Indian street as comprising a medley of social, recreational, political, commercial, as well as religious functions (Edensor, 1998). This suggests that street spaces are people places in terms of the way they are organised, regulated, and put to use as a direct reflection of people’s social, cultural, economic, and political manifestations and identities. This conception of space echoes ‘placeness’, which Norberg-Schulz (1980) has described as the human dimension to space (Norberg-Schulz, 1980).

To this end, as argued by Neal (2010), a terminological shift from “space”, which denotes a location defined by abstract geometries of distance and direction, to “place”, which denotes a location by the meanings attributed to it by its users, is needed. In this context, research adopting such a socio-spatial perspective may be considered as examining the street not as public space, but as place for the public.

Interrogating the Meaning of Liveability in Places

The overarching question in this study is whether a lively city is always a liveable city. In the literature, great attention has been placed on how public spaces can encourage physical activity and there is increasing emphasis on mixed-uses believed to make a city more vibrant and lively (see Jacobs, 1961). However, when Mehta (2007) measured liveliness, he defined it in terms of the number of people engaged in several activities, social or otherwise, in a particular setting. He went on to develop a liveliness index from three main characteristics: i) “the number of people engaged in some stationary and sustained activity...”; ii) “the number of people in groups of two or more engaged in some social activity”; and, iii) “their duration of stay” (Mehta, 2007, p. 174). Yet, liveability is generally seen as the measure of comfort and human functioning in the places they live.

There, however, seems to be no agreement as to what liveability really means; it is a compendium of value statements about the needs, desires, and aspirations of people cutting across a vast area, be they social, political, or economic. It brings together issues about the physical environmental characteristics of a place, socioeconomic concerns, and how the place is managed and governed in the interest of its users (Frey, 1999). In their seminal and most acclaimed research on “Livable Streets”, Appleyard and Lintell (1972, 1981) measured the effects of traffic on five major parameters: traffic hazard; noise, stress and pollution; environ-
mental awareness; and, neighbourly relations and the perception of home territory. The findings suggested an inverse correlation between high traffic and the liveability of residential streets (Appleyard, 1981, pp. 15-28).

Drawing on the methods of the Appleyard and Lintell study, Bosselmann and Macdonald (1999) evaluated the liveability of three high traffic residential boulevards. Like the Appleyard and Lintell study, they measured the effects of traffic on users’ comfort on the streets, their social interactions, and their perceptions of their home territories. The findings suggested that with regards to residential boulevards, mitigating factors like landscaping and the distance of buildings from traffic noise source reduced the negative impacts of high traffic (Bosselmann and Macdonald, 1999, p. 168). Moreover, objective criteria form the basis of liveable cities’ rankings by certain economic interest groups (for example, Mercer’s rankings and Savageau’s “Places Rated Almanac”). Nonetheless, concerns about the quality of urban life in cities has led to an increasing interest in surveys measuring the quality of life in particular places on both objective and subjective criteria. A major research project that utilizes a model from both a conceptual and empirical perspective has been launched in metro Detroit (Marans, 2005). This project has formed the core of the “International Programme of Research on Quality of Urban Life” coordinated at the University of Michigan, USA. Parallel studies were launched in several world cities including Famagusta (Gazimagusa), North Cyprus (see Famagusta Area Study – FAS by Oktay, 2010; Oktay and Rustemli, 2011).

Theoretical Framework

The above discussion suggests that liveability is a relative term contingent upon both purpose and context-specific criteria varying in emphasis with the scale of the built environment. It also suggests that people always have to do trade-offs between the bag of things they need or want and those they can actually acquire. As Amartya Sen (1993) reminds us, people’s well-being or quality of life is a measure of their capabilities and those capabilities are contingent on their freedom to choose how they want to live their lives in choosing among a number of life processes. This study builds on the aforementioned Appleyard (1981, pp. 243-244) study which identified seven indicators of street liveability, amongst them: the street as a sanctuary safe and secure; a healthy environment - clean, less noisy and pollution free; a community where communal life strives; a sense of community and belonging; a place to play and learn for children; and, a historic place with a ‘special identity’ for residents or the city at large.

RESEARCH CONTEXT
The Case - Kissy Street

The population of Freetown rose sharply during the decade-long civil war (1991-2001) due to urban in-migration of the internally displaced and other economic migrants from other parts of the country. As a direct corollary of this, the city centre has seen the most debilitating congestion ever in the history of the city. The spectre of traffic jams at peak hours, the noise pollution from car horns, screaming hawkers, the intermingling of automobiles, pedestrians, and street traders seem to be actually killing the city centre (see Figure 2a, b and c); this is only expected to get worse as urban growth and urbanisation gain momentum.

The mise en scene sketched above is indeed a spectacle of many streets in the city centre that connect seamlessly as street markets. However, Kissy Street (now Sani Abacha Street) is the most prominent of these street markets and an emblem of the congestion in the city centre and all the problems that come with it. This is perhaps due partly to its position as the main artery that links the two important squares: Eastern Police square to the east and PZ (Patterson and Zochonis) square to the west (Figure 1). Moreover, historical accounts suggest that this approximately 550 meters long street has always been the great centre of native trade in Freetown (Alldridge 1910, p. 55), an observation curiously true even today.

METHODOLOGY

The study employs the Sequential Mixed-Method Strategy that draws on both quantitative and qualitative procedures with emphasis placed on the quantitative data (in uppercase letters). The two data sets are analysed separately but mixed at the interpretation stage. The data include physical measurements, photographs, semi-structured interviews, and a questionnaire survey.

Data Collection and Sampling Procedures

The data for the study were collected in two phases: (a) between 10 and 30 September 2010 (the physical data, observations, photographs, and semi-structured interviews); (b) from the 11-29 January 2013 (the questionnaire survey). Two sampling methods were used: a) purposive or opportunistic sampling for the semi-structured interview in which eleven people (three residents, seven shop-
Keepers, and one security guard) were interviewed and b) random sampling for the questionnaire survey.

For the questionnaire, random samples were selected from three user groups or strata: these are:

- Residents
- Shopkeepers
- Street traders

The units of measurements were the number of occupied apartments for residents, the number of occupied shops for shopkeepers, and one trader sitting in front of every shop for the stationary street traders.

Population and Sample Size

Stratum 1 - Residents. Population/sampling frame (N) = 66 (out of 83 residential units observed, only 66 were occupied). Determined Sample size (n) = 40 respondents. Response rate = 30 (75%).

Stratum 2 - Shopkeepers. Population/sampling frame (N) = 154 (one each from every shop). Determined Sample size (n) = 92 respondents. Response rate = 30 (32%).

Stratum 3 - Stationary Street Traders. Population/sampling frame (N) = 154 and
Determined Sample size (n) = 92 respondents. Response rate = 70 (76%). In total, 224 questionnaires were distributed and only 130 (58%) respondents returned the questionnaires.

RESULTS AND FINDINGS

Qualitative Data

The qualitative data was analysed using the five-stage guidelines of Srnka & Koeszegi (2007). The following 11 themes from the recurring ideas in the data set were identified: disrespect for elders; dissatisfaction with noise; dirty street; difficulty of movement; petty crimes; no outdoor play space for children; movement hazards for children, the old, and the handicapped; no community cooperation and participation in decision-making; high taxes, low sales; availability of amenities like electricity and water supply; satisfaction with street management especially garbage collection; little sense of neighbouring and territoriality. Added to these are several lone ideas expressed by some interviewees: the street as a civic pride; lack of parking space; sense of civic responsibility but lack of reciprocity by city government; drug use and addiction; child abuse; and, rape.

Quantitative Data

Here the results of the quantitative data analysis are presented. The study put more emphasis on the quantitative data derived from the questionnaire survey.

Overall Satisfaction with Kissy Street

This measure applies across all the three strata. Respondents were asked to rate their level of satisfaction on a scale of 1-5 (1 being the most negative and 5 being the most positive). The findings suggest that 61% (79 out of 130) are satisfied; 17% (22 out of 130) are dissatisfied and 13% (17 out of 130) are neither satisfied nor dissatisfied.

A one-way analysis of variance showed a significant difference in satisfaction: $f(2,127) = 21.1, p < 0.01$ among residents (2.8/0.9), shopkeepers (3.6/1.0) and street traders (3.9/0.6) (see table 1 below). A Post Hoc (Tukey) analysis revealed no significant difference in satisfaction between gender groups at $p<0.05$.

Table 1. Overall Satisfaction with Kissy Street as a Place to Live (Percentage Distribution).

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident</td>
<td>30</td>
<td>2.7667</td>
<td>.97963</td>
<td>.16388</td>
</tr>
<tr>
<td>Shop Keepers</td>
<td>30</td>
<td>3.5667</td>
<td>.97143</td>
<td>.17736</td>
</tr>
<tr>
<td>Street Trader</td>
<td>70</td>
<td>3.9000</td>
<td>.66267</td>
<td>.07920</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>3.5615</td>
<td>.91502</td>
<td>.08025</td>
</tr>
</tbody>
</table>

Table 2. Kissy Street as Home or just a Place to Live (Frequency Distribution).

Table 3. Overall Perception of Safety on Kissy Street. (Percentage Distribution).

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident</td>
<td>30</td>
<td>14.2000</td>
<td>2.92905</td>
<td>.53477</td>
</tr>
<tr>
<td>Shop Keepers</td>
<td>30</td>
<td>15.4667</td>
<td>2.27025</td>
<td>.44144</td>
</tr>
<tr>
<td>Street Trader</td>
<td>70</td>
<td>13.2714</td>
<td>4.06798</td>
<td>.48622</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>13.9923</td>
<td>3.56881</td>
<td>.31300</td>
</tr>
</tbody>
</table>

Sense of Belonging to a Community

Perception of Street as Home

Sense of belonging is an emotional and psychological need of being part of a community and being able to fit in. Residents were asked to assess whether they take the street as home or just a place to live. Only 23% (7 out of 30) find it a home while 73% (22 out of 30) see it as just a place to leave.

Crime and Safety

Degree of Crime

Respondents at all three strata were asked to tell their opinion about the degree of crime on the street. 38% of all respondents think there is a great deal of crime while 59% think there is some crime and 3% thinking there’s little crime. To determine the degree of perception of crime between gender groups a Mann-Whitney U test showed no significance difference between them (male and female) at $p<0.05$.

Overall Perception of Safety on the Street

Respondents were asked about their overall perception of safety on the street on an aggregate score. A one-way analysis of variance showed less significant difference $f(2,127) = 4.2, p < 0.05$ among residents (14.2/2.9), shopkeepers (15.5/2.3) and street traders (13.3/4.1) (see table 3 above). A Post Hoc (Tukey) analysis revealed the difference in significance at $p < 0.05$ is between...
Healthy Environment

Here, respondents across all three strata were asked about how their street appears to them in terms of dirty or clean air, lots of vehicular traffic, very noisy or very quiet street, poorly or well-kept outside areas, crowded or not crowded and safe or unsafe. A one-way analysis of variance showed no significant difference at p < 0.05 among all groups (as shown in Table 4).

Community Participation in Governance

Satisfaction with Local Government Services

Considering the important role local government plays in providing services, respondents across all strata were asked (on a scale of 5 from very dissatisfied to very satisfied) to give an overall assessment of their degrees of satisfaction with the job being done by local government officials on the street. Overall, 63% of residents say they are dissatisfied while 10% are satisfied. 37% of shopkeepers are dissatisfied and 33% are satisfied. And an equal number of street traders are dissatisfied and satisfied respectively (34% each).

Participation in Governance

Asked if they have contacted any city officials in the past one year, 97% of residents said no while 93% said they have not attended any meetings or workshops with city officials in the said year (Tables 5 and 6).

DISCUSSIONS OF FINDINGS

As the findings above show, there is a significant difference among residents, shopkeepers and street traders in general satisfaction with Kissy Street. The street traders and shopkeepers are more satisfied with the street as a place to live than the residents. This is also reflected in the fact that an overwhelming number (73%) do not take the street and its neighbourhood as home; meaning they do not feel they belong. This was very much expected in the context of the overall perception of the negative qualities of the street which is high among all the groups. However, during the semi-structured interviews there were varied levels of satisfaction with the conditions on the street. One older respondent had this to say when asked about noise on the street:

"for those of us living in these buildings, we are being disturbed by the noise. Yes, we do sleep about 10 – 11 pm when the street traders have packed and left. That is when I even give lessons to my children but, when they are selling there is no chance to sleep...."

Other residents, however, sympathise with the situation even though they agree the street is noisy. For instance, in the words of one interviewee:

"...too much activity... so one expects noise levels to be high. Yes, the noise is too much but there is nothing I can do about it because the people selling here are trying to earn a living because things are not easy here."

Although it was expected that perception of crime and safety is an important human concern in overcrowded spaces, the findings suggest that respondents across all strata and even gender groups felt relatively safe. This is likely because petty crimes like shoplifting bag snatching and pickpocketing are not taken as serious crimes like armed robbery, murder, rape, etc.

On the question of governance and user participation in decision-making, the findings point to a high dissatisfaction with local government services provision and lack of citizen participation in governance of the street. The overwhelming majority of users have never being contacted or consulted on matters of their street or neighbourhood. Nonetheless, views on service provision by local government are suspiciously nuanced. Political affiliations may account for this as glimpses of this were manifested in the in-depth interviews. For instance, one shopkeeper fumed about high taxation:

"They do nothing; all they are interested in is to collect taxes every year without giving anything back. If one defaults on payment, they threaten one with
chaotic, insecure and uninteresting. Such environments and other users who might find them conflict with the aspirations and quality of living of residents while such public spaces may be lively, they may recommended profusely. It has postulated that tioned the liveability of such streets even though the public-private domains. This study has ques-

tion the liveability of such streets even though their characteristic liveliness has been admired and recommended profusely. It has postulated that while such public spaces may be lively, they may conflict with the aspirations and quality of living of residents and other users who might find them chaotic, insecure and uninteresting. Such environments are hardly responsive to the needs of children, old and ‘handicapped’ people.

Based on Appleyard’s (1981) study and using a mixed methodology, the study has identified five main indicators of liveability and some of the problems that affect the liveability of Kissy Street (a de facto street market). Because the street is predominantly a crowded street market, noise pollution, spatial congestion, and the untidiness that are characteristics of crowded spaces have created a negative spatial experience for resident users who are highly unsatisfied with their environment; satisfaction with one’s environment is an indication of whether it enables one to enhance one’s capabili-
ties for a better life or not. But the experience of space is highly subjective and liveability is a mixed bag of items to choose from. For this reason, and other sociocultural dynamics which dictate dependency among groups and individuals, there seem to be lots of compromises and negotiations of the rights that accrue to all. Therefore to make a place conducive, responsive and truly inclusive for its users, design strategies that provide opportunities for all user groups and ensure that some uses do not encroach upon other uses thereby creating discord should be employed.

Although overcrowding does not forestall an all-inclusive public space, reducing the phenomena through the following strategies will go a long way to reduce noise and crime, ease movement, and improve the sanitary conditions on the street: a) the provision of market spaces in the city centre to allow street traders full access to customers and not pushed to peripheral areas as has been the norm. This can be done by providing pedestrian only precincts and city wide promenades; b) the city can take advantage of its coastal waters as a highway or main street providing alternative transportation thereby reducing car traffic from the inner city areas; c) proper waste management mechanisms should be instituted to ensure a cleaner city. Freetown can learn from Curitiba’s creative example of attaching monetary value to dirt; d) user participation in decision-making and management of the street should be encouraged for a more equitable and liveable street and tax collected from the street and its neighbourhood should be ploughed back into the community to provide better facilities and a cleaner quality environment. This will empower people, give them control over their environment and engender in them a sense of belonging.

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INTRODUCTION

‘A scene in Ishash al Tourguman, Bulaq Abul Ela, central Cairo, 2015’

Arrival at the old area of al Tourguman holds images of a gritty past that is still remembered by its residents. Centrally located is a busy traditional coffee shop ‘Kahwa baladi’, situated in al Sahafa Street, where one normally spots elderly men in their late sixties or seventies, dressed in threadbare outfits and smoking Shisha. They rarely chat or socialise but rather continue to gulp short sips of tea with a mental tape of memories of what used to be their neighbourhood during golden childhood times. Another scene occurs in a tight alleyway: a lady dressed in a black gown sitting selling matchbooks and paper tissues, hoping for nominal revenue to head back home happy. Next to her, a group of kids playing football, vociferously pointing out where they live and work. A majority of these residents are living amidst the remains of their former houses and historical ruins and memories.

The inland of Bulaq slums, the so-called ‘ishash’, are, and have been, places where prejudiced and imbalanced assessments of land have led to consistent disputes. During the 1970s, under economic reform and high flows of migration to the city, Ishash al Tourguman had become a dangerous place, known for its informal housing, degraded infrastructure, and drug businesses. The ishash was described as the centre of anarchy and chaos following a series of riots in Cairo on 18-19 January, 1977 against the termination of state subsidies for basic commodities which had led to immediate and rapid price increases. The incident occurred after Egypt’s former president, Anwar Sadat, embarked on a series of economic reforms in 1974, pursuing an open-door economic policy to encourage foreign and domestic investment in the private sector. However, Egypt’s large debt burden soon pushed Sadat to take a series of loans from the World Bank, under the condition that state subsidies for foodstuffs would be severely limited. Furious Cairene residents attacked many symbols of Sadat’s luxury lifestyle like hotels, department stores, and even police stations. The ishash was then denounced as the hub of a Communist-led uprising of thieves, after groups of activists stashed themselves away in the swarming slums, making the mission of tracking them impossible since the tight streets prevented entry to police vehicles.

It is claimed that the cleansing of popular life in Cairo had started during Sadat’s regime with the violent clearance of ishash al Tourguman and displacement of its population. Hundreds of families were evicted in May 1977 without compensation. Replacing the ishash with high-rise structures reinforced Sadat’s claim to be eliminating signs of poverty and decline in Cairo by creating ‘a youth-
ful face of Egypt’, and indeed low-income groups occupying lands, which potentially carried high values, were not central to the beautification of the capital (Ghannam, 2002, p. 31). On the national level, city authorities explained that demolition would support the revamping and modernising of the Cairene life. Relocating a portion of its population from brutal living conditions to suitable modern housing units was crucial to improving their living standards. For over two decades, while renewal plans remained firmly on paper, a huge gaping hole marked the grounds of Bulaq where the ishash residents had once lived. In 2001, Cairo’s International Bus Terminal, a gigantic project, was constructed on the spot. But for years when travelling to Cairo, and despite many other things happening in Bulaq, one kept bumping in this anecdote: close to the terminal doors, one could still envisage the memory and footage of the clearance and displacement incident, police sirens and weeping toddlers. The ishash formed a narrative of a place of unyielding power cursed by its historical facts that its residents still track and enumerate. Their wounds bled from the heart of one of the world’s most fascinating cities, where the state’s inauguration of one of its grand architectural projects stopped at nothing in having its vision fulfilled (Figure 1).

The paper discusses how wounded spaces, marked by past deficits of power, violence, and exclusion in Cairo, are represented and how the spatiality of places remarkably articulates scars that are never cured by time but are still remembered and lived. Do relocation practices require care and attention that limit the violence and difficulty of abandoning a place? My argument is that such wounded spaces in Egypt insinuate the capacity that places should not remain the same physically and socially because they have been profoundly threatening postcolonial imperial processes. This capitalises that whatever is deemed ‘traditional’ – living in urban slums, uneducated and, mostly, engaged in political instability – is somewhat less legitimate; therefore, traditionalism is often scrutinised in terms of its authenticity and degree of exposure. Nevertheless, restructuring this reality to overlay new depictions on to a place, excluding its individuals and groups, often becomes the normative power of how we reshape our built environments (Davies, 2014). These processes have taken several forms of forcible action, such as compulsory relocation of people from their districts as one form of control over politicised spaces, with widespread destructive implications for the physical, metaphorical, and imaginative spheres.

THE URBAN MEMORY AND ITS POLITICAL INSCRIPTIONS

Postcolonial research examining urban settlements in the global south has shifted towards radicalising our understanding of cities and how to transmute their physical structures of inconsistencies, conflict, and inequality in celebrating residents’ lived realisms (Simone, 2010; Harvey, 2003). In the context of contesting the inherited values of modern urban development influenced by governance and governmentality, there still remains the quest to boost urban transformation in the desire for order and sweeping away sore histories. However, this approach is not without its costs. The reason why Western models of urban development, for example, tend to idealise the outcomes that predominantly impact the everyday encounters, practices, and social networks of the people. Urban renewal ventures drawing red battle lines around entire districts, for instance, signalled a new urban reality, not only to challenge physical conditions but also to wipe away individual memories of these places (Blunt and McEwan, 2002; Ellin, 1999). Manuel Castells’ account of Parisian urban gentrification in the nineteenth century, aimed equally at elaborating the state’s control of public spaces, is pertinent to what motivates governments today: ‘A Paris occupied by the higher social strata, a showcase of comfort and modernity, is a Paris cut off from potential outbursts of protest’ (Castells, 1972, p. 106).

Various examples show how a city is tacitly privileged by simulating its districts as parcels of land connected by networks of economy; but on the contrary, populated districts appear as blank entities discounted from potential development, leaving residents depicted as victims. We find urban sociologists and geographers retrieving conceptualisations of places, which vary from so-called slums to luxury theme parks and CBDs, as an inte-
migration within the city but not, peculiarly, as an add-on (Simone, 2010). Michel Foucault’s theories on power and control of space in the urban sphere show that modern governance similarly capitalises on various forms of this supremacy. It also reveals the position of the state in operating different security apparatuses to safeguard citizens and their sense of safety by preventing crime and handing over perpetrators to judicial authorities for prosecution. We therefore find that existential insecurity can be politically manipulated to increase the control of space. Violence, for instance, is presented to the public as a case of national security rather than safety in order to curtail the public sphere and influence the community perception of fear (Zukin, 1995).

From a postcolonial perspective, imagining the city consequently tolerates our understanding towards systems of urban political life, everyday existence, agitation, and disorientated mobilisation of people who are the absolute victims. These socially constructed spaces, according to Henri Lefebvre (1991, p. 220), offer individuals their membership links with the place. Its buildings and streets are grasped as a sign of the legendary nature of the place, one that is as important as the condition of those that lived there. These bonds remain memorised across time largely through material objects that presumably last much longer than we do. Yet, this idea remains unchallenged. But when subject to massive processes of destruction, mobilisation, and relocation, dense urban spaces occupied by inherent localities become impaired by spatial relations and social trauma imposed by state violence. Similar to several post-colonial localities, the sweeping away of entire districts has printed its own scars on these places and haunted remaining residents with wounds of past glories, whether they accepted it or not. The wounds reflect a condition of self-remembrance and individual memory embedded in the physicality structure of spatial order away from any external forces of colonial practices and their aftermath (Kearney, 2012). These spaces represent instances where local identity was an incipient political project against social and collective memory that demonstrates problematic or disturbing conditions. They are the territories where ‘geographical space... has been torn and fractured by violence and exile’, shaping a state of newness of physical and social realities that reproduces altered visual images integrated with modern cultural expressions and secured environments (Rose, 1996, p.191) (Figure 2).

PLACE REMINISCENCE AND ‘ROOT SHOCK’

“We still remember that day when the police suddenly surrounded the area and forced the people to leave their houses; the men bravely fought the police officers, the women were screaming, but they forced them to leave in the end” (interview).

Al-Tourguman is a poor area that expanded randomly in Bulaq during the 20th century. The place

![Figure 2. Ishash al-Tourguman images published in the planning scheme brief. (Source: The re-planning scheme Report 1979, GOPP, Cairo).](image-url)
was originally established by a Turkish merchant named Ali Bek al Tourgoman, whose name it gained, who customised its infrastructure and managed its tenet system until his death. The Ministry of Public Works privately sold wealthy stockholders, including Ali Bek, huge swathes of vacant land outside Bulaq’s east-west border to construct new developments that would aid with the absorption of Cairo’s migrant workers. Following Egypt’s defeat in the 1967 war, nationwide concerns were raised following the suspension of special government housing projects, particularly when daily newspapers published images of entire communities living in emergency shelters after several evacuation incidents. The government built these settlements as transitional housing systems to shelter homeless people whose houses had collapsed or become seriously damaged as they awaited allocation of housing in new residential settlements. By this time, al-Tourguman and other areas had gradually become dominated by shanty constructs built with light materials and leftover wood, which lacked water, electricity, and primary hygiene resources. Thousands of people were crammed into homes that were ‘only corners of single rooms that accommodate all the functions of the household members’ (Rugh, 1979, p. 47). The narrow alleyways rapidly turned into hives of illegal activities, which later became popularly known as ishash al Tourguman. People living in Bulaq describe their neighbours as tragic and doubtful (Figure 2).

“The government has neglected them. They no longer have any rights in this country.

They have depressing lives, their homes appear like squats of stacked and glue-like compartments stretching in narrow alleyways overwhelmed by poverty and hunger.

Men and women are jobless with no breadwinner, the elders are homeless and the children surrounded by slums, diseases, and hunger” (Interview).

But do memories of places relate to the past or articulate narratives of present human experiences? Or how do locals still living in al Tourguman distinguish between their present lives and the strong connections with the past that historical events evoke? Indeed, the furious escape of the young protestors in the 1977 riots emerged as a serious challenge to the state. People still recall how police vehicles failed to seize the vulnerable ‘boys’ and feel proud of helping them to escape this raid. Notwithstanding, residents of popular areas in Cairo, like Bulaq, are legendary for their generosity, bravery, and care. But since that time, state dis-
venient and infeasible. They claimed that the process was one of in-filling the site with high-rise projects that were competing with a surrounding context and that failure could have been predicted. Some added that it was a naive solution to represent Cairo in a modern image and apply order to what was thought to be a different reality in Bulaq – the reality of the poor versus that of the wealthy. This corresponds more closely to Timothy Mitchell’s (1988) world as an exhibition (Figure 3).

The outcome of futile initiatives of this nature was that new housing targets were not met, leaving streetscapes with many empty lots and absentee residents. A kind of political resistance that forms a different landscape to that for which it was planned, remained for at least 25 years after the evacuation. It was a milestone of failure to set unrealistic plans for change, especially when businessmen and investors later noted that the site was unsuitable for investment. The residents explained how people no longer communicated their previous healthy social networks and everyday encounters. Despite al T'ourguman’s vibrant and ideal location for CDD investment, it developed into an outcast ghetto and even fostered greater isolation from the city’s urban life than ever before (Marcuse, 1997). The reliability and transparency of the state have always been problematic, especially in terms of communicating political messages through local schemes like this. Equally, it may be that forcible eviction was a tool used by the state to expel the residents with no underlying plans to rehouse them (interview).

REMEMBERING THE SCARS: OLD MEMORIES, NEW SPACES

Literature on collective memory shows how constantly incidents of the past are tied in fundamentally with social networks and landscapes (Boyer, 1994; Halbwachs, 1980; Heynen, 1999; Abdelmonem and Selim, 2012). Memory occurs in the present to inform our habitual associations and way of life, not distinct from its archaeological presence. It is not surprising to observe controversial perceptions among social groups when they recall stories of the past and their living spaces. They usually tend to link their stories with places and physical objects to establish a thread of memory that may or may not be sites that witnessed suffering or disturbance. Yet, the place and its object dimensions and attributes become the most durable part of this fabric, through objects of remembrance (Bevan, 2006). Buildings and urban spaces are symbolic evidence of certain social networks and practices. There are indeed some remembered projects, like urban renewal or changing landscapes, which attempt to obstruct public dialogue and are appreciated as signs of forgetting the past, with an entire community disappearing and leaving behind its physical manifestations: buildings and spaces. Yet, spaces cannot mysteriously embody memories by the quality of their existence, just as the city cannot disclose history without supporting narratives (ibid.). In fact, societies retain their memory through continuous and sustainable performance of acts, rituals, and normative social behaviour.

On the other hand, places have meanings that exceed their forms as authored illustrations of the past and methods by which social groups experience them. In fact, the wounds of al T'ourguman emerged through conflicting pasts as zones of transition and social change to materialise transformation. Wounds also thrived through its residents, not only the groups that suffered the consequences of eviction but also those that had witnessed the razed for prospect development encountering and opposing state violence and the trauma of displacement. Under the increasing spread of differences in postmodern societies, class and social segregation follow distinct pathways and occupy different zones of the city, so that the wealthy hardly encounter the ‘unwanted’ others (Mitchell, 2003). Indeed, this idea will never arise without visions of a strong country protecting its citizens from the ‘unwanted’ beyond its boundaries, ‘change in this sense our rooted sympathies of what constitutes the public to legitimate new forms of urban structures through environmental change, behaviour modification and stringent policing’ (ibid., p. 4).

Fullilove (2004) argues that a ‘root shock’ threatens the ability of any person to function just as much as when they lose vast amounts of blood, simply because we all have strong social and emotional links with the places we inhabit. Thus, for us, place always develops as a protective shelter for our social and ecosystem associations. These qualities are not about local forms of owning or claiming the place but rather about the connections and structures of sentimental networks that give thick meaning to a citizen’s experience, one that associates more widely with place than human subjects themselves (Bennett, 2005, p. 10). This understanding opens for us different channels to express and communicate sensory emotions about places, rendering their distinct histories.

After the relocation incident, the ishash became an anchor for its former residents’ sense of belonging and took precedence over other associations. But the remaining groups became vital raconteurs of the incident and its aftermath. Many still form the elderly population living in Bulaq who either memorise or witnessed the confrontation with
the armed police. They explained how state actions disrupted their inveterate relations to the geographies of the place and that the inconsistencies produced in this process created odd grounds for people and places that, for many years, did not understand why their neighbours had been banished. Despite living in slums, their rooted habits, practices, and cultures signified a sustainable process of collective settlement, communicating a robust social message that they were connected groups that felt highly safe and secure (Selim, 2015).

People’s reminiscences on the hardships of living in the ishash are closely related to the housing conditions described as ‘ruins’. However, they always cite their easy access to other parts of Cairo, marketplaces, and cheap goods. One informant explained that ‘when our past neighbours baked something, the good smell would reach us from a distance and we would share the food. People tend to eat together and support each other during difficult times’ (interview). Local vendors also utilised al-Tourguman lands to sell cooked foods, sugarcane, and fresh vegetables. Others occupied the space to disseminate some of their home-based goods or set up bakery ovens for simple pastries. The area was a hub for young teenagers to gather and interact with others. While these activities gradually encouraged the presence of people, the area became empty, dark, and potentially unsafe for women and young children, especially at night when its original occupants vanished in no time. However, the continuous presence of people ensured assistance when needed. People were always ready to help prevent a fight or protect a child. Being seen by others provided social control that allowed more freedom of movement for women and legitimised their interaction with men.

Activities of unknown neighbours and the mixing of people from different parts of Cairo influenced the view of the empty lands and surrounding spaces. The new spatial settings supported restructuring the interaction between the residents and, in particular, others, and the way they observed public space. This shift was epitomised by growing restrictions on access and use of spaces following the evacuation, which was mostly driven by fear. Feelings of belonging to al-Tourguman were symbolised in a way that connects its residents with the past and appears to show a collective reference that articulates its support for state policing actions. Indeed, insecurity and an unknown future made for stress among the remaining population. They were mostly conscious that they would be subject to similar traumatic situations at any time and, somehow, were prepared for it. They were also aware that armed evacuation was also going ahead in other neighbourhoods in the city, like in the Ayn Hilwan dwellings of old Cairo and the al-Marg area. These and other unexpected incidents were aired in the media, showing armed police surrounding these houses to evacuate families by force.

CONCLUSION

Al-Tourguman and other similar sites in Cairo represent places where the status of local people has remained a significant social and political issue, and, over time, has become central to local conflict. The conflict also emerged as a struggle over landscapes for personal, group and national identity, and meaning and belonging. In fact, relocation is not only about moving people from one place to another, but about how it affects life and socio-spatial relationships within the local community. Sites defined by scars and wounds not only exist as imaginary and/or physical locales but endure as ‘behaviours and occasions for memory and intervention’ (Roach, 1996, p. xi). While everyday exemplified knowledge of inhabited places is taken for granted, eviction enables its spectators to possess firmer bonds with their former living place based on attachments that disengaged them from their childhood connections. In all ways, some residents remained in the ishash gave rise to another level of loss. They collectively formed a sound, chronic, and inveterate narrative that was slowly constructed after the immediate relocation losses. Indeed, the indigenous stabilisation of communities is fragmented once places are demolished.

The ishash residents, through their stories, raised moral inquiries about the politics of place making driven by urban upgrading. They called attention to their association with place, its mental memory and inspiration in making a just and unique life. They also challenged the invisible status the city authorities bestowed on them and have no capacity for state building. Yet, their commendable survival over almost four decades since the traumatic incident documents their existence through everyday encounters and use of space, thereby claiming individual and collective rights to their city. They also enact their habitual engagements with vibrant places like Bulaq evidencing their cognitive and emotional attachments, spatial and social memories, and fragile social systems. Still, their interpretations always reveal a bounded self-tension between the recognition of state violence and anxieties about the unknown future they face when hoping to survive.

In fact, new forms of public memory could be structured and transferred to the inhabitants through their intergenerational social outreach that offers social stability and security, despite the ongoing ruptures of geographical segregation and
exclusion. However, it is suggested that place memory is usually a complicated case to resolve. Communities usually tend to define themselves through their physical and social environments but will not always accept a place’s depressing history. Indeed, when individuals return to places that have witnessed violence and pain, they find themselves trapped in horrific images of the past, with living memories and emotional attachments. Similarly, displaced groups tend to revisit their friends and relatives back in the Ishash, and some will even shop and buy goods from traders they used to know. That is why social change must be counted as both loss and opportunity, particularly when chunks of the city become detached from other spaces.

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THE ABJECT DREAM OF NEO-CAPITAL: CAPITALIST URBANISM, ARCHITECTURE AND ENDANGERED LIVEABILITY OF THE MIDDLE EAST’S MODERN CITIES.

M. Gamal Abdelmonem

Abstract
This paper interrogates the notion of “New Capital” in the context of the hegemony of neoliberal urbanism in the Arab cities in the Middle East from historical, socioeconomic, and spatial perspectives. It reviews the historical narratives of new centres and districts in Cairo, Beirut, and evolving capitalist urbanism and architecture in the Arabian Peninsula in search of the elitist dream of neoliberal urbanism. It offers a comprehensive analysis to the notions of neoliberal ideology and urban policies, neo-Capital city as catalyst for nation-building, and neo-Capitalist architecture as the reproduction of clone structures of western models. The paper focuses its critical analysis on the aspects of liveability in the contemporary Arab City and its socio-spatial structures and everyday urban reality. It reports on urban narratives based on archival records, urban projects, and investigations of governmental accounts to determine aspects of success and failure in projects of new capital cities and districts. It argues that cities are essentially social-spatial systems in which hierarchy is a fundamental element, the lack of which determines abject failure of their anticipated vision.

Keywords: Capitalism, Globalization, Middle East, Urbanism, Contemporary Architecture.

INTRODUCTION: “NEO-CAPITAL” URBANISM IN THE GLOBAL CITY

Capital cities play a vital role in a nation’s life and psyche as they serve as a central repository of political, geographic, and economic balance and as the seat of government. They reflect the nation’s identity and play a crucial role in legitimising the state through the concentration of formal institutions and sustained networks of power, economy, and politics (Rawat, 2005; Dascher, 2000). Changing the seat of government prompts questions on the very identity of the nation, socio-geographic implications, and images that capture envisioned change. Over the past century, new capital cities were entirely designed such as Brasilia, Ankara, and Astana while other smaller cities were developed to serve a nation-building project or act as a home for International Organizations such as Chandigarh, Bonn, Brussels-EU, and Geneva-UN. Such facet of identity is often accomplished through cultural and architectural means, where national institutions, educational establishments, galleries, museums, and memorials are all geared up to encapsulate a meaningful image of the city symbolism (Jones, 2008). Such displacement of institutions of power and reshaping national identities were ever so explicit as was the case in the reconfiguration of new power hubs in the European Union (Risse, 2001).

Middle Eastern cities have operated in a hierarchy, in which each one has a role to play as a provincial capital, port, religious, or trade center and where the livelihood of city inhabitants are embedded in everyday mobility, connectivity, and interdependency. Over the past three decades, neoliberal policies and the flow of wealth prompted regional rivalries over the credibility of each city as a regional power broker (economic, political, and cultural). Emerging cities such as Dubai, Abu Dhabi, and Doha have started to challenge old metropolis such as Baghdad, Beirut, and Cairo over their capacity for attractiveness, accumulation of wealth, cultural events, and international corporations (Salama and Weidman, 2013). Through challenging normative spatial structures of interdependent cities, the financial power of urban elites introduced new perception of the city’s liveability ‘behind closed doors’. Compounded with planning naivety and ignorance of the middle class, neoliberal planning and policies succeeded in speeding up urban disharmony, social segregation, and growing unemployment (Goodman et al., 2010). New Cairo in Egypt, Beirut’s Downtown, Dubai’s Nakheel have largely reshaped new “micro” systems of urban structure, spatial order, and living culture that are removed from everyday realities of their “host” cities, creating alien territories within old fabric. Recognising the failure of privatised luxurious urban life in old metropolis, proposals for
“new ‘private’ capitals” have resurfaced by neoliberal economic alliances such as EMAAR, Solidere, and ELDAR, aiming to displace economic and political centres towards new privately developed and owned capital cities/quarters.

Urban historians, however, argue that new capital cities are by no means a new proposition in regional urban history or sociopolitical discourse. Current metropolises have, in fact, been founded as new towns, quarters, or cities that were designed away from congested settlements. In spatial terms, urban bourgeoisie tend to develop living havens in enclaves that are distant from the populace’s everyday life (Abdelmonem, 2016). The logic of human settlements as sets of spatial relationships and interdependent infrastructure have always defied models of distinct and manufactured lifestyle. In this paper, I interrogate the model of “New Capital” city as a neoliberal strategy of exclusive urban environments, where power and capital are separated from the ordinary citizens. Hence, the ‘Neo-Capital city’, as this paper calls such model, is set to examine the notion of NeoLiberal urbanism in the Arab Middle East by looking at the implications of clones of capitalist architecture and urban developments on the liveability of everyday spaces. It offers a conceptual analysis and theoretical framework on three levels of inquiry: first, ‘Neo-Capital city as a political strategy for rebuilding national identity’; ‘Neoliberalism as ideology to reshape socio-spatial structure of the city through creative destruction of normative reality’; and ‘Neo-Capitalist architecture as abject clones of global imagery’. I will not exclusively discuss brand-new cities, but also new quarters or private developments in existing cities that represent the agenda of new-liberal and capitalist architecture.

NEOLIBERAL IDEALS RESHAPING DISINGENUOUS URBAN REALITY

“The growth of high-profit corporate service firms and of a high-income professional class becomes legible in urban space through the growing demand for state-of-the-art office buildings, luxury residences, and luxury consumption spaces. The growing demand for both leads to often massive and visible displacements of the more modest-income households and modest profit-making firms... In this process, urban space itself becomes an object for contestation: the gentrifiers versus the displaced” (Saskia Sassen, 2009).

In the discourse of neoliberal ideology, national institutions of authority use their monopoly of power and violence to negotiate policies and decision making with the oversized international corporations. Neoliberalism is broadly defined as an approach to economics and social studies in which control of economy is shifted from the public sector to the private sector. It has been used differently amongst scholars and theorists who underlined its meaning through practice and policy-making (Saad-Filho and Johnston, 2005). Neoliberal ideology rests on the principal belief that competitive and unregulated markets, liberated from state interventions and actions of social collectivities, are the cornerstones for the optimal mechanism for socioeconomic development. (Peck, Theodore, and Brenner, 2009) Neoliberals have deep antipathy to forms of social and institutional solidarity and what they call the ‘tragedy of the commons’ and the irresponsible exploitation of common and natural resources such as land and water. (Harvey, 2005, p. 65). ‘Privatisation’, ‘deregulations’, and ‘competitiveness’ are utopian notions to eliminate bureaucracy, increase efficiency, improve quality, and reduce cost. In this sense, private and multinational organisations and self-regulating markets replace the authority of the state and associated welfare policies. In neoliberal literature, a successful city means a competitive and attractive one particularly to foreign investment.

Driven by neoclassical economics, neoliberalism suggests that governments reduce deficit spending, limit subsidies, broaden the tax base, eliminate fixed exchange rates, open up markets to competition, privatise state-run businesses, allow private property, and back deregulation (Touraine, 2001). Neoliberalism relies chiefly on delegating governance to the expert elites that is commonly translated as the ‘elitist rule’ under the jurisdiction of ‘the court of law’, to which the state is treated as equal an entity to individuals and companies (Chomsky, 1999; Plehwe, Walpen, and Neunhoffer, 2006). Under the pretext of neoliberalism, policies were deployed to justify the deregulation of state control over industry, assaults on organised labor, the reduction of corporate taxes, privatisation of public services and assets, the dismantling of welfare programs, and the enhancement of international capital mobility. For neoliberal politics, creative destruction to existing socioeconomic structures and hierarchical order and responsibility becomes necessary (Brenner and Theodore, 2002). The Financial Crisis of 2008 and the EU-Greek bailout crisis in early 2015 exposed early failure signs of neoliberal strategies and irresponsibility of multinational profit-seeking banks and corporations, whose private interest shaped the development plans and projects in many cities, such as Dubai, London, and Barcelona.

Neoliberal Urbanism, in this sense, is more about new investments, new developments, and
reshaping the ineffective projects based on value, market, and demand. Especially for the developing world, such as the Middle East, neoliberalism was a promising proposition for governments seeking foreign investments to support underachieving economies – a reverse to the socialist and nationalist governance of 1960s-1980s. However, this debate poses a principal question: How could the liveability of the city be maintained if the government has no control over its markets and types of projects, investments, and services provided? It also sets off alarm bills on accountability, and the extent to which power is given to unelected corporations and foreign organisations to decide the fate of policies and urban strategies such as privatisation of national services, transportation, and infrastructure in a given country (Bauman, 2000). The spatial politics of neoliberal urbanism could be palpably examined in relocating capitals or through the manner with which political identity and economic power have influenced new forms of architecture and urban fabric.

Despite its utopian ideals and propositions, neoliberal practice and weakened state power have generated ubiquitous market failures, social polarisation, a dramatic intensification of uneven spatial and urban developments and a crisis in city governance (Peck, Theodore, and Brenner, 2009). Furthermore, political theorists insist that authoritative state power was required to force free-market policies and destruction of the social-welfare state amidst wide societal rejection: the state had to intervene to disable itself. The dysfunctional effects of neoliberal urbanism include deterioration of services to modest-income societies, deprivation of resources to low class population, and the rise in service privileges in wealthy business neighborhoods and compounds (Amin, 1997). Crucially, the manifold disjuncture between ideology and practice, doctrine and reality, vision and consequence have exposed the notion of a freestanding, self-regulating market as a dangerously productive myth.

**“NEO-CAPITAL” URBANISM IN THE GLOBAL CITY**

The term ‘new’ immediately instigates conceptions that connote to the future, modernity, and ambition, which attract a favorable comparison with the ‘old’ that is explained as remnants of the unfashionable and unworkable past. Peter Hall defined several types of “new Capitals”, whose definitions and...
characteristics were overlapping to a degree, he had to define them in comparison with each other: multi-function, global, political, former, ex-imperial, and provincial. From imperial capitals to the home of international organisations, the influence of global power has shifted from seats of governments to the seats of multi-national systems (Sassen, 2009). Throughout the 20th century, many new capitals were built with the assistance of modernist architects such as Le Corbusier, Doxiadis, and Niemeyer to embody a hope for a better future as was captured by the Indian Prime Minister Jawaharlal Nehru’s speech in 1952 about Chandigarh as “symbolic of the freedom of India, unfettered by the traditions of the past, an expression of the nation’s faith in the future.” Kemal Ataturk swapped the Ottomans’ imperial capital with the newly built military camp of Ankara in the Asian side of Turkey in 1923 while in 1960, Brasilia became Brazil’s new capital following the country’s constitutions as federal nation in 1891.

The prerequisite of new order demands a visual image to illustrate the new vision. Brazil’s National Congress building designed by Oscar Niemeyer was the first image to capture Brasilia’s promising future. Similarly, ideals of utopia have also served as the inspiration for the new city in both Brasilia and Chandigarh. Interestingly enough, both were symbols of modernist hope as well as grand utopian projects that can both inspire and disappoint in 1950-60s (Baan, 2010). The rigid street grid and anti-pedestrian layout was a fit for formal urbanism of bureaucracy but less of a vibrant and social-friendly city. Le Corbusier’s Chandigarh was supposed to be an emblem for post-colonial independence. Rather, it ended up designed by Western architects who were alien implants into foreign culture, a symbol of dysfunction for foreign architecture (Marshall, 2004). Shanghai, New York, or Barcelona, on the other hand, are cities of power that surpass their capital cities’ building image and identity, driven by international corporations and the flow of private capital. They exert power on foreign territories and international markets through managing airports, sea terminals, and banks. Moreover, Qatar’s need for foreign labor for its 2022 FIFA World Cup infrastructure projects and Dubai’s skilled migrant labor have shaped the character of not only their host city, but also the living standards back home in Pakistan, India, Philippines, and Indonesia (Kanna, 2011). Those masses of labour, in return forced the development of liveable spaces that relate to their home countries with the largest markets and many restaurants in both cities serve and offer Pakistani or Indian products (El-Sheshtawy, 2010). The same goes to China Towns in London, New York, and San Francisco.

With multinational boundary-less neoliberalism increasingly prevalent in world spatial systems, its economic power and influential financial establishments have effectively created new structures, spatial order, and reshape the culture of living in many cosmopolitan cities since the start of the 21st century. To this effect, the nation-state’s control over the quality of life in their capital cities is negotiated with the interest of the global market and its competitive environment. These changing emphases of control had been heavily debated by sociologists such as Doreen Massey and Zygmunt Bauman who questioned the actual liberal values if the state’s investment in welfare and social projects or infrastructures is being questioned and negotiated by foreign investors (Bauman, 2000; Massey, 2005; Hall, Massey, and Rustin, 2015). The existence of such parallel institutions has exerted forceful decisions that are not necessarily in the public’s interest.

CAPITALIST URBANISM OF THE MIDDLE EAST: A HISTORICAL PERSPECTIVE

The notion of the new capital city involves a series of decisions that involve a fundamental displacement of power: the dichotomy of ‘establishing authority’ and ‘expressing fear’. Much of the urban history of the Arab cities owe much to the rise and fall of great capitals: imperial, provisional, and national. For much of their history, ancient cities such as Damascus, Baghdad, and Cairo have swapped their seats as provisional and imperial capitals. Their urbanism had developed as successive layers of evolution of power and urban strategies that were driven by individual interest and investments than of the state’s vision or plan. Architecture, structures, and urban projects and facilities (mosques, madrassas (schools) and hospitals) were largely developed and funded through individual endowments of rich merchants (Abdelmonem, 2015).

To get a deep understanding of the evolution of capitalist urban form, frequency of change, and the emergence of new Capitals, the narratives of Egypt’s successive capital cities culminate into a gigantic urbanism of metropolitan Cairo. The city’s total area of 453 km² and a history that stretches back to 30th century BC have grown on the back of four other different capital cities, each of which was a fortress for ruling elites and distant from native settlements: Memphis (31-7th Century BC); Al-Fustat; Al-Qata’I, and Al-Askar (6-10th Centuries AD), with Cairo as the uninterrupted capital city since 969 AD (Creswell, 1952). Despite the
The discourse on neoliberal urbanism must sit on such equally convincing arguments and force a balanced critical analysis to each situation. For example, in the Middle East, neoliberal institutions of power in the Gulf countries, such as the UAE, Saudi Arabia, Qatar, and Kuwait, are in effect owned by members of the royal elites and operate according to the state guidance; i.e. corporations operate through strategic partnership with the state. In more populous and less rich states, such as Egypt, Lebanon, and Tunisia, large businesses use similar alliances with ruling elites and officials to secure expansive lands central to the nation’s economy, viability, and economic future. Earliest models included El Gouna and Sharm ElSheikh, the Red Sea resorts in Egypt, Jumeirah Palm Island (Nakheel) in Dubai, and Sa’adiyat Island in Abu Dhabi, all of which have been exclusively developed and are managed by private-sector investors. Through land appropriation laws, foreign corporations and international investment firms such as Eldar, EMAAR, Orascom, Mubadala, and Solidere are granted expansive lands in prime sites in Cairo, the Red sea cost, Dubai, Abu Dhabi, and Beirut, prompting evacuation of local residents and changing the demographic structure of the city.

Two particular examples are the Solidere developments of Downtown Beirut (Beirut’s Central District; BCD), and EMAAR’s Uptown Cairo in Egypt. Both projects are designed in a manner to exclude average-income citizens and pride themselves in their emphasis on glamorous lifestyle. Solidere’s BCD project forced new patterns of movement, activities, commercialization and high-class environments that look alien to the city’s existing fabric. Solidere is a unique form of private-public partnership company that runs with special regulations and enjoys special powers with the agreement of the government to regulate, build, and lead projects in the city following its devastating Civil War. They have become mediators of the state’s power when it comes to urban development and execution plans. Similar to modernist projects of the mid-20th century, neoliberal developments are blueprint copies of their western counterparts such as the highly debated of London’s Canary Wharf and its impact on the city’s urban development. EMAAR’s Uptown Cairo is, on the other hand, a prime site on the hilly mountain of Maqattam in the heart of Cairo and opposite to the Citadel. The site had developed restrictions and was owned by the Egyptian Military and national institutions. However, through special agreements with the government, it was sanctioned as private
On the 13th March 2015, Mostafa Madbouly, Egypt’s Minister of Housing, unveiled the government’s plan for an unnamed New Capital City during the Egypt Economic Development Conference in Sharm ElSheikh. At 28 miles to the east of Greater Metropolitan Cairo, an area of 270 square miles and prospected population of 5 million, the new city would be the nation’s financial and administrative capital that houses a new Parliament complex, the Government’s departments and ministries, the financial center, and foreign embassies. Out of 46 districts, 21 are designed for residential purposes and 25 are dedicated to the administrative and financial zones with a large number of high-rise business towers and landmark structures (Figure 3). The project is set to include large recreational spaces, a central park, artificial lakes, a technology and innovations park, more than 2000 educational institutions, 600 hospitals and 1000 mosques. A smart and green city, it will rely on environment-friendly electric railways, solar energy farms, and a new international airport. According to the then Investment Minister, Ashraf Salaman, the New Capital was destined to be built entirely by private developer, Capital City Partners, to be fully functional by 2022 and with no cost to the Egyptian Treasury. The Capital City Partners led by the Emirati businessman, Mohamed El-Abbar, subsequently withdrew from the project due to disagreement on the project’s financial policies and the refusal of national banks to grant cash without back-up guarantees.

The Capital City (http://thecapitalcairo.com) has been a highly controversial and contentious issue within Egyptian financial, political, and urban development circles due to its sudden emergence and the huge resources it demands. Tipped by some scholars and rival politicians as a political ploy to serve President El-Sisi’s global profile, it was also claimed to inject confidence in a suffering economy, emphasise political stability, and deal with the “Cairo Problem” of congestion and overpopulation. Government officials, however, insisted that the total budge of over US $45billion is justified as to offer double benefit: relieve the congestion and pressure of government institutions on Cairo and allow new business corporations and international firms modern facilities close to the newly-widened Suez Canal. Whatever version we may believe, the new project means a fundamental shift of national priorities with financial resources and political support directed towards an enhanced image of the new city (Figure 4). More importantly, it demarcated a new level of capitalist urbanism in which private sector developers can for the first time build a ‘Capital City’; as an unmistakable gesture of the new wave of neoliberal urban, political, and financial power that sweeps aside the state, the social structure of the city and its quality of life were largely designed for the hybrid multiethnic majority of the society of higher income expat communities. The liveability of the city was experienced in the textbook neoliberal models of shopping malls, private beaches, hotels, and leisure centres.

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fast-track satellite cities around Cairo has been unimpressive over the past five decades. David Sims (2010) and Gehan Selim (2012 and 2015) highlight the inherited and largely ignorant top-down planning policies and practices in Egypt that caused more accumulated problems than offered solutions. The cities of Sixth of October, Al-Obour, Madinat al-Sadat, the Tenth of Ramadan were built in an attempt to ‘reconstruct the demographic map of Egypt’, attract a growing population, and disperse industrial and commercial activities outside of Cairo (Tarbush, 2012 Feiler, 1992).

Planned in 1960s and built during the 1970s and 1980s, it took them until the 2000s to stand a serious chance of success. Based on historic evidence, it is safe to assert that it takes up to 40-50 years of continuous investments and substantial shift in sociopolitical demography for a new Capital City to stand any chance of success and to realize basic levels of liveability. According to neoliberal ideologies, this is not a profit-generating project and such long-term gains are no good reward for corporate investments. The withdrawal of the foreign investor was inevitable and befitting with neoliberal urban-
ism that targets high and immediate return on low investments.

CONCLUSION

Similar to the released images of the proposed Capital City, European Quarters of Ismaili Cairo in 1870s-1890s were portrayed as elegant, progressive, and advanced (Lare-Pool, 1902). Garden City was the Egyptian equivalent of European aristocrats’ residences in the French and English countryside (Volait, 2009; Mynitti, 1999, AlSayyad, 2011; Abdelmonem, 2015). However, only decades later, they were flooded by an influx of internal migration of middle-class officers and state employees as occupants. Egypt’s current project of the Capital City resembles a new territory in sociopolitical applications of neoliberal urbanism that moved beyond the exclusive living culture to the one that deals with the state as a sub-structure, a tenant, and a shared partner. The project would most probably go down in history as an over-ambitious planning experiment that offered intriguing encounters of the hegemony of neoliberal urbanism and its peculiar capitalist architecture. In case of the unlikely success of the experiment, the new city will either evolve as a resort-like extravagant political and business hub where elitist culture and exclusive lifestyle is predominant, a forbidden city of sorts, or it will follow the normative course of its predecessors and attract a flow of middle-class residents, traders, labourers and disappear in the ever growing landscape. Both scenarios are no good news for those who look for neoliberal urbanism as a source of hope for better urban environment, market driven equality, and social coherence.

But these concerns about neoliberal urbanism are not new. In fact, much of urban developments in the region owe much to the capitalist investments into high architecture, public services, and commercial markets over centuries. The limitation of neoliberal ideology could never be clearer than its visible forms of gated communities and wealthy urban quarters that cause not only division in the urban landscape and social structure, but increase the vulnerability of the city to sustain its functions. In general, cities must suffer a full cycle of flourish; struggle, desperation, and the neoliberal city is no different. If we are to understand the urban phenomenon of new capital cities, we must realise the full cycle of its inherent integration in its context and its needs to hierarchical levels of services, labour, and flow of people and goods. Cities evolve around needs and an interconnected supply of capital, opportunities, and social coherence. The Neo-Capital of NeoLiberal urbanism is simply an unachievable dream and hardly lasts few decades, before the necessary flow of capital balances itself across the city and its supply chain. Capital is like water that must move through the sieves of urban fabric to feed into hotspots of needs and demands; interruption of this flow demands high levels of unsustainable security, costly infrastructure, and a network of supply that make the city more vulnerable to self-sustain its needs to flourish at difficult times.

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MEASURING THE POTENTIAL FOR ECOLOGICAL CITIZENSHIP AMONG RESIDENTS IN FAMAGUSTA, NORTH CYPRUS.

Buket Asilsoy, Derya Oktay

Abstract
The significance of ecological citizenship for the sustainable urbanism discourse has been highly recognised in recent years. Targeting to adopt ecological citizenship as a lifestyle among urban residents appears potentially significant and urgent for the city of Famagusta, North Cyprus. As a result of unsustainable urban development, Famagusta dictates a new way of living to its inhabitants that is not familiar to them in terms of local sociocultural characteristics and environmental values. Therefore, a user survey was carried out among local people, within a random sample of 165 residents, in order to obtain scientific data that may be used for the needed planning policies. Within the survey, environmental attitudes of the residents were measured with the help of Dunlop and Van Liere’s New Environmental Paradigm (NEP) scale. The aim was to understand the level of their existing environmental worldview, one of the basic aspects of ecological citizenship. The results of the survey reveal that Famagusta residents’ existing environmental attitudes cannot achieve an adequate level in order to be one of the dynamics shaping their lifestyles. However, residents have slightly more than a medium level of environmental worldview.

Keywords: Sustainable Urbanism, Ecological Citizenship, NEP Scale, User Survey, Famagusta.

INTRODUCTION

With the help of the knowledge and wisdom derived from the concept of sustainable urbanism, existing physical environments of many cities have been enhanced and new developments have been planned in order to be sustainable and ecologically responsive. When we evaluate cities that can be characterised as green, ecologically based on different dimensions, it can easily be grasped that the ecologically concerned inhabitants as citizens are one of the primary dynamics of their sustainability efforts. These citizens adopting ecologically concerned lifestyles with their values, attitudes, and behavior, have become significant catalysts of the whole process. It can be suggested that both the reason for and the result of sustainability efforts are these ecologically responsive citizens. On the one hand, they can be the civil power exerting pressure on their local and/or governmental institutions about environmental issues; on the contrary, they are the ones using, promoting, and enhancing related implementations of cities’ ecological dimensions such as recycling, green consuming, sustainable transportation, etc.

Therefore, focusing, examining, and evaluating everyday practices, attitudes, and behaviour with an aim of achieving more sustainable and ecological urban communities in cities have increased within sustainable urbanism discourse. In this context, ecological citizenship has been introduced as a new dimension of ecologically responsive cities. Both academics, policy makers, and environmentalists seek to find strategies and tools that make the behavioural changes for modern urban societies.

In line with these, this paper looks at the city of Famagusta, a city that has faced a rapid, unsustainable urban growth and decreased all these dynamics and environmental values it used to have in the older times. It seems that developing strategies towards environmentally concerned lifestyles appears as a significant need for the city of Famagusta in North Cyprus. Once having a rich diversity of cultural, natural, and local characteristics and values, Famagusta recently has faced rapid, unsustainable urban growth. The city dictates a new way of living to its inhabitants that is not familiar to them in terms of local sociocultural characteristics and sensitivity to environmental values. Neither the urban form and layout nor the policies and institutions are adequate to positively influence the environment and environmental attitudes.

In this study, existing environmental (ecocentric and anthropocentric) attitudes of Famagusta’s residents are examined. It is believed that scientific evidence of the study may be used for possible environmentally based policy strategies as
such strategies appear as a significant need. Additionally, the study helps achieve scientific data about environmentalism in a non-Western context, which is rare compared to that in the Western context.

The limitations of the study are related to possible misunderstandings regarding the nature of the study. In this context, we should emphasise the point that, although there is a remarkable amount of research indicating the significance of environmental attitude as a variable, the existence of environmental attitudes is not the certain indicator of making the individual an ecological citizen. On the contrary, environmental action is a complex research area with multi-determinants. In other words, there is no absolute proof that an individual with a high level of ecological worldview would have environmental behaviour as a lifestyle. However, the evidence can provide an opportunity to understand if there is any potential for adopting ecological citizenship as a lifestyle via environmental behavior.

Within this perspective, the paper first provides a critical review of the relevant literature. It then introduces the case with its demographic and geographic characteristics. Next, the method of user survey, including the sample, interview schedule, and measures are presented, and the survey findings are displayed and discussed. Finally, the findings are interpreted on the basis of the scholarship reviewed and recommendations are made for responsive and eco-friendly policy strategies, along with opportunities for further analysis of the data.

LITERATURE REVIEW

Ecological citizenship

Ecological citizenship as a term is still a developing concept. The content, meaning, and definition of this term differ within the context of ‘greening’ the citizenship. Accordingly, different suggestions are made to define the term.

Several theoretical works mostly prefer to define the concept of ecological citizenship within the political sciences (Barry, 2006; Dobson, 2003; Gustavsson and Elander, 2013; Spaargaren and Oosterveer, 2010). On the other hand, there are academics emphasising the role of daily activities as a significant aspect of the term (Carter and Huby, 2005; Horton, 2005; Jagers and Matti, 2010; Kennedy, 2011; Seyfang, 2006). According to such studies, it is crucial to conceptualise the connection of ecological citizenship to environmental behaviour.

Based on related literature, focusing on personal duties as obligations firstly in and around home within the private sphere seems to be more eligible and effective. Within this scope, environmental behaviour performed in everyday life of the individual is the key element that makes the difference between the traditional and ecological citizen. These daily practices constructing ecological citizenship can be grouped into the following six behavioural categories.

1) Energy saving
2) Water saving
3) Waste management
4) Sustainable transportation
5) Green consumption
6) Public participation.

Environmental attitudes

Questions emerged about investigating the nature, structure, and constructs of environmental action for the greening of communities, since the late 1970’s. There are many researches focusing on the determinants of environmental behaviour (Azjen, 1991; Carrus, Passafaro and Bonnes, 2008; Fishbein and Azjen, 1975; Perugini and Bagozzi, 2004).

Mostly starting from the 1980’s, there are researches considering the values that affect the behaviour. Within this spectrum of research focusing on values, environmental attitudes as value orientations has been evaluated as a significant focus area (Casey and Scott, 2006; Fielding et al., 2008; Kaiser et al., 1999; Ogunbode, 2013; Rauwald and Moore, 2002; Schultz et al. 2000).

In order to make a clarification, there is a necessity to define the meaning of ‘value’, ‘belief’, and ‘value orientation’. According to Rokeach (1973), values are conceptualised as important life goals or standards which serve as guiding principles in a person’s life. They are culturally ingrained modes of conduct that tend to remain constant throughout an individual’s lifetime. Broad values provide the foundation upon which beliefs are formed through observation, inference, or firsthand experience. Beliefs represent an individual’s assessment of themselves, environment, events, objects, and other people (Fishbein and Azjen, 2010). Sets of salient beliefs give rise to overarching value orientations, which regulate the direction and intensity of an individual’s stance on a particular object or issue (Fulton, et al., 1996; Vaske, 2008, cited in Weight and Bath, 2014).

In the context of environmental behaviour research, three types of value orientations have been identified: egoistic, social altruistic and biocentric environmental attitudes. Egoistic environmental attitudes are based on values about the
effect that environmental destruction may have on the individual. Social altruistic environmental attitudes are based on human benefits or human goals. Biocentric attitudes centre on the inherent value of the natural environment.

Additionally there are researchers who propose two motives instead of three, in relation to environmental issues. Within this perspective, egoistic and social altruistic dimensions merge into a single dimension in which the human being would be the centre of the relation. Thus, anthropocentric individuals would value the environment because of its contribution to the quality of human life. Another motive is the ecocentric environmental attitude. It can be added that the ecocentric attitude is similar to the biocentric attitude. According to the ecocentric view, the individual and the environment would be on equal terms, forming a unit.

**New environmental paradigm**

There have been different measures seeking to investigate environmental attitudes. Among these instruments, Dunlop and Van Liere’s New Environmental Paradigm (NEP) scale has become one of the most prominent scientific tools measuring the environmental attitudes, beliefs, values and worldview. The theoretical background for the development of the NEP scale was the authors’ recognition that it was possible to identify an emerging ecocentric system of beliefs that challenged the dominant anthropocentric system of beliefs current in Western societies (Hawcroft and Milfront, 2010). Current anthropocentric system was named the Dominant Social Paradigm (DSP) and the emerging ecocentric system was named the New Environmental Paradigm (NEP). According to the DSP, humans are separate from nature, however, NEP views humans as an integral part of nature. Therefore, the NEP scale proposes two types of environmental attitudes in relation to environmental issues: anthropocentric and ecocentric.

Another significant point about the scale is that NEP and DSP were theoretically related to Schwartz’s (1999) harmony-mastery cultural value dimension. Additionally, both the original and revised versions of the NEP scale are designed to tap into three and five related facets of environmental attitudes respectively (Dunlop and Van Liere, 1978; Dunlop, et al., 2000).

The NEP scale was originally based on a scale of 12 items (Dunlop and Van Liere, 1978). It was revised and a scale with 15 items was developed (Dunlop, et al., 2000). The authors argue that besides achieving a better balance between pro- and anti- statements, to broaden the content of the scale beyond the original three facets of balance of nature, limits to growth, and antianthro-

<table>
<thead>
<tr>
<th>NEP Facets</th>
<th>Scale Items</th>
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<tbody>
<tr>
<td>Anthropocentrism</td>
<td>1. Humans have the right to modify the natural environment to suit their needs.</td>
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<td></td>
<td>2. Plants and animals have as much right as humans to exist.</td>
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<td></td>
<td>3. Humans were meant to rule the earth.</td>
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<td>Biocentrism</td>
<td>4. When humans interfere with nature it often produces disastrous consequences.</td>
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<td></td>
<td>5. The balance of nature is strong enough to cope with the impact of modern industrial nations.</td>
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<td>6. The balance of nature is a delicate and easily upset.</td>
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<tr>
<td>Ecocentrism</td>
<td>7. Human ingenuity will enable us to defeat the forces of nature.</td>
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<td></td>
<td>8. Despite our special abilities, humans are still subject to the laws of nature.</td>
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<td>9. Humans will eventually learn enough about how nature works to be able to control it.</td>
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<td></td>
<td>10. The so-called ecological crisis facing humankind has been exaggerated.</td>
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<td></td>
<td>11. If things continue on their present course, we will experience a major ecological catastrophe.</td>
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**THE RESEARCH CONTEXT**

**The Case**

Famagusta situated on the eastern coast of the island of Cyprus, is the second largest city of Northern Cyprus with a population of 47,538 inhabitants (TRNC 2011 Population and Dwelling Census).

**Fig. 1. Location of the city of Famagusta in the regional and country scale** (Source: Authors).

Famagusta has developed throughout seven particular periods including the early periods (648-1192), the Lusignan (1192-1489), the Venetian (1489-1571), the Ottoman (1571-1878), the British (1878-1960), the Greek-Turkish (1960-1974) and the Turkish period after the division in 1974. The city was a significant regional centre of trade and tourism before 1974 and thereafter, it experienced a significant recession period followed by severe decline in tourism and commerce functions until the early 1980’s. Eastern Mediterranean University (EMU) which was founded in 1979, has
created a new dynamism and a new momentum within the city. With nearly 14,000 students from 67 different countries, EMU has been a significant factor in the overall economic and social structure of the city over the last three decades. Today, Famagusta accommodates a full diversity of residents, including the local Turkish Cypriots, immigrants who have come from the southern part of the island and different parts of Turkey since 1974 and university staff and students from many countries (Oktay, 2005). EMU plays a significant role in the socioeconomic life of the city.

While increasing the commercial functions, EMU has been one of the main reasons for rapid and unsustainable urban development. The university has perpetuated uncontrollable and hasty urban development in the form of multi-storey housing, inappropriate additions to existing houses, and incompatible land uses scattered throughout the city (Oktay, et al., 2012). Additionally, the uncertain status of the Varosha region (an area evacuated after 1974 by United Nations demarcation decision) has caused a cease in terms of development and construction functions in nearby quarters of the city. As a result, the city as a whole has a linear urban development with a scattered urban pattern lacking the effective use of urban open and green spaces and a town centre. However, as Oktay and Pontikis (2008) argue, streets, courtyards, squares, fruit gardens, and well-defined gardens with local vegetation and landscaping were significant characteristics of older settlements in the Cypriot towns (Figure 2). Furthermore, due to the lack of legislations, implementations, and any master plan, urban infrastructure facilities such as a public transportation system, waste management systems, urban ecology, and biodiversity are also inefficient or absent.

Figure 1. Location of the city of Famagusta in the regional and country scale (Source: Authors).

Figure 2. A typical image of a traditional Cypriot settlement (Source: T. N. Toutexis, in Lazarides, 2004).
These development tendencies have also affected the social structure of Famagusta’s residents. Although the concept of local community with close relationship to each other, high sense of place, and sensitivity to environmental values was a significant aspect in traditional Cypriot towns, in the new settlements, it is observed that the perception of local community and environmentally based living is not supported. This new unsustainable lifestyle is revealed with situations like highly numbers of cars in each household (mean = 2.04) and relatively high preferences of newly developed peri-urban quarters with low density and single function, in a scattered urban layout (Oktay, 2010).

**METHODOLOGY**

**The Sample**

A random sample of 165 residents between 16 and 75 years old within the territory of Famagusta municipality including all 16 quarters were chosen for the user survey. The number of participants from each of the 16 quarters was decided according to the ratio of the quarter’s population to the city’s whole population. The respondents were selected randomly in each sample area for filling out a questionnaire form.

**Gender:** 37.6 percent of the 165 participants were female and 62.4 percent were male.

**Age:** 30.9 percent of the participants in the study were between the ages of 26 and 40. 28.5 percent were between 16 and 25 and 24.8 percent were between 41 and 55 years old. The remaining 9.7 percent were between 56 and 65 years old and 6.1 percent were between 66 and 75.

**Education:** The largest portion (48.5 percent) among the participants had a high-school degree. 16.4 percent had a university degree. 13.3 percent had a secondary school degree. 12.7 percent had a primary school degree, and 7.9 percent had a master or PhD degree. A non-significant portion (1.2 percent) was without a degree.

The administration and application of the field study were carried out with the help of the survey firm ‘The Management Centre of the Mediterranean’, a fully resourced survey support centre. The field study was undertaken starting from the second week of April 2013 until the first week of June 2013, in a time period of 7 weeks.

**The Interview schedule**

The research was part of a questionnaire including a set of questions that fall under four important titles. Those titles were as follows: ‘Environmental awareness and concern’, ‘Environmental attitudes’, ‘Environmental behavior’, and ‘Socio-demographic data’.

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<th>Table 3. Participants’ age profile (%)</th>
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<th>Table 4. Participants’ education profile (%)</th>
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<td>None</td>
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<th>Table 5. User survey’s characteristics</th>
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<td>Basic Components</td>
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<td>Age, marital status, nationality etc.</td>
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Measure

Environmental worldview: The environmental attitudes were measured with the help of New Environmental Paradigm (NEP) scale including 15 items (Dunlop, et al., 2000) in the second section of the questionnaire. Likert type five-point scale (strongly disagree to strongly agree) was used to record the participants’ responses for each item. The answers for the eight odd numbered ecocentric items were coded as 5 = STRONGLY AGREE, 4 = AGREE, 3 = UNSURE, 2 = DISAGREE, or 1 = STRONGLY DISAGREE and the answers for the seven even numbered anthropocentric items were reverse coded. According to the NEP scale, it is expected to have agreement with the ecocentric items and disagreement with anthropocentric items for achieving an ecological worldview.

RESULTS

The NEP Scale, the measure used in the study, was analysed in order to test reliability and the alpha-reliability result of the fifteen-item scale. The results revealed that the scale had Cronbach’s alpha value of .77, which showed that the scale had good reliability.

In total, the mean score of the participants is calculated as 3.52. As it is accepted that a NEP mean score of 3 is the boundary between an anthropocentric and ecocentric worldview (Rideout, et al., 2005; Van Petegam and Blieck, 2006), the result showed that the respondents had a medium level of ecological worldview. In other words, the findings suggest that environmental attitudes among the sample are slightly close to be characterised by the NEP, rather than the DSP.

Ecocentric attitudes

The participants’ agreement (strongly agree or agree) was more than disagreement (strongly disagree or disagree) about all of the ecocentric statements. Moreover they replied ‘strongly agree’ or ‘agree’ to almost all of the eight statements with high percentages.

The percentage of the ecocentric item “11. The earth is like a spaceship with very limited room and resources”, that has the least agreement (strongly agree or agree) is 43.1 percent. Another small level of agreement is for the item “9. Despite our special abilities, humans are still subject to the laws of nature”; 57.6 percent replied ‘strongly agree’ or ‘agree’. The percentages of the agreement (strongly agree or agree) with the rest of the six ecocentric items are more than 70 percent. The highest agreement (strongly agree or agree) among the participants is for the item “7. Plants and animals have as much right as humans to exist”. 34.5 percent agree and 61.2 percent strongly agree with this ecocentric item.

Anthropocentric attitudes

The participants’ agreement was slightly below the average but again the agreement (‘strongly agree’ or ‘agree’) is more than the disagreement (strongly disagree or disagree) about most of these anthropocentric statements.

Their disagreement is more than agreement for merely two anthropocentric statements. 77.6 percent replied ‘disagree’ or ‘strongly disagree’ to the item “6. The earth has plenty of natural resources if we just learn how to develop them” and 50.3 percent replied ‘disagree’ or ‘strongly disagree’ to another item “14. Humans will eventually learn enough about how nature works to be able to control it”. For the rest of the five anthropocentric items, the participants replied ‘agree’ or ‘strongly agree’ with percentages of at least 45 percent.

Additionally, when the findings are evaluated in terms of NEP facets, participants’ mean scores on the NEP subscales exhibited that ‘the possibility of an ecological crisis’ NEP facet had the highest endorsement (mean = 3.87) and ‘rejection of exceptionalism’ and ‘the reality of limits to growth’ NEP facets had the weakest level of endorsement (mean = 3.1).

In other words, they exhibited strong belief in detrimental harm to the physical environment caused by humans (the possibility of an ecological crisis). On the contrary, they achieved strong belief in human beings’ right to modify and control the natural environment (antianthropocentrism).
CONCLUSION

Ecological citizenship is the emerging dimension of sustainable urbanism and environmental behaviour conceptualised within six categories is the nucleus of this term. Environmental attitudes are significant determinants of environmental behaviour. In this study, environmental attitudes of Famagusta’s residents were examined. As a theory based instrument, a revised (NEP) scale was used as the measure.

The findings suggest that environmental attitudes among the sample are slightly close to be characterized by the NEP, rather than the DSP. As NEP views humans as an integral part of nature, it can be argued that Famagusta’s residents somehow intend to live in harmony with nature.

Obviously, these findings seem to be remarkable. As a non-industrialised community, the evidence would be expected to reveal higher NEP score. In other words, it seems that Famagusta’s residents are slightly close to be characterised by the NEP; environmentally based education may be another efficient tool to increase the existing environmental attitudes.

The authors are confident that the survey materials used in this study could be used in other contexts, and environmental attitudes may be measured in other cities of North Cyprus in order to obtain more comprehensive evidence. At this point, for future research, it should be remembered that there are several other determinants that need to be surveyed to understand the dynamics of environmental behaviour as the nucleus of ecologically based living. For instance, environmental awareness, behavioural intentions, psychological variables, and situational variables are all disparate determinants that need to be surveyed in relation to environmental action. Additionally, general values where environmental attitudes are rooted is another significant predictor that deserves to be investigated. The relationship between general values and environmental attitudes might also be the focus of further research. These further studies can enable us to answer the complex question appropriately: ‘How can the environmentally responsive living be constituted?’

Finally, it should be added that the strengths, weaknesses, opportunities, and threats may differ in each case from one country to another or from one nation to another, such that in each case, the role of each determinant needs to be evaluated individually. With the help of cultural background, existing traditions and values may support the individuals to adopt environmentally responsive lifestyles via performing environmental behavior in and around home daily, more than of the nature. It seems that values hidden in their unique traditions and sociocultural dynamics help people acquire this ecological background. As a non-industrialised community, Cypriots once had many advantages of adopting environmentally responsive lifestyles. Traditional Cypriot cuisine and vernacular Cypriot architecture and settlements are significant indicators of that consequence.

In line with these, possible strategies may directly focus on strengthening the existing ecocentric attitudes of the residents. Residents’ unique traditions, sociocultural background, and aspects of traditional Cypriot settlements may be a guiding framework for this purpose. In this respect, sustainable environments may be an efficient, direct solution to increase environmentally based living. Based on the evidence, the residents have the potential to use the facilities of sustainable urban environments (waste management systems, public transportation services, parks, sport fields, pedestrian and bicycle lanes, and so forth). Additionally, as the residents are slightly close to be characterised by the NEP, environmentally based education may be another efficient tool to increase the existing environmental attitudes.

Table 7. Respondents’ mean scores on NEP facets.

<table>
<thead>
<tr>
<th>Facet</th>
<th>Mean Score</th>
</tr>
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<tbody>
<tr>
<td>The Reality of Limits to Growth</td>
<td>3.10</td>
</tr>
<tr>
<td>Item 1</td>
<td>3.99</td>
</tr>
<tr>
<td>Item 6</td>
<td>2.05</td>
</tr>
<tr>
<td>Item 11</td>
<td>3.27</td>
</tr>
<tr>
<td>Antianthropocentrism</td>
<td>3.77</td>
</tr>
<tr>
<td>Item 2</td>
<td>3.2</td>
</tr>
<tr>
<td>Item 7</td>
<td>4.53</td>
</tr>
<tr>
<td>Item 12</td>
<td>3.58</td>
</tr>
<tr>
<td>The Fragility of Nature’s Balance</td>
<td>3.75</td>
</tr>
<tr>
<td>Item 3</td>
<td>3.99</td>
</tr>
<tr>
<td>Item 8</td>
<td>3.32</td>
</tr>
<tr>
<td>Item 13</td>
<td>3.95</td>
</tr>
<tr>
<td>Rejection of Exemptionism</td>
<td>3.99</td>
</tr>
<tr>
<td>Item 4</td>
<td>3.11</td>
</tr>
<tr>
<td>Item 9</td>
<td>3.59</td>
</tr>
<tr>
<td>Item 14</td>
<td>2.59</td>
</tr>
<tr>
<td>The Possibility of an Ecological Crisis</td>
<td>3.87</td>
</tr>
<tr>
<td>Item 5</td>
<td>4.21</td>
</tr>
<tr>
<td>Item 10</td>
<td>3.27</td>
</tr>
<tr>
<td>Item 15</td>
<td>4.12</td>
</tr>
</tbody>
</table>
other determinants. In another case, environmental awareness achieved by various methods such as through lifelong education can be the opportunity of a country or the promotion of sustainable urban environments with mixed land uses, walkable and bikable streets, household recycling facilities or sustainable modes of transportation, as situational variables, can positively and directly influence the behavioral intension. Therefore, the questions such as ‘which determinant is strengthening the achievement of environmental behavior?’ or oppositely ‘in this case, which component is becoming a threat to adopting environmentally responsive lifestyles?’ should be asked openly in policy studies aiming to understand and adopt environmental behaviour.

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THE ROLE OF MEGA PROJECTS IN REDEFINING HOUSING DEVELOPMENT IN GULF CITIES.

Florian Wiedmann, Ashraf M. Salama, Hatem G. Ibrahim

Abstract
Since the end of the 1990s, large-scale mega projects have been initiated in Gulf cities to enable an unprecedented urban growth and the expansion of new economic sectors. In this respect, mega projects have played a key role in redefining housing developments in Gulf cities. This paper explores the newly emerging housing typologies and their distinctive roles in defining new urban environments. The selected case studies are located in the Jumeirah District in Dubai, which can be seen as the first prototype of a large cohesive development area that has been built of nine rather differing mega projects including the iconic Palm project and one of the largest residential high-rise agglomerations in the Middle East. The paper is based on the evaluation of official planning data from each project as well as field observations. Conclusions are drawn to highlight key implications while identifying housing development tendencies.

Keywords: Mega Projects, Housing, Urbanism, Dubai, Gulf.

INTRODUCTION: THE EVOLUTION OF HOUSING IN GULF CITIES

Until the oil production introduced modern urbanisation, housing typologies had been the result of self-built processes within tribal societies and thus a direct expression of local culture, climate, and available building materials. Furthermore, the migration of merchant families from Iran and India during the pearl trade era in the 19th century has led to a certain knowledge-transfer of building techniques, such as the introduction of wind towers (Hawker, Hull, and Rouhani, 2005). Each neighbourhood, known as fereej, was inhabited by homogeneous social groups, often related to each other (Pallathucheril, 2015, p. 99). The typical family dwelling was the introverted courtyard house, usually attached to surrounding buildings (Wiedmann, Salama, and Thierstein, 2012, p. 36).

The first phase of rapid urbanisation commenced in the middle of the 20th century and was enabled by the quick reinvestment of first oil revenues in infrastructure projects including basic road networks and utilities. The subsequent migration from rural areas in addition to the vast migration of millions of guest workers led to the first urban agglomerations, whose structure was mainly defined by the first infrastructural networks. In general, two major phases of new housing developments have led to a completely new morphology of settlements in the Gulf region during the oil urbanisation:

Firstly, the arrival of the rural native population in combination with the general objective to improve living conditions caused the development of low-rise residential areas in the periphery of previous historic settlement cores. And second, the widespread move of a large part of the native population from central areas to these new suburban areas led to an extensive demolition process of traditional neighbourhoods, which were replaced by modern multi-story developments (Al Hathloul and Mughal, 2004). This second phase of development had two major characteristics: the old central market areas were developed by the new road grid and subsequently expanded to become the main commercial districts. The first apartment buildings were built within and in proximity to these areas, where
they replaced the traditional neighbourhoods. The result of this transformation was an increasingly dense mixed-use downtown area surrounded by a sprawling residential urban periphery relying on the car as the main mode of transportation (Figure 1) (Wiedmann, 2012, p. 26).

This rather basic urban structure and development pattern was followed during the subsequent decades and the emergence of the first master plans during the 1970s (Scholz, 1999, p. 77). Thus, downtown areas became more and more densely built leading to first agglomerations of dense blocks and first towers, as it can be observed in the case of Abu Dhabi City, while suburban areas expanded due to the continuous distribution of residential land and subsequent infrastructural development, including the integration of shopping malls. The new shopping mall complexes enabled the urban periphery to increasingly detach from the old historic market areas, which have gradually lost their previous significance as main retail centres and leisure spaces for all inhabitants, while most working places hardly moved from central areas and commercial growth corridors (Salama and Wiedmann, 2013, p. 33).

At the end of the 20th century, a new development vision was introduced to establish Gulf cities as international hubs in order to diversify local economies. This new development phase was first initiated in cities, such as Dubai and Manama, where the local oil production receded. But due to the rapid impact on urban and thus economic growth, the new development strategies were adopted in various cities, including Doha and Abu Dhabi, where the production of oil and gas has enabled the public sector to reinvest revenues in new economic development strategies (Schmid, 2008 and 2009). This new phase of economic transformation is mainly rooted in the vision to establish oil-independent service economies by benefitting from the fortunate geopolitical location between regional and global markets. This vision was followed by distinctive public investment strategies in infrastructure, services, and certain landmark developments in combination with the liberalisation of markets by introducing free economic zones and by permitting regional and foreign investors to participate in local real-estate markets (Fox, Mourtada-Sabbah, and Al-Mutawa, 2006).

Consequently, the resulting construction boom has led to a second major urban transformation process in Gulf cities. Large scale developers and their mega projects have begun to play key roles in developing large areas of desert land in a very short period of time. Housing markets themselves have furthermore diversified due to the move of higher income migrant groups engaged in the new service economies. This paper therefore explores the new housing typologies, which have been the result of recent development dynamics and which have redefined urban environments in Gulf cities in most recent years.

METHODOLOGICAL APPROACH

This paper is based on an analysis and evaluation of all key mega projects, which have been developed in Dubai’s Western Jumeirah district, which is also known as New Dubai, since 1999. In comparison to other Gulf cities, mega projects in Dubai are the product of an intense development period of more than 16 years and are thus more diversified and can look back on various planning modifications. Dubai can furthermore be seen as a role model and thus testing ground of various new housing typologies in terms of market dynamics.

Research for this paper includes the collection of all key data for each mega project, such as the projected population, the number of housing units, the basic land uses and the built typologies. This data was collected from developers and their official documentation and websites. Furthermore, site visits were used to explore the current state of development. The new master planning efforts from the Dubai Municipality were furthermore evaluated regarding the general role of the Jumeirah districts and the multitude of mega projects.

THE CASE OF NEW DUBAI

The New Dubai district in Western Jumeirah became the first address for residential freehold property developments after the Emirates Golf Club was founded in 1988 and several hotels including the Burj Al Arab were built during the 1990s along Jumeirah’s coast. The new district extension is located at the Western coastline in a distance of around 20 kilometers from the old center at the Dubai Creek. The district is part of the main growth corridor along Sheikh Zayed Road towards Jebel Ali and the Emirate of Abu Dhabi (Figure 2). The convenient location and already existing infrastructural supply due to the main highways prompted the developer Emaar to build its very first freehold property project, called Emirates Hills, in New Dubai in 1999.

Over the course of the following years the Emirates Hills project was expanded through several developments including the Springs, the Meadows, the Lakes, the Views, and the Greens into one large development area called Emirates Living, which is home to approximately 40,000
The whole area is about 12.3 square kilometers and is predominantly occupied by two-story villas (Emirates Living, 2015). Apartment buildings were built within the projects the Views and the Greens as well as within several smaller projects in the north of the development. In the case of Emirates Hills, the master developer Emaar has built the basic infrastructure and provided freehold properties in the form of undeveloped large-scale plots of about 40 x 100 square meters, which have been designed and constructed individually by each individual investor. Most areas of the neighboring projects however were developed by the master developer itself by constructing a reduced set of different types of villa. The special feature of Emirates Living is the vast area of unbuilt land in the form of more than 20 artificial lakes and a golf course occupying more than 35% of the whole development. Furthermore, instead of an orthogonal road network, an ornamental layout was chosen for the developments, creating an individual structure with winding streets.

Apart from these suburban housing areas, which have been set up as semi-gated communities, several new ‘free economic zones’ have been developed in order to create business areas close to the new suburbs. In 2000, Dubai Internet City (DIC) was established as the first free zone in Jumeirah providing optimised business opportunities for international technology, software, and internet companies such as HP, Microsoft, IBM, and Siemens. In 2009, more than 1,200 companies were already settled in DIC, creating more than 10,000 jobs (Dubai Internet City, 2015). In addition to DIC, the company TECOM, which was established as a subsidiary of Dubai in order to invest in the knowledge-based economy, launched Dubai Media City (DMC) in 2001. In 2003, TECOM initiated the development of Dubai Knowledge Village (DKV) as part of the overall free zone conglomerate represented by the Dubai Creative Clusters Authority (DCCA). Various residential projects, such as large compounds with villas and low-rise apartment buildings in addition to

Figure 2. The New Dubai district and its nine main mega projects. (Source: Authors and Google Earth).

Figure 3. The various compound developments within the Dubai Internet City and Dubai Media City. (Source: Google Earth).
few residential towers have been integrated (Figure 3). The free zone is situated between Sheikh Zayed Road and the coast with an area in the south-east covering about 350 hectare to allow for future expansion. In the center of the conglomerate, the construction of the project Dubai Pearl has been started on a circular area to form a commercial centre and a residential complex of connected high-rise buildings to house approximately 29,000 residents and visitors (Dubai Pearl, 2015).

A bypass leading from TECOM’s Dubai Internet City and Media City forms the starting point of one of Dubai’s biggest landmarks – the Palm Jumeirah. A 300-metre long bridge leads to the beginning of the artificial islands, which are shaped in the form of a palm with a 2 km long trunk and 16 fronds protected by an 11 km long crescent functioning as a breakwater. In addition to a monorail, which runs from the crescent over a bridge and down the trunk to the coast, an 800 metre long tunnel at the top of the palm connects the crescent to the palm. Since 2001, more than 92 million cubic meters of sand have been needed to create the whole landmass on an area of about 550 hectare, which has added about 78 km of new coast line. Since 2009, 1,400 villas and 20 multi-story apartment buildings provide about 2,500 housing units (Figure 4). The whole project covers an area of 5 x 5 km and mainly consists of luxury freehold properties and 32 hotels and resorts (Nakheel (1), 2015).

In addition to the growing number of residence units on the Palm project itself, it has attracted new housing projects along the coast offering views on the artificial islands. One of these developments is Emaar’s Dubai Marina, a conglomerate of residential high-rise buildings along one of the largest man-made marinas in the world. Since 2003, the project has been developed in different stages on an area of around 400 hectare for more than 100,000 future residents (Emaar, 2015). In the year 2014, Dubai Marina housed 28,361 inhabitants, which is an indicator of a rather high vacancy rate in spite of several tower projects still under development (Dubai Statistics Authority, 2014). After a 3.6 kilometer long artificial channel was dug, the first residential towers were built in the east of the project as well as the promenade along the marina (Figure 5). Most of the towers have an average height of between 130 and 200 meters and are generally designed as freehold properties offering various sizes of apartments for the upper real estate market. About nine high-rise buildings are currently being developed with a height of over 300 meters, including the 516 metre tall Pentominium, which is still under construction.

Between the coast and Emaar’s Dubai Marina, a second residential high-rise development for about 30,000 residents was completed by Dubai Properties in 2007 – the Jumeirah Beach Residence, which includes 36 residential towers and four hotel towers spreading along the 1.7 km long shoreline (Figure 6) (Dubai Properties, 2015). The third and second largest development of a high-rise conglomerate in Jumeirah is Nakheel’s Jumeirah Lake Towers stretching over an area of 180 hectare on the opposite side of Sheikh Zayed Road along the Dubai Marina. The whole development is known as the first mixed-use free economic zone of Dubai, including 79 towers, which predominantly are residential towers for more than 60,000 people and office towers for more than 120,000 working visitors. The towers with 35 to 45 floors are clustered in groups of three, surrounded by four artificial lakes covering an area of about 18 hectares. In the south of the project, Nakheel has developed a smaller high-rise project called Jumeirah Heights offering about 2,300 residences within four high-rise buildings and six multi-story apartment blocks (Nakheel (2), 2015).
The project Jumeirah Heights marks not only the end of what is currently Dubai’s biggest high-rise agglomeration, it is also designed to be part of another signature project of Nakheel in Jumeirah – the Jumeirah Islands. The 300 hectare development consists of 46 clusters of man-made islands surrounded by artificial lakes. The 736 villas have been developed in different sizes in order to attract various investors. Along the borders of this development Nakheel has launched the project Jumeirah Park, which includes 2,000 villas and about 10 apartment buildings in the centre on an area of more than 350 hectares. Around three different architectural designs and nine different sizes of villa have been developed for the entire project (Nakheel (2), 2015).

Most development sites of the nine mega projects in New Dubai have been developed since the beginning of the new millennium. All projects in New Dubai aim for the upper real-estate market with rents exceeding AED 100,000 per annum. Today, it is estimated that there is an oversupply of 40% in this segment leading to high vacancy rates in many developments in New Dubai (World Property Journal, 2015). All projects combined have been designed for an expected total population of around 275,000 inhabitants in future. The whole built area, excluding the main high-way infrastructure, is covering almost 29 square kilometers, which is leading to a rather moderate future average urban density of less than 95 inhabitants per hectare (Table 1). In comparison, New Dubai is about half the size of Manhattan Island, where around 277 inhabitants reside per hectare.

HOUSING DEVELOPMENT TENDENCIES IN GULF CITIES

Based on the case studies in New Dubai, four distinctive new housing typologies can be distinguished: (1) The waterfront villa, (2) the waterfront tower, (3) the free-zone housing and (4) the suburban mega compound (Figure 7).

While waterfront villas and their private beach access are mainly the result of particular land reclamation patterns and restrained infrastructural opportunities to build higher densities, the tower developments along the coast are the result of rapidly increasing land prices, fueled by speculations regarding sea view properties. The large quantity of towers has however led to very limited access to sea views in the case of most properties. The residential tower clusters are often supplied with a variety of leisure spaces, such as integrated marinas, beaches, malls and promenades. This high-level of diversity regarding consumption and leisure spaces is based on both the average income of residents and the attraction of tourists due to integrated hotel complexes. The supply of social infrastructure is however often very limited. Thus, it can be observed that there is a big lack of schools within and in proximity to waterfront tower clusters due to missing regulations and high land prices in areas reserved for exclusive projects.

The development of mixed-use and

Table 1. The key facts of the nine mega projects in New Dubai. (Source: Authors & official developers’ websites).
themed free economic zones has led to the establishment of various integrated compound developments, which are differing from the usual compound sites due to their particular surroundings. The compounds are built between the various office complexes and usually house employees and their families engaged in the free zones. The residential projects often include various typologies from attached and detached villas to apartment blocks. In some cases compounds will be replaced by commercial developments depending on future demand, which is creating an environment of temporary rather than long-term neighborhoods. The walls of each compound are furthermore contributing to the fragmented appearance and the general lack of accessible public spaces within free zones.

The last new housing phenomena are large-scale themed suburban gated communities. Their development sites can occupy large areas of many square kilometers and their monotonous typologies of attached and detached dwellings as well as low-rise apartment blocks mainly differ from each other due to ornamental road grids, which are used to create individual spatial patterns. This has however led to rather detached and introverted residential areas with hardly any links than major highways. Subsequently, neighbourhood centres and social infrastructure have been developed in disperse locations depending on land availability rather than on a clear strategy to create integrated and accessible sub-centers for services and facilities. In some large-scale projects, certain leisure spaces, such as golf courses, water features, and small malls have been integrated to enhance the general attractiveness.

In summary, it can be stated that the recent mega projects have led to new urban landscapes, which are defined by new housing typologies and their spatial distribution (Figure 8). The emerging island projects have led to a variety of suburban settlements on reclaimed land with limited access and a high level of exclusivity. In parallel, large scale themed suburban mega projects have been launched inland along the urban periphery of former urban centres. The coastal transition zones are usually occupied by extending agglomerations of residential tower developments, which are the direct consequence of high land prices and already existing infrastructural supply. And last but not least, new themed mixed-use developments, which are often initiated as free economic zones along strategic growth corridors, integrate various residential typologies as either short-term housing supply depending on the demand on commercial projects or as exclusive but often rather isolated freehold property projects benefiting from the overall branding of developments as new cities within the city.

CONCLUSION

Earlier research emphasises that housing has become one of the most favoured commodities in Gulf cities. While trading pearls led to first port cities in the 19th century, trading oil and gas led to expanding cities with some of the lowest average urban densities worldwide (Salama, 2011). The
recent trading with real estate has led to a diversity of themed worlds inviting for leisure and consumption (Figure 9), but hardly integrating any sense of community and neighbourhood. The exponentially rising real-estate prices have furthermore led to a continuous increase of rental rates leading to an enhanced social segregation and the phenomenon of high vacancy rates and over-occupied properties, particularly in the case of more dated projects. Both the under-occupation due to high rental prices and the over-occupation due to single migrants sharing apartments or villas have led to disparities from area to area and thus insufficient infrastructural supply.

The new role of housing as an investment opportunity in Gulf cities has attracted both regional and global attention and has thus undoubtedly led to a large-scale diversification of housing types. While the big variety of differing typologies can be observed by analysing the entire spectrum of recent real-estate projects, the mass development of housing has led to rather monotonous urban spaces from the perspective of single projects and their immediate surroundings. The repeated architectural design and modular construction of hundreds of new dwellings have contributed to a highly disorienting housing environment. The missing neighbourhood centres, social services and accessible public spaces have furthermore contributed to a lack of identity and the remaining dependency on commuting by car, which documents the suburban role of most mega projects rather than the establishment of self-contained settlements.

Consequently, it can be stated that mega projects have introduced new housing opportunities for upper income groups, particularly various apartment types, which have become suitable representations of social status in Gulf cities. The needed diversification of housing, which was previously mainly dominated by suburban villas, has however not led to an enhanced urban identity and efficiency in the case of single districts and urban spaces. In most cases developers have labelled housing projects as new communities rather than integrating needed infrastructure and public spaces to actually create future communities. The lack of affordable housing schemes has furthermore contributed to social segregation and a rather fragile environment of repetitive exclusive projects relying on future economic growth in order to avoid a complete challenging of their existence as displayed in the recent financial crisis.

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A CONTEXTUAL FRAMEWORK FOR THE DEVELOPMENT OF A BUILDING SUSTAINABILITY ASSESSMENT METHOD FOR IRAN.

Shahrzad Malek, David Grierson

Abstract
As one of the fastest growing countries in the Middle East, and the one most vulnerable to climate change, the main challenge now facing Iran today is how to house its growing population in a socially, economically, and environmentally sustainable way. However, in the absence of a national framework to guide the sustainable development of the built environment, responding to this challenge is problematic. The articulation of a comprehensive assessment method that would enable issues of sustainability to be addressed and incorporated within building construction projects is urgently required. The research that underpins this paper takes account of current tools in aiming to support the development of a national building sustainability assessment method (BSAM) for use in Iran that involves the identification of sources of impact, specific benchmarks, and priorities for a weighting system for assessment criteria. This paper profiles the basis of a contextual framework that will inform the development of such a regional-based tool, taking account of Iran’s current climate change adaptation policies and priorities, its environmental conditions and socio-economic challenges, building typologies, standards and benchmarks.

Keywords: Iran, Sustainability, Building Assessment Method, Climate Change Adaptation, Building Codes.

INTRODUCTION
Following the publication of the Brundtland Commission report in 1987 (WCED, 1987), the concept of sustainable development has evolved significantly from a set of initially loosely related environmental concerns (Rodwell, 2007) to signify the practice of protecting the natural environment through the inclusion of social, economic, and cultural dimensions of human activities. As a result of major international action plans and agreements, such as Agenda 21 and the Kyoto Protocol, sustainable development (SD) has now become a policy priority for governments across the world. Today, issues of climate change adaptation and the promotion of SD principles are acknowledged through the development of international and national policy decision-making. Most countries across the world have begun to implement required actions to achieve concrete measures in mitigating climate change through imposing new requirements and conditions on their industrial and economic activities. The construction and property sector occupies a central position in the SD process particularly because of its material throughput, its scale of resource and energy use, and its faster rate of increase in energy use compared to other sectors (Schropfer, 2012). In response to this, many initiatives are being implemented at the scale of built environment, involving, for example, the introduction of new building codes, energy regulations, technical guides, and assessment tools. Many of these responses have tended to focus on aspects of energy efficiency and performance in buildings. However, more recently the transition from energy performance to sustainable performance, involves a shift from technical-based building codes and single criteria evaluations (e.g. energy performance), to a more holistic performance-based approach - an evaluation of buildings that considers a broader range of sustainability factors (Cooper, 1999; Kaatz, et al., 2006). Within the context of this broader framework of considerations, Building Sustainability Assessment Methods (BSAMs) can contribute effective and practical tools for the built environment to “provide a structured means of incorporating performance targets and criteria into the design process” (Crawley and Aho, 1999).

In recent years, the important role of BSAMs in addressing climate change adaptation measures within the design and construction sectors has led to the development of several building assessment schemes around the world. Influenced by the most widely known schemes – BREEAM and LEED – many countries have now adopted one or more of the existing schemes or have developed their own national assessment methods. Although the application of most BSAMs are voluntary, their
role in effecting market transformation (Cole, 2005), enforcing building codes and regulations, and serving as design guidelines have now seen them emerge as an essential tool for supporting a sustainable construction process. Indeed, some countries have now introduced them as mandatory building codes and some others have accepted them as an alternative route to complying with building regulations (Crawley and Aho, 1999). Despite an increasing demand stimulated by the introduction of national and international sustainability policies, building codes, and assessment tools around the world, Iran has yet to introduce a cohesive framework to address sustainability issues in the built environment, particularly within its construction sector. Under broader sustainable development policies, the country requires to develop objective frameworks for different sectors and organisations in order to tackle climate change and achieve its own SD targets. Considering the important role of construction, and specifically the housing sector, in Iran’s economic well-being, and as a major consumer of energy and resources, this sector urgently requires a set of policies and tools, comprehensive building codes, and guidelines and frameworks to promote ecologically-based SD that are aligned with overall national policies. This research aims to support this alignment through the development of a national building sustainability assessment method (BSAM) for use in Iran involving the identification of sources of impact, specific benchmarks, and priorities for a weighting system for assessment criteria. The paper profiles the basis of a contextual framework that will inform the development of such a regional tool, taking account of Iran’s current climate change adaptation policies and priorities, its environmental conditions and socio-economic challenges, building typologies, standards, and benchmarks.

CURRENT BUILDING SUSTAINABILITY ASSESSMENT TOOLS

Currently, there are two main ways to address sustainability concerns within the built environment: through policy and regulatory instrument and through assessment tools (Du Plessisa and Cole, 2011). While traditionally, national legislation, primarily concerned with the energy performance issues of buildings, was considered as the main driver to deal with environmental concerns within the construction industry (Du Plessisa and Cole, 2011), building assessment tools are increasingly addressing a broader range of sustainability issues (Cole, 1999). Although the first generation of these tools were striving solely to address environmental performance of individual buildings, most recent versions have started to consider sociocultural and economic dimensions and a wider range of applications for different projects based on their scale and function. Worldwide, there are now more than 40 assessment tools/certification schemes available for evaluating sustainability issues of the built environment. Most of the tools developed in recent years embrace similarities in terms of their approach, methodologies, rating systems, scope of assessments, and list of criteria. All introduce a broad range of sources of impacts structured under different categories such as energy, site, water, waste, indoor environment quality, and construction process, leading to a specified rating scale which determines the overall sustainability performance of the building. In some cases the tools link to other government policies and regulations, while many adopt criteria and standards that go beyond the policy standards set in the countries in which they are used (Reed, et al., 2009).

The success of assessment tools in creating positive change by furthering the promotion of higher environmental expectations and serving as a potent mechanism for affecting change in the building sector (Cole, 2005), has resulted in a rapid increase in the number of methods being developed worldwide. However, increased international interest in developing new market-based (or research-based) tools has highlighted problems associated with the use of existing generic systems for different contexts. The demand for significant organisational and financial resources, training, technical support (Cole, 2010; Crawley and Aho, 1999), and the need to comply with strict brand rules and quality conditions present a substantial challenge in adapting an existing tool (Cole, 2006). Crucially, individual characteristics of each country, such as historical background, climate, geography, culture, type of building stock, resources, building standards, and policies and governmental schemes necessitate the development of an individual sustainability-rating tool for that country. The use of specific local indicators in the rating systems and their credit allocation methods renders the term “sustainable construction” subjective (Alyamia and Rezguib, 2012) and confirms that assessment tools are not fully applicable to all regions (Crawley and Aho, 1999). Furthermore, the ultimate success of an assessment tool will inevitably rely on its acceptance and on the recognition it receives from the local community and industry. As suggested by Du Plessisa and Cole (2011), participation and input from stakeholders is essential in achieving the most effective change in shaping design and practice. Stakeholders’ engagement can provide a robust and verifiable support structure for the implementation, opera-
tion, and management of an assessment tool (UCD & IGBC, 2011).

The interdependent and holistic nature of sustainability requires the inclusion of sociocultural and economic issues (as well as environmental issues) that rely on stakeholder engagement and their “stories and aspirations of place” (Du Plessis and Cole, 2011). This inclusion of stakeholder engagement can help respond to main areas of criticism where tools are a) struggling to recognize regional distinctions, b) lacking to offer a holistic approach towards sustainability issues, and c) offering insufficient methodological transparency (Kaatz, et al., 2006).

Figure 1 maps recently developed tools including those introduced by government as a country’s national tool (such as QSAS in Qatar, Estidama in United Arab Emirates, GBI in Malaysia, Greenship in Indonesia, LOTUS in Vietnam), and those developed as a research-based tools (such as GBtool/SBtool developed as an international tool with the collaboration of 21 countries through Green Building Challenge (GBC), MOBSA developed by Zalina Shari for Malaysia, SABA developed by Ali & Nsairat for Jordan, SEAM developed by Alyami & Rezgui for Saudi Arabia). Research analysis suggests that: a) a set of core criteria relevant to the assessment context can be driven through the comparative and contextual analysis of existing assessment tools, b) regional specifications can be integrated into the assessment system through stakeholder engagement c) where metrics, data sources and reference benchmarks are not available, consensus based process is the most applicable method to develop performance criteria assessment targets (Todd et al, 2001).

THE DEVELOPMENT OF A METHODOLOGY: TOWARDS A BSAM FOR IRAN

Developing an assessment method is a multi-aspect procedure, which requires input data from multiple sources and the employment of various methodological approaches. Assessment methods are composed of three main elements:

• Assessment criteria: identifies the sources of impacts that should be taken into account and assessed against performance benchmarks;
• Benchmarks: represent the required performance standard expected to be met by the building industry;
• Weighting of criteria: prioritises assessment criteria based on their international, national and
These core elements play a crucial role in the validation of the assessment method and have a direct impact on the outcome of the assessment practice. Our research proposes a framework for the development process consisting of five interdependent stages as follows:

**Stage 1: Feasibility study**

The first step is to conduct a feasibility study in order to explore the country’s current progress in striking a balance between its policies and the wider sustainable development agenda, and to identify specific conditions, constraints, goals, priorities and challenges in promoting sustainability strategies within its construction industry in general, and barriers to developing an assessment method in particular. Outcomes of Stage 1 should be discussed and analysed by panels of experts at later stages of the development process, and appropriate measures should be established to overcome existing challenges and constraints and to clarify regional priorities and goals.

**Stage 2: Identifying sources of impact**

The next step is to identify sources of environmental, sociocultural, and economic impacts that should be included in the assessment method. It is acknowledged that a set of core criteria have global importance and relevance (i.e. are relevant all assessment methods across the world) and should be included in any new scheme that aims to assess the sustainability performance of buildings (Cole and Mitchell, 1999; Todd and Geissler, 1999). These criteria can be derived from existing assessment methods through a comprehensive comparative analysis of their content and approach, focusing on their areas of convergence and distinction (Cole, 2005). This analysis serves as a starting point in the formulation of an initial tentative list of assessment criteria as suggested by Cole (1999). The list is then subject to multiple modifications by panels of experts in order to fully reflect sociocultural, environmental, and economic requirements at both regional and national scales. Here, the composition of the expert panels is important in developing a flexible assessment method that allows for regional customisation and addresses variations under a single national scheme. Moreover, since assessment criteria are multi-dimensional and require input data from a vast range of different fields, expert panels should include stakeholders from all relevant sectors including academia, industry, and government (Alyamia and Rezguib, 2012). The composition of expert panels also plays a crucial role in receiving acceptance and recognition from relevant communities.

**Stage 3: Identifying specific benchmarks**

The third step is to explore current standards and industry norms, develop performance targets, and define desired outcomes of assessment criteria and the overall performance of the building. These are also identified through expert panel discussions and consensus.

**Stage 4: Identifying priorities and developing the weighting system**

The fourth step is concerned with identifying national and regional priorities and measuring the relative importance of various assessment criteria through a questionnaire survey. In order to develop a weighting system based on the priority sets delivered by the judgments of experts, a pairwise comparison methodology involved in the AHP technique (Analytical Hierarchy Process) is acknowledged to be the most applicable approach in synthesising the data and prioritising building assessment criteria for the given context.

**Stage 5: Verification, testing, and modification**

The reliability and applicability of any assessment method is subject to testing through experts’ verification and industry application in case study testing (Cole and Larsson, 1999). In this regard, the new scheme should be sent to experts for verification and further modifications and finally tested through the application and evaluation of case study projects. The results of these studies should inform further refinement of the new scheme.

**A CONTEXTUAL FRAMEWORK FOR A BSAM: PROFILE OF IRAN**

**Climate change and sustainable development**

Due to its geographical location, climate, high risk of natural disasters, oil dependent single-product
economy, overpopulation, rapid urbanisation, energy inefficiency, and unsustainable development patterns, Iran is classified as one of the most vulnerable regions to the impacts of climate change (DoE, 2004). Iran is the eighth largest contributor to the global greenhouse gas (GHG) emissions globally (WB, 2015). The energy sector accounts for the 77% of the country’s overall GHG emissions (Nachmany, 2015). Almost all (97%) of the Iran’s energy consumption relies on oil and natural gas while only 0.03% of electricity generation is from renewable sources (Nasrollahi, 2009). Over recent decades, Iran’s environment has deteriorated and its natural resources have been significantly depleted due to the lack of a coherent vision for sustainable development, inadequate protective legislation, lack of regulations and enforcement, unsustainable patterns of production and consumption, and infrastructural fragmentation (UNDAF, 2004). The result is that today, Iran struggles with many environmental problems in urban areas such as a rapid increase in domestic energy and resource consumption, an increase in pollution, the degradation of scarce water resources, and an increase in the quantity of solid waste. According to Iran’s Department of Environment, the average per capita renewable water availability will be reduced by 31% by 2021 compared to 2009 (DoE, 2010). The UN Department of Economic & Social Affairs has reported that 90% of Iran’s generated waste is being disposed in landfills, causing environmental damage and contamination of lands and water resources (UN, 2004). Iran is already one of the most seismically active countries with fault lines covering almost 90% of the country (Mansouri, et al., 2008). As a result of the increasing impacts of climate change, it is predicted that the country will be more exposed to environmental risks and severe weather events such as earthquakes, floods, etc. over coming decades (Pahl-Weber, et al., 2013).

In response to concerns on global warming, Iran signed and ratified the United Nations Framework Convention on Climate Change (UNFCCC) Kyoto Protocol in August 2005 and and established the Iranian National Committee on Sustainable Development (INCSD) under the supervision of the Department of Environment (DoE) to promote the implementation of SD approaches aligned with the Earth Summit’s Agenda 21 and related international conventions (DoE, 2004 and 2013). Although Iran has yet to develop an official national action plan for SD, a concern for climate change has been incorporated into the country’s 20-year Vision Plan (20-VP), its Fifth Development Plan (FDP), as well as other sector policies and regulations (Nachmany, 2015). Iran’s current SD strategies emerge from Article 50 of the country’s constitution that is dedicated to the environment. According to this Article (The Constitution of the Islamic Republic of Iran, 1979):

“The Protection of the environment, in which current and future generations have a right to flourishing social existence, is regarded as a public duty. In this regard, any economic or other activities causing pollution or any irreparable damage to the environment is forbidden.”

The country’s 20-VP defines the direction of Iran’s development in various fields such as culture, science, economy, politics, and social (EDC, 2003). While the main development objectives within the plan are targeted at social and economic advancements, environmental protection is addressed within a number of articles. The most important aspects refer to the protection of natural resources, the optimisation and reduction of energy consumption, and the promotion of public awareness and the achievement of sustainable development through the development of research activity. Iran’s FDP is aligned with the principles of 20-VP and aims to fulfil its goals and objectives, by emphasising the promotion of environmental protection and climate change prevention, while mandating all relevant ministries to develop and implement programs leading to the reduction of GHG emissions. The FDP anticipates that through the adoption of policies established in 20-VP, the country will be able to reduce its GHG emission by 30% by 2025 (Nachmany, 2015). The Iranian government has also announced a further possible reduction in emissions of 34% by utilising the technical and financial assistance of international institutions (Nachmany, 2015). Given the context of Iran as one of the major producers and consumers of fossil fuel energy, the government’s climate change adaptation
plans mainly focuses on the following areas: developing renewable energy plans and related technological improvements, developing a Subsidy Reform Plan, enforcing electricity duty, changing the culture of consumption and promotion of productivity and efficiency within all sectors and industries, and establishing energy standards. However, there are few policies and frameworks to directly promote the sustainability and energy efficiency of the built environment related to the construction sector. The main legal instrument in this regard is within the *Iranian National Building Code*, where there is a stated focus on energy savings at the level of single buildings, emphasising U-factors (thermal insulation properties) of a building’s envelope and its components, and proper overall insulation (Nasrollahi, 2009). Iran’s legislation on *Altering Energy Consumption Pattern* also calls for a change in the culture of consumption stressing on the importance of energy efficiency in residential and commercial buildings through the provision of power plants. The FDP also obliges municipalities to comply with the building codes and regulations to retrofit buildings and modify the pattern of energy consumption in buildings with a primary emphasis on residential buildings. The *National Rules of Procedure for Implementation of the UNFCCC* and the Kyoto Protocol, which were developed by the Department of Environment (and approved by the cabinet in 2009), oblige all ministries and organisations to develop their own Climate Change Action Plans, prepare relevant assessments and benchmarks, and introduce respective policies, legislations, guidelines, and frameworks. The development of a national building sustainability assessment method (BSAM) for use in Iran should help to address this obligation.

**The Construction industry and housing sector**

Housing is one of the most important sectors to Iran’s economy attracting about 40% of the country’s total annual investment, and contributing more than 20% of annual fixed capital formation. The sector generates over 8% of GDP and constitutes 12% of the employment of Iran’s working population, while at the same time accounting for 33% of household expenses (World Bank, 2004). Throughout recent decades, the main challenge facing Iran’s government has involved economic-related housing problems and the need to meet housing demand with an emphasis on affordable housing for lower and middle income families. Iran’s housing stock of 198 units per 1,000 residents is already low by international standards (World Bank, 2004) and it is estimated that at least 4 million new homes are required to meet the demand for the next five years (Shahriari, et al., 2014). In this context, providing affordable homes and relevant infrastructure has long been an urgent priority for the government. The provision of high density residential complexes within its cities (such as Mehr Housing Scheme) and the creation of new residential towns around metropolitan cities (such as Andisheh, Pardis and Parand near Tehran) have been two key responses by the public sector to this rising demand. However, the lack of an integrated planning and management system and the very slow pace of infrastructure deliveries have hindered progress. Economic constraints and the lack of efficient building codes and legislation have also resulted in poor construction quality of those residential units provided. Additionally, as real estate development is seen as a profitable investment in Iran, developers are consistently compromising the quality of design and construction in order to achieve greater profits in a shorter period of time (Sarkheyli, et al., 2012). In many cases, developers are even happy to pay fines for violations of rules and building codes since these have little financial impact (Pahl-Weber, et al., 2013) on their profits. Consequently, this has led to the deterioration of the urban fabric and has had a significant negative impact on the natural environment.

The World Bank has reported that Iran does not have an integrated building code to support and encourage SD and the use of appropriate technology (World Bank, 2004). In order to mitigate a building's vulnerability to natural disasters, building regulations in Iran implicitly favour steel and concrete structures, thus promoting modern energy-intensive materials. Iran’s building sector is responsible for 42% of total energy consumption and the fastest growing sector (Riazi and Hosseyni, 2011). The residential sector has the highest energy consumption contributing to the 23% share of...
total CO2 emission in Iran (World Bank, 2004) with heating and cooling being the main consumers with 83% of total energy used (Riazi and Hosseyni, 2011). There is also a considerable amount of wasted energy in the residential sector due to inefficient construction methods and processes and energy intensive household appliances (Farahmandpour, et al., 2008). Moreover, municipality supervision lacks the capacity to perform any effective form of quality control. The lack of an integrated building code has led to the proliferation of structures in Iran that contain energy-intensive materials, consume enormous amounts of energy, release large amounts of carbon dioxide, use the most wasteful construction techniques, have poor design and air quality, and have little to offer in terms of cultural and social needs of their occupants. It is clear that Iran needs to revise urban planning regulations, upgrade infrastructure, promote cost-effective, energy-efficient, environment-friendly housing typologies and reduce the use of hazardous materials, make provisions for increasing effective life and durability of building stock, through a revision of standards, and completion of the remaining parts of Iranian National Building Code (World Bank, 2004). The development of a national building sustainability assessment method (BSAM) for use in Iran should help support this process.

Building typology and climate

Recent research work considers the natural and climatic characteristics of different regions of Iran and introduces various classifications each presenting a different approach for different purposes. Considering required thermal properties of building typologies, the country can be divided into 8 large climatic zones (Kasmaei, 1992). Kasmaei’s classification has been approved by Iran’s Ministry of Housing and Urban Development as the authoritative document for the climatic classification for building design purposes (Kasmaei, 1992). However, his classification can also be grouped into four main climatic zones that not only represent geo-climatic variation but also represent sociocultural factors and similarities in lifestyle and building typologies. Such classification is widely acknowledged by other researchers in the field of climatic responsive architecture and is more relevant to our research as it also represents socio-cultural diversities of the regions (Ghobadian, 2015). The table below shows the climatic classification of Iran and associated traditional building typologies featuring different climatic responsive strategies based on both sociocultural and environmental necessities of regional conditions.

Despite having a rich history in climatic responsive architecture, environmental factors have largely been ignored in the formation of modern buildings in Iran, as construction shifted from craft-based to industry-based practices. Subsequently, with the introduction of new materials, building technologies and equipment, and construction techniques, building typologies completely transformed in favour of a modern lifestyle. Diversity of buildings in different climate regions of Iran has lost its ground and has been replaced by homogeneous building types in different regions of Iran. Planning controls and building regulations have also played a very important role not only in limiting and regulating construction practices but also by encouraging the introduction of new generic housing typologies. New controls have largely dic-
The emergence of typologies that have had a significant impact on urban built form in terms of land parcel, block size, proportion of built area, as well as on built form parameters such as building shape and depth mediated by building regulations (Shayesteh and Steadman, 2013). Since the main building codes apply throughout all regions of Iran there is sparse acknowledgement of regional climatic conditions, which results in the prevalence of similar, often inappropriate building typologies within different regions throughout Iran (Nasrollahi, 2009). The development of a national building sustainability assessment method (BSAM) for use in Iran that takes account of regional climatic differences, should help address this issue.

CHALLENGES AND LIMITATIONS

A review of current assessment methodologies in relation to Iran’s contextual framework has highlighted a number of challenges and limitations that require consideration in the development of the new BSAM:

**Building codes, legislation, and policies**

An assessment system cannot be efficiently integrated into the construction process as a stand-alone tool (Kaatz, et al., 2005). For the assessment method to be feasible, practical, and acceptable, it is vital that it is integrated with relevant guidelines, building codes and regulations, regional and national standards, as well larger national and international policies and programs. In order to ensure successful application, the assessment system must take account of regulatory instruments established by the political-administrative system within the relevant context (Todd and Geissler, 1999). On the other hand, assessment methods can be used to enforce essential modifications in regulatory systems or even inform fundamental policy directives at a regional or national level (Cole, 2005). In another words, it can push the building industry towards better performance (Todd and Geissler, 1999). In the case of Iran, this seems to be substantially problematic since building codes and national policies cannot be incorporated into...
the assessment system in their current form. As previously discussed, the country’s current building regulations can be heavily criticised in failing to acknowledge sociocultural and climatic diversity within different regions. Also, sustainability thinking has yet to be embedded within all governmental organisations, executive bodies, and larger policy decisions. Such development takes time and requires fundamental financial, technological, and infrastructural changes, involving the restructuring of the entire sector.

**Benchmarks**

The development of relevant benchmarks or reference buildings for the identification of assessment criteria and informing the overall evaluation of a building’s performance are commonly based on current performance levels and existing industry norms, which means that improvements are evaluated relative to the typical practice in the region (Cole, 1999 and 2005; Todd and Geissler, 1999). Different regions possess different environmental and resource capacities (e.g. water and electricity supplies), which entail different management strategies and regulations. Similarly, socioeconomic constraints in different regions require different strategies in terms of urban development, spatial planning, and construction. As identified by Todd & Geissler (1999), “superior performance in one country would be considered standard practice in another. And, a criterion that is very important for assessing the ‘greenness’ of a building in one region might be of less importance in another region.” This raises a significant challenge for the development of a BSAM for Iran. Firstly, due to the inefficiency of the current regulatory system, the development of criteria benchmarks and references, based on current practice norms, inevitably challenges the efficacy of the existing system. Secondly, Iran’s regional diversity necessitates the development of a national BSAM that allows for customisation and integration of regional characteristics within the evaluation process. Therefore, benchmarks and references must be developed through regional comparisons while at the same time complying with national goals and objectives.

**Infrastructure**

The reciprocal effects of a building on its surrounding infrastructure have an inevitably important role in the performance of the BSAM (Todd and Geissler, 1999) since buildings have enormous consequences on the design and operation of the community (Cole, 2005). At the same time, access to infrastructural facilities is essential for the operation of a building. Although Iran has experienced positive social and economic development over the last decade, significant social and economic inequalities across different regions remain evident, particularly in terms of a lack of access to infrastructure and social amenities in rural areas. In this context, Iran needs to upgrade infrastructure in existing sub-standard settlements (World Bank, 2004).

**Scale of assessments**

The BSAM must target global impacts while responding to regional concerns but local strategies can often have global impact and equally international policies can affect regional decisions. Therefore, the BSAM must focus on the integration of core criteria with global significance while incorporating customised elements with regional importance (Todd and Geissler, 1999). The scale of assessment can refer to assessment criteria relevant to varying geographic/physical levels, from building elements and components to the urban, regional and national scale (Edum-Fotwe and Price, 2008). In most cases, the evaluation of an individual building without consideration of extraneous influences such as urban configuration, infrastructure, community facilities, etc. is impossible. Therefore, it is crucial to define the appropriate boundaries for assessment criteria and clarify expectations with respect to an individual building’s contribution to overall sustainability goals.

**Emphasise on socio-cultural aspects**

All aspects of sustainability are holistic and interdependent; hence, sociocultural, economic, and environmental aspects should be all addressed within the BSAM. However, as discussed, there are significant differences in regional priorities in how to address sustainability principals. Environmental assessment methods have originated in developing countries where social and economic infrastruc-
tures are already well developed. However, in developing countries differing socioeconomic priorities dictate that domestic constraints on environmental progress are qualitatively different (Gibberd, 2002; Cole, 2005). On a path to SD, developing countries must continue to emphasise the fulfilment of basic needs, and promotion of socioeconomic aspects, while avoiding negative environmental impacts (Gibberd, 2002).

**Acceptance and recognition from industry**

For an assessment system to be reliable, feasible, and applicable, it is essential to receive acceptance and recognition from the wider community as well as industry. Consequently, the development of a BSAM must involve stakeholder participation in order to clarify and meet the requirements and expectations of the community (Kaatz, et al., 2006). Assessment criteria must consider socioeconomic constraints and limitations in order to be accepted by the industry (Todd and Geissler, 1999). Since, in Iran, all resource supplies are managed by the public sector, the successful implementation of a BSAM necessitates the support of government and public organisations not least with regard to the financial and economic implications associated with its use. Aside from fundamental changes in wider policies and sector decisions that are inevitable in transitioning to SD, the economic impact of a BSAM on the transformation of the real estate market must be explicitly acknowledged. While the profit motive continues to dominate decision-making, especially in housing and construction practices, the necessary additional costs associated with implementing a BSAM to support SD needs to be carefully considered in the context of Iran’s urgent need to promote the sustainability and energy efficiency of its built environment, and its public duty acknowledged in its constitution to protect the natural environment.

**CONCLUSION**

Iran is a vast country with abundant natural resources and renewable energy opportunities. However, the current state of energy and resource use, environmental degradation, climate change vulnerability, and urban and housing challenges requires a robust action to promote ecologically-based SD. The country’s recent moves towards strategies that address global environmental concerns have been a significant step, however, to implement broader SD policies address climate change adaptation measures, Iran needs to develop objective frameworks within its different sectors and organisations. In the field of the construction industry, this will require the revision of current urban planning regulations, building codes and standards, and the introduction of a sustainability-based framework for the assessment of the built environment. This will require the development of a national building sustainability assessment method (BSAM) for use in Iran involving the identification of sources of impact, specific benchmarks, and priorities for a weighting system for assessment criteria.

This paper has profiled the basis of a contextual framework that will inform the development of such a regional tool, taking account of Iran’s current climate change adaptation policies, and priorities, its environmental conditions and socioeconomic challenges, building typologies, standards, and benchmarks. The findings of this contextual study suggests the following considerations for the next stages of the development of a BSAM to be reported in future publications, involving a need:

- for integration with Iran’s national building codes, and regulations, regional and national standards as well as larger national and international policies and programs;
- to set higher performance benchmarks compared to current performance levels;
- to offer integration of core criteria with global significance and customized elements of national importance in Iran;
- to acknowledge regional variations within Iran;
- to offer a comprehensive list of criteria taking into account all interrelated dimensions of sustainability;
- to promote stakeholder participation;
- to offer transparency and compatibility;
- to propose a simple, practical and inexpensive methodology for application;
- to promote performance based evaluation rather than technical assessment.
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TRANSFORMING LIFESTYLES AND EVOLVING HOUSING PATTERNS: A COMPARATIVE CASE STUDY.

Smita Khan, Archana Bele

Abstract
The wisdom of developmental activities that propose voluminous increase in the built infrastructure is questionable. These can seriously undermine the ability of quintessential small cities to retain the sociocultural and people centric character leading to a saner lifestyle in comparison to the burgeoning metros. This study is based in Nagpur, a Grade II city of central India. It presents a comparative analysis of three unique housing neighbourhoods developed in distinct temporal periods: historic, pre-globalisation, and post-globalisation. It focuses upon seminal parameters that are intrinsic to emotional well-being of residents and encourage positive behavioural responses. The methodology follows a qualitative approach through a study of morphological maps, non-participatory observation, and photo documentation. An argument is developed for a comprehensive urban development process, based upon respect for intrinsic sociocultural values. It emphasises the need to celebrate and rejuvenate the thread of continuum for betterment of small cities. This enquiry resolves that to make a city smart and sustainable, efforts at people centricity are imperative along with ICT and other smart technologies of the future.

Keywords: Smart Cities, Sociocultural Sustainability, Environment-Behaviour, Parameters, Housing Patterns, Quality of Life.

INTRODUCTION
In the six decades after Indian independence, metropolitan cities witnessed unprecedented growth. Until recently, small cities and towns evidenced a slow, steady, and organic development by virtue of their location in political backwaters. A certain boon in disguise, these cities have been able to retain some of the old world charms. These include a green cover, quietude, a slow pace of life, a scaled built environment, human linkages, and a saner lifestyle compared to the burgeoning metros.

The new world order ushered in by globalisation and developments in communication technology has triggered growth even in these remote cities. In the contemporary era, development is measured by a voluminous increase in the built infrastructure. Urban development has usually been an instrument for extracting political mileage. The concurrent debate on smart cities focuses upon development of these smaller cities (http://www.urbannewsdigest.in and http://www.livemint.com).

Governmental propaganda misinterprets the meaning and understanding of a smart city. Debates on virtual media and minuscule publications miss out on a robust discussion on the subtle yet vital ingredients of sociocultural sustainability. The many concurrent layers within which Indian cities exist makes this a complex issue.

Unfortunately, efforts focus mainly on piecemeal physical planning and development that is visibly lacking in the still ‘underdeveloped’ Indian cities. Simultaneously, it is an erroneous assumption that such unidirectional interventions shall lead to altruistic good.

Research points out that an inclusive upgradation involves many aspects, important amongst which are Quality of Life (QoL) and holistic sustainability (Islam, 2011). This includes people’s lifestyles, their aspirations, preferences, and satisfaction with quality of life leading to an overall wellbeing (Morans, 2012). Appreciation and preservation of intrinsic sociocultural values of the people is an important aspect towards making a city ‘smart’. At the altar of technologically driven fantasies for a future city, the significance of the human element as critical in a city’s spatial order is over simplified. Hearteningly, a nascent yet potent term, ‘a city of wisdom’ (Reddy & Singh, 2015) is part of the discussion. It attempts to define the vital aspects constituting a smart city, although in a miniscule way.

The paper is positioned in the light of this situation. It examines the case of a quintessential Grade II city in India. It studies the typology of the housing settlement that simultaneously exists in many layers in Nagpur city. It draws upon three unique lifestyle experiences drawn from different
layers of the city. The paper argues for a comprehensive approach towards creating housing settlements by an examination of the sociocultural basis of spatial organisations of these housing developments. It focuses on factors that make a city ‘wise’.

METHODOLOGY OF STUDY

The study adopts a qualitative approach with case studies and logical reasoning. Desk study of morphological maps and plan layouts for comparative analysis, non-participatory observation, and photo documentation are predominant tools of study. For better comprehension, face-to-face interviews are conducted within the field study.

The study explores the sociocultural characteristics and spatial ingredients of the three distinctive housing developments. They are ‘Shukrawari’, a neighbourhood of Mahal the old city, ‘Svavalambi Nagar’, a modern neighbourhood, and ‘Godrej- Anandam World City’, a contemporary gated community. A comparative matrix of physical characteristics is drawn up. There is simultaneous reflection upon the sociocultural attributes by an assessment of key environ-behaviour parameters and the characteristics and attitudes underlying the lifestyles of residents in these areas.

OLD CITY AS A SEMINAL CONCEPT OF INDIAN LIFESTYLE VALUES

The sequence of this enquiry initiates with an investigation of the old city. Its physical form, akin to typical Indian core cities, embodies the ageless wisdom of orientation, climate responsiveness, materials, and construction techniques. It displays the potential to serve the physical and spiritual needs of its communities from the single family to the entire community (Steele & Doshi, 1998). Together they have shaped and supported the lifestyle of the community and vice versa. The morphology of old cities is a reflection of the values of its inhabitants (Rapoport, 1969) and the society at large.

The elongated sustainability of the strong sociocultural order, through times historical, is the highlight of Mahal the old city and the binding element of its community as well. It is a testimony to its flexibility and freedom for individuals to make choices of interpretations. The human centricity arising out of such satiated ground conditions make it the reference point to compare the changes in the evolving city.

CRITICAL PARAMETERS OF STUDY AND MANIFESTATION IN MAHAL

Scholarly research and lifestyle theories place deep emphasis upon the impact of seminal parameters of sociocultural milieu upon the well-being of the community. Underlying concepts of social interaction, defensible space, sense of belonging, human scale, privacy, and lifestyle are intrinsic to the emotional contentment of occupants. Built environments soliciting these attributes encourage positive behavioural responses, as studied approaches
emphasise (Kamp, et al. 2003). These are vital for a comprehensive urban development process.

With its democratic tradition of intellectual interactions, the ancient city of Athens, epitomised wisdom, justice, law and knowledge. It exemplifies that exalted values elevate the status of a city. The Greeks achieved it by a synchronisation of aspirations of its society and an appropriate place supporting social transmissions. This zenith of development is a lofty benchmark and a reflection of the crucial importance of social interaction. In a parallel cite, the intrinsic spirituality embedded in the Indian ethos is rooted in its social institutions.

The notion of social engagement is fundamental to sociocultural sustainability. It supports two important conditions: the psychological well-being of individuals and the creation of society. Social interaction can ameliorate psychological distress by garnering social support (Brown & Harris, 1978; LaRocco, House and French, 1980; Lowenthal and Haven, 1968). Appropriate social interaction instills deep-rooted security within the human. Alexander et al. (1977) refer to the everyday contact between people in public space as an essential ‘social glue’. This relationship of engagement between individuals holds together society and its structures. Catalysing engagement between people and the social space defines the critical challenge in the task of place making (Buote, 2008).

Supportive morphology of Mahal old city

The morphology of Shukrawari shows how spaces and built environs give permanence to such institutions (Figure 1).

The winding street pattern contains many spatial happenings. A shady tree or a temple shrine often marks the nondescript ‘chowk’¹. The ‘nukkad’², the ‘chowk’, the ‘atla’³, and the ‘osri’⁴ are elements in the hierarchy of spatial situations in a timeless sociocultural pattern. Modest as they may appear, these provided an opportunity to bring the community together: to meet, to discuss, to inform, to feel connected, and find solace in human company and feel socially cared for. As Doshi rightly points out in his article on ‘Social Institutions and a Sense of Place’, (Ameen, 1997) such sociocultural manifestations provide an understanding of the community’s intrinsic needs and must be studied before designing for them.

While these support the emotional needs of societal connect, the religious institutions and places of worship that dot the urban fabric of Mahal, hugely influence the environment of the community (Figure 2). Their congregational spaces ‘mandapas’ support the nurture of a participatory, democratic and meaningful engagement through regular hosting of the ‘kirtans’⁵ and ‘pravachans’⁶. These guide the value system and keep spirituality alive and instilled in the lives of the people. The community routinely converges over such ‘satsangs’⁷ (benevolent gatherings), which are also a form of popular entertainment. A deep sense of faith, identity, and belonging are natural outcomes of this sociocultural tradition. They are provisions of cultural stability and have shaped behavioral patterns. The nurture and continuum of these interactive and contemporarily relevant traditions is a special character of Mahal. Moral and cultural values, a strong faith in the community, and a sense of belonging are attributable to them. These and more such activities that initiate through them have shaped life in Mahal. The value system of a society delineates its lifestyle.

The ‘atlas’ and ‘dalans’⁸ of the shrines that dot the housing neighbourhoods serve as multifunctional spaces for the young and the old of the community in the dense fabric of the old city.
Narrow access spaces such as lanes and streets characterise traditional settlements. Not designed for motorised movement, they act as open spaces for a variety of social, political, recreational, commercial, religious, and festive activities.

One of the most significant outcomes of social interaction is the web of connectedness it fosters in a housing community. Newman’s definition of defensible space being a socio-physical phenomenon revolves around a well-knit community as a key agent in ensuing security of their locality (Newman, 1976). Achievement of defensibility is a natural outcome of this sociocultural set-up.

At the micro level, the typology of the house is an introvert spatial congregation supporting needs of privacy. While the smaller houses open into a shared open space, the larger ones called ‘wada’, are developed around a sequence of internal courtyards (Figure 4 and 5). The building elements of the wada were multi-functional. The window, the staircase, and the roof, in addition to providing light and ventilation, connecting levels, and providing shelter respectively, provided flexibility of usage. The staircase and window doubled as a place to sit, to sleep if wider, and the roof was a place to sleep in the hot summer nights, a place to dry clothes and condiments and to fly kites in spring. ‘Construction was not simply additive, its multi-functionality made it basic to a balanced life,’ Doshi explains. Such an outlook shaped the Indian temperament and the culture at large.

Traditionally, the floor has been a flexi-use space. Devoid of much furniture, the activity of cooking, dining, entertaining, and also sleeping is essentially on the floor. Uninterrupted floor space accommodates with ease the large family gatherings.

The concept of security and privacy is primal in a home space. Its practice varies with the culture. Wada walls abut the street. Transition into private domestic space is through a gateway in the tall compound walls. In the culture under study, the womenfolk are relatively liberated, with no purdah system. Wadas nevertheless had inner courts assigned to the women and their domestic activities, granting them privacy.

The patriarchal joint family system, albeit its share of disadvantages, offers many positives. It serves as an excellent support system for the elderly as well as the very young and provides an extended protection to all members in times of need (Mullatti, 1995). This societal structure gives precedence to the organisation, the family, in this case than the individual. This is in deep contrast to the contemporary practices (Ameen., Ed. 1997, Chadha, 1999).

Architecture is a reflection of values upheld by the community. Mahal is replete with a high quality of craftsmanship that was a prerogative of the building trades. Freedom of expression at the individual level to interpret the principles within the overall design conception was granted while working within the framework of building established by the first ‘sthapati’ (Mullatti, 1995). It included materials, construction, and design of ornaments. Individualistic details enriched the homogeneity of the resultant visual expression (Figure 6).

Old city Mahal is a testimony to the fact that an all-compassing value system is a cohesive force that binds community with its build environment and vice versa, through a holistic satiation of seminal E-B concepts. It is a lesson in sociocultural sustainability. Transforming outlooks and con-
temporary lifestyle preferences looking for individual expression find this a stifling experience, as many young residents expressed.

EVOLVING PATTERNS OF THE GROWING CITY

Post-independence, the natural organic expansion of the city was regularised with the Development Control Regulations (DCR’s). The city has expanded in two distinct phases: pre- and post-globalisation. This study takes up two neighbourhoods that originated in these two distinct time frames. Swavalambi Nagar is one of the many pre-globalisation housing colonies that mushroomed on the city fringes in the 1980. This is a greenfield development displaying orderliness arising out of planning bylaws. The other housing community is gated and belongs to the post globalisation era of 1990’s. This is an upcoming brownfield development located on the south-western edge of Mahal. Three overlays of Nagpur city are distinct in their physical manifestation (Refer to Table 1).

ANALYSIS OF OBSERVATIONS

For generations, Indian society has organised itself around the caste system (Adler and Pouwels, 2008). It is a very distinctive feature of Indian cities to have areas segregated on lines of distinctive culture based communities despite belonging to a similar religious faith. So despite the universalising effect of the bylaws, each neighbourhood has its unique cultural flavor manifest through non-verbal means such as symbolism. Of the two neighbourhoods chosen for this study, the first belongs to this category.

The post globalisation era heralded a new class, based on economic similarities, but the trend is miniscule in scale especially in smaller cities. Gated communities largely fall in this category.

Democratic formation of new city and reinterpretation of mother settlement

A major part of expansion of the city in the pre-globalisation era was due to resettling of inhabitants of the congested core city area. Mahal was under attack due to malaise of urban growth. With the creation of new layouts in the pre-globalisation period of 1980-s, exodus of inhabitants from Mahal created new neighbourhoods. The Marathi

Table 1. Comparative matrix of the three neighbourhoods. (Source: Authors).
speaking Brahmin community created Swavalambi Nagar. Despite the pre-ordained gridiron development of land, the migrant community nurtured an acculturation of the old city. This was possible since the co-operative societies were people centric and incorporated their needs and aspirations. The morphological map shows the dotting of the entire area with shrines big and small, a distinctive feature of Mahal (Figure 7).

The many open spaces, mandated by bylaws, have a small temple with a portico. These were built and are maintained by monetary contributions from the local community. Congregational activities and community classes for yoga and pranayama are conducted in the dalans of the more active temples. One of the many interesting activities observed in this colony is the ‘Bhajani mandal’, which is a chorus group of housewives and the elderly women. During the many festivals that dot the calendar, these amateur micro-sociocultural groups come together for competitions on original creations. This space serves as an excellent area for the elderly to interact in the evenings (Figure 8).

Most residences house a single extended family, which includes grandparents. Despite nuclear families, aging parents are cared for at home. India lacks a social security system and old age homes are not in vogue. Family is the security. Grandparents bridge the gap between parents and children by assisting in childcare. Thus the problem of the elderly is mellowed India (Nalini, 1997). So strong is the sentiment, that one of the parks is named ‘Aji-Ajoba’ 10 park. Children use the open space adjacent to the temple under watchful eyes of the grandparents. Thus, while the move gave greater freedom and autonomy to the newly formed nuclear families, this community was able to bridge the generational and cultural gap.

A diligent follow-up of bylaws has imparted human scale and spaciousness to this neighbourhood (Figure 9). Each house has a small garden and compound walls to keep away stray animals. Due to increased affordances of space, many households have pets. It is a common feature to...
find residents on an evening walk around the open spaces with their dogs.

The typical house plan shows the drawing cum dining area with the household shrine at the far end (Figure 10). This area doubles up during festivals when furniture is stacked away, to create an uninterrupted space for floor decorations and family feasts on the floor (Figure 11). This lifestyle pattern is still popularly in vogue. This practice entails removal of shoes outside the main door.

Characteristics of the parent community such as human scale, perceptible discipline and order, defensibility, privacy, a sense of identity, and cohesiveness have achieved continuum, albeit the difference in settings. In Grade II cities like Nagpur, recreational infrastructure is not well developed. In the absence of such, social engagements enrich lifestyle while imparting a sense of quietude and satisfaction to this community.

Some observations worth noting in the negative are the lack of a refined sense of visual expression, despite the cultural richness displayed. Mahal had completed the circle of a holistic built environment, with its rich display of architectural detailing. Swavalambi Nagar’s inspiration stops short at the cultural continuum. It had ample scope to be designed with involvement of skills of the local artisans, but not much thought is given to such finer aspects of the built environments. The parks have an unkempt look, so also the streets. This is with exception of the shrines, which have a fresh coat of paint. This comes as a surprise to the observer, due to the maturity displayed in other endeavors. Rapoport notes that such lack of ‘taste’ displayed in architectural expression may merely be incapacity to choose outside the framework of traditional forms. (Rapoport, 1969).

Gated community as a product of the ‘development’ industry

The second neighbourhood under study belongs to the contemporary era. The typology of Gated Communities is imported from the developed world. It gained popularity in urban and suburban areas of developing countries (Webster, Glasze, and Frantz, 2002). Marketed as a ‘lifestyle concept’, it is a package deal consisting of exclusivity, identity, feeling of belonging to a special place, comfort, and sense of security (Blakeley and Snyder, 1997; Grant, 2005). Such enclaves are akin to a fancy wrapped gift, unmindful and unconscious of the rent created in the complex urban fabric. They are a sudden and deep dis-link from the ongoing urban development (Turgut, 2010). Burgeoning growth of such enclaves was witnessed in late 1990’s in the metropolitan cities of India. One of the reasons for their increasing popularity in India is the multitude of facilities that support the lifestyle that the civic authorities fail to provide in the populous Indian cities. The social prestige that comes with such location is an added advantage.

Smaller cities like Nagpur also saw such projects shaping on city fringes and as brownfield developments within the old city. Unlike the initiative taken by community-based co-operative societies of the 1980’s to create residential colonies, these are developed in totality by real estate developers.

The Godrej-Anandam World City is one such brownfield development in a prime area which became available when colonial era mills were demolished (Figure 12). Planned by an international firm and designed by a reputed architect, its international vocabulary is obvious. Presentation is an important aspect of gated communities and
many have a themed expression.

Enclosing a land parcel of approximately thirty acres, this enclave offers various combinations of housing: stand alone villa houses and tall buildings with a mix of two and three bedroom apartments. Ample parking, well-maintained services, 24X7 water and electric supply, and open spaces with manicured lawns, plantations, pathways for strolling, etc. make this a desirable proposition. Being in the heart of the city yet avoiding its multiple hassles and owning a place that affords a lifestyle experience is a lure. The cynosure of these enclaves is the quintessential clubhouse with amenities for health, well-being, entertainment and socialising. This makes it possible as a daily engagement, since commuting on congested urban roads to the local park for an evening walk makes it an indulgence when living in the city cen-
The willing acceptance to these gated enclaves’ results out of some positive experiences. It is a cosmopolitan place with its population and presentation, where shared interests can be nurtured and interactions can take place in a designer ambiance (Figures 13, 14, and 15). Herein, lifestyle permits the formation of a homogenised community based upon economic class. This is a distinct departure from the traditional communities within the city based on caste, regional culture, or religion (Chacko and Varghese, 2009).

Pertinent reflections on the environment-behaviour realm

Lifestyle swings are on the anvil. New sociocultural norms are set to take over. The focus has shifted from the community to the individual, changing the underlying basis of core concepts. The pivotal point of the gated community is the individual, his privacy, and personal space. The intrinsic need for identity is fulfilled by the borrowed and strong visual uniqueness of the architectural expression. Walls, gates, and security on mobile devices control defensibility, an intrinsic human trait. The sense of belonging comes with familiarity rather than human bonding.

The clubhouse designed by name architects in fancy vocabulary is a place of pride, which encourages a lifestyle focusing on physical well-being. The nature of social interactions has transformed to get-togethers, parties and fellowships over drinks. Like most social engagements, these aim at enjoyment and relaxation, unsupported or guided by the age-old social institutions. Needless to say, both the developers and the architect-planners in their zest for ‘an international equity’ do not have an agenda to support the traditional continuum.

Similar transformations are occurring the world over in countries with deep historical legacies. These are generally in the Global South. Research and studies are pointing at the extinction of common elements resulting in loss of urban identity. Mirmoghtadaee (2009, p. 79), succinctly states the failure of enforcing fundamental changes in the intrinsic culture of the residents by transformation of their physical environments:

‘Habitats should be physically harmonious with traditions and lifestyles; otherwise residents will react by changing the environment according to their wishes. When environment itself is not changeable, residents have to adopt themselves to the new conditions; consequently, some valuable traditions would be lost forever.’

While economic well-being is appreciable, the loss of spirituality and social binding is a looming negative. Loneliness in the midst of a populated world is the irony of the contemporary lifestyle, glorified by the synthetic, and alienating make-up of the enclave community.

CONCLUSION

This study compares the morphological set up of three housing neighbourhoods of Nagpur city and lifestyles it supports. In doing so, the status of E-B parameters such as social interaction, defensible space, sense of belonging, human scale, privacy, and lifestyle are observed for determining QoL in each case. The assessment involved the neighbourhood at the macro level and the individual house at the micro level. The study brings out the primal importance of a robust and meaningful social interaction in serving as a catalyst for achieving a healthy sociocultural environment. It highlights the unique nature of the traditional continuum in smaller Indian cities as the backbone of sociocultural sustainability.

The study is pertinent from the point of view of the recent governmental propaganda for transforming grade II cities into smart cities. The application of ICT is the hyped agenda in such an endeavor. An isolated effort of haphazard infrastructural additions seeks the well-being of citizens. The approach being adopted lacks a holistic view of development, making manifest a huge gap in perception of the ground situation and the value addition being proposed.

ICT-enabled with state-of-the-art technology has the prowess to virtually connect cities and humans globally. Ironically, the distance between humans in the real world is increasing phenomenally. This is leading to many lifestyle changes, many of which are undesirable. Gated communi-
ties with their gratified existence divorced from surrounding ground realities are shaping lifestyles commensurate with globalisation and commodification. The rift cannot be bridged by technological applications alone. Smart cities can never be a holistic dream without a sociocultural revolution. The ethos of Indian cities still continues its existence as one of the many layers of its simultaneity. There is need to celebrate and rejuvenate this thread of continuity for urban betterment.

Many architects are acknowledging this fact when they borrow liberally from the spatial pattern of old cities in a bid to recreate a familiar setting with an altruistic hope, that the essence of community life shall conjoin to add value to modern lifestyle. But the vital continuity of live traditions that constitutes the soul of community life eludes. There is a need in an aware world, to expand the confines of positive traditions to a cosmopolitan level, instead of sideling them. Without the soul of such human traditions, these remain as visually appealing spatial patterns. The sea change of priorities from the community’s well-being to the individual’s well-being is a change that no amount of nostalgic pattern making can revive.

Quintessential tier 2 cities in a developing nation, despite lack of adequate social infrastructure, still reflect a humane side of urbanity with its quietude, pace of life, scale and community connectedness – characteristics that need nurturing and learning from. Environ of pre-globalised neighbourhoods support a vigorous continuum of community events that dot the Indian calendar. This is an age-old sociocultural mechanism to keep communities engaged, enriched, and bonded. This ‘greening’ is the backbone of sociocultural sustainability. It is as vital as the other aspects of city development.

The model of pre-globalised neighbourhood is an excellent example of people’s participation in the making of their colony. It takes positively from the past and can be made ‘smart’ in consonance with the need of the times. The right balance between the ICT applications and preservation of the sociocultural “green” is the need of the hour.

Small cities with their perceived ‘backwardness’ hold great potential for a holistic development. To make a city smart and sustainable, efforts at people centricity are imperative along with ICT and other smart technologies of the future. The current reckless additions in infrastructure are myopic and oversimplify human aspects. This study plugs the gap by highlighting the vital need for a continuum of intangible traditions that are enriching lifestyles in smaller cities. It is important to safeguard the age-old devices of human bonding even as cities grow and become smart. Such initiatives should be designed to nurture and enrich ‘the measurable and the unmeasurable, the physical as well as the spiritual’ (Kahn, Trombly, 2003). These are critical aspects for the achievement of sociocultural sustainability.

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NOTES

1. ‘chowk’ is space at the intersection of streets; 2.
‘nukkad’ is the corner of street; 3. the ‘otla’ is a platform
to sit around; 4. ‘osri’ is the verandah extension
of a house.

5. ‘Kirtans’ and 6. ‘Pravachans’ are a form of socio-
religious activity that is rooted in the ‘Bhakti’
movement. These traditions date back to the 12th
century AD and are still alive due to their mass
appeal. Kirtan is a form of theatrical folk song with
interactive chanting. It also involves music, dance,
comedy, oratory, memory, awareness of current
happenings, and Sanskrit literature. Pravachans are
discourses on scriptures. Both these are performed
by erudite performers.

7. ‘satsangs’ are benevolent gatherings where people
meet over some intellectual or social activity
and are popular even today.

8. ‘dalan’ is a semi-open verandah

9. ‘sthapati’ was the chief architect and designer

10. ‘Aji-Ajoba’ stands for grandmother and grand-
father in Marathi

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UNSETTLING MODERNITY: SHIFTING VALUES AND CHANGING HOUSING STYLES IN THE KATHMANDU VALLEY.

Vibha Bhattarai-Upadhyay, Urmi Sengupta

Abstract
Culture has always been important for the character of the cities, as have the civic and public institutions that sustain a lifestyle and provide an identity. Substantial evidence of the unique historical, urban civilisation remains within the traditional settlements in the Kathmandu Valley in Nepal, manifested in houses, palaces, temples, rest houses, open spaces, festivals, rituals, customs and cultural institutions. Indigenous knowledge and practices prescribed the arrangement of houses, roads, and urban spaces giving the city a distinctive physical form, character, and a unique oriental nativeness. In a technical sense, these societies did not have written rules for guiding development. In recent decades, the urban culture of the city has been changing with the forces of urbanisation and globalisation and the demand for new buildings and spaces. New residential design is increasingly dominated by distinctive patterns of Western suburban ideal comprising detached or semi-detached homes and high rise tower blocks. This architectural iconoclasm can be construed as a rather crude response to the indigenous culture and built form. The paper attempts to dismantle the current tension between traditional and contemporary ‘culture’ (and hence society) and housing (or built form) in the Kathmandu Valley by engaging in a discussion that cuts across space, time, and meaning of architecture as we know it.

Keywords: Housing, Architecture, Traditional, Modernity, Kathmandu Valley.

INTRODUCTION

Kathmandu Valley in Nepal has a unique conglomeration of indigenous urban settlements spread out in historic core areas of the three cities – Kathmandu, Bhaktapur, and Lalitpur, which encompass seven monument zones of the UNESCO’s World Heritage listed, Kathmandu Valley World Heritage Site. Everyday activities in and around these settlements illustrate an ongoing interaction between society, culture, and the environment through numerous religious and cultural practices.

Various rituals and religious practices – mainly Hindu and Buddhist – shaped the urban spaces and forms giving the cities a distinctive medieval flavour. In the last two decades, spaces and buildings in the Valley have been going through a transition and the contemporary building typologies that have emerged are emblematic of the changing urban environment and behaviours articulated through new forms of identity, aspirations, and aesthetics (Gutschow and Kreutzmann, 2013; Sengupta and Bhattarai Upadhyay, 2016; Shah, 2013). New residential design is dominated by distinctive patterns following the Western suburban ideal of detached or semi-detached individual homes and high rise tower blocks. This building style is in contrast to the indigenous urban form interspersed by series of communal spaces, linkages, and landmarks. Traditional houses were organised around a square where people from the extended families resided. Often the votive miniature temple, large water spouts or a well enhanced the aesthetics of the space and also provided the local residents the opportunity to interact and socialise. The embedded nature of public and private spaces was unique to Nepalese society that accommodated the age-old sociocultural and religious practices. Today as Mumford (1938) contends “a great many things stand in the way of grasping the role of the city and of transforming this basic means of communal existence” limiting not only opportunities for social interactions but also eroding traditional housing forms and spatial system.

The medieval urban culture that existed in the Kathmandu Valley until 19th century (Aranha, 1991; Gutschow and Kreutzmann, 2013; Tiwari, 2001) is being replaced rapidly by the new modernity, which penetrated urban landscape of the Valley and the lifestyle of its residents in the last four to five decades. The new urban landscape of the Kathmandu Valley today is attributed to various forces of urbanisation and globalisation and the demand for new buildings and spaces. Traditional
buildings are being replaced by incongruous tall buildings with little emphasis on artistic taste (Shrestha, 1981) whilst the shift from owner-built housing to developer-built housing has accelerated this trend. More recently, multi-storeyed apartment buildings have dotted the Kathmandu Valley skyline, which Shah (2013, p. 53) claims “offered a new product in the market for the newly rich”. The recent devastating earthquake of 25th of April, 2015 further placed the appropriateness of the new residential architecture at the forefront of discussion.

The paper discusses the current tension between traditional and contemporary ‘culture’ (and hence society) and housing (or built form) in the Kathmandu Valley by engaging in a discussion that cuts across space, time, and meaning of building. The next section discusses the organisation of space and house types in the traditional and contemporary Kathmandu Valley to illustrate the major ideological difference between the conception and creation of urban architecture and space then and now. The paper concludes that residential architecture in Kathmandu Valley today stands disengaged from its glorious past and remains disoriented.

RELIGIOUS VALUES, SOCIOCULTURAL NORMS, AND TRADITIONAL ARCHITECTURE

The distinct urban form and spatial pattern of the traditional quarters in the Kathmandu Valley dates roughly back to 2000 years, with multiple dynasties (such as, Licchavis, Mallas, Ranas and lately Shahs) contributing to city building. Building and artistic activities peaked during the 15th and 16th centuries as the Malla rulers from the three city states, Kathmandu, Bhaktapur, and Lalitpur (Patan), competed with each other in building temples, monuments, and public spaces. This period is regarded as one of the glorious periods in the history of Kathmandu Valley that provided distinctive identity to the architecture and urban form of the Valley.

Royal palaces and squares assumed the highest importance as administrative, bureaucratic, and religious spaces. These were multifunctional spaces implying an extended involvement of ‘Royal institution’ in the society. The traditional towns reflect organic growth over centuries, “the splendour of the Newar town design seems to emanate from an innate sense of aesthetics, a natural rhythmic articulation achieved over a long time span rather than a conscious organisation of space according to dictate” (Slusser, 1982, p. 94), but scholars (Müller, 1981; Tiwari, 2008) argue that they are certainly not unplanned settlements despite the lack of a regular road pattern, a general misconception about a planned town. The layout of the towns generally centred on a palace with immediate surrounding areas occupied by the elites – people from the higher castes. The lower castes lived outside the city walls. The importance of the district declined with distance from the city centre (Wright, 1877).

Typology of a Newar house

A typical Newar house was a three to four storeyed building which either faced a courtyard or a street. On the ground floor, rooms facing the street were often used as shops and the inner rooms facing the courtyard were used as open living areas or workshops, approached through courts (Müller, 1981). Typical building materials were red bricks laid out on mud mortar. Timbers were used for floors, doors, windows, and roof structures. Almost all the building materials were sourced locally and built by the local builders and craftsmen. Houses of the rich had ornately carved wooden windows facing the streets. The windows were small to shut out the winter cold. Courtyards were shared spaces to observe religious or everyday activities.

The individual house was a part of the larger group, a neighbourhood (tol), which consisted of houses built around courtyards and people generally moved through a series of interconnected
courtyards to get to streets and nearby public squares. Some houses are even connected at the attic level, and doors are opened on the days of large communal feasts (Pant, 2002). The doors were very low in height and it is believed that the reason for this was to show respect to your own house when entering it by bowing your head (Haaland, 1982).

Each tol of around 150-300 houses was intricately linked to people based on their caste and occupation, thereby giving them a unique collective identity. The location of the house in a typical street or in tol indicated the social status of the owner (Shrestha, 1981). Each house used to be two to three storied and usually housed a joint family of parents, their children, and grandchildren, living together for social, as well as, economic reasons (Haaland, 1982).

An individual’s house is the first place of worship, where there is usually a corner or a separate room, usually on the top floor, dedicated to different deities. There is also a place of worship in the courtyard, which is worshipped by the families living around the courtyard. Away from the periphery of the house, at the first junction of the streets, there is a temple, often for Lord Ganesh or Goddess Bhagavati. In larger open spaces, there are bigger temples. There are a number of temples spread out across the city. Each family is attached to these deities located in different parts of the city and their association with them is based on daily or annual rituals or festivals held at a particular time of the year. The festivals attached to certain deities and located in certain neighbourhoods also provide unity and belonging to the neighbourhood. The local religious procession is the manifestation of this cohesion (Sharma, 1997). The living quarters, distinctly divided according to caste groups, were assigned different set of rules for building, for example, people on the lower caste were prohibited from using tiles on their roofs; instead, their roofing material had to be thatch. The procedure for building a house was different for each caste with elaborate rituals generally prescribed for higher caste groups. Houses of the elites, who lived closer to the palace, were valued more than the houses on a street or a lane, farther from the palace or the city centre (Wright, 1877).

Guidelines, restrictions, and incentives
As early as the mid-14th century, the Newar rulers established clear guidelines on what a house should look like and its value using religious scripture as a basis for settlement planning. These religious rules of allocating spaces in or outside the city based on one’s caste group are a clear and early example of how rules regarding urban space have been used to reflect and reinforce social status. Building scale and visual harmony was emphasised with uniform building designs prescribed for the size and the structure of the building for different castes. Values of houses in different parts of the cities were standardised. This indicates the expected economic outcomes if the properties were to be sold, i.e. the identification of economic opportunities of the house and land (Wright, 1877).

Not only were there certain rules on how to build residences and where to build, there were systems in place to make sure that the public buildings and spaces were appropriately maintained. Once the public buildings and spaces were constructed, donations of various kinds were organised, which generally involved the establishment of a trust known as guthi, to fund the long term maintenance and management of those spaces/structures (Tiwari, 2007).

SHifting VALUES, MODERN ASPIRATIONS, AND CONTEMPORARY ARCHITECTURE

The Kathmandu Valley is the biggest urban centre in Nepal and includes five major urban areas: Kathmandu Metropolitan City, Lalitpur sub...
Metropolitan City, Bhaktapur Municipality, Kirtipur Municipality, and Thimi Municipality, each with varying degrees of urban development activities. Kathmandu Valley’s expanding architectural modernity lends itself to the exploration of its recent history. Historians in Nepal mark the year 1786 as the beginning of ‘modern era’ when Prithvi Narayan Shah (the first King of Unified Nepal) took over Kathmandu Valley and established Kathmandu as the capital of Nepal. From the commencement of the rule of Prithvi Narayan Shah, power of the state was transferred from the ruling Malla class and the elite Newars into the hands of the Shah dynasty and original Gorkhalis. However, while the Shah Royal family were the official rulers, there was a de facto seizure of power by prime ministers belonging to the Rana family between 1846-1951 (Slusser, 1982). The Rana rulers directed all the wealth of the country’s treasury towards their own welfare and led extravagant lifestyles within luxurious palaces. Opposition was repressed and information and education was kept away from people (Müller, 1974). The indigenous Newars of the Kathmandu Valley, however, were less affected by the political chaos revolving around the continuous fighting between the small upper caste ruling classes, as the majority of the population was associated with trade and farming and had very little to do with the feudal class (Hosken, 1974).

Contemporary architecture in Kathmandu Valley has its roots in external influences. As early as 1850, Rana ruler Jung Bahadur Rana travelled to England to witness the development and military prowess of England and other European countries. His trip was the instigator to the creation of huge Neoclassical, baroque style palace buildings in different parts of the Kathmandu Valley. These palaces became the identity of modernity in the early years as the pseudo renaissance columns and stucco decorations became a part of the Kathmandu Valley landscape (Shrestha, 1981). Still, modernisation in Nepal effectively began with the redevelopment of much of Juddha Sadak (renamed ‘New Road’ – to underscore advent of modernity) into a retail hub, which was following the 1934 earthquake (Gustchow and Kreutzmann, 2013).

On reflection, modernity in Kathmandu Valley is analogous to globalisation. In 1951, after the revolution to overthrow the autocratic Rana rule, the new democratic government opened the country to the outside world for the first time after more than a century of seclusion. Soon foreign donations started to pour in and international aid agencies started setting up offices in Nepal. In 1955, the country acquired its first airport bringing the city closer to the outside world. The growing importance of the Valley internationally was accompanied by rapid internal migration that brought diverse ethnic population with disparate material possession into the Valley (Proksch, 1995). The Valley’s agricultural hinterland became the new material sites for development. Images from the 1960s and 1970s (Hagen, 1980) show settlements still clustered around traditional town areas and along major transport routes, whereas between 1971 and 1981, residential land area grew twice (Doebele, 1987). Increasing exposure to the outside world fuelled by easy access to international print and visual media influenced the development of so-called modern architecture in the Valley. The landscape of uniformity and homogeneity in architectural style and design gave way to a collage of styles driven by images of Western modernity.

The first-ever plan for the Kathmandu Valley, the Physical Development Plan for the Kathmandu Valley, was prepared in 1969 followed by a number of planning studies and policy documents over the subsequent decades. Most of these documents discussed the gradual loss of the historic architecture in the Kathmandu Valley, but none made efforts to understand the underlying sociocultural mechanism that was successful in conserving the traditional environment in the Kathmandu Valley for centuries. Various controls, including the Ancient Monument Preservation Act that came into force in 1956, introduced a horde of building bylaws mainly in and around historic centres; however, owing to difficulties in monitoring mechanism and lack of penalty for non-compliance, the enforcement of rules have been weak leading to indiscriminate conversions of many older buildings. The lack of adequate management and immense development pressures have been a major threat to the World Heritage sites and the peripheral areas (Tiwari, 2001). This coupled with the failing planning guidelines and control mechanism can also be explained by what AlSayyad (2013, p. 3) calls the ‘homogenising forces of twentieth-century modernity’.

**Development incrementalism**

The contemporary urban environment of Kathmandu is dominated by individual piecemeal housing developments. Unlike the houses of the original Newar towns, these houses are usually very different in colour, design, and in scale to each other. The introduction of reinforced concrete in the 1950s was instrumental in changing the traditional brick-walled residential houses into bungalow type structures which would start as a single-storeyed residence with subsequent addition of floors as the family grew in size and the needs expanded (Shah, 2010). More recent houses with multiple storeys
had different families living in each floor rented out by the owners. With the rise of land prices, housing plots became smaller as the residences rose in height disregarding the bylaws. The new evolving landscape was marked by the reinforcement steel bars protruding from the top slab of buildings, in anticipation of future additions (Shah, 2010, para. 2).

**Emergence of formal real estate**

The privately planned residential enclaves in the city emerged in around 2000, with the enactment of the Apartment Act and deregulation of housing finance. In the turn of the century, the Indian real estate giant, Ansal Group, partnered with Chaudhary Group to launch the first apartment based housing project in Nepal ‘Kathmandu Residency’ in Lalitpur followed by Mount View Residency in Hattiban in Lalitpur. Those projects in fact predated the promulgation of Apartment Act making it a classic case of government apparatus playing a catch up with the market. Since then, about 150 private companies have become registered with the Nepal Land and Housing Developers' Association. Whilst the majority are one-off developers, more than 10 have built a successful real estate developer’s business model. As of yet, the supply of housing estates and modern apartment complexes is mainly geared towards the upper middle class, including non-resident Nepalese living abroad. In fact, many of the developers specifically target the latter group. Real estate expositions are regularly organised in the UK, USA, and Australia not only attracted overseas buyers but also brought their aspirations and lifestyles.

**Middle class imaginaries: Contemporary residential architecture redefined**

Private developers in Kathmandu Valley have planned modern enclaves in a grid-iron pattern to mimic classic Western suburban neighbourhood designs. More recently, apartment towers have appeared in different parts of the city. Most of them are developed by the local investors, but lately, Chinese, Korean, and Indian investors have also entered the market.

One of the first housing companies to start planned housing colonies is the Civil Homes Pvt Ltd. Civil Homes is currently undertaking phase seven of a housing development on the outskirts of the Kathmandu Metropolitan City. The past six developments have been hugely successful. The Civil Homes website claims it is “one of the largest planned housing undertakings in the country; it sets new standards of living, amenities, and aesthetics”. The developer further claims that the development is specifically and authentically Nepalese:

“It is a project undertaken by the Nepalese for the Nepalese people, with conscious efforts made to provide for local conditions, tastes and habits. The exquisitely designed buildings, though contemporary, fit in the Nepalese landscape” (Civil Homes, 2015).

The Civil Homes Phase III development located at Sunakothisi in the southern part of Lalitpur district is one of the biggest housing developments. This development was marketed as a place with good views, a peaceful and healthy environment, tree lined boulevards leading to a central open space for community uses, full security with boundary walls, gates, and security guards, an onsite private school, clinic, and postal services, as well as a reliable water supply and drainage systems (Civil Housing Program, n.d.). There are six types of houses depending upon the area of the land and the facilities, but each has some private open space and onsite parking. The prices of these houses at the time of their selling varied from approximately NRs. 3.35 million to 7.75 million (approximately equivalent to £20,563 to £47,571, as of July 2015) (Civil Homes, 2009; Civil Housing Program, n.d.). The developers claim that the housing complex is developed to achieve a greater sense of neighbourhood and to be environmentally friendly by utilising a low density grid street pattern with a hierarchy of road sizes (Civil Housing Program, n.d.).

Despite the nationalistic marketing blurb, the Civil Homes housing development deliberately imitates the subdivision design of Western gated communities. Entry to the housing is guarded by security personnel. The researcher observed that development is strictly zoned and there are no commercial activities within the residential areas – a contrast from the traditional neighbourhoods. Community facilities are allocated to a separate section of the complex. Although there are six dif-
ifferent types of houses in the plan, the exteriors of the houses vary little with the same materials and design elements used. In contrast to downtown Kathmandu, and even new independently developed areas, the streets inside the complex were observed to be very quiet. The open space was also very quiet with no activities.

Another example of a modern residential development in Kathmandu is the Terraces also located in Sunakothi. The Terraces, developed by Valley Homes Pvt. Ltd., was marketed as a gated community. The properties were sold in 2009-2010, with prices starting at NRs. 12.17 million (approximately equivalent to £74,701) to NRs. 17.56 million (approximately equivalent to £107,786, as of August 2015) depending upon different house types. There are 12 different designs, with some potential for customisation to suit specific client needs. The Terraces had landscaped gardens, walking and jogging paths, wide open roads, open spaces, and a soon to open community club with all the modern facilities (Valley Homes Pvt. Ltd., n.d.; Valley Homes, 2009).

Inside the Terraces compound, visited between 2012 and 2014, the houses presented an idealised image of the houses in Western countries with European neoclassical elements used in the treatment of the exteriors. These houses are luxurious and expensive in comparison to those in the Civil Homes development. There are no visible references to indigenous architecture or neighbourhood design.

Apartment buildings are the most recent residential developments in the Kathmandu Valley. The biggest advantage the apartments had over the individual houses like Civil Homes or Terraces were the lower costs but similar facilities. One such development is the Sun City. Sun City is the ‘luxurious and affordable apartment township’, built in the suburb of Gothatar in Kathmandu. The Shangrila Housing Pvt Ltd., developers of the Suncity, claim on their website that the township was developed “to ensure that it serves to all those who believe in enthusiastic living...the apartments offer a fine blend of the comforts of Luxury resort...Sun City Global Township is all about modernized, sophisticated yet smooth living. We have made sure that Sun City provides all the basic necessities for smooth living such as good supply of water and security, so that you can live a hassle free life and enjoy great moments that it offers.”

Similarly, developers of the TCH Tower IV – Sitapaila, a suburb on the outskirts of Kathmandu city, claim “that apartments are the need and the ultimate solution of this rapidly growing society”. The features of the development such as, ‘round the clock security system’, ‘treated water supply’, ‘gymnasium, sauna, and jacuzzi rooms, swimming pool’ are highlighted including a small temple located at the ‘site gate’.

Construction of the apartment buildings gathered pace in the last couple of years and sales had gradually picked up and the businesses looked promising after a gradual slump since 2009 due to a recession (KTM2Day, 2014). That was until the devastating earthquake of 25th of April, 2015 in which few highly sought after apartment buildings were destroyed beyond repair (AFP, 2015).

CONCLUSION: UNCANNY MODERNITY

The paper has described how traditional architecture in the Kathmandu Valley has become an ongoing, potent symbol of engagement with the past.
Within these symbols are found traditional practices and ways of life that have evolved over many centuries. Architecture and built form has been shaped by the well-structured societal norms and religious practices, in turn helping preserve these very norms and practices to give cultural continuity. The advent of modernity, however, grounded in historic timings, has subscribed to different reference points. Modernity in residential architecture was shaped during the decades globalisation flourished with a powerful architectural vision laden with Western ideals and aesthetics. Private developers became the torchbearers to promote this vision, which was well received in the Kathmandu Valley.

Writings of the early travellers to Kathmandu Valley, such as Wright (1877) and Oldfield (1880) were dismissive of the Newar house designs, claiming them to be repetitive across the Kathmandu Valley towns. In their writings they assert as though anything different or not equivalent to the designs popular in Western countries are deemed to be inferior. Similar feelings became deeply rooted in Nepalese society, as over the years, society tried to adopt Western styles of building and architecture assuming it to be superior from the indigenous style. Bhattarai Upadhyay (2012, p. 170) quotes one of the current urban planning practitioners KW in the Kathmandu Valley who claims that

“there is a misconception that …once you build with concrete your house is modern. All the legal system is based on this understanding that concrete is pukka (permanent) and non-concrete is kacha (impermanent)”

This highlights the technical ignorance among the general public and the inability of the government to promote awareness in these issues; as a result, people find it easier to follow the techniques that everyone is using, thus abandoning the traditional architectural styles for imported techniques of building construction. Moreover, the contemporary professionals’ treatment of the indigenous system as inferior to the new techniques has resulted in the gradual abandonment of the traditional system.

It can be argued that the new residential architecture had an opportunity to engineer a new society keeping and enhancing some of the best architectural practice. Why Nepalese architecture could not serve as an example for the new built homes or apartments is an important question. The three decades of civil war triggered massive influx of migrants and capital offering opportunities for redevelopment and urban extensions aligned with the traditional architecture. But the sustained subscription to Westernised and globalised notions of buildings and spaces have been pervasive. These practices have steadily grown to undermine the value of historic enclaves as centres of tradition, identity and nationhood.

Shrestha (1981) questioned how much of these architectural treasures could be preserved given the then pseudo-modernization. Nearly four decades later his question remains even more important as the process of transition to modernity has intensified.

The relevance of the new residential architecture should be reviewed especially in the post-disaster context and also in the context that there is acute fuel, electricity, and water supply shortage throughout the year. There are traditional Nepalese architecture and techniques better equipped to provide the much needed resilience in the city. It is a tragic paradox that the contemporary architecture in Kathmandu Valley turns its back on the very legacy that gave it an identity and survival.

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INTRODUCTION

The face of Asian cities is transforming to shape new realities. The economic growth in the past four decades has resulted in the rapid increase in urban population and the emerging of new global centres. Between 1970 and 2005, the urban population in Asia has more than tripled and the level of urbanisation was short of doubling at 39.7% in 2005 (Yeung, 2011). Cities in Southeast Asia, including Kuala Lumpur reflect this transformation. Once independent from colonial rules, Kuala Lumpur began to seek its local identity and social coherence. The impact of development is strongly evident in architectural identity, the economic state, and social behaviour. Contemporary Kuala Lumpur city is a by-product of the physical, technological, and social transformation. Beginning as an agrarian society, the city emerged as a new post-modern industrialised city.

Urbanism comprises the physical, social, and psychological characteristics of urban life. In the context of urban design, urbanism is captured in a ‘place’ in its total sense. Beyond the physical forms, a city is a lived experienced where people seek meanings and contentment. As many other developing cities, Kuala Lumpur urbanism features a complex layers of historical transformation which has embraced the global urbanity. While the physical and spatial transformation seemed to be much influenced by the West, the social and psychological impact of the change on the city inhabitants has been implicit and inadequately explored (Pirera and Tang, 2012). This paper provides an account of people’s affective perception that may have influenced the social behaviour of contemporary urban society.

The need to rethink place as a total human experience was relevant to the issue of place authenticity. Relph (1976) and Tuan (1977) regarded these conditions as “placelessness”, i.e. “an environment without significant places and the underlying attitude which does not acknowledge the significance in places”. In the case of Kuala Lumpur, global culture and images often resulted in the homogeneity of buildings’ scales and appearances. It has led to the loss of buildings and spaces of traditional and cultural values and the disappearance of traditional streets as major public spaces for social and cultural interactions (Ujang, 2014). These transformations have shaped the way users experienced, perceived, and felt about local places. Arefi (1999) cautioned that the weakening of place identity could result in the loss of meaning and disrupt emotional attachment to place. In this case, the conflict between tradition and modernity persists. The psychological effect of this conflict could be reflected in the urbanites’ attachment to the places, in particular, the historical parts of the cities.

Keywords: Place Attachment, Dependence, Emotion, Memory, Urbanism.
PLACES ATTACHMENT

Human experience and behaviour are developed through a network of memories and identities attached to the environment (Cheshmehzangi and Heath, 2012). The loss of association, desegregation, or detachment weakens place attachment. Researchers argue about the incapability of the modernist approach in facing the contemporary issues including the deterioration of historical cities (Salama, 2009). The lack of connectivity of the physical landscapes with place meanings cut across broader physical, cultural, and emotional contexts. As the phenomena affect the identity of the many local urban places, there is an need to approach places contextually and understand the complexities of what give places their identities.

The concept of place attachment is closely linked with the affective aspects of environmental meaning (Altman and Low, 1992). Beyond the physical manifestation, a place is a space imbued with meanings (Relph, 1976) according to the values that people give to that place (Zakaria, Mohyuddin, and Yaman, 2007). The physical and cultural characteristics combined with the individual’s affective perceptions and functional needs shape place attachment (Bott et al, 2005). Place attachment refers to “the development of an affective bond or link between people or individuals and specific places” (Hidalgo and Hernandez, 2001) expressed through interplay of affect and emotion, knowledge and beliefs, and behaviours and actions (Prohansky, et al., 1995). It develops when “a place is well-identified and felt significant by the users and able to provide condition to fulfill their functional needs and supports their behavioural goals better than a known alternative, known as place dependence” (Williams, et al, 1995) associated place dependence with the degree to which occupants perceive themselves to be dependent on a particular place (Smaldone et. al., 2005). Place identity is important for contributing to individual, groups, and cultural self-definition and integrity, (Altman, 1992) and individual variations in people’s perception and conception of place.

METHODOLOGY

The qualitative methodology has been favoured by researchers to unravel the relationship between people and the environment (Castello, 2010, Mazumdar, 2005). A face-to-face conversation using a semi-structured interview format was carried out with Kuala Lumpur urbanites to understand how they associated their experience with historical places in the city centre. Questions were related to knowledge (familiarity, changes, information), dependency (place importance, length of engagement, activities, responses to relocation, suggestion for improvement), emotions (feelings, emotional and social attachment), and memory (memory recalled, response on demolishing old places and buildings). To understand the cultural influence, this paper focuses on the Malay ethnic group as the major and the earliest cultural group in Malaysia. The framework of the inquiry could apply to other ethnic groups namely the Chinese and the Indian.

Twenty-five respondents (13 males, 12 females), aged from 17 to 55 years old, participated in the inquiry. They had between 1 to 20 years of association with the places. Apart from shoppers and local visitors, the respondents were those who work and study in the areas. The locations of the interviews were Jalan Masjid India (Masjid India Street), Dataran Merdeka (Merdeka Square), Pasar Seni (Central Market), and Medan Pasar (Market Square).

DESCRIBING HUMAN-PLACE RELATIONSHIP: A PLACE OF ATTACHMENT

The emotional attachment to the places indicates the ability of a place to fulfil the psychological needs of the users of the places. The inquiry reveals that the distinctive symbolic or intangible characteristics of the historical places were reflected in the urbanites’ feeling and emotion. In addition, place identity is developed parallel to the length of engagement, deeper sociocultural interaction, and sense of pride and belonging. The following sections discuss the knowledge, dependency, memory, and emotion of the urbanites towards the historical places.

A place of the familiar

The significance of the historical place for trading, businesses’ and leisure activities has shaped the urbanites’ knowledge and familiarity about the places. The attachment has influenced their sensitivity towards the physical changes observed in the areas, in particular from those who had long-term association. However, younger urbanites demonstrated very little knowledge of the history of the place despite continuous engagement with the areas. The older respondents had not only explicit knowledge of historic events but also expressed greater pride of the city’s history. For instance, they repeatedly mentioned the significance of the Merdeka Square as a place of memory; the square was proudly remembered as a meaningful event associated with Malaysia’s Independence and also well known as a tourist location. This was exemplified by the following response:
The respondents’ general knowledge about the historical places was to some extent, commendable. Nevertheless, their knowledge about the history and transformation of the buildings and spaces is very limited. Many noticed changes in the area and major transformations in the city. Those include the positive remarks on the provision of the light rail transport (LRT) and the increased bus services.

A certain level of positivity, excitement, and hope could be felt when the urbanites described new improvements to the existing public spaces in the City. This, in particular, is the River of Life project – a new riverfront redevelopment project currently in progress in the heart of the City. Those who run businesses in the area had a good knowledge on the improvement of the places. They were happy that the improvement will bring more tourists into the City thus promoting their good and services. The beautification of buildings and spaces is regarded as a positive effort to increase attraction despite the issue of immigrant workers occupying the area and the meandering homeless that was perceived as a negative image of the City.

“Some of the historical places in Kuala Lumpur are Merdeka Square and National Monument. I know about Sultan Abdul Samad building. It used to be a courthouse. There are changes such as the new Textile Museum and the Smart Tunnel to solve the flooding problem” (R1: Female, 26 years old; Local visitor).

Places to which individuals become most attached are those with which they have the highest levels of experience. This was often the result of long-time habitation in a particular locality (Gustafson, 2001). Knowledge of changes and transformation were described as below:

“Kuala Lumpur is developing very rapidly. There was no river project as what we have now. We must upgrade our city so that tourists can appreciate. I am happy and excited with the changes and improvement, more tourist activities, creating a good image. So, we should promote landmarks and the history of this place” (R15: Female, 22 years old; Local visitor).

“I used to visit these places during my childhood. The Merdeka Square is a place where our Independence was declared. In Market Square we could see old buildings, the design is preserved. This is a place where tourists take photos. From the Merdeka Square, they will go to Central Market, and then to Market Square, where art items are sold. The Market Square became more beautiful now after the renovation, so does the Merdeka Square. Of course I am happy with the upgrading because the places are our landmarks, it is good to attract more tourists” (R18: Female, 25 years old; Local visitor).

Previous studies on urbanites in the main shopping streets in the city also revealed similar responses. Familiarity was also reflected in people’s knowledge of the physical elements and changes in the area. The attachment to the historic places could be best described by those who spend most of his or her life in the area and engaged in daily activities for the life sustenance.

Places dependency

The study indicates that place attachment is developed as a result of interaction in diverse activities. The significant commercial functions of the historic places are blended with cultural, educational, and recreational activities sustain the sense of place.

Economic dependency on historical shopping streets is described by the pattern of engagement based on daily trading association and the frequency of visits to the areas. The importance of the historical places was identified when the idea of relocation was brought up. The sentiments from a few of the urbanites were felt despite positive responses on the values of the historical places as the main tourist attraction in the city centre.

Influenced by the background, role, and the need for engaging in activities, the respondents relied on the historical places for income generation, leisure, and shopping activities. The workers and shop owners wished to remain in the area because of the
availability of public transport facilities for easy access from home to the workplaces. The places are also viewed as the best place to appreciate the history of Kuala Lumpur with many historical buildings.

“I enjoy running my business here. Close to tourist spots such as the Central Market, the library, and the Royal Club. Also, it’s close to the LRT station. We have the free bus service, the Go KL. It is easy for me to move with good transport services. There are many tourists, even more people during special events. They like my henna pattern and ask me to design it especially for them. I feel hurt if I were asked to move to another place because I have been here for a long time. My customers are already familiar with the location of my shop” (R2: Female, 39 years old; Shopowner).

The business owners felt that the place is the best place for their economic sustenance due to popularity and attraction. Those who had long-term engagement were strongly opposed to the idea of relocation. Since the customers have been familiar with their locations, shop-owners were uncomfortable with the risk of losing the customers’ attachment to their shops. A new location would be unfamiliar to the regular customers. This is unlike the historical places that are known to the visitors. The territorial belonging to the business and vending activities turned into a feeling of insecurity as a result of contestation of trading spaces. The issue of territorial contestation strongly prevailed among the shopowners and street vendors. A few respondents perceived immigrants as outsiders that threatened their territories, therefore, were not welcomed.

“The problem here is the coming of immigrants who also run their business here. I am not sure if they run the business legally. I do not know why a lot of restriction was imposed on us, not the immigrants. When there are so many of them, and there is no control, the locals feel unsafe. It’s not good for the tourism’s image. This will affect this place. The attitude of shopowners to engage the immigrants in saving cost has caused this problem. The authorities should be more sensitive to this issue before it gets out of hand. They need to take action” (R23: Male, 53 years old; Street Vendor).

A shopowner expressed his attachment to the Central Market because his father has been selling crafts for 30 years in the market. His father’s legacy of owning and selling the antiques in the area has been a meaningful part of his life since he used to play and live in the shop since his childhood. He is used to the place and unwilling to be relocated to other places. He would feel sad if they were forced to move.

“I am very happy being here. I have been living here from my childhood years, I know almost everyone here. I was schooling at Bukit Nenas area. I frequently came here after school, weekend and school holidays - I will spend my time here. Transportation here is easy, with the bus and the LRT. I disagree with the idea of moving because my father and I have been here for almost 30 years. There are eight antique shops here and we own one of the shops. There are batik shops upstairs and also easy to get necessities for a marriage ceremony. It is just that the rent of the shop is very high. I feel sad if we were asked to move because I grew here, this is the place where I used to play when I was young” (R10: Male, 17 years old, Shop Assistant).

**Emotions**

The urbanites’ affective reactions can provide an indication of the value of the historic places and qualities associated with the places that influence their attachment. The urbanites expressed a sense of happiness, dissatisfaction, sentiment, and care with regards to the historic buildings and places. Many insisted that the historical places should be well managed and preserved to sustain their attraction. On the other hand, the respondents also expressed dissatisfaction towards the presence of immigrants dominating major public spaces and the street vending areas. During weekends and public holidays, large numbers of immigrant workers gather in public spaces for socialisation. This situation creates the feeling of discomfort and insecurity to the locals who visit and work in the area. The followings expressed sentiments over the issue:

“The main issue here is that there are too many immigrants. I don’t feel that safe because this place is overcrowded with immigrants, normally on weekends. The coming of immigrants should be controlled, if not, we will continue to feel insecure” (R17: Female, 25 year old; Office worker).

“The authorities should monitor immigrants, either they have to have passport or visa. There are too many of them that the locals could not use the space, it’s a bit difficult to use the space comfortably” (R18: Female, 22 years old; Local Visitor).

A few of the respondents felt comfortable associating with those from other ethnic groups due to a long-term association with the places and the people. They know some of them personally because they interact on a daily basis. A respondent men-
tioned that he loved to mix with people from different ethnic backgrounds, foreign tourists, and visitors. He found that public spaces are accessible for people from different ethnicities. The concern is to feel at ease with other people surrounding the areas.

“I do mix with people from all ethnic backgrounds; I love to make friends. I know many people here because I have been working here for a long time. I meet familiar faces everyday. This place is the best place to sell artworks” (R4: Male, 48 years old; Shop owner).

The feeling is also associated with the unwelcoming political event in the city. The issue of political demonstrations was also regarded as ‘negatively’ affecting their association with the places, in particular, the Dataran Merdeka. A few of the urbanites addressed the feeling of uneasiness. However, a peaceful demonstration is acceptable since it does not affect the business and social activities. The Dataran Merdeka is a famous square in the city and receives many tourists. The fact that this square is a formal ‘independence’ space does not allow for many types of activities in the area. The activities mainly involve walking and touring with less opportunity for longer stay due to the lack of shaded spaces to sit and view the surroundings. The historical square, however, has been associated with occasional political rallies that the shop-owners felt threatened with.

“The problem here is that this place becomes the spot for political rallies to express dissatisfaction. It happened in the Merdeka Square and SOGO. So many of them gather outside the building, we were scared to go out. They chose a tourist place to demonstrate. This occurrence will tarnish the image of our country” (R5: Male, 45 years old; Worker).

**Place memory**
The urbanites recalled memories associated with shared activities and the physical changes of the place. These memories include shopping with parents during childhood and the urban elements of the past that are still treasured. They shared similar identifiable elements perceived to be the characteristics and qualities that described the character of the places. Those include activities, historic place markers, the shopping attractions, special historical events, the physical structures and features, and the general atmosphere of the streets. Here, people and activity are the key components of a living place that generates a sense of belonging and spirit of the people (Steele, 1981). A sense of pride was expressed in relation to particularities distinctive to the historical places, from the historic buildings to memorable historic events.

The memory of the places directly links to the length of association and engagement with the people and places. Many mentioned the memory of participating in special events such as the Independence Day celebration and other festivals in the city.

“In the past, I joined all the celebrations. I was schooling at the religious school close to the National Mosque. Walking distance to the Bird Park and Botanical Park. I was always roaming around that area after school. The place used to be felt very big. I used to do an exercise with my mother at the Lake Garden. A lot of childhood memories living in the city. I could see the firework right from my window. The sound of the firework awakened me, and I would watch it from the window. Those are my enjoyable moments” (R19: Female, 21 years old; Local visitor).

The respondents were asked about their feelings if the historical buildings and spaces were to be demolished for new developments. Almost all of them disagreed with the idea and felt that the buildings should be preserved and conserved for the benefit of future generations and the tourism industry. However, a few respondents thought that if the buildings are dilapidated and unsafe to function, new buildings should replace it. A few felt sad if the old buildings are demolished because the value and history of the place or the building will be lost, and new generations will not know about their heritage.

“I am sad because it had been there for a very long time, became tourist attractions and contributed to the economy of the place. The buildings have sentimental values to the attached users and should be refurbished and restored, and remain as a symbolic element and landmark of the city. They are priceless historical elements for people to appreciate history and heritage. The colonial buildings such as the Museum should not be demolished because the building represents the British architectural identity in Malaysian history that should be acknowledged by future generations. The original elements will not be the same as the new elements because of the memory attached to the old elements” (R5: Male, 45 years old; Worker).

The Central Market and Jalan Masjid India have been the source of income for a few of the respondents. They expressed a strong resistance to the idea of rebuilding because the new place and location may not be the best for such activities and will
cause a huge loss to the shopowners. The following present the urbanites’ responses on the issue:

“It’s very sad if the old buildings are destroyed. They are our historical places. If we demolish them, that is the end of our heritage. There is no chance for the young people to know about this heritage” (R11: Female, 25 years old; Office worker).

“I feel sad. For those who have been staying here for a long time, the old buildings may have sentimental values to them. It is a symbolic element. However, if the changes are necessary and bring benefit, I agree. But the heritage buildings should be restored and repaired. Even if the buildings will be demolished, leave a sign of the existence of the buildings, for example, a monument, etc” (R9: Female, 20 years old; Student).

“I feel it’s not fair. Because there have been too many changes in the area; this place is also known as a heritage place. If this Central Market is demolished, where will be the new location? The new place will be known, and people will come to look for craft, and batik. The new place should be appropriate to the needs and aspiration of the local community; if not the place will be dead” (R12: Female, 42 years old; Shopkeeper).

**DISCUSSION**

The urbanites shared their knowledge about places mixed with sentiments and pride. The compelling sentiment related strongly to the sense of ‘ownership’ and ‘territoriality’ reflecting place dependency and place identity. Familiarity and frequent engagement developed a sense of belonging expressed in a strong emotional feeling. In a few instances attachment to a place was translated in the form of pride towards the distinct historical and heritage characteristics. That contributes to social activities that give places meanings (Nik Muhamad, et. al, 2013; Ujang, 2008). The cultural significance of places is strongly manifested in place diversity as well as colonial and multi-ethnic identity. Therefore, changing in the physical forms and actions if not sensitively implemented, will disassociate the attached users from familiar objects in the city. Changes could be acceptable as long as they will not exacerbate lives, economic sustenance, and ease of mobility around the areas.

Place attachment involves culturally shared affective meanings and activities associated with a place. Culture relates to beliefs and perception, values and norms, customs and mode of appropriate behaviour (Altman and Low, 1992). The differences in landscape experiences pose different form, types, and degree of attachment for different cultural groups (Riley,1992). There is a need to understand the meaning and interpretation of the contemporary spaces with consideration for local culture and spatial practices, perception, and meanings. In the case of a pluralistic society in Malaysian cities, cultural principles play an important role in defining group identity and influence the character and identity of the places.

**IMPLICATIONS TO PLANNING AND DESIGN**

Place attachment and meaning(s) could be explained by examining the live-in experiences of the people in place. In cities, the form and degree of attachment are reflected in place dependency in the economic and cultural sense. The multi-cultural characteristic is a challenge for determining the social and psychological values of the place in the perception of the people. In the case of Kuala Lumpur, it is imperative that the social well-being of communities and their ‘valuable and memorable elements’ can grow accordingly. However, these values and the physical elements are continuously under the threat of modernisation and unfit regeneration of places and globalised images and economy. Proper understanding of place values prepares the designers to develop places naturally to sustain its physical and social significance.

In Malaysia’s major cities, physical transformation has been parallel with the growth of globalised culture and social behaviour. Therefore, it demands that psychological, physical, and socio-cultural aspects be considered integratively in the planning and design process. The reinterpretation of tradition based on current needs should take into consideration the continuity of place legacy and social values embedded in the meanings attached to the people’s life in the city.

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