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Luanda's New Frontier
The Peri-Urban Growth in Angola

Célia Macedo

Introduction

Angola currently faces an almost impossible mission of healing its territory and people from the wounds left behind by nearly three decades of violent conflict. Since peace was first installed in 2002, Angola and its entire population have been under the world's gaze, a fact that has highlighted the many issues and obstacles facing this sub-Saharan country. In order to address such challenges a general reconstruction strategy, which particularly emphasizes the need to mitigate the lack of housing and related social problems, has been put in place. Understanding and rehabilitating the country's built environment, particularly within urban areas, represents a paramount but much needed task to rebuild Angola as a whole. The complexity of this task is further enhanced by the many difficulties currently affecting the poorer fringe of the population - those who have been failing to sustainably accompany the emerging economic development of Angola.

As far as the evolution of the urban built environment is concerned, Angola's background does not differ significantly from that of other former colonies in Sub-Saharan Africa. Whilst under a colonial rule which endured for roughly five centuries, Angola was subject to a profound reinterpretation of the essence of its built environment, regardless of the country's established architectural traditions. New concepts of space, mainly influenced by acclaimed European models, were gradually introduced all over the country but especially in urban areas. Entire cities were thus designed and built from scratch, composed of massive buildings framed by large avenues and orthogonally organized streets, as opposed to the earlier confusing arrangement of apparently fragile settlements. Over the years, these thriving cities became points of attraction to many thousands of people arriving from Europe as well as from different parts of Angola, generally seeking a better life. The demographic patterns, mainly characterized by rural-urban movements, were further enhanced during civil war, subsequent to the independence from Portugal in 1975. This caused further densification in the existing urban fabric, and the physical expansion of Angola's major cities until exhaustion. Today Angola is a country of deep social inequalities, where one of the most expensive cities in the world is built side by side with endless sprawl of informal occupation and extreme poverty. With urban development not showing signs of stabilizing, the issues associated with lack of housing and urban-poverty are a difficult reality for many. In a time when sustainable development is a global issue, the question of how Angola will be able to mitigate the acute housing shortage arises as one in urgent need of an answer.

Peri-urban growth in Angola, the example of Luanda

The capital of Angola - Luanda - embodies the typical example of the demographic patterns and urban development described above. Following its creation in the mid 16th century, up until the mid 20th century, Luanda was characterized by a reduced resident population and low economic activity. As described by Amaral (1983), the environment of 19th century Luanda was one of a

city well adapted to its context, displaying a morphological and functional balance with its surroundings. The built environment was mostly composed of an array of adobe and wattle-and-daub houses, often built side by side with Baroque churches.

The explosive growth of Luanda would only take place after the Second World War to then gain further momentum with the industrialization of Angola. In subsequent years the growing development of Luanda would sustain a continuous rising trend, thus contributing to the redefinition of the city's identity. The cityscape of Luanda quickly revealed all the signs of a common western modern city where high-rise buildings, concrete, steel, and glazing emerged to play the principal role.

This prosperous period, however, also had its shortcomings. One of the obvious consequences of the growing prosperity was the rapid increase of the inhabitant population. Despite lack of current census data, this rising trend was registered until the last general population census carried out in Angola in 1970, where Luanda's resident population increased dramatically from 50,588 in 1930 to 475,328 people in 1970 (Amaral,1983).

Today, although numbers are solely based on estimates, Luanda's population already reached approximately 3.2 million. This results in a high demand for housing, services and infrastructure.

As Fonte (2007) explains, during the colonial period of Angola, architecture and urbanism generally reflected the policies in place at the time, a fact that clearly influenced the early planning and laying out of Luanda. The city revealed distinct layers or types of occupation, in which location and morphology of buildings were fundamental variables. Given that these were mostly determined by occupants' social status, one could find for example the planned area made by Europeans for Europeans to occupy, other planned areas of the city occupied by a mixed race population, and finally the indigenous *bairros*, planned by Europeans but to be occupied by indigenous population.

Most of the unqualified work force of Luanda, however, was sourced from one area that was not contemplated in urban plans: the informal *bairros* surrounding the main city. These areas, also designated as *musseques*, housed those who either could not afford, or were not

considered sufficiently civilized, to inhabit any of the planned areas of the "cement city". The existence of areas of informal huts scattered throughout the outskirts of Luanda date back to its origins and their physical expansion has been developing in parallel with the growth of the city, up until the present date. The massive growth of peri-urban Luanda is mainly attributed to continuous fluxes of rural-urban internal migrations or displacements of African population, nevertheless, over the years the musseques also provided shelter for poor population with different origins and backgrounds. This meant that having a weak economic condition became the main feature of the musseques' resident population, rather than a racial one.

### Building and inhabiting the musseques: adapting to a life of uncertainty

The built environment in the musseques has developed under unique circumstances. Up until the 19th century the outskirts of Luanda were mostly used as agricultural land. However, as the city expanded, clusters of settlements developed in stages to accommodate the various waves of migrants seeking a better life in Luanda. With respect to the nature of the dwellings, unlike the main city, in which European concepts of architectural and urban space were gradually introduced, construction activities in the musseques during the 20th century tended to be associated with absence of planning and infrastructure and, therefore, with self-building activities. These were areas frequently described as dense labyrinths of wattle and daub huts which spontaneously occupied any piece of land available. Moreover, given the diverse ethnic backgrounds of its inhabitants, the buildings frequently resembled traditional rural dwellings found elsewhere in Angola.

The proximity to the cement city, coupled with a later influx of a Portuguese poor population, eventually provided the perfect environment for the metamorphosis of the musseques' fabric. This assimilation of European architectural features extended not only to the building form of the dwellings but also to the building materials and technologies adopted. As illustrated in Redinha (1964) and Thyssen's (1966) studies of the Angolan indigenous house, the single room circular plan house, for example, was abandoned in favour of the multiple

room rectangular house, and the façades began to incorporate more windows than previously. Overall, the building envelope was altered into something that accommodated elements of both modern and indigenous forms of construction. Therefore, despite the growing use of materials such as metal sheets or asbestos for the roofs; concrete blocks, fired bricks or timber for the walls and cement for the floor, one could still find references to indigenous construction in the musseques. This view is further supported by the data provided by the 1970s census which reveal that the majority of houses in the musseques had wattle and daub walls (Monteiro,1973).

The complicity between the main city and its spatial surroundings where the musseques developed was, and still is, a major decision factor in choosing the building technology for one's dwelling. As Trindade (2000) remarks, at times it was difficult to distinguish accurately where the city ended and the musseque started. The constant swelling of the city limits put extra pressure on the musseques' population, who reacted to the authorities' claim of land for urban development by moving and rapidly building shelter elsewhere, usually further away from the city. In this respect, Monteiro (1973) concludes that the preference for certain construction techniques and building materials in the musseques would depend on various aspects, namely cost, availability and flexibility of use. Further to this, the temporary or permanent occupation, as well as the dynamic social structure of the household - which repeatedly required additions and/or modifications to the core structure of the building - would also define the type of dwelling to be constructed. This could, for example, make the difference between using stone, cement blocks (permanent materials) or earth and timber (temporary and/or demountable structures).

The uncertainty with regard to the ownership of land combined with the precarious nature of the dwellings, lack of infrastructures and urban management, meant that the musseques have always been very susceptible to disasters. Fires, floods, landslides and other naturally occurring disasters frequently wiped out considerable areas of houses. For this reason, the design and implementation of a rehabilitation strategy of such areas is currently considered to be an absolute priority, as shall be explained in due course.
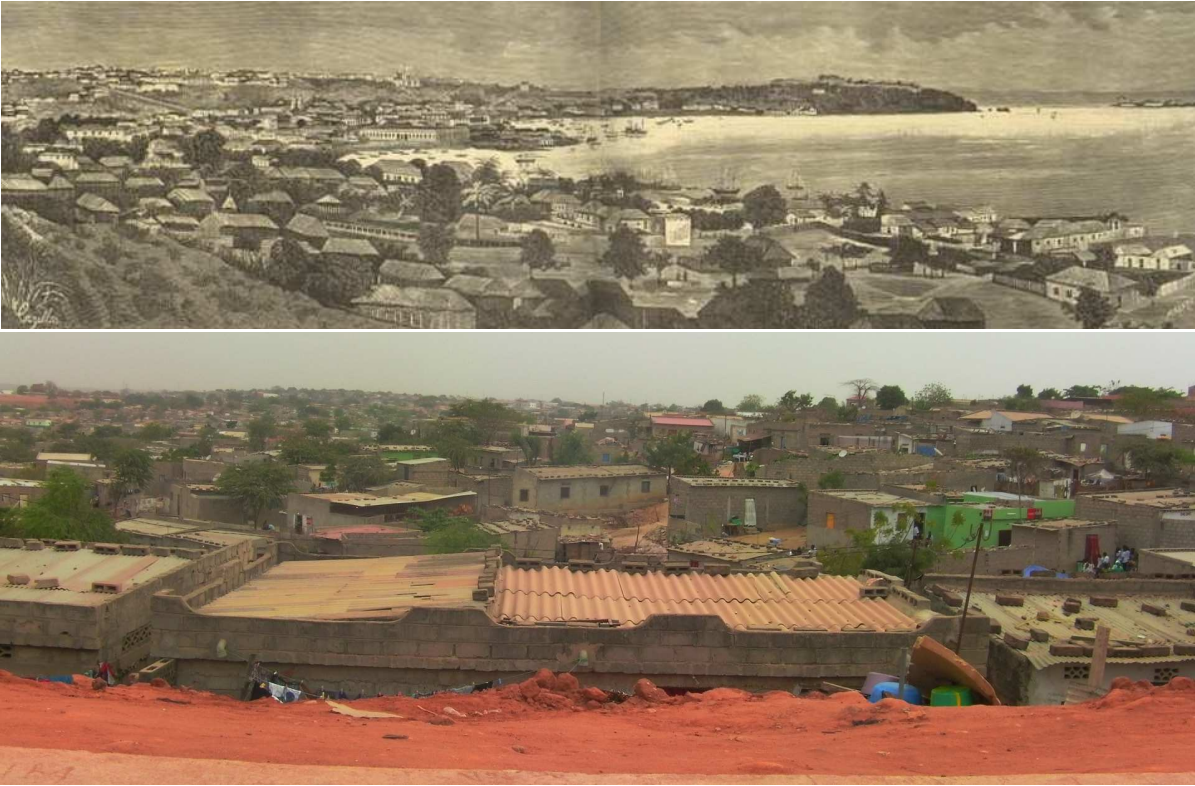
Top **19th century view of Luanda**
Bottom **View of a musseque**

Life in the musseques today: building a sustainable future for the musseques and its inhabitants

According to the UN-HABITAT more than 80% of Angola's population lives in slum areas, many of those based in the peripheries of Luanda. Moreover, the capital has grown to more than four times the second largest city in Angola, and estimates indicate that it accounts for about a quarter of the country's total population (UN-HABITAT, 2010). The poor conditions experienced in the musseques today have not undergone dramatic improvements over the last years. In fact, apart from the few musseques existing inside the actual city, which did not have further room to grow, the settlements in the periphery continue to expand outwards, increasing the distance between the city and the musseques. In addition to the spreading out of existing areas, new musseques were even created after the independence. This is the case with the musseque Rocha Pinto which, as stated in Trindade (2000), has a population of roughly 900 thousand people and, due to the distance to the city, has achieved nearly self-sufficiency by incorporating basic services within its limits.

Since the colonial period, efforts have been made towards finding the most adequate solution to tackle both the acute housing shortage as well as the problems resulting from the almost total lack of infrastructure in the musseques. Nevertheless, according to Amaral (1968), these urban planning experiments were not always very successful, since they often failed to consider natural and human environments. An example provided by the same author was the inadequacy of the building's design to people's cultural context, ignoring for example the importance of the outside space to cook or socialize. Furthermore, many of the buildings were structurally unsound and formed monotonous streets were landscape was scarce. As a result, valuable lessons were learnt regarding the need to have an in-depth knowledge, of both the site and the inhabitants, in potential upgrading programmes. Spaces where communities can thrive and live harmoniously, where family life can evolve and be respected, creation of a diversity of spaces and houses which can be flexible and adaptable enough to accommodate different needs in different periods of people's lives, were aspects recommended as primary for any successful urban intervention in the musseques.

Currently, probably more than ever, there seems to exist an agreement on the urgency of providing Angolan population with the right to housing and a decent quality of life. In 2004, extreme poverty was acknowledged by the government as a serious issue in Angola, as can be found in the document Strategy for Combating Poverty (República de Angola, 2004). Herein, the reduction of poverty and improvement of people's quality of life is set as a goal to achieve in a near future, which necessarily entails action at the level of the building sector. Thus, the government hopes to improve the overall conditions of the musseques and degraded buildings of urban areas, mainly through urban requalification programmes. Such programmes would range from providing infrastructures to existing degraded areas, to design and building of whole new parts of the city. The latter would include construction of social housing to accommodate and relocate the poorest fringe of population - particularly the homeless and displaced. In line with this target, in 2008, the Government launched the National Urbanism and Housing Programme, with a very ambitious goal of building 1 million houses before the end of 2012, from which 115 thousand will be provided by the government, 120 thousand by the private sector, 80 thousand by cooperatives and 685 thousand will be constructed through self-help building activities.

The programme is still ongoing and, therefore, the amount of information available remains rather scarce. Nevertheless, questions have been raised regarding how the 1 million houses goal is being pursued and, especially, as to its effectiveness amongst the poor population of the informal settlements. International organizations such as Amnesty International have reported that, in order to clear land for the construction of new housing developments, continuous evictions of thousands of families have been taking place in the periphery of Angolan cities. Furthermore, as Amnesty International adds, this has been done without any 'prior notification, information or consultation, legal protection, adequate alternative accommodation or an effective remedy' (Amnesty International, 2008, p.1) which, in the view of the organization, constitutes a clear violation of human rights. In order to highlight such issues, during the celebrations of the World Habitat Day in 2008, which took place in Luanda, Amnesty International directed an open letter to the Executive Director of the UN-HABITAT, condemning the choice of Luanda as the location for the celebrations, arguing that it constituted an 'insult to the injury committed against Angola's thousand affected by forced evictions' (Amnesty International, 2008, p.3).

Nonetheless, the progress on the construction of houses since the launch of the National Urbanism and Housing Programme has been frequently reported as successful through local and international news agencies. Additionally, despite the accusations of forced evictions, the rehousing process of some of the people whose houses had been demolished between 2004 and 2006 is expected to start in September 2011, as recently announced by the government. The intention of eliminating the musseques entails, yet again, profound changes and adaptations from the low-income population, who so many times throughout Angola's history had to readjust to new realities and paradigms, building new homes, livelihoods, social and economic structures from scratch. Reusing existing housing does not seem to be included in any plan or strategy, which rather prefer looking at more radical solutions, whereby eliminating the musseques is the main objective. However, while such plans do not come into practice, people have been developing creative solutions to adapt existing dwellings to meet constantly changing needs. A building in a restrained plot of land can easily change configuration to accommodate a growing family, create private areas to rent out, or incorporate a small business accessible through the elevation facing the road. Houses in the musseques thus grow organically, expand horizontally and/or vertically, usually according to peoples' financial means. This dynamics has been possible partially thanks to the wide availability of prefabricated building materials such as cement blocks or metal sheet roofing, which have clearly outgrown traditional building practices in popularity and appear to be the way forward when it comes to informal settlements in Luanda.

The Constitutional Law of Angola's article 85th states that 'every citizen has the right to appropriate housing and to a decent quality of life. It carries on by declaring that the state has the responsibility to 'promote the social and economic conditions to ensure the right to housing and quality of life' (Assembleia Nacional

– Comissão Constitucional, 2010). Although, apparently, the country is heading towards this direction, it is clear that there is still much work to be carried out, in order to sustainably mitigate the housing shortages in Angola. In this respect, the way that built environment is conceptualized may indeed play a significant role in assisting the poor population achieving a better quality of life. The familiarity with self-help building of the informal settlements seems to have been picked up and is now being utilised as an important tool of the National Housing Programme. Self-building kits have been made available for the low-income population, who, according to the Government, will also be able to benefit from special financial schemes to buy or rent houses. As stated above, the programme is still ongoing, however, according to recent statements that consider the possibility of surpassing the goal of 1 million houses, the country's reconstruction process mentioned in the beginning of this paper appears to be taking place in Angola. One will have to wait until 2012 to determine the immediate success as well as the sustainability of the programme. More importantly, it is fundamental to assess its effects in areas such as the musseques, where the most pressing issues exist.

In 1983, we were reminded by Amaral (1983) that the research focused on the evolution of the musseques' environment is very scarce. He further adds that the urban periphery is an incredibly complex reality and, therefore, any intervention or proposed upgrading programme necessarily requires the action of studies, which should be conducted by a multidisciplinary team, given the different nature of the many issues inherent to the periphery of Luanda (economic, social, technical, juridical, financial, etc). Regrettably, this situation has not changed over the last years and the musseques still lack thorough studies and research.

Considering all the aforementioned, if on the one hand it is a reality that the musseques are lacking even the most basic infrastructures and are, therefore, in urgent need of an intervention; on the other hand one has to wonder whether a radical solution based on demolishing the existing to rebuild according to western models is the most adequate one for this particular context. The flexibility and adaptability which characterizes these informal settlements, despite reflecting a sustainable practice, is also often regarded as a sign of insecurity. For this reason, it is likely that people are open to embrace a new style of living which will necessarily include a new approach towards the built environment.

A deep understanding of the social characteristics of these informal settlements as well as of their social, economic and environmental contexts may prove to be a fundamental tool to orient towards a sustainability agenda of any future policy or upgrading plan for the informal peri-urban settlements in Luanda.

Endnotes

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Left **Wide availability of prefabricated building materials in the musseques**
Middle **Eliminating the musseques entails profound changes for the low- income popoulation**
Right **Self-building kits in the musseques**

project credits and Information

Restoration Economy

name of project_MANUFAKTURA **location_**Łódź, Poland **name of design firm_**Sud Architectes (Lyon) Virgile & Stone Company (Imagination Group, London) **names of key architects/designers involved_**Sud Architectes + André Mrowiec Marciniak & Witasiak OTH / Bovis J. Lutomski **name of owner_**Horyzont (APSYS International, Paris) **name of contractor_**Mitex, Budumex **name of photographer_**Manufaktura archives + Marcin Romańsk (Fabryki Muzeum) **year completed_**2006 **cost of construction_**280,000,000 USD **website address of design firm_**www.sudarchitectes.com, www.virgileandstone.com, V+SM.html

name of project_ANDEL'S HOTEL **location_** Łódź, Poland **name of design firm_**Jestico & Whiles (concept: public space, rooms) OP ARCHITEKTEN (other areas, detailed design) **names of key architects/designers involved_**Jestico + Whiles Wojciech Popławski (Main Architect) Andrzej Orlinski **name of contractor_**PORR Polska S.A. **name of owner_**UBM / WARIMPEX **year completed_**2006 – 2009 (project) / 2007 -2009 (construction) **website address of design firm_**www.jesticowhiles.com www.op-architekten.com

Flying Tea Rooms

name of research team_ Dr. Vittoria Capresi (Urban Analysis), Dr. Petra Gruber (Building Structure and Bionics), Dr. Ulrike Herbig (Photogrammetry and Recordings of Architecture), Prof. Caroline Jaeger-Klein (History of Architecture), Prof. Erich Lehner (Architecture of non-Western traditions), DI. Irmengard Mayer (Building Research and 3D-Laserscanning), Prof. Hermann Mueckler (Social Anthropology) and Arch. DI. Gudrun Styhler-Aydin (Building Research) **name of photographer_**Andrea Rieger-Jandl **department_**Department for the History of Architecture and Building Archaeology (Architekturgeschichte Bauforschung) UNIVERSITY OF TECHNOLOGY VIENNA / AUSTRIA **website address of University_**www.TUWien.ac.at

Learning from Old Xining

location_ Xining, Qinghai Province, People's Republic of China **graphic Illustration_**James Patterson-Waterston **acknowledgements_**The paper addresses a piece of ongoing research into the adaptation of the urban form of the city of Xining. Already the research is demonstrating engineering and environmental value in the existing city grid and building layout, while further fieldwork is due to take place in early 2012.

InterioReuse

location_ Guangdong (Canton) Province, People's Republic of China **name of photographer_**Lucilla Zanolari Bottelli **survey year_**February 2010 **acknowledgements_**The survery was a joint partnership between the Department of Architecture at Politecnico di Milano and the Huiyang Municipality.

The Old Carries the New

name of project_ The Museum of Slovenian Film Actors **name of architects_**Matjaž Bolcina, Ernest Milcinovic, Teja Savelli **name of client_**Community of Divaca with the Ministry of Culture **location_**Kraška cesta 25, 6215 Divaca, Slovenia **site area:** 6000m2 **built area_**476m2 **completion date_** 2010 **construction company_**Kraški zidar d.d. **structural engineering_**Edo Wallner **electrical_**Aleš Mrkun **HVAC_**Jana Kotar **acoustics_**Saša Galonja **project manager for the Community of Divaca_**Mateja Maganja **project supervisor_**Nataša Ðukic Vasic **heritage supervisor_**Eda Belingar **construction cost_**2,030 million euros ($2,795 million) made possible by Norway grants **name of photographer_**Miran Kambic

Sustainability as Information

name of project_ The Rubber Tyre School, ARCò **covered surface_**350 square meters, 2,200 tyres **construction time_**15 days **address_**road n°1, between Jerusalem and Jerico, Al Akhmar **year_**2009 **construction_**Vento di Terra **image permission_**Valerio Marazzi for ARCò **name of project_**Recyling Plant, Senegal **image permission_**LVIA **name of project_**Project Formal Modulation for acoustic performances **image permission_**Caterina Tiazzoldi and Chris Whitelaw, the Non Linear Solutions Unit, GSAAP Columbia University and Nicholas Tixier, Ecole d'architecture de Grenoble **acknowledgements_**Alessandro Bobba (LVIA),

Chiara Rigotti (Architects without Frontiers - Burkina Faso), Giorgia Dalby (Architects without Frontiers – Italy) Gloria Pasero (Politecnico di Torino), Heather Leson (Ushaidi), Lia Curcio Massimo Annibale Rossi (Vento di Terra) (LVIA), Pierre Alain Croset (Politecnico di Torino), Sara Williams (Columbia University), Stefano Pensa (Politecnico di Torino + ETH Zurich), Rocco Curto (Politecnico di Torino), Valeria Cottino (Architects without Frontiers – Italy)

Submerging

name of project_ Multi functional complex Le Terrazze: Hotel, residence, shopping mall, SPA, offices, bar and restaurant **name of design firm_**Studio Marco Piva **names of key architects_**Studio Marco Piva **location_**Carità di Villorba-Treviso, Italy **year completed_**2011 **name of photographer_**Andrea Martiradonna

Reinterpreting Tal Chappar

name of project_ Tal Chappar Sanctuary **location_**Chappar Village, District Churu, Rajasthan, India **name of design firm_**Kamath Design Studio **names of key architects/designers involved in project_**Revathi Kamath, Shruti Soni, Satandra, Jaskirat Sangra **name of owner_**Forest Department, Rajasthan **name of contractor_**Bhageetath Prajajapat Suratgarh **name of head mason_**Karni Ram **name of photographer_**Sooraj Singh Poonia, Mangi Lal Gupta, Ayodh Kamath **year completed_**September 2010 **acknowledgements_**Sooraj Singh Poonia and T.C. Gupta provided many of the photographs; Ayodh Kamath organized the images.

Economics and Authenticity

location_ Kreta Ayer, Chinatown, Republic of Singapore **name of photographer_**Lawrence Chin **names of researchers_**Lawrence Chin & Chen Binjuan **department_**Department of Real Estate, National University of Singapore **graphic_**Dinah Fried

Footprints of Industrial Giants

images_ Karen Doviner, Yigal Tartakowsky and Michal Morad **acknowledgements_**I would like to thank architect Alon Zohar, my partner in studio, for his inspiring comments and his time and effort devoted to advance our students. I would like to thank our students for their cooperation and enthusiastic spirit, for the hard work and excellent performance. In particular I would like to thank the students whose work is presented in this paper: Yigal Tartakowsky, Michal Morad and Karen Doviner.

Legacy of the Cold War

name of photographers_ Arif Belgaumi, Lucien Hervé

Luanda's New Frontier

images_ Celia Macedo **acknowledgements_**This article arises from the research the author is currently carrying out for her PhD thesis, which looks at the sustainability of the use of earthen building technologies in the peri-urban areas of Angola. The research is being supervised by Prof. Ray Ogden, Dr. Bousmaha Baiche and Prof. David Sanderson. This project was awarded an Individual Doctoral Grant from FCT (Fundação para a Ciência e Tecnologia) – Ministry of Science, Technology and Higher Education, Portugal.

TRANSCENDING TIME

name of project_MYU Bar **location_**Gouraud street, Gemayze, Beirut, Lebanon **name of design firm_**PAUL KALOUSTIAN ARCHITECT **name of key architect_**Paul Kaloustian **name of photographer_**Paul Kaloustian **owner_**Joe Mourani **contrator_**Khater engineering **cost_**225.000$ **total area_**140m2 **date of completion_**2006 (due to the 2006 war the project was delayed, the bar opened as soon as the war ended) **lighting_**cold cathode lights and candles **sound system_** alcons audio **furniture_**custom designed - manufactured by ARDECO amatouri **website address of design firm_**www.paulkaloustian.com

colophon

AUTHORS

Carole Aizenstark's interest in adaptive reuse has its roots in Paris where she was born and raised. She holds a Master's in Interior Design from Florida International University and works as a design professional in Miami.

Arif Belgaumi is a registered architect and heads his own practice in Karachi, Pakistan. He holds an MArch from the University of Pennsylvania, Philadelphia USA. He is a member of the adjunct faculty of the Department of Architecture at the Indus Valley School of Art and Architecture, Karachi where he teaches Design. Prior to establishing his practice in Karachi he worked for architectural offices in the US and Pakistan. In addition, he writes occasional articles on urban and environmental issues in a local newspaper.

Lucilla Zanolari Bottelli, architect, has always studied different cultures by attending schools in Switzerland, Italy, USA, Spain, China in her formative years. She graduated in Architecture in 2004 from Politecnico di Milano, with a thesis on visual perception as a design tool. Her experiences abroad and her professional background have led Lucilla into interior and furniture design. She lives in Milan and collaborates as an assistant lecturer at Politecnico di Milano in Architecture and Design Faculties, while completing her PhD in Interior Design and Exhibition at Politecnico di Milano, Department of Architecture.

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Barbara Camocini, Architect and Ph.D in Interior Architecture and Exhibition Design, is an adjunct professor and temporary research fellow at INDACO Department – Lab.I.R.Int - Politecnico di Milano. Her research work focuses on the effects of adaptive re-use upon urban evolution and living and working interiors. She also takes part, as an expert, in conferences and jury of competitions within the international programme for the development of the Baltic Sea Region. In

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Dafna Fisher-Gewirtzman is a Senior Lecturer at the Faculty of Architecture & Town Planning at the Technion in Israel. Dafna teaches and coordinates architectural design and Interior architecture design studios focusing on recycling/regenerating and adaptive reuse in architecture.
Her research focus is in the field of visual analysis, quantitative methods and tools on subjective human response. She has published many papers in leading professional journals and presented her work in many international conferences. She has received much recognition and is the recipient for the UNESCO fellowship. In addition to her academic activities, she is a practicing architect. Her work has been published in local professional journals.

Revathi Kamath is an architect and planner based in New Delhi, India, and a partner in Kamath Design Studio. The Kamath Design Studio has designed over 300 buildings, each informed by an explicitly environmental agenda. Their work is a creative synthesis of attitudes and technologies into an aesthetic habitat and way of life.

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Ambika Kamath is a first-year graduate student in the Department of Organismic and Evolutionary Biology at Harvard University.

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Caroline Jaeger-Klein is Associate Professor for History of Architecture at Vienna University of Technology as well as at UBT Prishtina in Kosovo. After university studies in Austria and the United States, she wrote her PhD on Austrian Architecture of the 19th and 20th centuries. In addition to her theoretical focus, she continued teaching design courses on building in a historical context, her master thesis topic. For the moment, she is leading a research study on current Austrian school buildings as well as on Traditional Architecture of Saudi Arabia. She is national expert-in-court and member of ICOMOS.

Célia Macedo studied architecture as her first degree at Universidade Lusíada of Lisbon in Portugal. Following some years of professional experience in architectural practices, both in Portugal and the UK, she graduated from Oxford Brookes University with an MSc in Energy Efficient and Sustainable Building in 2009. At the moment, Célia is doing research on the informal settlements of Luanda (Angola) for her PhD in Architecture at Oxford Brookes University, UK.

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