

Spontaneous Living Spaces a research project on places' culture of living

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Abstract

The ongoing urbanization process creates a movement of people from the rural to the urban environment and when dwellings are not enough self-building becomes a spontaneous answer to the need of a *home*. In this process the builders and dwellers do not completely adapt to existing living patterns, but they import their own culture of living within the city. Therefore, cities get enriched by new typologies and technologies and new forms of living are born from a rural/urban cultural background representing the needs of a contemporary society.

Spontaneous Living Spaces is a research project that focuses on the diversity of the cultures of living and considers their spontaneous forms as heritage, to be protected and enhanced, especially in their intangible knowledge and social and environmental relationships. It documents and analyses the places' culture of living through a variety of tools from the architectural survey to the photo-reportage. The work is aimed at recognizing the cultural importance of these parts of urban fabric and providing the tools for Municipalities, planners and designers to work with full awareness of the local culture of living.

Since 2011 the project developed three case studies: *Jardim Filhos da Terra a favela* in Sao Paulo (Brazil), *Pok Fu Lam*, a low-density neighbourhood in Hong Kong (China) and *four selected neighbourhoods of Pemba* (Mozambique). The project is open to new cases for the creation of an *atlas* of the spontaneous culture of living.

Premises

Conceiving the house as a cultural phenomenon resulting from a whole range of socio-cultural factors seen in their broadest terms and adapted to local climatic conditions, site, economical possibilities, technologies and materials (Rapoport, 1969), the research considers the forms of living as cultural expressions, therefore understanding their diversity makes possible to have a deeper knowledge of the context, to plan and design responding to cultural peculiarities and to environmental interactions.

Furthermore, self-built settlements are the spontaneous answer to the spatial need of home and represent an important expression of the local culture of living as the housing solutions and living characteristics are defined directly from their inhabitants and builders on the basis of their real needs and possibilities.ⁱ Self-built homes, mainly thought as temporary at the time of their construction, often become constituent parts of the urban fabric. Losing the character of temporariness, it is necessary to consider them as integral part of the city and to provide their adequate documentation recognizing them as an important phase of the city's contemporary evolution and analysing the new characters of living deriving from the importation and merging of different forms of living.

The challenge of the research project *Spontaneous Living Spaces* is to create a transversal knowledge of different cultures' way of living contributing to the cultural mappingⁱⁱ of the nowadays-moving society. The research proposes tools and methodologies to:

- contribute to the mapping of the contemporary cultural landscape;
- increase the awareness on local cultural diversity;
- contribute to the management of the changing urban environments;
- create the basis for the understanding of the *living landscape*ⁱⁱⁱ of places;



Figure 1. Contamination of rural and urban elements in a house of Pemba: the house is in simple bamboo with vegetal roof and sand floor, but a high-tech antenna is working in the courtyard, supported by bamboo sticks.



Figure 2. The cover of the book related to the Sao Paulo case study, published in 2014 by Pacini Editore. On the cover the schematic plans of the surveyed houses.

- inform designers and planners with preliminary studies on local contemporary spontaneous living.

Finally, the research avoids using the terms formal/informal, planned/unplanned as often are not fitting the diversity of the analysed contexts. Within this framework, since 2011, the research developed the documentation and analysis of the houses of three case studies in which the phenomenon was relevant:

1. a block in the *favela* Guapira II, within the area called *Jardim Filhos da Terra*^{iv},
2. *Pok Fu Lam*, a traditional Hong Kong neighbourhood,
3. the Mozambican coastal city of *Pemba*^v, with the survey of *four selected city neighbourhoods*.

Methodology

The spaces documentation and study is done through an integrated typo-morphological analysis at various scales, from the urban to the objects one, and uses several instruments, among which the architectural survey, for spaces and functions, photo-reportage, videos, interviews and historical documentation to trace the evolution of the settlements and of the houses' typologies. Furthermore, the three case studies represent examples of self-building in a comparable climatic zone, being all located between the tropic of the Cancer and the tropic of the Capricorn. Up to date, the research used the climatic element to facilitate the cultural comparison but, objectifying the creation of an *atlas* of the spontaneous living, in future, case studies not belonging to this area will not be excluded.

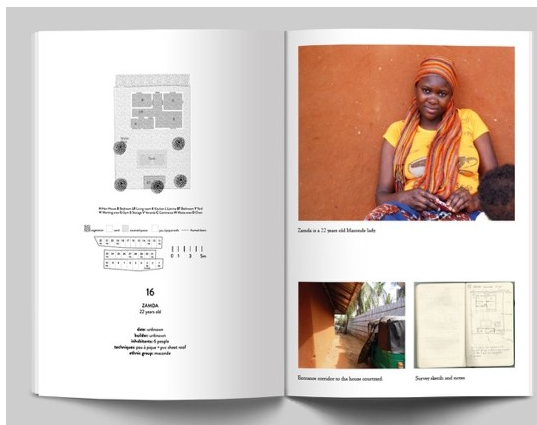


Figure 3. A spread of the book on the survey in Pemba: each house is documented in its spaces and functions, information on the dwellers/builders, location within the neighbourhood, sketches, portrait of the interviewed inhabitant and photographs of the spaces.

Three case studies

The three studied contexts have similar issues in terms of weather, with heavy seasonal rains and droughts, but strong cultural and economic differences that reflect in dwellings and settlements functions, shapes, materials and distribution. A selection of houses per neighbourhood was analysed and a prevailing typology per each was determined. In each context it was selected one or more blocks in order to survey the spaces and functions of the houses and the relationships among the plots. The blocks were chosen to be representative of a stable house type.

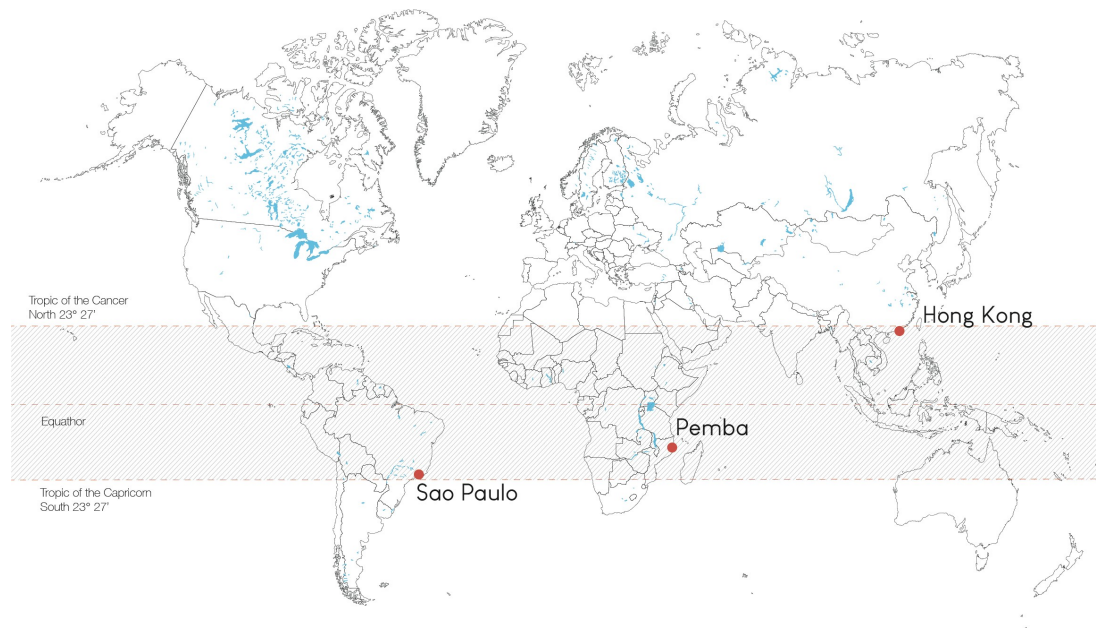


Figure 4. Location of the three case studies developed: Sao Paulo (2012), Hong Kong (2013) and Pemba (2016).

Jardim Filhos da Terra

The first case study that has been developed is a block of *Jardim Filhos da Terra*, an area in the northern region of Sao Paulo where is located the *favela* Guapira II, born at the end of the 90s. The project was developed under the guidance of Stefano Boeri and with the support of the Municipality of Sao Paulo. Here, houses are gradually built upwards in rectangular plots, by using several construction materials available: reinforced masonry, concrete blocks, metal sheets etc. A multi storey typology is prevailing in the area with two to four floors^{vii}. The stairs, a key feature because of the topography, are usually semiprivate spaces, closed by a door or a gate (with or without a key or locker) and for ventilation purposes they are partially or completely open at the roof level. The sensation when entering the staircase is one of disorder and noise, caused by the overlapping functions of this area. The stairs distribute the floors and the apartments, as the property on each plot can be either for a single family or for multiple ones. Each apartment is usually made of two to four bedrooms, one to two bathrooms (with at least one shower but never bathtubs), a kitchen, a living room and in most of the cases a garage at street level. Floors are added according to the family's needs. People

build them during their free time and the materials and the workforce are provided both by the family and by the *mutirões*^{viii}. The finishing is usually very rough even if sometimes plaster is used on the cladding. Technical equipment is commonly positioned outside the walls and pavements are often finished in concrete.

Home is a place open to everybody, with non-exclusive bedrooms usage, it is a place for family and friends. Courtyards are a gathering point representing the entrance to the houses and are used both for leisure activities and services. They usually follow the longitudinal axis, and, as they incorporate various functions, tend to be spacious.

In terms of public space, at the neighbourhood scale, the only present and fully respected one is the street space that is used for various neighbourhood activities. As a consequence, there is a generalized lack of breaks in the urban fabric.

Pok Fu Lam

Shifting to Asia, in Hong Kong, due to the density of the city, communities settle informal and self-built settlements at the skyscrapers' rooftop^{ix}. However, this is not the case of *Pok Fu Lam* one of the few historical and low-density neighbourhoods of the city.

Entering in *Pok Fu Lam* the visitor has the perception of entering in a private, closed neighbourhood. The use of the streets and alleys, mainly pedestrian and characterized by small steps going up and down the hill, is semiprivate. To make an example, often sinks are located along the alley, and with sinks also toothbrushes, kitchen pots and dishes and other private objects and often residents wash their hair in these sinks or in buckets along the alley. Furthermore, as residents take off their shoes in the house, usually these are tidily left in front of the door along the street.

Here the prevailing house typology is usually made of two parts: the 'wet part' (kitchen and bathroom) and the 'dry part' (living room and bedroom). These are often separated by the street on which two doors stand on the two sides of the alley, one for the wet and one for the dry part. Therefore, the house is cut by a street that consequently becomes a succession of semiprivate spaces. While the wet part is one floor high, the dry part of the house can be of two or three floors and adapt to the topography of the area, especially on those plots that have a transversal double entrance. Staircases, or just few steps, distribute the multiple floors present inside the houses. Houses vertical structures are mainly built in concrete blocks or in PVC sheets, and roofs are usually in PVC sheets. Public space also includes neighbourhood gardens, spaces where to sit and where private chairs are left all day long. In this neighbourhood public and private deeply interact and contaminate one each other.

Four selected neighbourhoods in Pemba
Pemba is a coastal city in the northern region of Cabo Delgado of the sub-Saharan African Mozambique. Here the four neighbourhoods of *Alto Gingone*, *Paquitequete*, *Chuiba* and *Natite* were selected and analysed. Mozambican traditional house can be defined as a sequence of open and covered spaces within a plot where the everyday activities take place. Usually, the plot is delimited by a physical boundary that gets thicker and more solid as the density of the area increases. The prevailing materials used for boundaries are bamboo sticks, interlaced or simply aligned and fixed together to wooden bars with nails and cement blocks.

The constructions within the courtyards are at least two: the main building and the hygienic services, such as bathroom and latrine. The main building is usually made of a wooden structure, often simply leaning on the sand or in other cases on a 10 cm thick concrete slab. Internal and external walls are mainly built with the traditional *pau à pique*^x technique. Vertical finishing is often absent and if it is present it is in *matope*^{xi} that can be of different colours, from light brown to red. The roof is made of a wooden structure and covered in vegetal materials or in metal sheets. The interior of the building is usually cut by a central corridor that connects two symmetrical entrances, on the street and on the courtyard sides. This distributes four rooms of similar dimensions, two on one side and two on the other. The second construction within the yard, is hosting the hygienic functions of bathroom and latrine. This is made to be moved within the yard, as no sewage system is present, and it is located in the furthest point from the living areas, on the back side of the yard. Its surrounding walls are in bamboo, plastic materials or in fabric. Waste is usually buried or thrown at the edges of the neighbourhoods or buried in the courtyards. The courtyard also hosts vegetal elements, decorative and/or productive, such as a kitchen garden or fruit trees, and in most cases a hen house is present. Most of the elements of the houses are made of local materials, which make the houses environmentally friendly and cheap. The insertion of industrial elements is today perceived as wealth recognition, even though often they are not properly employed (for example used as decorations or for symbolic and religious purposes). These are not the only elements changing the typology: today the main variation is represented by PVC roofs, replacing the vegetal ones. Having a different weight, this change might modify the whole structure and internal distribution of the house. At the neighbourhood scale, the typology is easily aggregable and independent from the urban structure and public space is present, respected and perceived as important by the community.

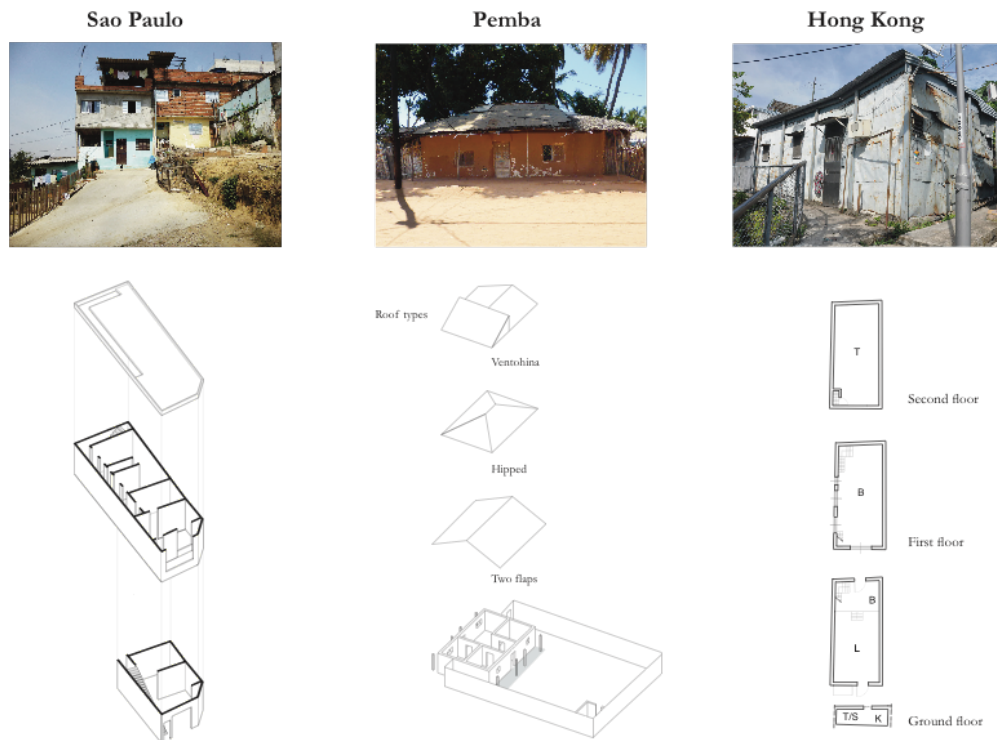


Figure 5. Comparison of the three case studies' typologies.

Conclusions

In a world highly globalized and in which urbanization is a high-speed phenomenon, self-built houses can be powerful answers to the urbanization phenomenon. They make up a cultural landscape and are representative of a part of the local contemporary cultural identity. For these reasons, they should be documented and analysed to record, understand, protect and design with full awareness. Furthermore, assuming the fact that some places cannot afford substantial public investments, they represent alternative resources for the cities development plans basing on the creativity of the local inhabitants and their productive and building capabilities.

The morpho-typological surveys, implemented within the framework of the research *Spontaneous Living Spaces*, lead to context specific conclusions at the architectural and urban scale.

In spite of the differences, the self-built houses of Sao Paulo, Hong Kong and Pemba represent a part of the contemporary living that is mixing the rural with the urban characteristics and are expression of a diffused knowledge and of the local cultural identity. Therefore, they represent a resource for the local development and could bring innovative ideas to the existing urbanization models. Moreover, the bottom up construction rises the possibility of improving the self-built houses much easily providing information tools to the citizens to improve their living quality and increases the community resilience.

In these contexts formal and Western urbanization has not already verified and the urban culture is created almost *ex-novo*. Here alternative urban models, based on the local identity, can evolve preserving the cultural diversity and fostering a development that is grounded on the community awareness and on context specific cultural resources.

Endnotes

ⁱ The first footsteps of the research were done in 2011 during the researches for the exhibition *São Paulo Calling*, by the Secretaria da Habitação of Sao Paulo and Stefano Boeri Architetti, aimed at creating a dialogue and confrontation among different experiences of slums management and living (São Paulo, Rome, Nairobi, Medellín, Mumbai, Moscow and Baghdad). <https://www.stefanoboeriarchitetti.net/project/sao-paulo-calling-2/> (last visited September 16, 2019)

ⁱⁱ Pillai, Janet. 2013. *Cultural Mapping: A Guide to Understanding Place, Community and Continuity*. Strategic Information and Research Development Centre. Selangor.

ⁱⁱⁱ UNESCO. 2011. *Reccomendation on Historic Urban Landscape*

^{iv} As previously mentioned the case study idea developed in 2011 during the work at Stefano Boeri Architetti for the exhibition *São Paulo Calling*, and concluded in 2013 with the author's master thesis awarded *cum laude* at the Politecnico di Milano, supervisor Stefano Boeri and co-supervisor Pier Paolo Tamburelli. The research was then published by Pacini Editore in 2014 with the name *Jardim Filhos da Terra*.

^v The case study represented the PhD research entitle *Dwellings and Settlements in Pemba, a typo- morphological analysis in a changing urban environment* carried out at the Politecnico di Milano, Dipartimento di Architettura e Studi Urbani, supervisor Michele Ugolini, Professor at the Politecnico of Milan, and co-supervisor Michael Turner, UNESCO Chair at the Bezalel Academy in Jerusalem. The PhD was concluded *cum laude* in December 2018.

^{vi} Climatic and environmental conditions are crucial in the designing of the house and neighbourhood and also in the way of living in them. The tropical zone is characterized by mainly two seasons (the humid and the dry one) with temperatures never severe and with days and nights length of around 12 hours along the whole year.

^{vii} In the surveyed area of Guapira II, it was possible to identify three macro categories of housing types: the most diffused is the multi storey house, then is the one consisting of one floor, finally is the wooden hut.

^{viii} Neighbourhood solidarity groups.

^{ix} Canham, Stephan, and Rufina Wu. 2015. *Portraits from Above – Hong Kong's Informal Rooftop Communities*. Peperoni Books. Berlin.

^x Local constructive technique in which two layers of bamboo sticks are filled with stones and mud.

^{xi} Swahili word for mud.

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