The Macrotheme Review

A multidisciplinary journal of global macro trends

From a Skyscraper to a Slumscrapper: Residential Satisfaction in Torre David, Caracas

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Abstract

About forty percent of the inhabitants of the Venezuelan capital, Caracas, live in informal neighborhoods usually built on invaded land. In recent years a new type of unauthorized settlement is appearing in the city. Low-income inhabitants are invading vacant buildings creating vertical slums. The most impressive of the invasions is a "slumscrapper" called "Torre David". This forty-five-story tower, initially designed as the luxury headquarters of a bank, was occupied by 600 families. This paper presents the results of a research study and surveys related with residential satisfaction among the householders living in the building. The tower has serious deficiencies. Unlike other self-built communities of Caracas, were inhabitants are proud of their community and self-built dwellings, the level of satisfaction of the tower's inhabitants is much lower. In the 2012 Venice Architecture Biennale, an exhibition of the Urban Think Tank praised the "Torre de David" occupancy and won a festival Golden Lyon prize. The selection of this project has been highly criticized by many architects. The effort of informal dwellers must be recognized, but in this case, Torre David is a monument of misery and an inadequate use of an expensive urban facility.

Keywords: Residential Satisfaction, Slumscrapper, Informal Settlements, squatters

1. Introduction

Venezuela used to be a country with relatively high standard of life. As one of the richest oil countries, it attracted many immigrants. The capital, Caracas, was one of the most modern and attractive cities of the region. It was the second city in the world with flights to Paris operated by the Concorde planes. The city had glamorous buildings and impressive highways. As many other cities in developing countries, Caracas experienced a rapid growth as a result of the migration of people from the countryside looking for better economical opportunities. In 1968, the population of Caracas was about 1.1 million habitants, which has grown to about 4 million in 2013 (INE, 2013). The urban population's growth was not only because of rural migration but also due to the arrival of thousands of immigrants looking to be part of the Venezuelan oil boom.

Nearly forty percent of the inhabitants of Caracas live in self-built informal settlements. Poor migrants invaded public and private land to build shacks, which over time have been improved to

form relatively successful neighborhoods in the city. Located in a section of valley surrounded by scarped mountains, the vacant land of Caracas has become restricted, as the city density has increased. According to the Venezuelan government, the housing deficit of Venezuela is two million units and in Caracas alone more than 400,000 units, (Garcia, 2013). Another problem is that Venezuela is prone to flooding and landslides; every year heavy rains destroy various areas leaving hundreds of people without homes. With limited access to loans, less land available to be invaded and a recent government with a permissive attitude towards invasions and illegal takeovers, squatting has become one of the few housing options low-income people have (Lopez, 2011). When the possibilities to invade free land become more and more difficult, poor inhabitants of Caracas decided to invade unfinished and abandoned buildings and structures. The trend began in 1999 when the strongest torrential rains of the XX century destroyed thousands of dwellings in Caracas and the surrounding areas. As an immediate solution the government obligated most hotels to give free accommodations to the homeless and some politicians encouraged invasions of abandoned buildings. As of January 2013, an estimated 400 offices, apartment buildings, malls, and government structures in Caracas were occupied by squatters. Among the invaded buildings is the "Centro Financiero Confinanzas" or "Torre David", a 221,000 square meter complex of five buildings including an impressive forty-seven floor glass tower, located in one of the financial districts of the capital.

Fig 1 shows a plan of the complex. The main tower is the third tallest building in Caracas and one of the tallest of South America. The building was never finished. David Brillembourg, the investor who gave the skyscraper its nickname "Torre David", died in 1993. The following year most Venezuelan banks collapsed, leaving the half built skyscraper standing as an accidental monument to the financial disaster (Anderson, 2013 'b').

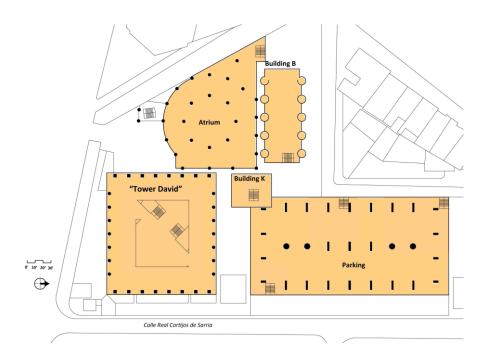


Fig. 1 Site plan of the Confinanzas Center and Torre David.

The building complex stood vacant until October 17, 2007 when 200 families invaded the tower; some because of the loss of their shelters after heavy rains and others because they wanted their own homes after living in the homes of family members or in rented shacks. The leader of the invasion was Alessandro Daza. He was as a petty thug and went to prison for 5 years before he became an evangelical preacher, (Bodzin, 2012). Then in 2007, he helped lead the takeover of "Torre de David". He is now the tower's chief and also the priest of the evangelical church located on the building. (Anderson, 2013 'a') For many months, after the invasion, the inhabitants lived in tents as they cleaned the debris and started building the dwellers partitions. The invaders built a rudimentary water system and electrical connections. In 2009 the inhabitants registered a housing cooperative in order to find a legal status (Casiques de Venezuela R.L.). Now about 850 families totaling nearly 2500 residents call the tower home (Brazzesco, 2013).



Fig. 2. Exterior view of the Torre David in Caracas.

2. Torre David Services

The invaders adapted the concrete and glass structure by erecting brick partitions suited to their needs and bricks walls as parapets visible in the façades. (Fig. 2). The tower has apartments, shops, a church and even a small gym on a terrace. The community is relatively organized with the management of the tower being divided into three different areas; surveillance and security, health services and recreational activities. The community operates as a city within the city and its administrative system seems to be copied from the illegal inmates' organizations of Venezuelan jails. The community has some commercial services, small markets, rudimentary convenient stores, a butcher shop, cybercafé, beauty salon, barbershop and other businesses located in corner shops or inside the apartments. The original parking lot is a structure connected

to the tower; therefore inhabitants can move the merchandise relatively easy up to the 10 floor using a car or moto-taxi. Similar to the self-built shanties of Caracas; the main problem in the neighborhood is the lack of adequate sanitary services. When the invaders arrived they did not have running water or electricity. The self-installation of rudimentary water and electrical services barely made possible to live in the complex.

2.1 Water services

The tower is connected to the city's water system. Using two water pumps installed by the inhabitants, water is propelled to the 11th floor of one of the occupied buildings and from there to the main tank located on the 16th floor where additional pumps distribute the water to the rest of the levels. There are water tanks in each of the dwellings because the water does not arrive directly to them but to a distribution point and because the service is not continuous. "The improvised water system operated twice a week because it lacks the infrastructure required for continuous operation and distribution" (Fonseca & Schlueter, 2013). There is chronic scarcity of water in the city grid of Caracas, especially in the dry season, which is a greater challenge to the community supply. Sewerage in the complex is primitive with residents having installed sewage pipes in the unused elevators shafts. The pipes constantly leak leading to an abundance of raw sewage on the first floor of the tower and on the main stairs. The underground level is permanently inundated with water and sewage.

2.2 Electricity service

Electricity is a self-constructed connection to the city grid. The system is precarious gnarl of cables and electrical wires that hang in the circulation spaces and in the stairwells. The tower's association has permanent employees who monitor and repair the electrical and water installations. Not surprisingly, there are problems with pipes, electrical connections, and cables that require constant repairs.

2.3 Location and transportation

However, living in the complex has its advantages; apart from having free shelter, with impressive panoramic views, the location is premium. Some residents believe that they are better here than in the city shanties; "The shanties don't have services and they are far from everything" says a 36-year-old cook who moved into the tower in 2011. Here I step out of the door and there is a bus stop that takes me to my job in five minutes. This place is a blessing" (Lopez, 2011) However, stepping inside the shelters is not always that easy, because there are no elevators inhabitants need to take the stairs; some are fortunate to live on the lower floors while some need to climb up as high as the 28 floor with each level being about 3.6 meters high.

2.4 Security

Some of the inhabitants believe that the tower is safe. However many neighbors complain about crime. Of late, even rapes have been reported recently (Rojas, 2012). In many areas there are no railings and at least two children have died as a result of falling from a higher floor. It was also reported that a car fell down from the fifth floor of the parking structure (Espinoza, 2012).

3. The Golden Lyon 2012

An exhibition promoted by the Urban Think Tank won one of the Golden Lyon awarded by the Biennale di Venezia in 2012. The Urban Think Tank published a 450-page book that illustrates the lives of the invaders presented as a vibrant community that occupied a symbol of Venezuelan capitalism. Many researchers were astonished. According to the Venezuelan architect Oscar Tenreiro, the exhibitors are using the people struggling desire to survive against a manipulative government, as a springboard in an international forum of art. (Tenreiro, 2012) There is little to celebrate here. To some people in the government the situation is unacceptable, "...For me, it's a symbol of anarchy, a symbol of a lack of government and of public inefficiency," says Sulemar Bolivar, the head of urban planning for the mayor of Caracas, Antonio Ledezma, who is a member of the opposition. It's like rewarding the man who steals because he's hungry. No? Their act of invasion was not justified, Ms. Bolivar argues..." (Grant, 2010). According with the photographer Bonadies. who took photos of the building for several years, the tower is like a reproduction of all the problems of Venezuela, the tyranny, the bureaucracy, religious dogma, power game exclusions, violence and sanitary scarcity.

The true is that the Tower can be compared with the city. "...Caracas is a failed city, and the Torre David is perhaps the ultimate symbol of that failure..." Anderson, 2013 'a'. There are many articles in the news about Torre David but, they are mostly the exploitation of this incredible story. There are only two journal publications, one about the Biennale presentation (Kalipoti 2013) and an article about an approach for an energy supply in the building. (Fonseca & Schlueter 2013). The rest of the bibliographies related with the tower are mostly magazines and newspaper articles.

4. Methodology

4.1 Hypothesis

Independently of the opinions of researchers and architecture professionals, the opinion of the people living in the place is one of the most important tools to estimate if a community is successful or not. Residential satisfaction is not only an important component of individual's quality of life but also determines the way they respond to the residential environment (Lu, 1999). It is an import tool to determine the residential well being of a community. The hypothesis of this research is that settlers living in the "Torre de David" are not particularly satisfied with their dwellings or their neighborhood. Previous research by the author proves that one of the reasons which explains why dwellers are satisfied with their housing condition is because they built the dwelling themselves (Caldieron, 2011). Transforming a simple shack to a decent home is a great accomplishment. Informal dwellings in the "barrios" or informal settlements of Caracas usually are adapted to the needs of the inhabitants. The dwellings in those neighborhoods are built with a lot of effort, in accordance with the family's changing needs and economic possibilities. In the case of "Torre de David", the inhabitants invaded an existing construction. It is true that they cleaned and improved the spaces, as well as creating a self-governing neighborhood. However, the tower was originally an unfinished office building, nowadays consist of residential units, which have fixed dimensions and cannot expand in order to be adapted to the changing needs of the families.

4.2 Surveys

The research to prove this hypothesis comprises of interviews with 60 householders who reside in the main tower of the complex. The limited number is due to the issues involved with visiting the building and holding the interviews. In many informal settlements in Venezuela, visitors are welcome and it is not difficult to approach the inhabitants. In some countries finding collaboration to complete research questionnaires is near a 100 per cent rate, (Caldieron, 2013). However, some communities can be suspicious of the researcher's intentions. Therefore, it is necessary to establish relations with the community's leaders in order to have access to the informal settlement. As this community is located in an invaded building, it was suspected that it would be difficult to receive cooperation until a relationship had been established. In the beginning the author ventured several times into the building, "incognito", to speak with the inhabitants. On several occasions the author was able to enter to the building through the secondary parking entrance. It was then possible, in some cases, to hold interviews with the inhabitants, visit and make sketches of the apartments or the extended common spaces and circulation areas that are out of the scale of a residential building (Fig. 3)

Fig. 3. The building was designed as an office tower, for the present residential use, the dimensions of services and circulation areas is disproportionate.



When visiting the tower, most of the times, the inhabitants were very generous in answering questions, but usually did not give permission to take photographs of the housing units. A few inhabitants requested that the author obtain permission from the community leaders before engaging in any survey. The author was not able to convince the community leader to collaborate in the study. Due to this hindrance the author decided to hold the interviews in a small and congested area just outside the entry of the building. With the assistance of two volunteers, who reside in the tower, householders arriving or leaving the community were asked to collaborate with the research. The original questionnaire was reduced to a few questions so as not to inconvenience the inhabitants by taking too much of their time. The participants were selected until three complete groups of twenty responders were interviewed. The groups are defined by floor levels with the first consisting of inhabitants living on levels 2 to 9, levels 10 to 19 and the last group levels 20 through 28. Only the inhabitants living in the main tower were interviewed,

hence, this study is not related to the families living in other parts of the complex as the conditions vary making the comparisons to difficult.

5. Results

5.1 Main problems in the Community

The participants were asked to name the three most important issues of the complex. The surveyed, as previously explained, were divided three groups of twenty persons each in accordance with the location of floor on which they live. In this particular question, the deviation between the group's responses is very small. The most serious problem for the dwellers was criminality. Caracas is a city with endemic crime, according to the United Nations Office on Drugs and Crime, in 2009, the rate of homicide was 122 people per 100,000 residents, it was the highest among the world's most populous cities. Therefore it is not a surprise that crime is also the number one concern according to the rest of the inhabitants of the city (Rebotier, 2011). About 60 per cent of the inhabitants agree that crime is the most important problem of the complex. Another serious problem in the tower is the lack of elevators. This is the only question were there is a clear difference among the three groups. It is obvious that settlers who live on the higher floors are the ones who are most concerned about the lack of elevators. About 70 per cent of the inhabitants living on floors 19 through 28 believe that the lack of elevators is the main concern. The number is reduced to about 40 per cent for the other two groups taking part in this study.

There are also two other important concerns, the water and electrical services. As explained those services were rudimentarily installed by the dwellers and the problems are persistent. The study shows that water service is a main concern for about 50 per cent of the dwellers taking part in this survey. Electricity is among the three most important problems to 40 per cent of the lower floors and 50 per cent of the highest floors residents taking part in this survey. Sewerage services are one of the 3 most important problems for 30 per cent of the householders. Finally between 10 per cent and 20 per cent express the neighbors and the neighbor associations were important problems.

Table 1. The 3 most serious challenges of living in the tower community

		% Dwelling located between Floors 2 to 10	% Dwelling located between Floors 11 to 19	% Dwelling located between Floors 19 to 28
What are the three				
most	Water service	55	50	50
serious challenges that	Criminality	60	55	60
you and your family faced living in this neighborhood	Elevators	30	50	70
	Electricity service	40	55	50
	Other Services	30	25	35
	Educational			
	facilities	30	20	20
	Bad neighbors	10	20	10
	Neighbors association	10	20	10
	N/A (not including others)	5	0	0

5.2 Advantages of living in the tower community

As explained before living in the place have advantages, apart to have a free roof and in most cases great panoramic views. However what are the most important advantages of living in the tower community according with their owns inhabitants? Results are presented in Table 2. According to the inhabitants, location was the main advantage; this was expressed by 86 per cent of the interviewees. The proximity to urban transportation was also named by 53 per cent of the householders taking part in this study. "Torre David" is located in one of the bank districts of the city. It is near to the city center and there is a relative abundance of schools in the sector. The Avenue Urdaneta is located at south of the complex. This is one of the most import commercial avenues of the city with abundance of buses and other public transportation. The nearest subway station is about 500 meters from the tower entry. The tower may be in a convenient location, however, once inside many of the dwellers need to walk up more than twenty floors in badly illuminated and unventilated stairwells. A list of the main advantages of living in the tower according to its inhabitants is presented in Table 2.

Table 2. Advantages living in this tower community.

		% Dwellings	% Dwellings	% Dwellings
		located	located	located
		through	through	through
		Floors 2	Floors 11 to	Floors 19 to
		to10	19	28
	Location	80	80	70
What are the three	Urban transportation	60	50	50
biggest advantages	No advantages	10	15	1
of living in this	Educational facilities	20	20	30
neighborhood?	Is my home	20	10	20
	Neighbors	20	10	10
	Others	15	20	20

5.3 Householder satisfaction with the neighborhood

After analyzing the results of the main problems of the neighborhood and the advantages of living in the complex, householders were asked how satisfied they feel living in the complex. Only 30 per cent of the householders living floors 2 through 19 of the complex feel very satisfied or satisfied. However the level of satisfaction diminishes to 20 per cent from floor 19 to 28 were only 5 per cent of the dwellers are very satisfied and 15 per cent are satisfied (Table 3). Independent of the dwelling location, about 45 per cent of the householders participating in this survey are unsatisfied with their living conditions.

Table 3. Householder satisfaction living in the neighborhood (Tower complex)

		% Dwellings	% Dwellings	% Dwellings
		located through	located through	located through
		Floors 2	Floors 11 to	Floors 19 to
		to10	19	28
Householder opinion:	Very satisfied	10	10	0
How satisfied is the	Satisfied	20	20	15
Householder about living in the tower complex	Average	25	25	25
	Unsatisfied	35	40	50
	Very unsatisfied	10	5	10

5.4 Residential satisfaction

After understanding the level of satisfaction of the householders within the community is low, participants were asked how satisfied they feel with their individual dwellings. As previously referenced residential satisfaction is a very important tool to define well being. Householder satisfaction in the building is not as high as expected. Table 3 shows the level of agreement with the question about householder satisfaction with their individual dwelling. Only 10 per cent of the householders, all of them living in the first 10 floors strongly agree that they are satisfied with their individual dwelling. The 40 per cent of the people living in the first 10 floors of the building are not satisfied with their dwelling. This value augments to 65 per cent of the inhabitants that live from floors 19 through 28. It is obvious that the householders are not really happy with their living conditions. Many of the dwellings do not have sanitary services—and some of them do not even have natural light. This together with the community issues very inconvenient.

Table 4. Householder dwelling satisfaction

		% Dwellings	% Dwellings	% Dwellings
		located	located	located
		through	through	through
		Floors 2	Floors 11 to	Floors 19 to
		to10	19	28
Householder opinion:	Very satisfied	10	0	0
How satisfied	Satisfied	25	20	20
are you with your	Average	25	30	30
individual dwelling?	Unsatisfied	30	40	55
	Very unsatisfied	10	10	10

5.5 Neighbors willing to move to a government apartment

In order to corroborate the level of satisfaction of the householders participating in this survey, it was asked if they would like to move from their present location to government sponsored apartment. This question can be considered unrealistic, there is not a specific location where dwellers can move. However, the government has been building new housing complexes in the last few years in central areas of the city and the people living in the city, is aware of it. The government units are relatively small and many structural problems and lack of new services have been reported. In other surveys held by the author, in several neighborhoods in Caracas, the inhabitants of upgraded, self-built dwellings are not willing to exchange their homes for government housing. The percentage of people who wanted to move in a survey held in the area of Petare in 2011 was less than 15 percent. In contrast, in the "Torre de David", about 45 per cent of the householders want to move to government apartments (Table 5). This number is very elevated when compared to other neighborhoods inside and outside Caracas. The reason why people want to move differs depending on the family. People living on the lower floors do not suffer as much from the lack of elevators and they feel more satisfied. However people on the upper floors of the tower agree that location is a problem. Two of the householders answering this question expressed that they use to climb many steps to access their home when they were living in the elevated areas of the Caracas shantytown where stairs were the only access to their home.

Table 5: Householder willing to move out of the present location

		% Dwellings	% Dwellings	% Dwellings
		located	located	located
		through	through	through
		Floors 2	Floors 11 to	Floors 19 to
		to10	19	28
Are you willing to move	Yes	35	50	50
from the tower to a	Maybe yes	15	20	15
government dwelling?	Depends	25	20	15
	No	20	10	10
	N/A	5	0	10

5.6 Examples of dwellings

In order to understand more about the living conditions in the tower, Fig. 5 presents two typical floor plans of dwellings. Most of the dwellings are located around to a central vertical circulation area. Fig 3 shows a partial view of the interior corridors. This is the area that looks the most impressive and clean in the tower. However, the rest of the tower is not in such good conditions.

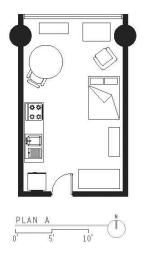


Fig. 4. Interior corridors of Torre David

Plan A is the dwelling of a family of four people. They do not have any sanitary services. There are two beds, a corner that functions as a kitchen range and a table with one seat. The inhabitants use the restroom of a family member in the same complex. The dwelling has floor to ceiling curtain wall windows which are not operable. Therefore they try to keep the door open during the day. Plan B is a one bedroom apartment and is occupied by a multi-generational family a grandmother and her daughter, who is a single mother of 3 children. The dwelling has a restroom

but it is not connected to the building plumbing. A small space serves as a kitchen. They built a separation dividing the main space into two areas, a living room that also functions as the main bedroom and a small bedroom for the two older children. The dwelling has openings allowing for a balcony but without windows there is no protection against the wind or rain.

Fig. 5. Dwelling plans A and B



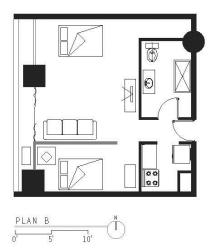
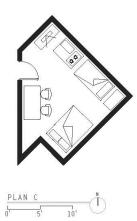
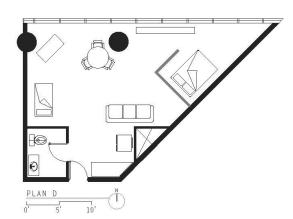


Figure 6 presents two other dwelling formats. The first one, plan C, is a small room were a family of two people live. There are no windows, ventilation or sanitary services. The apartment is located in the core of the building. The space they occupy seems to be originally a mechanical room. The family spends most of their time outside working as hawkers. Plan D shows a "corner unit" dwelling that has a long floor to ceiling window. The settlers broke the window in one of the corners providing for open ventilation. The dwelling has a small bathroom and a self-made division that offers some privacy to the bedroom.

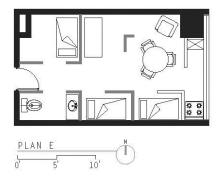
Fig. 6 Dwelling plans C and D

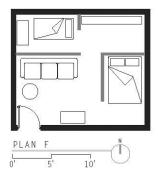




The final two dwellings are presented in figure 7. Plan E is a small apartment that has been subdivided into three bedrooms and a fourth room under construction. There is a small terrace with a space allocated for the kitchen range. There is also a bathroom and small reception hall. Finally Plan F is a small dwelling with a space that is expected to become the kitchen, a small living room and two small bedrooms. The dwelling does not have ventilation, natural light or sanitary services.

Fig. 7 Dwelling plans E and F





Looking at the plans, the housing conditions of most of the dwellings are very far from optimal. Spaces are crowded and some openings are not protected from the wind and rain. On the contrary, some dwellings lack any sunlight or ventilation. The worst are the dwellings without sanitary services. It is true that some of the inhabitants are better here than living in places with unaffordable rents or crammed into the houses of family and friends. However, "Torre de David" with its unsanitary conditions and the inconvenience due to the lack of elevators has significant problems. There is no doubt that rehabilitating the tower will be a difficult task. According to many researchers, the building is an embarrassment to the regime and to the country's architecture. "The Skyscraper is a modern ruin buzzing with life, a post-apocalyptic mockery of an oil-rich nation's aspirations" (Davinson, 2011). Out of necessity, these occupants continue to live in this vertical slum—evidence of the failure of Venezuela's social programs, perhaps, but more so of the collective will to build new lives for themselves. (Architizer news) Mike Davis, urban theorist and author of Planet of Slums, thinks, Torre David "...is testimony to the acute housing shortage in Caracas, a problem, like crime, that has vexed the revolutionary government"

7. Conclusions

For many years, the low-income inhabitants of Caracas have lived on invaded land in self-built dwellings. Over time those informal settlements have improved and are examples of thriving communities. There are many positive elements in many squatters and unauthorized settlements, especially after improvements have been made like the majority of informal settlements in Caracas. However, "Torre de David" is an unsustainable example of community development. The tower recalls the novel "High Rise" by James Graham Ballard. There is a negative leadership system in the tower that replicates that of a jail in Venezuela. It is important to understand that most of the people in other informal settlements in Caracas do not have tenure of the land they occupy. However there is a perceived land tenure security that allows the householder to believe that the resources spent for the improvement of the dwellings is a good investment. In the case of

"Torre David" most settlers understand that by invading the building at any moment they could be evicted. Torre David is notably a different picture, as this represents the transformation of a high-end office skyscraper into an unfortunate slumscrapper. The research surveys show that even though the inhabitants appreciate the location of the building and the availability of public transportation in the area, the tower is facing too many challenges with few possibilities to implement any effective solutions.

According to the surveys held for this research, the inhabitants expressed their concern about criminality, lack of elevators, inadequate electrical and sanitary services. More than 50 per cent of the inhabitants are not satisfied with their residential units or with the neighborhood. Many of them would prefer to live in a government-sponsored dwelling. Apart from the inhabitant's views, most architects would feel concern about how an unfinished building, originally projected as an office complex, is now of residential use. Obviously the proportion and types of the service spaces of an office complex are not adequate for the adapted re-use as residential post-invasion.

Most residents believe that they cannot live in the tower much longer. They appreciate the central location of the building, but are unsatisfied with the dwelling, the inadequate social conditions and the illegal status.

It is surprising how an exhibition of the "Torre de David" community won a Golden Lyon prize in the Venice Biennale of 2012, considering the living conditions and circumstances of these projects are less than adequate. The most difficult question is what happens next? It seems the Venezuelan government is not particularly concerned with finding a solution. The state is not only tolerant of the invaders it also encourages them to invade. Some politicians believe that allowing some group of inhabitants to have the freedom to do whatever they want grants them votes and unfortunately for certain levels of population this is true. How an exhibition of this community won the architecture Gold Lyon Prize of the Venice Biennale seems to be publicity stunt. The shame in this case is that a building designed by the architect Enrique Gomez as an office building has been disrespected from its original conception and transformed for a use that is not adequate. The future of the tower inhabitants and the many other Venezuelans families living in invaded structures is a serious problem, which does not seem to be a current priority for the Venezuelan government.

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