

Exploring Housing Conditions Through Children's Eyes

Explorando as condições da moradia pelos olhos das crianças

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Abstract

This paper presents a methodology for exploring housing conditions through the perception of children who live in informal settlements, employing photography as the research tool. Informal housing is usually in a bad condition, affecting the health of users and often putting their lives at risk; but this is not always something users are aware of. In this sense, finding ways to make bad housing conditions visible can contribute to their improvement. With this in mind, this paper concerns children's perception of their dwellings and how these observations and insights can contribute to improve quality of life in these impoverished areas. The research was conducted with children aged between 6 and 12 years old, living in informal settlements of the Southern periphery of Bogotá, Colombia. The findings confirm “old topics” regarding housing conditions and open up “new topics” as well; all of them defined by children's perceptions. In this sense, findings can help built environment practitioners and informal self-builders, understand how housing conditions impact children's health and wellbeing, and support their exploration of alternative housing solutions.

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Keywords: housing conditions, visual sociology, photo self-representation, photo elicitation, informal settlements.

Resumo

Este artigo apresenta uma metodologia para explorar as condições de moradia por meio da percepção de crianças que vivem em assentamentos informais, empregando a fotografia como ferramenta de pesquisa. A habitação informal geralmente está em más condições, afetando a saúde dos usuários e, muitas vezes, colocando suas vidas em risco; mas isso nem sempre é algo que os usuários conhecem. Nesse sentido, encontrar maneiras de tornar visíveis as más condições de habitação pode contribuir para sua melhoria. Com isso em mente, este artigo diz respeito à percepção das crianças sobre suas habitações e como essas observações e percepções podem contribuir para melhorar a qualidade de vida nessas áreas pobres. A pesquisa foi realizada com crianças de 6 a 12 anos de idade, residentes em assentamentos informais da periferia sul de Bogotá, Colômbia. As descobertas confirmam “tópicos antigos” sobre as condições de moradia e abrem “novos tópicos” também; todos eles definidos pelas percepções das crianças. Nesse sentido, as descobertas podem ajudar os praticantes do meio ambiente construídos e construtores informais, entender como as condições da moradia afetam a saúde e o bem-estar das crianças e apoiar a exploração de soluções alternativas para a habitação.

Palavras-chave: condições de moradia, sociologia visual, auto-representação fotográfica, obtenção de fotos, assentamentos informais.

1. Introduction

Informal settlements are an overwhelming reality for most Latin American cities and the global south, with an estimated 1 billion people living in these areas (UN-HABITAT, 2006). In 2012 more than 80% of the population lived in cities and 23.5% or 113 million people of the Latin America's urban population were estimated to be living in conditions defined by United Nations Human Settlements as slums (ONU-HABITAT, 2012), and figures are on the rise. Informal settlements have been the only way to gain access to housing and urban facilities (HERNÁNDEZ-GARCÍA, 2013) for a great part of the population of the region. Today, informal settlements are a consistent feature of cities such as Bogota, which houses nearly 8 million people (BOGOTÁ CÓMO VAMOS, 2017), and

where it is estimated that more than 50% of the urban fabric has grown from some kind of informal pattern (MARTIN-MOLANO, 2000).

Informal settlements, conceived both as self-developed housing and urban facilities, have been to a large extent a response to the housing shortage and to the few affordable possibilities offered to low income families. The housing shortage in Bogota in 2017 was estimated to consist of 220,000 units (CAQUIMBO, RINCÓN Y JOLLY, 2017) as a result of new households in need of housing, existing poor housing conditions, and overcrowding (CENTRO DE ESTUDIOS DE LA CONSTRUCCIÓN Y EL DESARROLLO REGIONAL, 2011). Overcrowding has been identified as a determinant cause that affects both physical and mental health (HUNT, 1990; KATSIVO *et al.*, 1994; SHARMA *et al.*, 1998; Krieger and HIGGINS, 2002; GUERRA AND CROCKETT, 2004). With respect to physical health, data shows a relationship between overcrowding and respiratory diseases. In terms of mental health, lack of privacy can generate feelings of frustration and depression (CEBALLOS *et al.*, 2015). Research shows also that when rooms are shared by minors and adults, incidences of sexual abuse may increase (CEBALLOS *et al.*, 2014; ÁVALOS, 2003 cited in CORRAL *et al.* 2011).

Within this panorama shall be highlighted that children suffer the most from poor quality and overcrowded housing (EVANS, 2004), in addition to the direct violation of the rights of a child to an adequate living (UNITED NATIONS HUMAN RIGHTS, 1990). Looking for ways to improve housing conditions, especially in informal settlements, is therefore, an imperative. In this sense, this research explores housing conditions in informal settlements through the eyes of children who live in these areas, as a methodology to investigate situations which affect them greatly, and to inform adults (built environment practitioners and informal self-builders) of possible solutions.

The paper is based on a longitudinal study conducted between 2015 and 2107. Following a brief theoretical background on informal settlements and the right to housing, the methodology “through your eyes” is presented. A case study is used to test the methodology, namely the Compostela *barrio*, an informal settlement in the Southwestern periphery of Bogotá, in which children between 6 and 12 years old participated in the research. The section following this discusses the housing conditions of *Compostela* as explored through children’s eyes. The article concludes by critically pointing out the potentialities of addressing socio-spatial realities in informal settlements, through the voice of young boys and girls.

2. The Informal City and the Right to Housing

Informal settlements in Bogotá are a dynamic part of the city in physical, economic, social and cultural terms. Indistinct as to their origins, many of these settlements gradually develop and consolidate thanks to self-build and self-help practices. They are constantly undergoing change and transformation, frequently with minimum support from public or private bodies (HERNÁNDEZ-GARCÍA, 2013). Informal settlements are by definition unfinished projects in which the agency and creativity of the occupant-builders is central, in contrast to architect-produced architecture which emphasises the physical form of the buildings often at the expense of users (KELLETT, 2008). Informal settlements constitute not only a spatial practice but also a social response to the challenges of the city.

Nevertheless, housing conditions in informal settlements are usually poor affecting quality of life in these areas. For Viviescas (1989) and Torres (2007), informal settlements are clearly a problem that needs to be tackled through a top-down approach, with structural political and economic changes. They acknowledge the resourcefulness of informal settlers in finding ways to meet their daily needs, but they believe it is the government's role to provide proper housing and urban facilities for all, and should not be left to the people by themselves. For Varley (2013) the emerging literature on the "new slum urbanism" may promote misleading images of informal settlements. She argues that *favelas* (informal settlements) have become an iconic image of informal urbanity, an image that may make one forget what lies behind: the precariousness of housing and the struggle of the people.

Among these concerns, perhaps the most important is the housing quality, which is also at the centre of the current discussion on informal settlements in Colombia. Although it is possible to find housing solutions in Bogotá's informal settlements with a high level of consolidation, and with one, two and even three storeys for a single family, built with good materials and with good environmental conditions, these cases are exceptional. Informal housing in most cases has poor quality, especially in terms of overcrowding and environmental conditions, of natural light and ventilation (CEBALLOS et al., 2014). In this sense, both public policy and academic debates address the subject from the perspective of the Right to Housing for every Colombian citizen.

The Colombian Constitution, 1991, Chapter 2, article 51, about Economic, Social, and Cultural Rights (REPÚBLICA DE COLOMBIA, 1991), declares:

"All Colombian citizens are entitled to live in dignity. The state will determine the conditions necessary to give effect to this right and will promote plans for public housing, appropriate systems of long-term financing, and community plans for the execution of these housing programs."

However, a complex situation arises for the purpose of guaranteeing the core criteria of the Right to Housing: accessibility and cultural adaptation. The first "consists of the existence of sufficient housing supply and access to the funds required to fulfil a method for tenancy. That access must consider especially the most disadvantaged and marginalized groups within society; thus, it refers to the economic and financial aspects relating to home purchase" (DEFENSORÍA DEL PUEBLO, 2007). The second deals with what housing means for different people, including building materials and aesthetics. Although housing has a universal dimension common to all people, it also has a dimension associated with the different cultural contexts where people and social groups develop (DEFENSORÍA DEL PUEBLO, 2007).

Within this frame, this paper addresses, on the one hand, issues around poor quality housing in informal settlements and, on the other hand, the Right to Housing propounded by the government and the Colombian Constitution. In doing so, it explores housing conditions through a methodology that draws on children's perspectives of their built environment, with the aim to identify themes that affect children and that are important to them.

3. The Methodology: "Through Your Eyes"

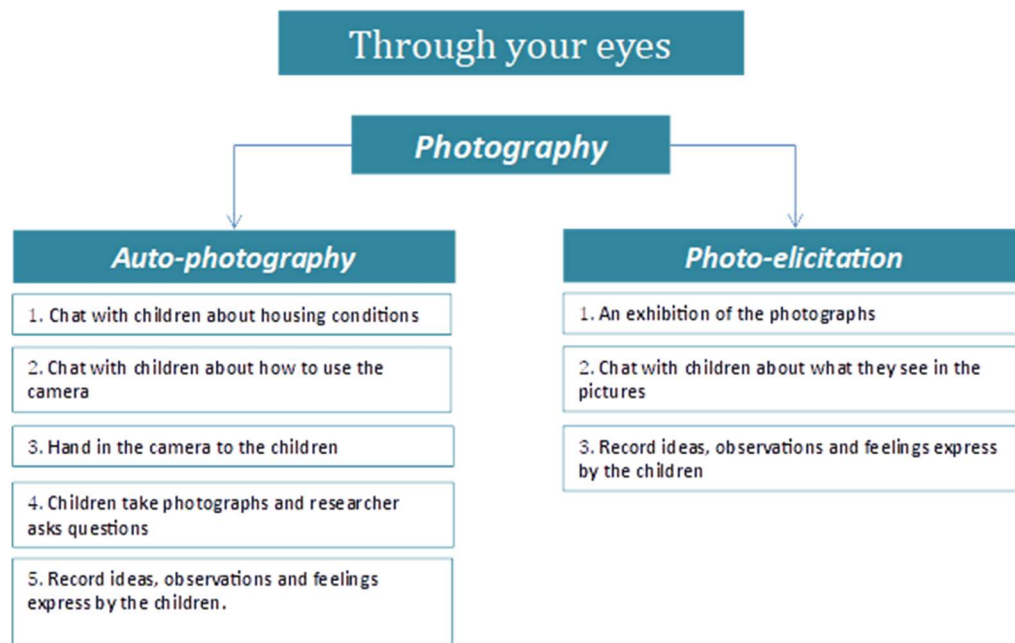
The family and the communal environment are very important for children, because these are where boys and girls learn values, attitudes, ideas, beliefs, habits and abilities to build up their cognitive and experiential training for life (ROMERA, 2003). But not only experiences are learned through relatives and neighbours, affective incentives are also provided, the same as role models and life references (COLOM, 1994; FLAQUER, 1995; FROUFE, 1995; LÓPEZ, 1998). In this sense, the house and the neighbourhood represent the two main socio-spatial units for children's growth and development. To a large extent what happens there can affect their lives, either positively or negatively.

The perception and representation that children develop of their surroundings lay the foundations of their relationship with the day-to-day space. The constant dialogue between the materiality and the subjectivity that configure spaces is a social construction and, at the same time, it is part of the identity of each individual and social group that live in such spaces (SALGADO, 2013). Therefore, including children in research processes about their built environment allow them to develop awareness: awareness of their rights and potentials, and awareness about the social groups to which they belong; while generating confidence in themselves (Fondo de Emergencia de las Naciones Unidas para la Infancia, 2008). Children can thus express their opinions and decisions concerning the issues that are directly related to them: in the household, in the school, and in their every day surroundings in general.

The search for alternatives to encourage boys and girls of informal settlements to express their perceptions and feelings about their built environment, and to investigate how such ideas could inform the improvement of informal settlements, led to the formulation of "Through your eyes" (*A través de tus ojos*): a methodology that focuses on the understanding of the housing conditions through the children's perceptions. This methodology draws on the concept of Saldarriaga (1981: 57) according to which "housing conditions are the physical and non-physical characteristics that allow the human permanence in a place, the survival, and a level of comfort and joy with the existence". As for the analysis of the results, we draw on what Tarchopulos and Ceballos (2003) presents as the main attributes to assess the quality of housing: safety, comfort, sanitation and privacy.

The methodology is based on photography as research tool (BANKS, 2001; SILVA, 2012; SCHWARTZ, 1989). Photography allows to gain deep knowledge through feelings and perceptions (MIGUEL and PONCE DE LEÓN, 1998). Also, it permits a fluid communication with children, because it is attractive and easy to use. Photography is a valuable tool to obtain information about how children perceive their own home (HUME et al., 2005; RASMUSSEN, 1999). Photography has been used here as photo self-representation (self-photography) and photo-elicitation, as in exploratory social research techniques (CLARK-IBÁÑEZ, 2004; BANKS 2001; SCHWARTZ, 1989) (Fig. 1).

Figure 1. Methodology. The authors.



3.1. Auto-photography

Auto-photography is about using a camera to shoot pictures that are of interest for the photographer. In our case, our interest was to explore the way children perceive their own housing conditions. Auto-photography is “an important tool for building bridges with marginalized groups in the research process, since it offers researchers a way to let participants speak for themselves” (NOLAND, 2006: 1). Five steps were identified to develop auto-photography for the project:

3.1.1. Chat with children about housing conditions. General and specific information about housing conditions are presented to children, in an attractive and easy way. This information includes the purpose of the house, the usual parts of it, building materials, and the importance of ventilation and illumination, among others. Explanation about the four quality attributes of housing conditions (according to TARCHÓPULOS and CEBALLOS, 2003) is also provided: safety, comfort, sanitation and privacy. The idea is that children identify these topics in their photographs.

3.1.2. Chat with children about how to use the camera. It encompasses the basics of using a camera, including how to take a picture from different angles and how to avoid using the flash, in order to get the real conditions of natural illumination of the place.

3.1.3. Hand in the camera to the children. This is about practicing with children the use of the camera, and allowing them to become confident with it. The researcher accompanies each child, allowing children to make comments and suggestions about the use of the camera, as well as about the housing conditions. This practice ideally takes place in the children's own house, and at the presence of at least one family member. It is also important to make some prints of the photographs in order to show children the outcome of their shots.

3.1.4. Children take photographs and researcher asks questions. This is the actual activity of auto-photography, when children take the photos of their houses themselves. The researcher is with the child to help, but also to guide and make questions. Questions are about housing conditions as described earlier, while giving enough space to the children to make their own decisions in terms of the topics they want to portray. Other questions can be about what favourite (and less favourite) spaces of the house, feelings in and about spaces, what they like and dislike about a particular space, and so on. It can be helpful to have a plan of the house (or make one with the child) and follow a specific route.

3.1.5. Record ideas, observations, and feelings expressed by the children.

3.2. Photo-elicitation

Collier and Collier (cited in NOLAND, 2006) describe photo-elicitation as a method consisting of an interview in which the informant and the interviewer discuss photographs together. The interviewer asks questions about the photographs and the informants discover the answers to these questions in the realities of the photographs.

“Furthermore, these authors claim that photo-elicitation relieves the stress of being the subject that many informants feel. Instead their role can be one of expert guides leading the fieldworker through the content of the pictures allowing them to tell stories spontaneously” (COLLIER and COLLIER cited in NOLAND, 2006: 19).

In our case, photo-elicitation is used as a complement of auto-photography to reinforce or challenge some of the interpretations and assumptions made with the former. It also acts as a way to visualize and give credit to the work of the children, and to allow families to become aware of their housing conditions and ideally to identify some initiatives to improve them. Three steps were identified to develop photo-elicitation for the project:

- 3.2.1. An exhibition of the photographs.** Children's photographs are to be printed on 1/4 poster size and exhibited in a suitable place. This can be the *barrio* community area, a gallery, the university, or any other similar place. The photographs can be organised per house, or per housing condition: safety, comfort, sanitation and privacy. The exhibition will be used for the photo-elicitation activity, but also for families of the *barrio* and other interested subjects, as well as a way to make visible the work of the children and give them credit.
- 3.2.2. Chat with children about what they see in the photographs.** This is the photo-elicitation activity, and will be developed with the boys and girls participating in the auto-photography session. The researcher makes a tour with the children, pausing on some photographs (as many as possible), and asking children what they see in each photo, what they think (specially in relation with housing conditions), what they feel, and any other question/comment that may arise. It is important that the child who took the photograph participates as well.
- 3.2.3. Record ideas, observations and feelings express by the children.**

4. Applying the Methodology: Compostela *barrio*.

The methodology was applied in the informal settlement of *Compostela*, located in the Southwestern periphery of Bogotá. The study was undertaken in 2015 with the help of architecture students of the School of Architecture and Design at the Pontificia Universidad Javeriana in Bogota. It was revisited in 2016 and 2107 to observe transformations in the houses and speak with some of the children and their families who participated in the 2015 study.

The work started by approaching PROSOFI, a social programme of the Javeriana University that undertake social initiatives in informal settlements of Bogotá, including *Compostela*. The PROSOFI programme introduced us to several families with which we held a number of meetings, to explain the project and what they could expect from it, in terms of visualizing their housing conditions. We also clarified which the role of the children and their families was going to be, and asked them for their permission to take part in the study, by filling consent forms. Overall, 15 children between 6 and 12, and their families, accepted to join the programme.

The first part of auto-photography dealt with the explanation of the housing conditions, following to Tarchopulos and Ceballos (2003), as explained earlier. The following illustration (figure 2) was used:

Figure 2. Housing living conditions (original is in Spanish). The authors.

Do you know what a house is? Can you tell me the parts of your house? Do you know how your house is built? Do you know the role of ventilation and natural illumination in a house?

Do you know that your house should provide health and comfort for you and your family? And it also should protect the family from external weather conditions? And bring opportunities to the family to say together but also to get some privacy when needed?

1. Safety

- Is your house humid?
- Does your house have fissures and cracks?
- Is your house strong enough?

2. Comfort

- How many people live in your house? How big is it?
- What is your favourite room of the house?
- Do you have a bedroom? Whom do you share it with? Do you like your bedroom?

3. Sanitation.

- Is drinking water in your house clean?
- Do you have a toilet in your house? How does it work?
- Does your house have windows to allow air and sun enters?

4. Privacy.

- Is your house quiet or noisy? If noisy, from inside or from outside?
- Do you have a bed for your own? Or do you have to share?
- When you use the toilet, can you close the door? Nobody see you?

Perfect, let's take a photograph now!

For the second and third steps of the auto-photography, we received the support of a photographer, who gave the children important instructions on how to operate the camera, along with some practical tips.

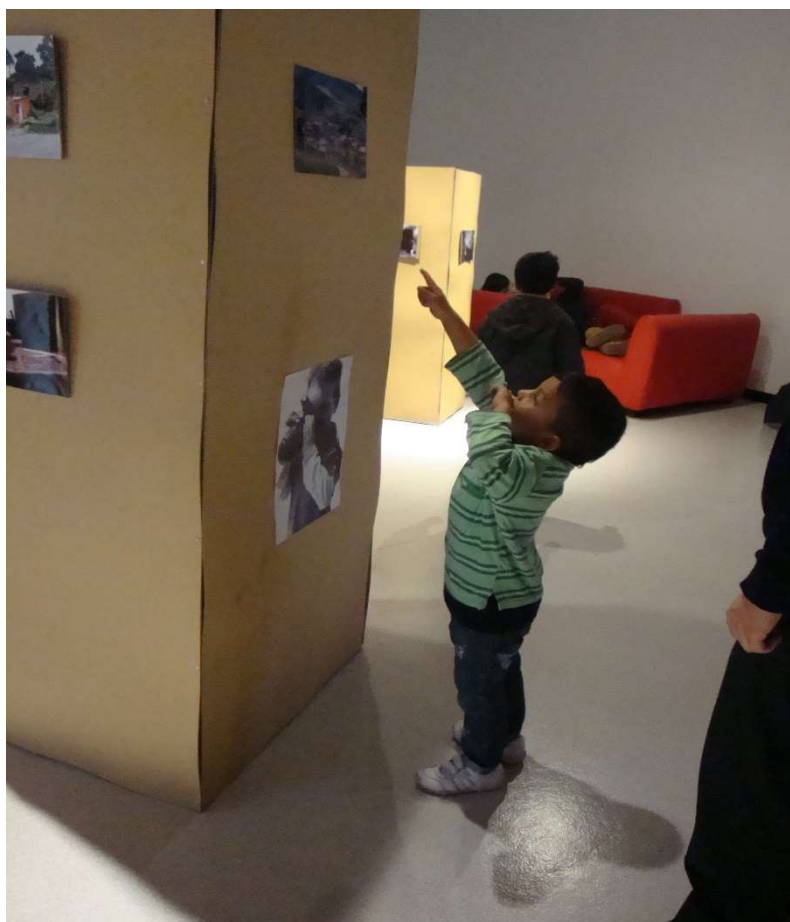
Concerning the fourth step (the picture-taking session), it was necessary to implement a strategy to guarantee that the kids gave us information about their dwellings through pictures without falling into a disorganized activity; since, for them, the camera is a toy to which they do not have a frequent access to. Therefore, it was decided to take the pictures during what was considered to be a regular

day for them at their homes. In this way, as the kids were taking the pictures they were describing to us their everyday experience within the dwelling.

For the application of the photo-elicitation technique, an exhibition was set up in a place other than the children's homes. It took place in a show room at the Javeriana University. The photographs were organised around the four attributes of the housing living conditions explained earlier. (Figures 3 and 4). The exhibition remained open for the general public during a week, and on a day the children participating in the programme and their families were invited. When the children arrived at the exhibition with their families, they went right away to look for their work and started describing what they saw in the images. This moment was very important because it allowed complementing the subsequent conversation held with them, and we had the chance to speak with the kids and to develop the second step of the photo-elicitation activity: ask them questions about the photographs they had made. (Figures 5 and 6).

Figures 3 and 4. The exhibition at the Javeriana University. The author.





Figures 5 and 6: In conversation with the children. The author.



Some of the homes of the boys and girls who took part in the study were visited again in 2016 and 2017. The purpose here was to find out what had happened with their houses in relation to the

pictures that had been taken in 2015. Informal conversations with the children and their families were held, photographs were revised again, and some of the house's spaces were observed. We also had the chance to discuss about the exercise we had undertaken in 2015, and to reason collectively about what we had learned from that experience.

5. Exploring Housing Conditions Through Children's Eyes

A reading of the housing conditions with the "through your eyes" methodology allowed us to identify how satisfied the children felt with their dwellings, as well as with the attributes of their houses easily identifiable by them. In addition, new analytical categories emerged, which complement the parameters of the initial study.

In general, through explorative questions about their feelings in relation to some aspects of the dwelling, the dialogues and the pictures, the children expressed their satisfaction with the dwellings they inhabited, despite identifying some negative aspects. Concerning the development of the first part of the methodology (auto-photography), this highlighted that it is easier for children to identify dwelling-related problems through the lens of safety and comfort, rather than sanitation and privacy.

The **safety** attribute is related to the set of requirements a house must comply with in order to isolate, in a permanent manner, its inhabitants from external agents and their negative effects, such as cold, heat, wind, rain, dust, noise, natural disasters, animals and crime (TARCHOPULOS and CEBALLOS, 2003). Taking into consideration the number of variables implied in this attribute, it was decided to relate it to the physical condition of the dwelling, to be analysed through the presence of humidity in the floor and the walls, as well as fissures and cracks. The experience with the kids evidenced that the presence of humidity in the floor and walls is identified as the most frequent problem in the dwellings, while the presence of fissures and cracks seem to be less problematic (figures 7 and 8). It is worth noting that the presence of humidity in the floor and in the walls is also the main living condition problem identified by the Bogotá Multipurpose Survey (SECRETARÍA DISTRITAL DE PLANEACIÓN, 2017).

When visiting the *barrio* in 2016 and 2017, and speaking with some of the children who participated in the 2015 study, they seemed to be more aware of the bad consequences of humidity, and some of them told us this is an issue their families are trying to resolve.

Figures 7 and 8: Lack of finishing the roof-wall, causing poor isolation. Humidity and cracks. Author:
The children.



The **comfort** attribute refers to the requirements, in the sense that the house must provide enough spaces for the activities of their inhabitants and their belongings (TARCHOPULOS and CEBALLOS, 2003). Some of the questions addressed dealt with the size of the dwelling and the different rooms. Concerning this aspect, kids related this attribute to the presence of objects and pleasant moments in the dwelling, rather than its size. Thus, the size may not be very important, as the memories that this space may convene.

The interest of the boys was more evident concerning their room due to the presence of certain devices such as the TV set, videogame consoles, or computer, turning it into a more comfortable space for them. The interest in the bedroom may change depending on the income level of the family since most of the households from informal sectors do not have the financial resources in order to have access to this type of technology.

The bedroom is important for the girls, even though the relationship with this space is not that strong in relation to electronic devices but in terms of their “personal things,” as girls call their belongings, such as the bed, clothing and toys. In addition, other spaces of the dwelling give them comfort: for example, the living room, because it is the place where they get together with their parents. Another space is the terrace, which is where they play.

Comfort for children, therefore, is most often associated with the facilities offered by a certain dwelling, rather than with the size and the environmental conditions of it (figure 9). It is also worth noting that, despite the limited space for children bedrooms, and the common need to share it with their siblings (and sometimes other members of the family too), the bedroom does represent a special place for them in the house. This impression was reinforced during the visits of 2016 and 2017, as some of the children showed us how their bedrooms, which they have not been environmentally improved (solar light and ventilation for example), but kids were very proud of them because rooms have more elements/facilities (toys and electronic equipments).

Figure 9: Children's room, showing a lack of natural illumination and ventilation.

Author: The children.



The **sanitation** attribute refers to the characteristics of the dwelling that allow decreasing the risk of being infected or becoming sick (TARCHOPULOS and CEBALLOS, 2003). The methodology included questions about hygiene habits, as well as about the illumination and ventilation of the dwelling. The results evidenced that both children think that the water at their homes is clean; some of them even addressed practices aimed at reducing water consumption, such as collecting water from the shower for the toilets and reducing water consumption when flushing the toilet. Nevertheless, the physical conditions of the bathrooms and kitchens depicted in their pictures reveal living conditions problems (figure 10). For example, the closeness of the bathroom to the kitchen, inadequate water storage, and deterioration of the bathroom floor, walls, and other architectural elements.

Concerning natural illumination and ventilation, the findings were very similar to the earlier commented. It seems that kids are not aware that the absence of windows may cause health problems, or they think it is not important. The same thing applied to the issue of overcrowding: it is possible that the fact of sharing sleeping spaces with their parents or grandparents, or with several brothers and sisters, does not give rise to uneasiness. If environmental conditions of the dwelling might not be important, particular past good or bad experiences may have an impact of the

perception of the space. In other words, experiences in the space seem to be more important than the actual condition of the space; what remains unclear is the relationship between environmental conditions and the experiences they may facilitate.

In literature, lack of natural illumination and ventilation, as well as overcrowding, are considered to be the main living conditions problems of housing in informal settlements (HARKER, 2007; CEBALLOS et al., 2014). However, the families that we interviewed for this study seemed not to be very concerned about such issues, which confirms what children commented. On the one hand, informal houses are constructed gradually in time, and with no planning process; in this sense, in order to make space for a new room, a courtyard may need to be closed, thus reducing natural illumination and ventilation inside the house. On the other hand, financial resources are always scarce, and to open new windows costs money. Regarding overcrowding, families in informal settlements tend to be big, as often even far relatives and friends live in the same house. Children accept this as a fact, and we could observe little changes in this sense in 2016 and 2017.

Figure 10: A kitchen's house. Lack of space to place different materials with no risk. Author: The children.



Concerning the **privacy** attribute, this refers to the conditions the dwelling must offer the family in order for external and internal privacy to be achieved. External privacy allows the voluntary isolation from the social and physical milieu, while internal privacy allows a certain level of voluntary physical, visual and acoustic isolation from the rest of the inhabitants to be achieved (TARCHOPULOS and CEBALLOS, 2003). The methodology associated privacy with the spaces offering a higher degree of privacy: the bedroom (figure 11) and the bathroom. Both boys and girls who participated expressed that they were satisfied with these spaces. Noise was also studied in relation to the privacy attribute. Regarding this aspect, some of the girls expressed discomfort derived from noise, the source of which mostly originated from the street.

In the return visits of 2016 and 2017 made, some changes were observed regarding privacy. Children had become more aware of the need for both internal and external privacy. Girls reported that they are more cautious in the house, however due to overcrowding privacy was not easy to achieve. It is also worth noting that families had also become more aware of this issue, possibly due to increased news coverage of child abuse, despite this little physical changes had been made.

Figure 11: A child's shared bedroom, showing the impossibility to have some privacy. Author: The children.



Along with the development of the second part of the methodology (photo-elicitation), which involved the family, the importance of the aspects analysed in the first part is confirmed: safety, comfort, sanitation and privacy. However in this second phase, new topics were raised by the children and families: spaces for recreation and those that can provide a food source. The absence of spaces to play actively inside the dwellings meant that the main communal living area of the *barrio* was used as a recreational space. In relation to food sources, the presence of spaces devoted to urban agriculture becomes a “life insurance policy” since residents can grow food in their houses that they can contribute to their daily subsistence.

In the visits undertaken one and two years following the research, it was interesting to note that there were improvements to some of the dwellings previously visited, particularly in aspects related to the hygiene and privacy attributes. One of those transformations was the opening of windows to allow natural light and ventilation in some houses. In a conversation with one family, we learned that the reason for making the improvement related to the child's photograph, in which the space looked very dark.

Other transformations observed in some houses dealt with their hygienic conditions and privacy. In one house, for instance, the family had a henhouse in poor hygienic conditions and they were feeding the animals themselves; they mentioned that, thanks to the children's photographs, they made up their minds and decided to refurbish the henhouse. In another dwelling, the new changes were aimed at improving the rooms: initially, they had only one room for both dining and sleeping; after the photographs, they decided to separate the two activities and accommodate them in two different spaces: first with a curtain, and as soon as they had a greater financial possibility, with a wall. Once again, the reason to undertake this improvement was the children's photographs and the conversation undertaken with them about the pictures.

6. Conclusions.

The dwelling is acknowledged, within the legal instruments in relation to human rights, as a key component for the development of an adequate quality of life and a life with dignity (NACIONES UNIDAS, 2015; COMITÉ DE DERECHOS ECONÓMICOS SOCIALES Y CULTURALES, 1991; GALVIS and FERNÁNDEZ, 2009). However, the living space of boys and girls in the informal-origin sectors is affected by a series of social and economic limitations that dissipate the chances of developing a life with dignity. Therefore, exploring the perception of children within these contexts is fundamental since understanding their socio-spatial reality shall allow contributing to policy formulation and to the design of State Subsidized Housing (*Vivienda de Interés Social - VIS*, in Spanish), as well as to generate instruments to guarantee the fulfilment of the right to housing.

The perception of children is not homogeneous. The experiences lived at their homes, the income of the family, the gender, even including the location of the dwelling and personality traits, may affect the spatial perception. Consequently, the "through your eyes" methodology allowed to explore physical aspects of the dwelling related to the protection, comfort, hygiene, and privacy attributes. This ended up being interesting since it evidenced perception differences related to the social vulnerability derived from being a kid, to gender or, mainly, to the income of the family. Therefore the fact of acknowledging dwelling problems more easily in relation to the protection and comfort aspects, rather than hygiene and privacy, may imply some kind of children vulnerability. The interest in the spaces for playing or for growing food may also speak about other needs and

expectations beyond the shelter. Likewise, the interest in the bedrooms may be determined by the income level of the family and the possibilities to have more things in them.

Although the results obtained with our methodology were relatively expected, the transformations that followed in some of the dwellings were surprising. We did not anticipate that, as a result of this study, changes would have been undertaken. In this sense, photography proved to be a technique that allowed setting up an effective communication channel with the families that took part in the study. This was especially clear with photo-elicitation, thanks to which the family members had the chance to discuss about their dwellings and about the possibility to improve them, sometimes with little costs. Such changes are essential in the relation between living conditions and the health of the population; whereby the latter is understood not only as the absence of illness but also as a state of wellness, both physical and mental, which may be affected by lighting and airing problems, and overcrowding conditions, among others.

In a similar vein, the changes that can be produced in the family are not associated only with the physical space but also with domestic and interpersonal communication systems. Women, as it happens in many communities (SOLES, 2008), play an important role. The rules related to the internal household order, the internal home control and the sensibility formation obey to mothers' internalization for the development of a type of horizontal communication rather than through authoritarian commands. The consequence is a reduction in the situations of conflict violence and a healthy home with respect to the socialization process.

It is important to stress that changes, as a result of this study, were not only observed in the houses but also in the social sphere of the household. Such social and spatial transformations are still on going, despite the exercise took place some years ago. For the community leaders of *Compostela*, the study opened the gate to think and implement social – including recreational – programmes for boys and girls of the *barrio*, as a way to build social capital and sense of belonging. For the mothers of the children involved, it was a “magic drop” (in the words of one them), because the study awoke the interest in photography and arts in general; besides taking children away from daily struggles and difficulties that are common in these impoverish areas. For the boys and girls who took part in the study, this exercise was a moment of joy and learning, of satisfaction and discovery, that hopefully could bring them more substantial benefits in the future.

Finally, this methodology demonstrated that exploring “with children’s eyes” can be useful to identify problems and alternative solutions, to understand different motivations and expectations. Besides giving them voice, which they usually do not have, especially in informal settlements. This approach can also be helpful for built environment practitioners, in particular, and public policy-makers, in general to bring their attention to children and to explore alternatives to traditional housing solutions.

Acknowledgements: The authors would like to thank Dr. Megan Weller and Giulia Torino for their comments and recommendations, which helped to improve the paper. Also, the authors are grateful with colleagues and students of the Architecture Studio: “Popular Housing”, the same as with staff of PROSOFI of the Pontificia Universidad Javeriana in Bogotá, for their support when doing the research. Finally, the authors are thankful with the Pontificia Universidad Javeriana for providing the funding to make the research. But this study could have not been accomplished without the participation and generosity of children and families of the Compostela *barrio*, to them our immense gratitude.

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Trabalho enviado em 20 de dezembro de 2018

Aceito em 30 de setembro de 2019