Living and Sustainability: An Environmental Critique of Design & Building Practices, Locally and Globally
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INTRODUCTION

This publication is the product of the conference Living and Sustainability: An Environmental Critique of Design and Building Practices, Locally and Globally held at London South Bank University in 2017. The event was set in the context of estimates of the building industry’s contribution to world carbon emissions reaching as high as 30% worldwide – with figures on energy consumption in the region of 40%. Given the scale of the industry’s contribution to these figures it is obvious that we cannot ensure a sustainable planet without addressing the practices, materials and legacy of our building industries, our cities and our buildings. However, key to a sustainable future are also related social questions. The sustainability of communities is one of the most basic components of the quality of life and opportunity. Badly planned developments can not only lead to the destruction of habitats, they bring unaffordable housing, displaced communities and negative effects on physical health. Hosted in London, this conference was concerned with the broad range of issues that affect the cities of advanced economies, the metropoles of new economic powerhouses, and the conurbations of the developing world from both these related perspectives.

Keynotes at the event included Professor Andy Ford, Director of the Centre for Efficient and Renewable Energy in Buildings (CEREB) and Paul Allen, Project Coordinator, Zero Carbon Britain, Centre for Alternative Technology.

This publication, and the conference which it documents, were organised by the research organisation AMPS, its academic journal Architecture_MPS, and the School of The Built Environment and Architecture at London South Bank University. It formed part of the AMPS program of events, Housing – Critical Futures.

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EXTRA-LONG RESIDENTIAL INFRASTRUCTURES

The term of Extra-Long Residential Infrastructures is assigned to the constructions of one block or a blocks settlement (preferably only one of them), whose façade perception is longer than 400 metres of length, its scale is urban and it wraps a territory. In this way, XL is an appropriation of the fashion and textile world, using scales defined by Koolhaas and Mau, and wants to reference to those extra-long objects instead of extra-large buildings. Therefore, these developments should have an extra-length, which is longer than the length of the standard buildings. In the same way, the Infrastructure concept is referred to a human construction designed and led by professionals from Architecture, Civil Engineering or Urban Planning, providing the support for the development of uses, in this particular case, mainly housing and secondary other complementary uses. Therefore, we could define these buildings as support artefacts. According to Fernandez, these social condensers were developed in Soviet Union at 1927, in the competition for new residential proposals by the group’s journal Sovremennaya Arkhitektura. The XL Residential Infrastructures would have to hold a complete residential programme, what includes housing, but also entrance streets or galleries, community areas, green spaces, and so on. This one is the same situation of the Infinity Loop or 8 House and little tower, whose author defined it as “vertical suburbia”, using terms as “big block” with an “enormous green area”, “emerging plaza”, “stepped streets” and “mountain paths”, resuming “where the public life traditional is tied to taking place on the ground floor, flat as a pancake, with everything above privatized” and understanding “the public life” as the relationship between the city and “the privatized life” as the community life.

Mostly, these cases have a standard section with a unified aesthetic, normally concrete, and they are usually not urban icons. Their functional programme distribution is like a mille-feuille with housing units located in a supporting structure, public streets in the sky (although they could have restricted use or, in other cases, they could be transited at different speeds), and other services intermittently located.
In some cases, these infrastructures could be composed of different blocks, and each one should have common characteristics that allow it to be recognized as a settlement, either by a similar aesthetic (formal characteristic), by a standard section (programmatical characteristic) or by a community feeling (humanistic characteristic). Then, a disaggregated composition becomes a unitary entity. This is the case of New Corviale\(^6\) (1973-1981), which is composed of two blocks and was divided in five community units, although it is considered a unit settlement.

Among 63 detected cases so far, we could emphasize the case of Park Hill housing (1955-1961), in Sheffield, designed by Ivor Smith and Jack Lynn, with a façade length of 1,010 meters and capacity for 3,448 people; Forte di Quezzi social housing (1956-1968) in Genoa, designed by Luigi Carlo Daneri and Eugenio Fuselli, with a façade length of 1,550 meters and capacity for 2,010 people only in the main building (block A); Rozzol Melara Estate (1969-1982), in Trieste, designed by Carlo Celli, with a façade length of 837 meters and capacity for 2,500 people; Byker development (1970-1980), in Newcastle upon Tyne, designed by Ralph Erskine, with a façade length of 980 meters (adding the 3 blocks) and capacity for 1,900 people (only in its longitudinal building); New Corviale (1973-1981), in Rome, designed by Mario Fiorentino, with a façade length of 958 meters and capacity for 8,953
people; or 8 House and small tower (2006-2010), in Copenhagen, designed by BIG, with a façade length of 640 meters and capacity for 1,500 people.

As shown with these examples, the most part of these cases were built more than 30 years ago, in particular from 1927 to the 1970s. In this time, the behaviour patterns of these communities, forced to live in stackable cities, could not generate a united cluster. Furthermore, we should consider their populations have changed and evolved and, as a result, the constructions are outdated because their communities do not have known how to adapt them to their contemporary needs. For this reason, these artefacts are currently failures of contemporary cohabitation that we must research to propose solutions that allow their living together and being enabled to hold a daily routine in harmony.
RESEARCH QUESTIONS

As a result of the latest developments and due to threats of demolition, detecting the problems of these constructions and providing solutions to allow a social cohesion are a priority since the logistical complications are excessive to focus the problem only through the re-homing of these people. In this way, we propose the study of these architectures focusing on community areas, interior streets, entrance galleries, and so on, places understood as in-between-spaces. We understand the in-between-spaces as the connections between the housing scale and the urban scale or as every space contained in the infrastructure with horizontal spatiality or with capacity to hold a different use from the circulation or movement. In this way, we would like to research about how people who live in these XL Residential Infrastructures have evolved during operating life of these buildings, analysing the uses that have been developed in the community areas. Therefore, we would board topics more closely linked to the community concept that should be generated in these areas due to the community feeling. Furthermore, we would like to research which are the problems located in the community areas. We wonder which would be the magnitude of community concept linked to XL Residential Infrastructures and if the community feeling is reinforced by being linked to an architectural space or if is an outdated concept. In addition, we are questioning how they have faced over the years or what would be the processes that can be applied to reinforce the community unity that allow living together so different people.

RESEARCH DESIGN

For the analysis process, we have designed a qualitative matrix. With this instrument, we cross the qualities of interest of the 63 cases detected as Extra-Long Residential Infrastructures, which have
been collected from the consultation of different representative research journals in the architecture world, since the early 20th century.

The cases list contains the following examples:
1. Road Town by Edgar Chambless (1910)
2. Horizontal Skyscraper by Friedrich Kiesler (1925)
3. Vertical city by Ludwig Hilberseimer (1925)
4. Plan Voisin, in Paris (France), by Le Corbusier (1925)
5. Siedlung Römerstadt, in Frankfurt am Main (Germany), by Ernst May (1927-1929)
6. Karl Marx Hof, in Vienna (Austria), by Karl Ehn (1927-1930)
7. The Britz, in Berlin (Germany), by Bruno Taut and Martin Wagner (1927-1929)
8. Project for Spandau-Haselhorst Apartments, in Berlin (Germany), by Marcel Breuer (1928)
9. The Jarrestadt, in Hamburg (Germany), by Fritz Schumacher (1928-1930)
10. Urban plan for Rio de Janeiro (Brazil), by Le Corbusier (1929)
11. Skyscraper Bridge Apartments, in New York (US), by Hugh Ferriss (1929)
12. Manhattan proposal for 1950 (US), by Raymond Hood (1929)
13. Langer Jammer in Siemensstadt, in Berlin (Germany), by Otto Bartning (1929-1930)
14. Public-housing for 500 Individuals (Soviet Union), by Mikhail Okhitovich (1930)
15. Design for a Row House Complex by Friedrich Kiesler (1931)
16. Plan Obus, in Algiers (Algeria), by Le Corbusier (1933)
17. Resort Prora, in Rügen Island (Germany), by Robert Ley and Erich Putlitz (1936-1939)
18. Pedregulho Residential Complex, in Rio de Janeiro (Brazil), by Affonso Eduardo Reidy (1946-58)
19. CUPA, in Mexico City (Mexico), by Mario Pani (1947-1949)
21. Catacumbas Residential Complex, in Rio de Janeiro (Brazil), by Alfonso Eduardo Reidy (1951)
22. Golden Lane Project by Alison and Peter Smithson (1952)
23. Marques de San Vicente Residential Complex, in Rio de Janeiro (Brazil), by Affonso Eduardo Reidy (1952-1955)
24. Blue Ribbon, in Helsinki (Finland), by Viljo Revell (1952)
27. Forte di Quezzi social housing, in Genoa (Italy), by Luigi Carlo Daneri and Eugenio Fuselli (1956-1968)
28. II Treno, in Bologna (Italy), by Giuseppe Vaccaro (1957-1962)
29. Ecological Artic Town by Ralph Erskine (1958)
30. Residential Complex in Sundbyberg, in Stockholm (Sweden), by Sven Markelius (1958)
31. Housing at Nockebyhov, in Stockholm (Sweden), by Sven de Backström and Leif Reinius (1958-1960)
32. New Babylon, (US), by Constant Nieuwenhuys (1959)
33. Vila Isabel, in Rio de Janeiro (Brazil), by Francisco Bolonha (1960)
34. Motopia by Geoffrey Jellicoe (1960)
35. City in the air, in Shinjuku (Tokyo), by Arigo Isozaki (1960)
36. Pioneering housing scheme Le Lignon, in Vernier (Switzerland), by Georges Addor (1960-1971)
37. Sant Ambrogio Residential Complex, in Milan (Italy), by Arrigo Arrighetti (1964-1971)
38. The Bijlmermeer, in Amsterdam (Netherlands), by Amsterdam planning department (1965-1975)
39. Proposal for residential area Ruhwald, in Berlin (Germany), by Stefan Wewerka (1965)
40. The Jersey Corridor Project, in Jersey (US), by Peter Eisenman and Michael Graves (1965)
41. Polykatoikia Asyrmatos, in Athens (Greece), by Eli Vasilikioti (1965-1967)
42. Neighbours Set n3 Elviña, in A Coruña (Spain), by José Antonio Corrales (1965-1967)
43. Toulouse le Mirail, in Toulouse (France), by Georges Candilis, Alexis Josie and Shadrach Woods (1965-1975)
45. Gallaratese Residential Complex, in Milan (Italy), by Carlo Aymonino and Aldo Rossi (1967-1972)
46. Parallels Districts, in Berlin (Germany), by Archizoom (1969)
47. The Continuous Monument by Superstudio (1969)
49. Rozzol Melara Estate, in Trieste (Italy), by Carlo Celli (1969-1982)
50. Bridge city by Alan Boutwell (1970)
51. Asse Attrezzato, in Rome (Italy), by Studio Asse (1970)
52. Falowiec, in Gdansk (Poland), by unknown (1970-1975)
55. New Corviale, in Rome (Italy), by Mario Fiorentino (1973-1981)
56. Economic restructuring of Valle de Elia, in Sicilia (Italy), by Vittorio Gresotti (1976)
57. Building “de peperklip”, in Rotterdam (Nederlands), by Hoogstad Weeber Schulze Van Tilburg (1979-1987)
58. First City in Antarctica by Amancio Williams (1980-1983)
60. Apartments Moabit Werder, in Berlin (Germany), by Georg Bumiller (1997-1999)
61. Linked Hybrid, in Beijing (China), by Steven Holl (2003-2009)
62. Vanke Center, in Shenzhen (China), by Steven Holl (2006-2009)
63. 8 House and small tower, in Copenhagen (Denmark), by BIG (2006-2010)

Thereby, the analysed variables are data and parameters that focus several dimensions as:

• whether it is a construction which generates a limit or a wraparound building;
• whether its section is regular or adjustable;
• whether it is an urban icon;
• whether it is functioning isolated;
• whether there are shops on ground floor;
• whether there are shops on raised levels;
• whether there are other services in the block;
• whether the streets in the sky are public or private;
• whether people can move by different means of transport;
• whether the housing solution is the same standard dwelling for every localization;
• whether there are community areas;
• whether there is an intention to create a community;
• whether there are green areas.
On the other hand, we proposed a comparative graphic analysis among particular case studies based on the method used by Cánovas, Espegel, Lapuerta, Martínez Arroyo and Pemjean in which the analysis of case studies is conducted through their redraws. The case studies selected for this more specific analysis were: Pedregulho Residential Complex; Park Hill housing; Forte di Quezzi social housing; Neighbours Set n3 Elviña; New Corviale; and 8 House and small tower. As a researchers, we understand these cases need to be observed in almost four different scales as the territorial or infrastructural scale (1:20,000), the urban scale (1:7,500), the residential scale (1:1,000), and the unit scale (1:350 and 1:150). In other words, we think these cases should be studied in an additional scale than the scales suggested previously by the authors, because these examples are on the large scale. In the same way, the scale dimensions have been adapted for these settlements.

Nevertheless, due to the raised research questions, we have considered only the residential scale because in it we will understand the infrastructure as a built element within the city, which could define a landscape or operate as a boundary. Moreover, the relationships among the public space, the community one, and the private one could show some problems of functioning in these settlements, maybe related with the different gradations of privacy. Bearing in mind that these XL Residential Infrastructures solve their problem of accumulation of dwelling as cells of a honeycomb or the “wine rack” system of Le Corbusier, we should observe the strategies proposed to generate community life. This point could be fostered by community areas and streets in the sky, which could form a neighbourhood contained in a building.

Figure 5. Qualitative matrix
In order to confront these results, we have implemented another research instrument: the in situ observation. In this way, we have visited six cases in different dates: Forte di Quezzi social housing (Genoa) in August 2014; Rozzol Melara Estate (Trieste) in March 2016; New Corviale (Rome) in November 2016; Park Hill housing (Sheffield) in February 2017; Robin Hood Gardens (London) in February 2017; and Polykatoikia Asyrmato (Athens) in April 2017. These visits were made to check the reality of these settlements currently, to take notes about community behaviour and to take photographs about the building situation.
RESULTS AND DISCUSSION

Comparative matrix analysis

As results of this analysis, we highlight that almost 70% of these case studies involve a territory or are the link between two situations or sites. In this way, the XL Residential Infrastructures protect or identify a green area or landscape, located on the same elevation of the city.

The 65.08% of the cases have a regular section, point which reinforces the hypothesis of that these artefacts are formed by the superposition of horizontal layers, what we have named previously pancake or mille-feuille. The most part of the no-regular section have been designed since 1950.

Although it could seem its opposite, the iconic intention is only attributable to the 20.64%, because these residential developments are focused on solving a great housing lack and they try to create a residential mass where to accommodate one or several communities of neighbours. This is the case of Forte di Quezzi social housing10 whose reason for its construction was to generate employment for a significant number of jobless, building dwellings for low-income families and recovering the construction activity. Therefore, these blocks were a real huge city mass with a residential programme.

Notwithstanding, a large part of these examples, in particular, 44.44%, are able to operate autonomously, with a quite small dependence on the city services. This point strengthens the idea about the creation of a city into another city, with its own functioning by itself.

33.33% of these settlements have shops on the ground floor and only the 25.4% on the raised levels. Most part of the developments, which show local commerce programme in the higher levels, were designed between 1950s and 1960s. Surprisingly, and concerning the autonomy of the social condenser, a 63.25% contains other integrated services in conjunction with its residential programme.

The public streets in the sky, which start to emerge in projects designed from 1910 to 1927, are in 47.62% of the examples, while 33.33% have access to the housing units through restricted streets or galleries. Overall, a 68.25% of the case studies propose public or restricted streets in the sky. In relation to the dimensions and width of these streets, we could highlight 39.68% of these ones, which are enabled to facilitate the movement at different speeds. With this last term, we would like to reference to people who use cars, motorbikes, bikes, or skates to move.
The huge housing lack promoted the irrelevance of dwellings design that was minimal, using the repetition of housing units as the standard residential solution in 85.71% of the cases. It means that the housing solution is the same for the different orientations and locations.

In regard to the community areas, 76.19% of these developments include spaces to make community activities and to leverage the community life. The XL Residential Infrastructures that show a population with community characteristics are 53.97%. This reflects that almost half of these sets have not been able to link the population and the architectural space, unleashing a rejection of these buildings. In addition, we have found that populations, who form communities, have a dimension around 600 and 1,000 neighbours. The lack of this whole feeling has propitiated several criminal activities and causing the neighbours disruption and the space detriment.

Eventually, 85.71% of these examples have green areas. Bearing in mind that the green areas are the direct relationship with the city, the rejection of the city to the XL Residential Infrastructure could be explained due to the enveloping shape of the settlement.

**Redraws of case studies**

The case studies selected to redraw have been: Pedregulho Residential Complex; Park Hill housing; Forte di Quezzi social housing; Neighbours Set n3 Elviña; New Corviale; and 8 House and small tower. As results we can indicate all cases are located close to the city centre, working as a structuring element of the landscape or as a new neighbourhood, with the exception of New Corviale. Furthermore, we have observed two different positions in relation to their context: the first one as a limit which becomes independent from the urban complex, normally due to an impressive topography; the second one as an enveloping shape, with green areas and services which implement the set.

The characterization of the streets in the sky is linked to their dimensions and width. They are open in one of their sides and sometimes they don’t have roofs. These streets allow to access to dwellings, shops or other services. Frequently, the ground floor is higher and more public than the other levels. The housing units are stacked and absorb the irregularities of the block shape.
The slope characterizes the terrain; therefore, the building could be a retaining element or a cutting instrument. In this way, the block could leverage this situation for introducing bottom levels or could be settled on the territory. Therefore, the transversal behaviour of the building is permeable, many times in duplex, with two directions dwellings and large holes. This point shows a reality illustrated in every instrument: the XL scale is understood only in comparison with other elements. In the same way, observing the sections, we could understand all cases have the same character.
Observation in situ of case studies

The existence of the four diverse scales is revealed during the visit because these sets represent an urban strategy on the large-scale, in territorial terms, which is sensed on the different localizations of the city instead of the rest of the housing standard constructions. Furthermore, the logistical effort is registered in many buses and means of transportation to go to these settlements, and these sets several have several bus stops to connect them to the city. As well, the particular legislations for rubbish collection are implemented for these large communities. This is the situation of Forte di Quezzi (Genoa) or New Corviale (Rome).

The urban scale could be represented by the relationship between these suburbs and the city context. In this way, we observe the interactions happened between both elements, considering firstly whether the set is closed on itself or whether it is associated to the city, facilitating a situation of urban density intensification. In this regard, we have found four different circumstances as:

- **Direct relationship with the street.** The block enjoys a public street or open access to get to dwellings, and the built shape is parallel to the urban street. This is the case of Forte di Quezzi (Genoa) and New Corviale (Rome).
- **Visual direct relationship with the street and access restricted to residents.** The block enjoys a public street whose entry could only be opened with a key to access to dwellings, and the built shape is parallel to the urban street. This is the case of Polykatoikia Asyrmatos (Athens).
- **Denial of the city with permeable accesses.** The block wraps a public green area, which is used only by residents, allowing the admission through large holes to the green areas and public streets. This is the case of Rozzol Melara State (Trieste).
- **Denial of the city with visual permeable accesses restricted to residents.** The block wraps a public green area, which is used only by residents, allowing the admission through large holes to the green areas and restricting the access to the private streets whose entry could only be opened with a key. This is the case of Park Hill (Sheffield) and Robin Hood Gardens (London).

In the same examples, the sets could be satellite elements of the cities, similarly to a dormitory town. This situation is illustrated in three of the six cases visited as Forte di Quezzi (Genoa), New Corviale (Rome) and Robin Hood Gardens (London), due to the community areas conditions are not appropriate for the community live, either by uncomfortable or non-existent furniture, by lightless streets, or by excessive dirty and poor maintenance. On the other hand, in the rest of examples, the same qualities of the community areas are detected as positive conditions which allow their use. For example, Park Hill (Sheffield) holds between one and three levels with offices, nursery school, and so on, in such a way that one part of the daily life is carried out inside the set. Polykatoikia Asyrmatos (Athens) is close to this last case, holding a nursery school and shops on the ground floor. A similar
situation is illustrated in Rozzol Melara State (Trieste) which holds different shops, associations, cafeterias, a post office, and so on, in its public gallery.

![Figure 13. Uncomfortable furniture in New Corviale (Rome)](image)

We should note that these case studies have been revisited and have been the main topic in performances, conferences and international competitions[^12]. For example, between 2002 and 2009, Forte di Quezzi was the focus of the project leaded by plug_in - laboratorio di architettura e di arti multimediali. In this proposal[^13], they coordinated activities as “Pic-nic al Biscione” or “Una giornata al Biscione”, to focus on the approach between the settlement and the city inhabitants and vice versa.

Another case, which has been the objective of multiple revisits, competitions and researches, is New Corviale (Rome). This set has suffered many acts of vandalism, among them, the stealing of the mailboxes, which propitiated their self-made or their purchase by the neighbours. Furthermore, we have observed more than four family names have mentioned in the mailboxes, so we could confirm the overpopulation in this development. Terraces have been closed, expanding the kitchen or living room or, in other cases, obtaining a new room. In addition, at the beginning of the 1990s, ten years after the end of the construction, the fourth level started to be inhabited by squatters. Currently, this level is occupied with self-construction dwellings, which are organized around community areas. A great part of the population of this level is illegal, while another part are inhabitants who owned a theoretical dwelling in this level and decided to start the construction by themselves. The main problem is the lack of economic cooperation to the community expenses. Also, the security deficiency and the increasing number of non-payment inhabitants, have resulted in the division of the settlement every 100 meters by the neighbours, generating 10 management units, in contrast to the 5 units which were raised at the beginning. Eventually, this condition managed to legalize 120 illegal inhabitants from the fourth level, when the public administration authorized a renovation project developed with the neighbours. Moreover, some community areas, as the laundries located on the top of the building, are totally abandoned.
Due to their huge dimension, the streets in the sky of these sets need a specific naming and numbering. This point is shown in all cases with the exception of Robin Hood Gardens (London) and Polykatoikia Asyrmatos (Athens), which are the shortest. Curiously, these same streets with their own numbering accept several means of transportation as cars, motorbikes, bikes, skates, and so on.

To facilitate the cohabitation, we have been able to identify the existence of community regulations, from different periods. In this way, in Forte di Quezzi we can find regulations of 1968 and 2014, with their consequent differences. The current rules are restrictions about the ball games and the circulation on bicycle, skateboard, and so on. The original rules were restrictions about the access to foreign people; placing objects in the community areas; dirtying stairs, streets, and so on; disturbing between 13.30 and 15.30; allowing access to homeless; and so on. This means that we could observe the differences between the previous and current life styles.
It is a fact that use of social media has changed the way of understanding human relationships. In this way, the neighbourhood's life has been replaced with the virtual communication among our confidence circles. However, these media are starting to be used to visualize the individual and community activities. In this regard, a Forte di Quezzi profile was created on Facebook with the popular name “Il Biscione” to update several events that the neighbours perform. Nevertheless, it has very few followers (114 followers\textsuperscript{15}) and on its posts are shared pictures about food, landscapes, and so on. On the other hand, this neighbours community has a website to manage the set, publishing regularly resolutions of its meetings.

With these visits, we have consolidated the idea that these sets are accumulations of housing units which have neglected the characteristics of the communal areas. On this basis, the residents have damaged their property, because they have not recognized it as their home. Following this, since the 1980s some voices request the demolition of these buildings\textsuperscript{15} and the others with similar characteristics. However, it is impossible because it would be necessary to transfer between 1,000 and 7,000 inhabitants, depending on the case. This one was the case of Hyde Park (Sheffield), which was demolished in 1992. In the opposite side, there is the example of Park Hill (Sheffield) which has been rehabilitated through a complex process in 2007, which has not restructured the communal areas, that could trigger the same abandonment of the streets in the sky.

CONCLUSIONS

Some conclusions of this research could be the following points:

- The XL Residential Infrastructures are constructions or constructions sets that can operate as dormitory towns. This situation is fostered by the denial of the city through the architectonical design. In consequence, the city context rejects the XL Residential Infrastructures residents.
- Internally, the XL Residential Infrastructures are constructions that consist of dwellings units and in-between-spaces or places where the inhabitants can share activities as community areas, interior streets, entrance galleries, and so on. These in-between-spaces are the connection between the housing scale and the urban scale.
- The residents of the XL Residential Infrastructures have damaged their property since they have not recognized it as their home. This is due to two reasons: on one hand, the inappropriate design of the communal areas, with uncomfortable or non-existent furniture, lightless streets, and excessive dirty and poor maintenance; on the other hand, the change of the life style has promoted the abandonment of the neighbouring activities to the virtual connections. In consequence, the communal areas have been abandoned and disused.
- The community areas have been looted, burned and turned into dumps. Furthermore, their walls are covered with graffiti and their lightless conveys insecurity. A better maintenance of these areas would require the economic cooperation for the community expenses. This point results
very complex owing to the dimension of community managed. The recommended size for a administration unit is between 600 and 1,000 people or 100 and 200 dwellings, being organized by an external manager. The process of self-management is not possible because this one is adequate for communities between 100 and 300 people.

- The prohibition of circulation by car, motorbike, bicycle or skate is detrimental as well, due to the strengthening of the abandonment of public and private streets in the sky. By contrast, allowing the movement with different speeds could improve the relationship between neighbours, facilitating occasional meetings.

- In the same way, it would appear as necessary to review of the cohabitation regulations, allowing the use of games areas and plazas and fostering the human relations. Therefore, a moral code could be designed, permitting the peaceful cohabitation.

- The process to reinforce the community unity could start through the visualization of the individual and community activities on the virtual media. Facebook, Twitter or Instagram profiles could facilitate neighbours’ connections, in the same way that a web support would make easier the communications about the neighbours’ meetings.

- The activities to strengthen the informal cohabitation and educational processes, involving the neighbours, improve the understanding of set benefits instead of the detriment.

- The final objective would be to generate a community linked to the architectonical construction in such a way that the neighbours are a group of people who have specific elements in common and who feel pride of them.

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