¿Cómo es la habitabilidad en viviendas de interés social? caso de estudio: fraccionamientos lomas del bosque y privadas la torre en saltillo, coahuila

How is the habitability in social interest housing? case study: neighborhoods of lomas del bosque and privadas la torre in Saltillo, Coahuila

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Resumen

El presente trabajo es resultado de una tesis de nivel licenciatura, realizado en colaboración con una estudiante. El proceso de investigación consistió en la revisión bibliográfica-documental y trabajo de campo, a fin de obtener información primaria. El objetivo es determinar el nivel de habitabilidad de las viviendas de interés social en la ciudad de Saltillo, Coahuila. Varias investigaciones sobre esta temática fueron analizadas para identificar las variables, metodología y parámetros aplicados por otros investigadores. Considerando un marco referencial similar, se establecieron los límites de la investigación, que finalmente se realizó durante un año. Lo obtenido mostró algunos resultados ya conocidos, pero surge una interrogante al final: ¿qué hace con el tiempo a una vivienda habitable?, ¿que se cuente con más espacios?, ¿o ampliar para una mejor movilidad? Ahí es donde también se considera el concepto habitus, que es la "capacidad infinita de engendrar en total libertad (controlada) productos, pensamientos, percepciones, expresiones, acciones, que tienen siempre como límites las condiciones de su producción, histórica y socialmente situadas" (Bourdieu, 1991), cuestionando la costumbre o el hábito. ¿Esto nos hace ser conformistas o adaptarnos con respecto a la vivienda actual?

Palabras clave: habitabilidad, vivienda, espacio.

Abstract

This work is the result of a doctoral thesis at undergraduate level, in collaboration with a student. The research process consisted of the bibliographical/documental review and field work, in order to obtain primary information. The objective is to determine the level of habitability of social interest housing in the city of Saltillo, Coahuila. Several studies on this subject were analyzed to identify variables, methodology and parameters applied by other researchers. Whereas a similar frame of reference, settled the boundaries of research, finally held during a year. The information obtained showed some results already known, but there is a question mark at the end: What does over time to a habitable dwelling?, that is having more space?, or expand for better mobility? That's where is also considered the concept of habitus, that is the "infinite capacity of fathering in total freedom (controlled) products, thoughts, perceptions, expressions, actions, which have always limits the conditions of its production, historical and socially situated" (Bourdieu, 1991), questioning the custom or habit. Does this make us be conformists or adapt to current housing?

Key words: livability, housing, dwelling, space.

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Introduction

The habitability emerged in Europe during the Industrial Revolution, by which in places like Spain has one greater interest in the satisfaction of space with different solutions; also, in the East the departmental buildings and the design of the furniture has been a solution to solve housing problems. Taking into account that the Industrial Revolution in Mexico emerged after that in Europe, we are at a stage in which no has been given to the social housing the importance that requires, as in Chile and Colombia, where has the Government generated measurements, together with organizations dedicated exclusively to offer habitability, measures studied mainly by Tarchópulos and Ceballos (2003). The analysis of the conditions of habitability in spaces where it resides, especially domestic, is important since it addresses the subject from aspects of subjective and objective, with special emphasis on the satisfaction of the resident, reason why these studies are obligatory reference and, in fact, provide an important conceptual basis for the realization of the

relation space-inhabitant, and so to the satisfaction of the housing must be provided insofar as they progress in the theoretical and methodological approaches to the habitability. Various investigations have focused the study of residential accommodations, in the identification and evaluation of the condition of the dwelling of lower socio-economic strata; Some deal exclusively with an objective reading; Landazuri, market (2004) and Zulaica and Rampoldi (2009), among others, addressed it more fully as Tarchópulos and Ceballos (2003), whereas objective and subjective aspects of it. Analyses have been made from interpretative, comparative perspectives, design, among others, and have been limited to establish the relationships between the physical conditions of housing, political decisions and the final product, between physical space and its influence on improvement. According to the United Nations, the habitability relates the characteristics and qualities of the space, social environment and environment, that uniquely contribute to give people a sense of personal and collective well-being, and give you the satisfaction of residing in a given settlement.

In Mexico, market Domenech (2004) indicates that the livability is the degree to which housing meets the needs and expectations of its inhabitants. The relationship between habitability and degree of control over the environment, the trigger levels, the rate of information and hedonic value of design as well as the relationship between the above factors and physical design, using the subject as measuring instrument . Concludes that the habitability of housing is determined by physical and psychological correlates, they interact and influence each other, leading to countless possibilities of multidisciplinary research in the social sciences and design.

DEVELOPING

Define housing

For anthropology, the living spaces allow recall the rules of behavior culturally agreed from the association of normative behavior in space.

According to sociology, social housing is an area of great importance as a space long and intensely lived by individuals and groups, especially households. Similarly, as the family becomes a social unit, as an essential primary group for individuals and for society. So housing is a fundamental socio-spatial unit for the individual and for the socio-spatial system in general.

Environmental psychology sees housing as an object for study of behavior and reactions of man.

According to the economy, housing is one of the main drivers of change, it is a strategic sector that benefits the economic growth of a population, but also is the factor that can create an economic crisis through the housing deficit or neglect. That is, housing is seen as a commodity and is produced in order to make a profit by trading the product in the real estate market. This method works in the upper strata; however, when imposed in the sectors of medium-low and low class, aspects of quality of life are underestimated, giving priority to the minimum and private housing unit.

Culturally speaking, housing is seen as an object that represents it, since housing is formed, designed and built according to the cultural aspects of the region.

In the field of politics, housing is a right every citizen has the right to decent housing.

In the field of architecture, Moreno (2005) states that the house is "part of the house, for private use, which guarantees who dwells protection ... under appropriate conditions." Through this concept, it is clarified that the house carries meaning formed by the materiality of the device and the system properties it extrapolated based on the solution of the issues that shape.

Definition of habitability

The habitability of housing has been addressed in different scenarios, among them International Congresses of Modern Architecture (CIAM) and the World Summits Habitat and has become a concern in various institutions at global, national and local levels.

It fails to see the need to provide housing containing residents and provide high levels of satisfaction to inhabit. Another major evidenced concerns is the lack of connection and correlation between physical space and the resident, taking into account that this process mediate aspects that connect directly with the culture and, for that reason, complicate this relationship to achieve habitability .

Adequate housing must be habitable, in terms of providing adequate space for its occupants and protecting them from cold, damp, heat, rain, wind or other threats to health, structural hazards and disease vectors . It should also ensure the physical safety of the occupants.

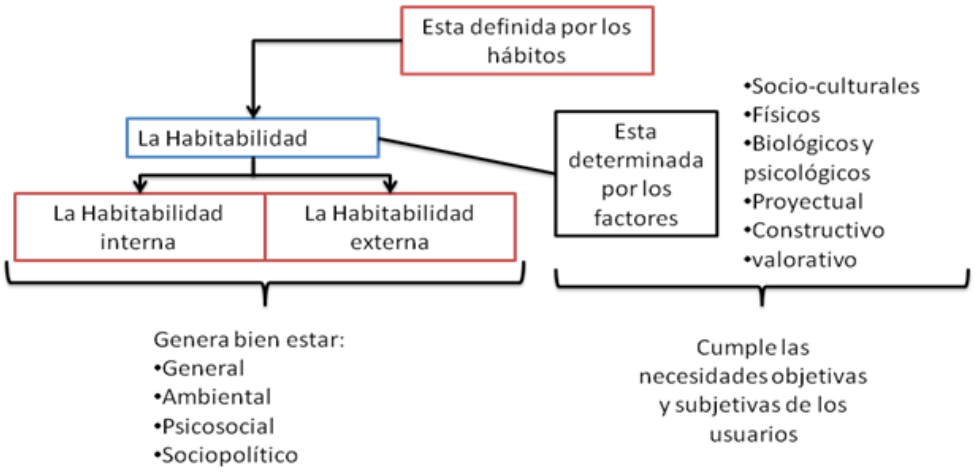
The quality of housing, in terms of livability, depend on the balance achieved between all the activities of the city and the practice of living.

In the field of architecture, compliance does not guarantee minimum conditions of habitability, but not only related to physical aspects related to ensuring human life, but also to meet the housing needs. In its physical dimension, brings together essential attributes, which constitute housing characteristics, which together provide meet the needs of residents. Elements such as structure, building materials, natural ventilation and lighting, as well as drinking water and drainage, the number of people per room, among other aspects, are crucial to living conditions. At the same time, aspects of space, circulation, provision of furniture, among others, become conditions of habitability (Tarchópulos and Ceballos, 2003).

It should be recognized that housing is the site of a dialectic between the physical and social dimensions, because as physical fact, responds to human activities that generate and determined urban and architectural scale and as a social fact should meet the housing needs of their residents.

Therefore, the quality of housing in terms of habitability is not limited exclusively to natural conditions, but simultaneously involves the perception of users. In these terms, it is necessary to consider the implicit social dimension in the relationship established users exclusively in space. Diagram 1.

Diagrama 1. La habitabilidad



Fuente: Elaboración propia

Market (2004) it identified three elements that must be met to be considered a habitable place:

- Subjectivity and perception of the subject.
- External factors from society and environmental conditions.
- Adaptability designs these points.

Livability concerns the relationship of humans with housing scenario oldest and most important interaction, both individually and collectively and as it is the fundamental social unit in human settlements is closely related to family life (Mercado, 1998).

Livability is also understood as a goal of being and, in addition to the physical fact of housing, involves the sociocultural environment and the environment. In achieving livability, physical qualities (absence or presence of contamination and deterioration state of the landscape from an aesthetic point of view, among others) as well as socio-cultural (social network, networks of relationships, imaginary, consumption patterns involved , exchange mechanisms, dealing with conflict and security, among others) (Moreno 2002; Zulaica and Bushel, 2008).

In that sense, Gómez Azpeitia (2007) states: "The matter of vital interest of the architecture is the living space, not the building that contains it, which is only a means, not the design that is just a method, or the Art is just a plus ", space is configured through the delimiting edilicias.

Villagrán (2001) argues that it necessarily implies living space-man relationship. The spaces, as necessary means must be satisfactions of human needs and to architecture.

Therefore, these must meet conditions that enable them to fulfill the demands of the man who lives, since the activities are the expression of different ways of living and, for that reason, determined to project spaces.

Dependent factors according to design and market Landázuri (2004):

• Physical dimensions of housing. It is necessary to establish the physical dimensions to get a sense of the limitations.

• Connectivity. Connection between the spaces, ease or difficulty in moving.

• Circulation. Set the types of movement that can be vertical or horizontal, direct or indirect housing.

• Sociopetividad. Define each space as a function of relationship, or sociópetos sociófugos.

• Depth. Based on the number of gates and hurdles to go through to get to the bottom of the housing and the view windows.

• Security. It comprises two aspects: the state of the building materials in the building for protection from inclement weather and the systems or resources that the user implements for your safety.

• Vigibilidad. Grade control observation of the environment, ie without being seen.

• Operability. Satisfaction having a space for activities to which it is intended.

Independent design factors (Landázuri and Mercado, 2004):

• Pleasure. Satisfaction and perceived freedom within the housing.

• Significance. Degree of personalization of space, internal or external, symbols and signs that are an expression of the people (identity, pride, sense of belonging, roots, values, status, etc.).

• Functionality. Compliance of each space with its design purpose.

• Activation. Levels of emotional tension generated house (order, tranquility, noise).

• Privacy. Control of the desired interaction and prevent the unwanted within the home.

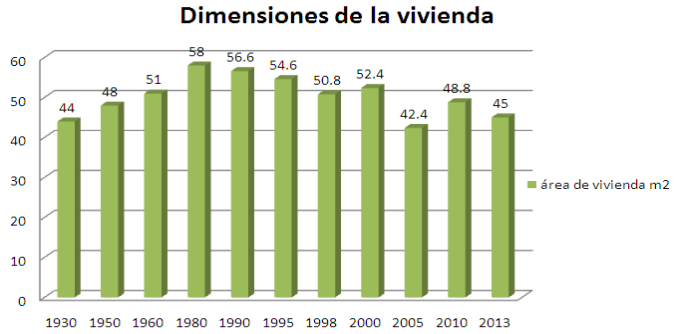
• escalation. Extension of living space.

• Flexibility, expansion or replacement of functions within the house.

Evolution of living spaces

The house has undergone many changes in their spaces along the time. Some of the factors involved are economic and political, mainly. One consequence is minimal dimensioning of construction, established in the Building Regulations for Affordable Housing. Figure 1.

Figure 1. Historical analysis of the dimensions of housing in Mexico.



Fuente. Javier Sánchez Corral, 2012.

In the above graph, you can see the minimum amount of square meters of construction that have been established in Mexico with the passage of time. In the early twentieth century an increase in its dimensions is presented; However, since 1980 these again dropped.

In the fifties

While lifestyle defines the spaciousness, as well as the number of inhabitants, we can deduce that this house was spacious, and the families of those years were numerous compared to those of today. This type of housing had not defined their areas and were more open spaces. Preferences and uses other than those spaces were available, that is, households had large rooms like the bedroom, which had great hairdressers and, usually, a sewing machine was had.

In the eighties and nineties

These houses are organized and specific furniture. With the advent of technology and different styles, these homes had at least 58m2 construction, the highest established in Mexico. Spaces and furniture are defined by population; it had approximately 5 members. The areas were more limited by walls. The house had a choice of 2 levels, leaving the intimate area on the second floor. This guy was very commercialized, the property was slightly larger (8m x 18m approximately) and gave opportunity to expand spaces.

In 2013

The property has no defined spaces and are minimized; Families today are approximately 4 members. The living room is used as a distributor of spaces, just fit 2 chairs, sometimes a showcase and a dining area for 4 to 6 people maximum; allows for the kitchen stove, refrigerator and sink with a small work space, which can only handle one person; the bathroom has not changed in its dimensions, bedrooms are usually located close to each room and the other at the other end of the house are smaller so there's only bed and closet space. The main problem is the space distribution and reduction thereof.

Study Place

Coahuila is a state in northeastern Mexico, one of the 31 states with the Federal District, comprise the 32 states of the United Mexican States. It consists of 38 municipalities and its capital is the city of Saltillo. The total population in Coahuila is 2 million 748 thousand 391 inhabitants, 2.4% of the national total; its population distribution is 90% urban and 10% rural. The 2010 census conducted by the INEGI, Coahuila found that exists in a population of 18.13 inhabitants per square meter, and there are 727 000 458 inhabited houses in the state, which are classified into 5 categories according to the type of family:

- Nuclear (parents and children, a father and his son or single parents).
- Expanded (nuclear household plus other relatives), compound (nuclear or extended more people home without relationship to the head of the house).
- Unipersonal (one person).
- Co-resident (two or more people without kinship).

In 2010, Saltillo had 187 000 764 private homes and 37 are collective (INEGI, 2010). The Federal Mortgage Society (SHF) established that by 2012, Coahuila would have a demand for more housing 50,000 homes; also it provides that Coahuila is located within 10 states representing 28% of the housing deficit in Mexico. According SHF residential satisfaction comprises the following aspects. Diagram 2.

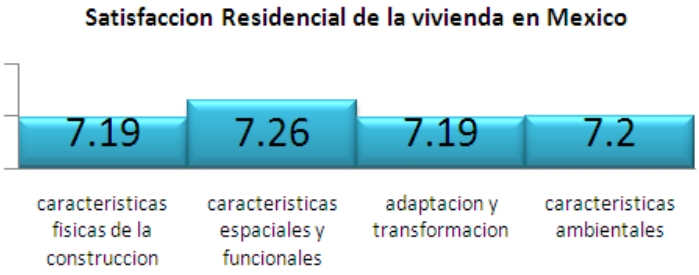
Diagram 2. Residential Satisfaction according to SHF

Fuente: Estado actual de la vivienda (SHF) 2012

Currently residential satisfaction index at the national level is 7.04; the states with the highest rates are: San Luis Potosi (8.08), Baja California Sur (8.02), Sinaloa (7.98) and Colima (7.85). Coahuila is located at the middle level, with 7.17.

In Figure 2, you can see the parameters considered for the satisfaction rate on housing.

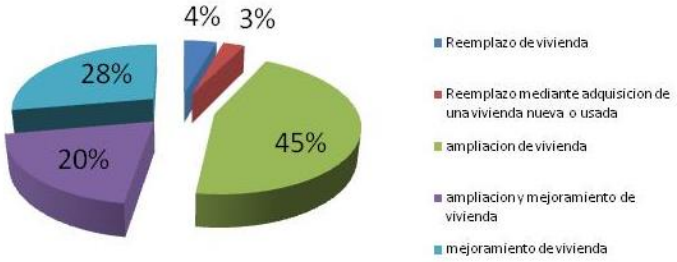
Figure 2. Residential Satisfaction.



Fuente: Estado actual de la vivienda (SHF) 2012

According to the National Housing Commission (CONAVI), studies in 2012, Saltillo had a housing deficit rate of 34.2%, distributed in different solutions as shown in Figure 3.

Figure 3. Index housing shortage and solutions.



Fuente: Comisión Nacional de Vivienda (CONAVI 2012)

The Director General of the CONAVI, Rodrigo Alejandro Nieto Enriquez said that there is a shortage of dwellings at the national level of at least 9 million estate, which included new, and the lag you have overcrowding (Mejia, 2013).

Methodology

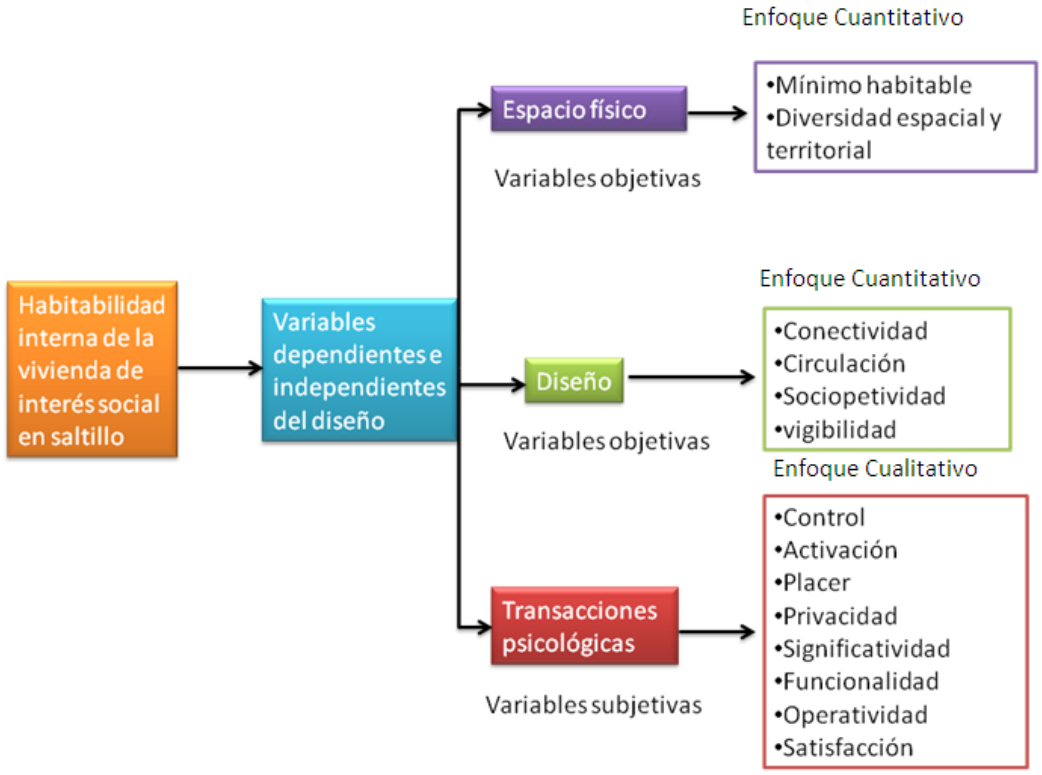
literature review was conducted to establish the factors and indices measuring and field for primary information (photographic collection, observation, interviews, surveys, physical measurements and photographs). This work was limited to study aspects of internal habitability of housing. The type of housing that this research is to analyze social interest, which is aimed primarily at workers, with variable surface construction between 31 and 50 m2, set in the National Development Plan.

Splits the following requirements were selected: being social housing, with a length equal to or greater than 7 years, that one is a private area and another open, which by Lomas Splits Forest and Private Tower was chosen, in both cases, a non-probability purposive sampling was used, selected acquaintances to choose housing that determined the sample. The Lomas del Bosque is 18 and is open, and Private Tower is 8 and is closed. By the time

factor of the investigation, which is 1 year, 40 homes were analyzed in each division, giving a total of 80 homes tested.

Physical space variables according to Barrera Peña (2007) and Gomez (2005), and the subjective and objective variables and Landázuri Market (2004) were considered. Diagram 3.

Diagram 3. Research Instrument



Fuente: Mercado y Landázuri (2004), Peña Barrera (2007) y Gómez (2005).

Spatial aspects of the interior spatial indexes, foreign spatiality, decent housing indicator and territoriality (Gómez, 2005), which is calculated quantitatively acotaron. Occupancy rates and market posed by Landazuri (2004), evaluated qualitatively, through interviews with the people and open surveys. Table 1.

Table 1. Measurement Instruments

Tipo de variable	Indicadores	Instrumentos
Variables del espacio físico	Mínimo habitable	• Levantamiento de datos • Registro Fotográfico
	Diversidad espacial	
	Territorialidad	
	Índice de vivienda digna	
Variables del diseño	Conectividad	• Levantamiento de datos • Registro Fotográfico • Realización de Encuesta
	Circulación	
	Sociopetividad	
	Vigibilidad	
Variables de transacciones psicológicas	Control	• Levantamiento de datos • Registro Fotográfico • Realización de Entrevista • Realización de Encuesta
	Activación	
	Placer	
	Privacidad	
	Significatividad	
	Funcionalidad	
	Operatividad	
	Satisfacción	

Fuente: Elaboración propia.

Selected dwellings are both divisions of credit INFONAVIT, the largest being proposed in INFONAVIT architectural plan, the construction area is between 31 and 50 m2, set in the National Development Plan.

Study case

Lomas del Bosque

Located between Zaragoza and Private la Torre, open fractionation colony 18 years old and located in an area of crime. Limited Pinos street with Dr. Hugo Castellanos streets and Naranjos, comprising 57 houses with the following features:

Lot Frontage: 7 m

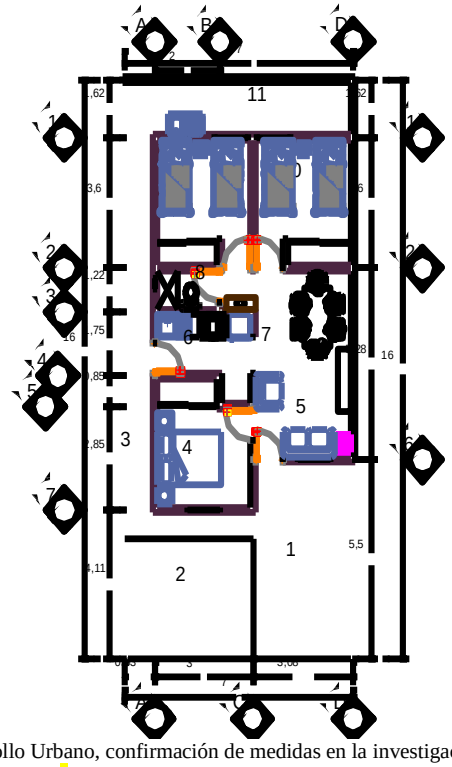
Lot Fund: 16 m

Plot: 112m2

Number of spaces: 11

Construction: 50m2

Figure 1. Architectural Floor Lomas del Bosque.



Fuente: Desarrollo Urbano, confirmación de medidas en la investigación en campo

Photo 1 and 2. Kitchen and Main facade.

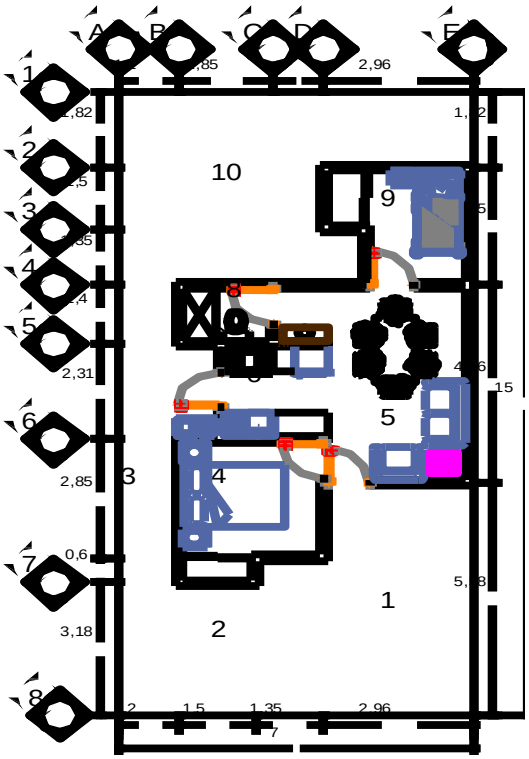
Fuente: de las autoras.

Private la Torre

Located between the Division and Morelos Lomas del Bosque Enlargement between private Encino and Santa Anita, consisting of 74 houses. This fractionation is modern and has the following characteristics:

Front: 7 m
Depth: 15 m
Plot: 105m2
Number of spaces: 10
Construction: 40.93 m2

Figure 2. Architectural Floor Private la Torre.



Fuente: Desarrollo Urbano, confirmación de medidas en la investigación en campo.

Photo 3 and 4. Kitchen and facade.

Fuente: de las autoras.

Resultas

Interior spaciousness.

Family Profile. In both divisions nuclear or extended family profiles were detected:

Parents and children 66%

A father and his sons 6%

Parents, children and family 28%

Both have an average of 4.6 people per household. The minimum is 3 and the maximum of 7 or more.

Living area. A comparison of the areas concerning the provisions of the Building Regulations and the CTE (Technical Building Code) CONAVI, Table 2 was performed.

Table 2. Dimensions of housing.

			Caso 1. Lomas del Bosque		**Caso 2. Privadas la Torre**	
Espacio interior	**Dimensión normada**	**m^2**	**Medidas (m)**	**m^2**	**Medidas (m)**	**m^2**
Sala-comedor	2.70 x 5.00	**13.60**	2.92 x 5.13	**15.00**	4.61 x 2.70	**12.44**
Cocina	2.70 x 1.15	**3.00**	1.60 x 3	**4.80**	2.16 x 2.05	**4.42**
Baño	1.15 x 2.50	**3.00**	1.07 x 1.85	**1.97**	1.25 x 1.70	**2.12**
Recámara 1	2.70 x 2.60	**7.00**	2.79 x 2.90	**8.09**	2.70 x 2.70	**7.29**
Recámara 2	2.50 x 2.50	**6.00**	2.64 x 2.85	**7.52**	2.70 x 2.91	**7.83**
Recámara 3			2.77 x 2.85	**7.89**		
Clóset 1	.70 x .90	**0.63**	.60 x 1.90	**1.14**	.51 x 1.35	**0.68**
Clóset 2	.70 x .90	**0.63**	.60 x 1.84	**1.10**	.76 x 1.35	**1.02**
Clóset 3			.75 x 1.83	**1.37**		
Área habitable interior		**33.8, 40.40**		**48.88**		**35.8**
Área construida habitable		**45**		**50**		**40.93**

Fuente: Elaboración propia.

It is observed in the majority that the dimensions of the space are in keeping with the regulated by the Building Regulations, except for the living room in Private la Torre has 12.44 m2 when it should be 13 m2, and in both divisions the bathroom has 1.97 m2 and 2.12 m2, when they should have 3 m2. The regulation also provides that the Building built habitable area must be at least 45m2 of construction, and the tower that has 40.93 m2 of construction is not met in the case of Private.

Outside spatiality. Composed outdoor living area, Table 3, and exterior spatiality, Table 4.

Table 3. Outdoor Living Area.

Espacio	**Reglamento**	**Caso 1. Lomas del Bosque**	**Caso 2. Privadas la Torre**
Alineamiento al frente	$15m^2$ a $24m^2$	$28.77m^2$	$22.26m^2$
Área pórtica	n/d	0.0	0.0
Área de jardín al frente	n/d	13.04	0.0
Contigüidad lateral	0.90	0.93	1.20
Espacialidad posterior	n/d	10.49	25.01

Table 4. Espacialidad exterior

Espacio	Reglamento	Caso 1. Lomas del bosque	Caso 2. Privadas la Torre
Superficie de terreno unifamiliar	Lote mín. 91 m^2	112 m^2	105 m^2
Metros de construcción	45 m^2	50 m^2	**40.93 m^2**
Área habitable exterior	75 m^2	**62 m^2**	**64 m^2**

Fuente: Elaboración propia

Spatial diversity and territoriality.
Intimate, social and service area.
Spatial diversity as defined by the coefficient relative Connectivity (CCR), Table 5, a rate of the sum of two coefficients is obtained:

1. Space Privacy coefficient (CIE) established by Gomez (2005), considered the indoor and outdoor spaces; It is nested according to an index of intimacy with values 0-3, for example, 0 for lobbies, distributors, corridors, lobbies, garage, closet and bathroom; 2 for study and 3 bedrooms, bedroom, bedroom. Minimum of 11 levels of intimacy is considered. In both cases, it meets the minimum established for the CIE in Private Lomas 17 and 14.
2. Privacy coefficient Link (CIV) is the sum of the connector housing linking rooms, outdoor spaces, as well as those who are not visual, floor or level changes, etc.; therefore it is seen that in neither splits has the optimum value established privacy.

Table 5. Coeficiente de conectividad relativa (CCR)

Concepto	Lomas del Bosque	Privadas La Torre	Índice recomendado
Coeficiente de Intimidad Espacial (CIE)	17	14	CCR= 0.54
Coeficiente de Intimidad Vincular (CIV)	11	8	
Coeficiente de Conectividad Relativa	0.64	0.57	

Fuente: Elaboración propia.

It was found that the fractionation Lomas del Bosque exceeds the limit, and the Division Private La Torre is located near the tolerable range, indicating that both have competition in the housing space.
Relative coefficient Space Diversity (DER), assesses the territorial jurisdiction of the identified areas (E) by the number of inhabitants (H) of housing, building relationships E = M * 2.4, and should be considered at least 11 spaces for 4 people.
Resulting, in Private La Torre has 50%, reflecting the homes have territorial jurisdiction; however, Lomas del Bosque has 20%, so there is a smaller percentage of competition, as these homes have more than one quarter of private housing La Torre.
Living spaces and their relationship to the number of occupants
In the subdivisions analyzed averages 4.6 people per household, taking 80 is 100% of the households interviewed.

Table 6. Ocupantes por vivienda.

Casos de estudio	**Número de personas que ocupan la vivienda**						
	1	**2**	**3**	**4**	**5**	**6**	**7 o más**
Caso 1 L.B.	0	0	5	13	14	6	2
Caso 2 P.T.	0	0	6	14	14	4	2
Suma	**0**	**0**	**11**	**27**	**28**	**10**	**4**
Porcentaje	**0**	**0**	**13.75 %**	**33.75 %**	**35 %**	**12.5 %**	**5 %**

Fuente: Elaboración propia.

Overcrowding coefficient Night (CHN), evaluates the competition that is generated in the occupation of the bedroom according to the number of inhabitants. The set for the occupation of dormitories is 1.5 occupants.

It was found in the fractionation Lomas del Bosque, in the 42.50% of the houses are no more than 1.5 occupants per bedroom; in the case of fractionation Private La Torre's 27.50% have more than 1.5 occupants per bedroom, so only 30% of the dwellings meet the 1.5 occupants per bedroom, the existence of night overcrowding and competition is observed by space , resulting in promiscuity and prone to family conflicts.

Coefficient Overcrowding Day (CHD) is determined by the number of bathrooms and the relationship of the people, according to Gomez (2005), it is tolerable and can be arranged hygiene activities without family conflicts, taking a maximum of 4 people and 1 bathroom . The percentage of daytime overcrowding both cases exceeds 50%, the activities of daily grooming and hygiene, favor the confluence of several passengers at a time, being factor of vulnerability to conflict, CHD have effects in everyday life and in the organization Internal family; "It is possible that households with ability to adapt to their nearest environment, shows the same attitude in the way they relate and condition to improve habitability," Gomez (2005).

Territoriality. Consider the size of the building and the number of inhabitants, obtaining the percentage of homes where conditions of competition for territory, Gomez (2005) proposed that four people would be the minimum area 71 m2, the limit of this ratio is 17.8 without turning into a stressor (equation * 17.8 AC = H). The condition of competition for territory, occurs when the activities assigned to a home area is insufficient and is characterized by the difficulty occupants to customize somewhere.

Table 7. territoriality.

Habitantes / vivienda	**Área const. m^2**	**Territorialidad**	**% Caso 1 L.B.**	**Área const. m^2**	**Territorialidad**	**% Caso 2 P.T.**
3	50	16.6	12.5%	40.93	13.64	15%
4	50	12.5	32.5%	40.93	10.24	35%
5	50	10	35%	40.93	8.18	35%
6	50	8.3	15%	40.93	6.82	10%
7 o más	50	7.14	5%	40.93	5.84	5%
Suma caso 1			100%	**Suma caso 2**		100%

Fuente: Elaboración propia.

As a result, Table 7, it was found that none of the homes of both divisions analyzed present a suitable surface for each inhabitant.

Indicator decent housing

It is considered that for every living space (removing those spaces can not be used as a bedroom) must have only 2 or fewer occupants. That is, that the houses occupied by more than five persons or more families do not meet the condition of the concept of decent housing as the number of people present situations that tend to overcrowding and / or promiscuity.

In Fraccionamiento Lomas del Bosque, it covers 90% of decent housing, having 6 occupants and have 3 bedrooms. However, in the Division Private La Torre, with 4 people it has 2 bedrooms, so that 50% of homes do not meet this index, since these families have children of both sexes in the same room, which leads to conflicts and promiscuity. The final result reveals that 65% of surveyed households are decent housing to meet the needs of space, and the remaining 35% as not worthy.

Design Variables

Sociopetividad. This variable refers to the ease of meeting spaces, ie the spaces encourage interaction between family members, we can see that the space is considered more suitable for interaction is the dining room, followed by the room, and not allowing the relationship is the kitchen, since its size can only be one person.

Security. This variable considers the elements that give them security to users, such as window protections and cancel forward. The survey found that 90% of homes in subdivisions consider both feel safe and 10% say their security is regular, by external factors such as gang members, that does not give them security in their home.

Vigibilidad. This variable describes the facility to observe the outside from the inside without being seen from the outside, for example, observe who touches, avoiding elements that limit outward visibility. The scale of 1 to 5, where 1 represented very bad and 5 very good established. According to the results, on average it was found that was very good visibility in Lomas del Bosque and Private La Torre, because abroad there are several trees that prevent being seen inside the house.

Psychological transaction

Control. The control is defined by the connectivity, which consists of the number of gaps between the rooms and the management of room access; that is, where the doors and other rooms flow are directed; so when greater connectivity and control over the environment, as desired activities are carried out without having to go through other places which do not correspond, there is conducive to have more control over what we do inside the house.

According to the results of surveys and observation, it was found that both in Lomas del Bosque and Private La Torre, there are no gaps between the rooms and the doors of the rooms are directed straight to the living room, which is used as a distributor to other rooms, which favors that good control of the activities carried out have not, since there is no order of the functions of the spaces and there is an overload of information about the activities of every person, consequently causes anxiety and stress.

Activation. Connectivity defined by the number of spaces, total circulation and sociopetividad:

- The number of spaces determines how exciting is the home to increase the diversity of opportunities for activities.
- The greater the number of circulations, activation is smaller because it has more privacy and less interference and conflict.
- The sociopetividad and connectivity increases the stimulation by allowing more interactions.

The activation is also linked to the intensity of the stimulation they receive, such as noise, the complexity of the environment related to the activity. The survey showed that 77.5% of homes Private La Torre no emotional stress; compared to 56.50% of Lomas del Bosque, having more people in a space disorder seen and therefore no tranquility.

Pleasure. Defined m2, number of spaces, proximity of the rooms to public spaces, to be important that the house is away from the public space but not of information, taking an auditory and visual control to observe the outside.

As a result, 53% in Lomas del Bosque and 76% in private La Torre was obtained, as the rooms overlook the courtyard, but they can see the outside from the living room, because the only space that divides the room -dining and public space is the car park.

Privacy. Privacy defined by total circulations, having more circulations has better access control having other our spaces. 45% degree of privacy in Lomas del Bosque and 57% was found in Private La Torre; still low, since in both divisions rooms have direct access to the social area reducing privacy with outsiders.

Functionality. This depends on the number of spaces, average size, circulation and safety, affecting behavior patterns, furniture being another factor that allows the organization of activities.

The results show the Lomas del Bosque 43.5% and 47% in private La Torre in functionality, confirming previous analysis with the dimension of space, areas like the bathroom, kitchen and laundry, have been reduced to a minimum without considering movements, revealing that are difficult or annoying.

Operability. It relates to functionality, m2 construction, average dimensions and circulations, determines possible obstructions to the movement within the spaces. The result is almost the same as functionality.

Proving that you can not have several furniture, which eventually become obstacles. The alternative is to have more kids furniture, which happen to be ergonomically poorly designed in Mexico, thereby causing other problems of posture and comfort; for example, the kitchen being small and cramped feeling causes an increased risk of domestic accidents; owning more space gives greater distance between furniture allowing better performance.

Satisfaction housing. 70% satisfaction found in private La Torre by the appearance of the facade, because as most new homes, residents show interest in maintaining the image of his house, when servicing and cleaning facades. In the other division, 50% less appreciated in the care home.

Changes in housing. It was detected in overall expansion in both divisions in the kitchen, most space was removed to enlarge the living room, either reduced or eliminated the courtyard and most recurrent is to have a second floor.

Conclusions

Of all the issues discussed, you can set the functionality and privacy are the most important; in the polls it said that users prefer Fraccionamiento Lomas del Bosque spacious and functional spaces, without the aesthetic value, as most still has the original facade and painting is old and dirty.

One particular survey question gave us concern as 82% in homes, they are questioned about over the years involving mobility in the home when they are old or have an accident and / or require equipment to move. It is noteworthy that although the physical dimensions meet the standards set by the Building Regulations, psychological variables transaction does not meet the 75% required.

Therefore, if we add the percentages of the physical dimensions and variables of psychological transactions, giving each variable to 50% of the total habitable, it is concluded that the homes of Lomas del Bosque meet the habitability of 69.52% and Private La Torre with 64.63%, if we rely on the provisions Market (2004) have at least 75%, none of the two subdivisions are habitable.

The result of the analysis indicates that the most important thing is to solve the housing circulation, number of rooms and m2. Also it should be concerned to obtain satisfaction, privacy and functionality, the first two related to the design of spaces and connections; however, the functionality is according to the operation on dimensions of the spaces and the furniture according to the activity of the people.

Even with these shortcomings, people do not complain about your home, settle more are not satisfied. They are used to living that way for economic and political factors that establish how to live within the framework of references found references that only you can make living with the habits of life itself, and what they feel these families home according to the analysis. This relates to the concept of "habitus is not the destination, as interpreted at times. Being a product of history, it is an open system of provisions that are permanently

confronted with new experiences and, therefore, is also permanently affected by them. It is durable, but not immutable" (Bourdieu, 1992).

This research requires consideration of permanent housing around the habitability analysis, so new questions designed to meet the requirements of habitability arise, do these divisions responding to dream or desire of every family ?, with the passage of time What makes a livable dwelling ?, have more space? o expand for better mobility? Custom or habit is in question, does this make us conformists or adapt regarding the current housing? "In any case, I think that since I was socially, given what may be called my social conditions of production, sociology was the best thing he could do, but to feel according to life, at least to find more or less acceptable the world in which he was condemned to live "(Bourdieu and Wacquant, 1992).

As Bourdieu (1991) states: "The habitus is an infinite capacity to engender in total freedom (controlled) product-thoughts, perceptions, expressions, actions-as they have always limits the conditions of production, historically and socially situated". Consequently, despite the current situation, the residents feel pride and satisfaction, not the original house, but modified for themselves.

According to the above, it is recommended to consider housing on one level, with spacious and functional circulations, in rooms or consider appropriate furniture designed as space optimization; itself, study the modulation with design alternatives, with a change of regulations and articles used in the Building Regulations. It is hoped that this analysis will serve to reform the current housing, generating awareness among stakeholders (government, construction and the same user) and lead to a new proposal for social housing.

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