Co-creation: involving everybody.

An ethical dimension of the design process and a discussion of solutions between different actors with practical and creative goals.

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Abstract. Public spaces have become fragile environments where minority groups, children and their caretakers are the most affected by socio-spatial inequalities. The real and perceived insecurity has been restricting minors' presence to institutionalised places designed especially for them. This form of integration denies the educational function of the city as a place to appropriate with personal interpretation.

However, we can still find proximity inside the neighbourhood unit and make it visible through children's actions and interactions with the public space. Hence, their participation in urban public policy design and inclusive perspective should be the benchmark for improving cities' public places.

While this movement has engaged academics and has been advocated by municipalities, it has had little to no influence on design and planning agendas yet.

Appointing children into decision-making positions encouraging organisations and businesses to promote a friendlier public realm, is the way to a fairer society.

The urban laboratory in Contumil and Lagarteiro neighbourhoods' public spaces in Porto, Portugal, intends to investigate whether it is possible to formulate more inclusive urban policies, starting from the exploration of co-responsibility in social housing districts, considering children as indicators of urban inequality and as determinants of inclusive urban design.

Measuring children's right to the city, as the right to inclusiveness, producing an analysis-reading tool and a road map for all who want Southern Europe to move forward in improving everyday urban opportunities for children, offering a template for effective, long-term action for the lack of inclusion in public life.

Keywords: Public spaces, Children's rights, Urban design.

1   Introduction

This paper is part of the PhD research developed at the Faculty of Architecture of the University of Porto (FAUP) since 2020 by Elena Parnisari: "*Searching for equitable, inclusive and caring urban neighbourhoods: measuring children's right to the city through urban design. An urban laboratory in Contumil and Lagarteiro social housing.*"

   The research intends to study and apply the results of successful international policy programs from the southern European context to two selected social housing neighbourhoods of Porto, Portugal: Contumil and Lagarteiro.

It analyses children's experience through site-specific pilot workshops developed in neighbourhoods with school-age children in the first stage of primary education (5-10 years). The groups are diverse regarding ethnic and parental background and eager to participate in different activities and methods, reinforcing community and solidarity networks.

These workshops aim to assert theory and practice with direct participation and cooperation between several associations working in the territory, ensuring a situated work focused on the public spaces of the neighbourhoods. One of the goals of this academic research is to provide a road map and guarantee direct dialogue between the associations that still hesitate to work together.

   The workshops have been designed to be developed as a participatory urban diagnostic conducted in the two neighbourhoods from January to September 2022, with a common methodological thread through analytical play dynamics.

In the Contumil neighbourhood, the activities were developed with a small group of 15 Roma children, in the Lagarteiro neighbourhood with 50 children diverse in ethnicities. The activities were developed with the following partners: Associação Equipa de Rua Oriental da Norte Vida, Projeto Cercar-te no Lagarteiro-E8G Programa Escolhas, Espaço T-Associação para o Apoio à Integração Social e Comunitária, Projeto Galerias Comunitárias, Centro Social do Lagarteiro-Obra Diocesana de Promoção Social, Serviço Educativo da Casa da Arquitectura.

1.1   Children's right to the city

Children's citizenship and participation are significant topics in contemporary social policy and scientific debates. The children's rights are gradually becoming benchmarks for national, regional and local policies following the 1989 UN Convention on the Rights of the Child (CRC).

In this record emerged the importance of considering children as active social actors and introducing their perspectives in research. However, the idea that public spaces and the urban realm should accommodate the needs and comforts of children is still a long way from being acknowledged and accepted in all institutional settings, social contexts, or political processes. However, a child-friendly city is a city that is good for all [1].

Children have often been used to measure of population changes, for example, through birth or child mortality rates. However, they have yet to been seen as affecting demographic and urban change through their rights. The urban space became specialized,

forgetting the needs of younger generations, women, older people, people with disabilities, people experiencing poverty and immigrants [2].

Is it then possible to formulate more inclusive urban policies, assuming children's rights to the city as an indicator of urban inequality and a determinant for inclusive urban design?

If children's perspectives were considered, a city designed for them would be thriving for everyone [3], overcoming the lack of inclusiveness in public policies. Urban planning can no longer exclude the youth since 70% of the global population will be under 18 by 2050 [4].

To address the children's right to the city, however, it is essential to recognize that the urban and social crisis we are going through nowadays arises from different roots than the background of the '70s of Henri Lefebvre.

What is the right to the city today? What does it claim? Whose right are we talking about?

It is crucial to consider the differences between the historical context of the 1968 crisis in which Lefebvre first popularized the expression and the one we live in today: the rise of unemployment, the threat of public education and school support, lack of assistance for childhood, shrink of local governmental services, emergency of health care and health system, widespread of insecurity, fear of inhabitants' exclusion from the decisions that shape their everyday life and spaces.

In the mid-70s, the slogan claimed mainly the right to housing: promoting dwellings in the poorest neighbourhoods. Today, the urban community claims the right to social inclusion, equity and social justice. Indeed, the expression is gaining greater attention against patriarchal cities and social exclusion, claiming rights to spatial justice through participatory planning for every citizen regardless of ethnic origin, religion, income, gender or disability. The feeling shared today is due to a loss of trust in institutions, politics, participation and cooperation between individuals.

Lefebvre does not clearly say that decisions that produce urban space should be made entirely by inhabitants through their voices and contributions. However, the role inhabitants play must be central and direct through their majority and hegemonic voice [5]. According to him, those who inhabit the city have a right to the city (political inclusion).

1.2   Children as the thermometer of social housing public spaces inclusivity

We define public space as space produced by the state, appropriated by groups or collectives and space for political action. Indeed, it is defined by the people who use, inhabit, appropriate and transform it through their daily routines and practices of their social experience across diverse locations [6].

Who lives with whom?

In social housing neighbourhoods, the public space becomes a fundamental element as an extension of the home, not being reduced merely to a means of access but becoming an actual arena of social expression. Indeed, a public space that adapts to the needs, movements and imagination of children is an inclusive space for all. As Jane Jacobs [7] wrote, cities can provide something for everyone only because, and only when, everyone creates them.

Urban public politics should then include concepts such as justice, equity, democracy, and the full development of human potential or capabilities. To everybody according to their needs, from everybody according to their abilities, for recognising human differences.

If there is a need for more responsiveness in public space towards children, how can we expect it to be an inclusive space that meets the needs of all its users? To quote Van Eyck [8], "If cities are not meant for children, neither are they meant for citizens. If they are not designed for citizens, they are not cities."

The research starts from the central hypothesis that if children were to be considered as the 'thermometer' of society, since they naturally appropriate spaces and places that have not been explicitly made-measured-designed specifically for them but can adapt them to their functions and needs movement and play, so one could use this spontaneous appropriation as a moment of analysis of the inclusion of such places at the level of safety, permeability and comfort, not only for the children themselves but for all citizens who use such spaces, based on the assumption in this research that if a space is child-friendly then it works for everyone.

Thus, the research develops by attempting to answer a central question -to what extent can urban planning strategies benefit from children's way of appropriating space?

The provocation highlighted here concerns society and its geographies, which are far from homogeneous: Children are limited and controlled in their use of space by adults, institutions, legislation, peers, their cognitive development and physical abilities. Children do not have the same voice or power as adults to change or shape their environment, so their daily lives reveal broader concerns about their place and potential.

2   Co-creating participation

Today, in Portugal, municipal planning public participation still does not exist. As the democratic process, after the 25th of April 1974 revolution, has matured in Portugal over the last 40 years, participation in the architecture debate has gradually disappeared [9]. The scholarly debate around the evaluation of citizen participation in policymaking has not developed yet [10]. There is a total discredit in politicians, projects and technicians. Living in degrading urban conditions, the residents have lost feelings of neighborship, social solidarity and territorial appropriation that the new democracy and the trend towards egalitarian ideals should seek to respect [11].

Participation is often invoked in city politics but rarely practised seriously; it is impoverished, and citizens rarely have more than a nominal and advisory voice in decisions [12]. The essence of urban living compromises sharing spaces, promoting sociality and spontaneity with which everybody occupies a place.

The public space is considered an educational one. Its users can appropriate it with the help of their imagination and their very personal interpretation, integrating themselves into a fragmented and changing context.

Is it possible to reconsider the public space as an opportunity where exchange and relationship can be fostered by the need to co-create alternatives together? Co-creation

has become a popular concept almost substituting participation or sometimes working in parallel, as a new methodology for raising democratic processes in knowledge production [13], where the dimension associated with discussing solutions between actors with practical and creative objective should be provided. The value should be placed on the project process, where participation is designed as a confrontation with the place and is understood as designing with and not designing for. Co-creative processes raise a critical reflection on whose voices and points of view get heard through it and their role at all stages of the process [14], reinforcing participation and social cohesion in societies that are fragmented and individualised.

Co-creation can empower citizens and build more resilient communities when it is put into practice as an inclusive process, enhancing mutual trust [15].

2.1   The urban laboratory

This paper focuses on the results of the urban laboratory developed in the Contumil and Lagarteiro social housing neighbourhoods.

The methodological approach started with winning children's trust first, with an initial comprehensive perception of public life in the neighbourhood, up to a more narrow and intimate scale of interpersonal relationships in specific public places: storytelling of spatial experiences and critical planning.

The activities were planned with the dual function of analysis and data collection for the researcher and of providing reflection and conscientisation tools for the children, introducing perspectives of thinking and perception that were new to them.

The initial goal of these workshops was to understand better what the qualities and weaknesses of a given public space are for a given use and how to improve the programs and services in it from the children's perspective.

Fig. 1. Urban laboratory at Lagarteiro neighbourhood – an exploration of public spaces. Photo by Larissa Ribeiro Cunha, March 2022.

Fig. 2. Urban laboratory at Lagarteiro neighbourhood - working in groups inside the associations and municipality infrastructures. Photo by Larissa Ribeiro Cunha, January 2022.

Fig. 3. Urban laboratory at Lagarteiro neighbourhood - producing material for the urban diagnostic through creative actions. Photo by Larissa Ribeiro Cunha, January 2022.

Fig. 4. Urban laboratory at Lagarteiro neighbourhood - the results of the exploratory walk are reported and shared with everyone. Photo by Larissa Ribeiro Cunha, March 2022.

Throughout the activities in the neighbourhood, we listened and understood the space through the children's eyes of to build knowledge together. We created opportunities to understand children's socialisation and culture: the relationship between children's daily lives and the neighbourhood scale. Dialogue tools were used with children through collective mapping, territory recognition maps, and participatory and collaborative activities.

The development of the laboratories was characterised by the succession and often overlapping of various analysis and playing methods with children: observing, drawing, mapping, photographing, walking, storytelling, filming, exploring, creating, writing, responding and asking.

The laboratories were followed by the development of activities in a logical way, which aimed to create a story and narrative to describe the children's use of the neighbourhood's public space.

Before starting to explore the neighbourhood and its potential, it was essential to get a critical view from the children about the positive and negative elements that characterise the public spaces in the neighbourhood and about the elements that children dream of implementing or believe would improve the quality of the spaces.

After stimulating children to critical verbal analysis, this diagnostic was deepened through drawings and surveys, which confronted children with choices and determining factors that aroused the interest of many towards the activity of cartography and mapping of the spaces they live in.

Once this initial analysis phase was over, together with the children, we explored the neighbourhood from a more practical and sensory point of view through exploratory walks to discover everyday spaces and unknown and forbidden ones. This exploration was then mapped to record the children's feelings, smells, colours and noises as they went along.

The process was then concluded by projecting the dreams listed in the first activity executed on a full scale by drawing directly into the public space.

This concluding activity aimed to close the circle of the proposed laboratory, trying to identify whether there had been growth and awareness of the rights, participation, recognition of use and care of spaces, which had matured during the development of the activities over the months between the proposal of the dreams in the first activity and the last one.

Fig. 5. Urban laboratory at Contumil neighbourhood - exploratory urban walk and survey on public spaces in the neighbourhoods. The children established routes and conducted a walk to learn about, map out, photograph, and draw the connector spaces between their homes and the associations' headquarters. They developed a critical sense in reporting information and details to reflect and criticise the current situation, making an urban report on the lack of programs, care and accessibility of neighbourhoods. Photo by Elena Parnisari, February 2022.

Fig. 6. Urban laboratory at Lagarteiro neighbourhood - children's storytelling about living in the neighbourhood's public space. Children were asked to make comic strips of daily life, paying attention to the positive and negative sides of community life in the neighbourhood, dreams and discriminations, to make them aware of the rights they can exercise over the spaces. Photo by the Elena Parnisari, May 2022.

Fig. 7. Urban laboratory at Lagarteiro neighbourhood - during the last workshop, children drew the infrastructures they would like to have in the neighbourhood and chose the location. Photo by Catarina Silva - @yellowrocket_prods, August 2022.

The final step of these laboratories was an internal and public evaluation of results and impact through an exhibition in the neighbourhoods to systematise an urban analysis-reading toolkit as a child participation assessment tool to make knowledge operational, reproducible and adaptable in different contexts. This open-source tool would empower children as citizens, users and creators to participate in the city-making process as they become aware of how they use places and their rights as citizens.

This procedural toolkit would rely upon the methodology innovation from the point of view of communication, arising from an investigation method developed through the critical study of consolidated methodological experiences and the in- depth analysis and action of these activities in a specific context. The toolkit represents the diagnostic of children's appropriation of space; it is a research result but not a conclusion. It is a synthesis of all the activities carried out in the urban laboratory of the case study of the research, where analysis activities are determined which can be applied in other contexts since they are not place-specific activities but are activities of reflection and analysis by the child of the use and need in the space. The toolkit for each activity explains what is needed to carry out the activity, both in terms of materials to be used and in terms of people to be involved, to form a team consisting of experts in the art area but also professionals in the social field working locally in the neighbourhoods of interest. Urban planners, architects, social workers, and administrators can carry out the activities in the toolkit when they want to involve children in the participatory design of policies or spaces, where the answers could be used as guidelines for a more inclusive and helpful design towards citizens.

Fig. 8. Urban laboratory at Lagarteiro neighbourhood – the final exhibition of the comics of everyday life in the public spaces of the neighbourhood drawn individually by each child. Photo by Larissa Ribeiro Cunha, September 2022.

Fig. 9. Urban laboratory at Lagarteiro neighbourhood – the final exhibition where all the works carried out with children during the workshops were shown. Photo by Larissa Ribeiro Cunha, September 2022.

2.2   Measuring children's right to the city

The motivation and innovation behind this research rely upon making knowledge feasible through a pilot project, developed over consolidated methodological experiences and reflections, that can be operationalised and politicised to transform a specific urban context, offering a template for effective, long-term action.

The purpose of this paper is to show through transcribed cartographies, that is, the interpretation and composition of cartographies of an architectural language starting with the children's drawings and interviews, to what extent community co-responsibility can be used to observe the lack of inclusivity of urban policies in social housing neighbourhoods, and how this can affect an urban design process.

As a preliminary result of this research, five levels of reading are presented here to collect and compare the different perceptions of every child.

The information collected during the workshops and the interviews with children and their caregivers is transcribed by spatialising information through cartography.

We heard what children and their caregivers want and why they want programs to go on or to be built in a specific place. We analysed what happens there: a central area of

the neighbourhood, where they usually gather, that everyone likes, not dirty, that people take care of.

The main objective is to analyse what is behind the necessities and desires and show preliminary results through cartography as a metaphor for writing. It is an illustrative way an architect can work and draw conclusions about space, making an analytical and prospective diagnosis of the appropriation of children's spaces.

This interpretive mapping work is carried out for both case study neighbourhoods. However, this paper only presents a small example of the Contumil social housing neighbourhood.
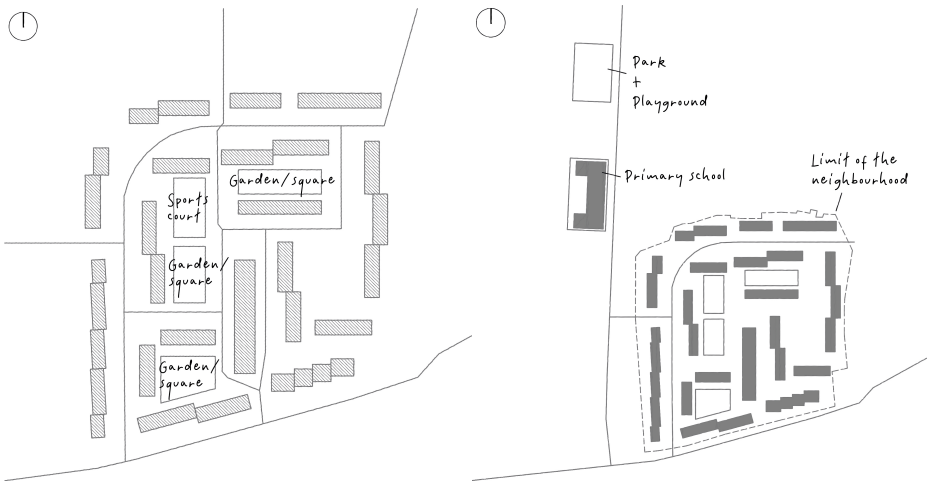

Fig. 10. Contumil neighbourhood - base plan where the main urban elements of the neighbourhood are identified and on which the five reading levels are set. Cartography by Elena Parnisari.

Fig. 11. Contumil neighbourhood – the first reading level: fear and relief plan. The children identify areas of the neighbourhood where they feel safe and those where they feel in danger, relating areas with feelings. Cartography by Elena Parnisari.

Fig. 12. Contumil neighbourhood – the second reading level: activities plan. The children identify the neighbourhood's public spaces with play or sports activities. Cartography by Elena Parnisari.
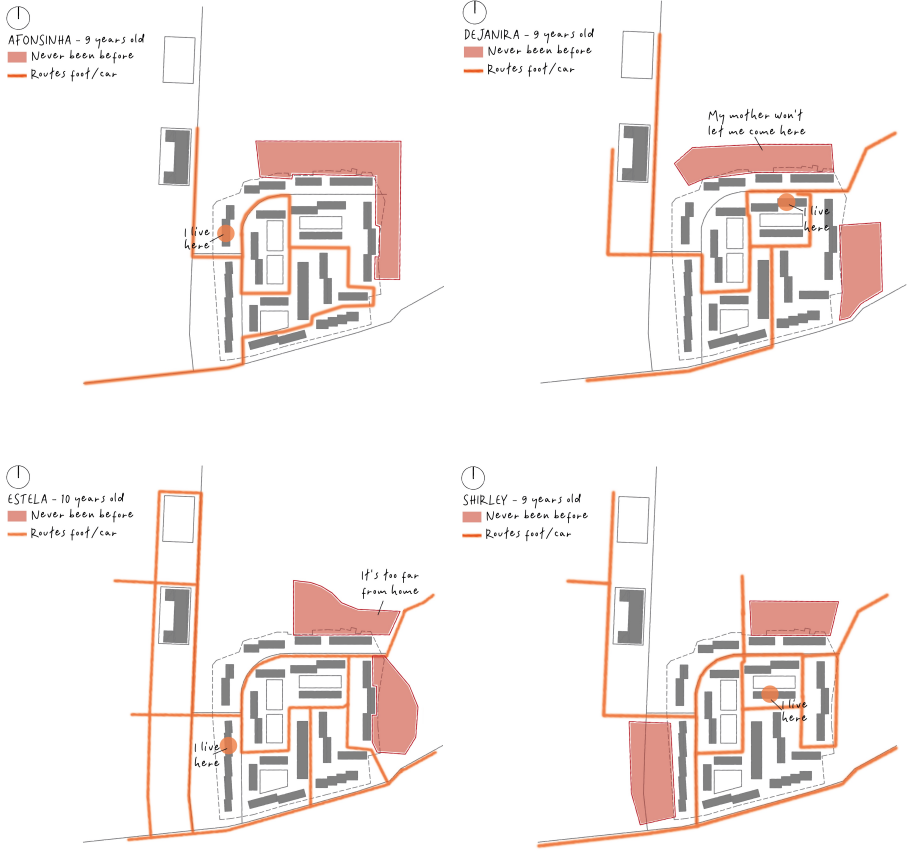
Fig. 13. Contumil neighbourhood – the third reading level: limits plan. The children identify the limits of the neighbourhood based on the spaces they use and those they have never explored. Cartography by Elena Parnisari.

Fig. 14. Contumil neighbourhood – the fourth reading level: routes plan. The children identify the main daily routes of their activities: going to school, playing/doing sports. Cartography by Elena Parnisari.
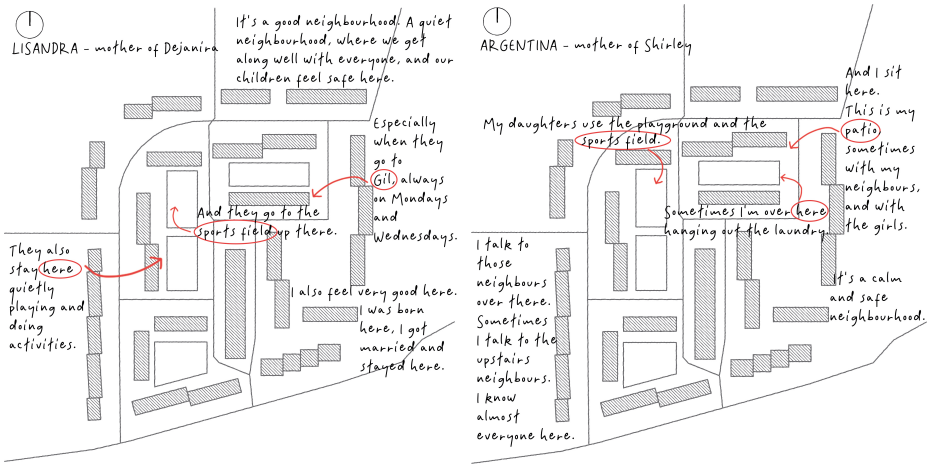
LISANDRA – mother of Dejanira

It's a good neighbourhood! A quiet neighbourhood, where we get along well with everyone, and our children feel safe here.

Especially when they go to Gil always on Mondays and Wednesdays.

And they go to the Sports field up there.

They also stay here quietly playing and doing activities.

I also feel very good here. I was born here, I got married and stayed here.

ARGENTINA – mother of Shirley

My daughters use the playground and the sports field.

Sometimes I'm over here hanging out the laundry.

And I sit here. This is my patio sometimes with my neighbours, and with the girls.

It's a calm and safe neighbourhood.

I talk to those neighbours over there. Sometimes I talk to the upstairs neighbours. I know almost everyone here.

Fig. 15. Contumil neighbourhood – the fifth reading level: storytelling plan. The children's mothers describe the spaces they use during an interview. Cartography by Elena Parnisari.

The plans presented above are a small part that stands as an example of a more extensive work, where the visions of several children are compared simultaneously on the same topics and overlapped to achieve an experimental interpretation of the questions the research attempts to answer.
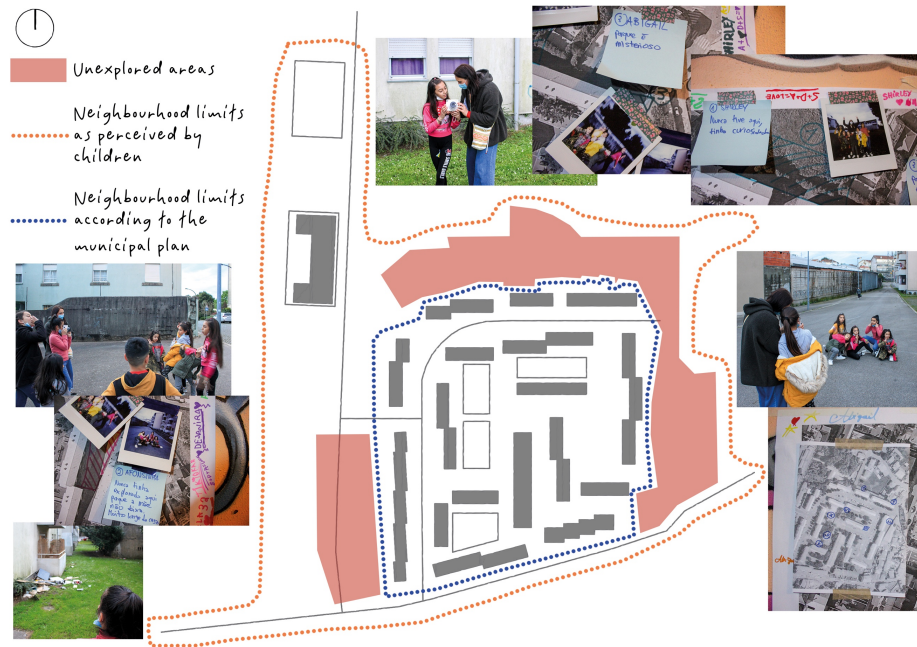

Unexplored areas

Neighbourhood limits as perceived by children

Neighbourhood limits according to the municipal plan

Fig. 16. Contumil neighbourhood – comparison between the children's perspective of the neighbourhood limits and reality. Cartography by Elena Parnisari.
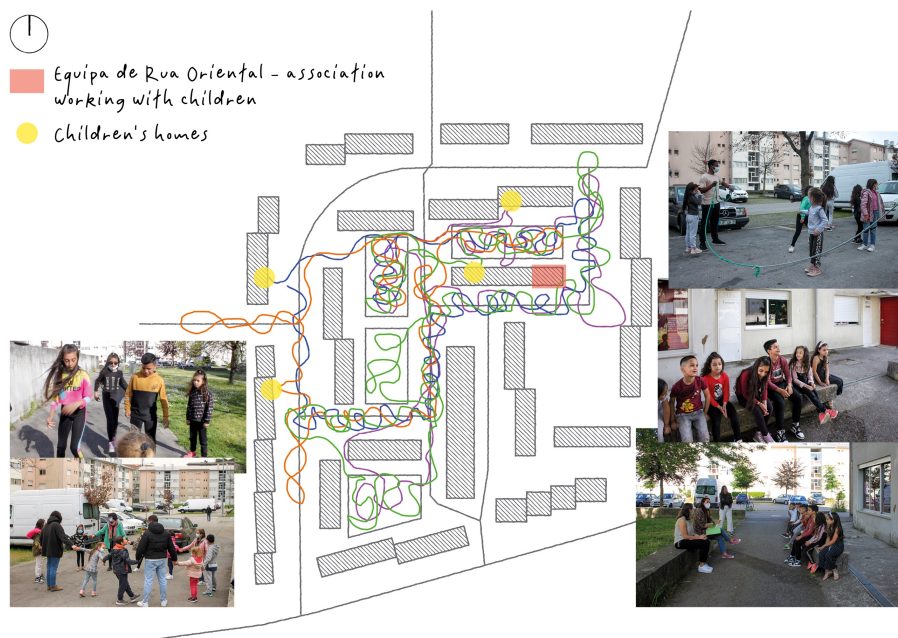

Fig. 17. Contumil neighbourhood – Identification of the public spaces most frequented by children concerning the distance from their homes. Cartography by Elena Parnisari.

The socio-spatial plans presented here aim to show the spatial flows and their correlation with the scale of the neighbourhood's public space.
The children's perception of the neighbourhood's limits extends far beyond those with which the neighbourhood is registered in the municipality. The children contemplate the primary school within the neighbourhood and the playground adjacent to it, as there is no playground within the neighbourhood itself.
Boundaries are also perceived beyond those the children have never explored because they are considered dark, dangerous or forbidden by their parents. Such areas correspond with the buildings' rear facades, where community 'control' does not reach.
The children are firmly attached to the association Equipa de Rua Oriental, the only association in the neighbourhood whose target audience is children and their mothers, as is the sociological target of the research itself since it focuses on some of the categories excluded from the design of urban policies and spaces, one of the largest being children, which inevitably also include their carers, primarily female figures.
 All the children's extracurricular activities occur almost around the association's headquarters, creating a sense of protection and security.

The children take possession of the existing public spaces (sports fields and gardens) by playing, dancing and playing sports. By noting where the flows are most concentrated, and not only the flows of children but also of their mothers, one immediately perceives from the plans how these are the central spaces in the neighbourhood where urban policies should be concentrated in terms of planning and programming.

Children often define the streets surrounding these spaces as dirty, noisy and dangerous. Hence, they tend to limit their activities within circumscribed public spaces and use the streets only as a passageway, not as a place of permanence.

A final consideration that can be made when looking at the plans is that buildings surround the spaces of most significant use. As repeated in the interviews of both children and mothers, the Contumil neighbourhood is safe since there is a form of mutual control and a feeling of co-responsibility within the community.

By providing an accurate reading of the use of spaces by children and their mothers, of the positive and negative aspects present in these spaces, of what they would like to see realised, these maps are listing a sort of decalogue of measures and good practices that could be taken into consideration by future urban planners who will be working on a new project to renovate public spaces in the neighbourhood specifically, but in general would serve everyone to draw conclusions on which elements need greater emphasis in the design, and which aspects should be paid attention to according to the answers. The guidelines that can be drawn from reading these drawings would also benefit all residents and not only children, since as stated at the beginning of this article, the aim of introducing the child-friendly city perspective into urban design aims at a more inclusive design for all, since the minimum parameters that should be respected to design spaces suitable for children are consequently suitable for any other adult with special needs or not.

This work is therefore proposed as a methodology of analysis to understand how the children use the spaces and why they concentrate their activities in specific spaces. This type of analysis focuses on co-creation and co-participation when the possibility of improving the space arises. Planning is, therefore, made from within those who live in the space.

3   Conclusion

In conclusion, the results presented here are embryonic reflections of a work-in-progress process that has been achieved through the experience of these workshops, which are intended to be a tool to help define the goals of this thesis: justifying theory through practice, always keeping in mind that the gap that exists between knowing and doing can challenge the impact of the project. In reality, in order to continue to pursue this objective, someone must take responsibility and act to improve these neighbourhoods, such as the local administration with the promotion of projects with specific targets on the public space in these neighbourhoods and to start drawing attention to the social and urban needs that exist and to establish action-research observatories that can be concretely effective on the ground.

Indeed, to date, what comes up is that the chosen unit of analysis - the social housing neighbourhood - is a microcosm of actions and relationships where experiences of community and participatory life still subsist and that it would be much more complex and of much more broad results to develop this analysis in a larger, disconnected urban context. Although this should be the ultimate goal, that is to carry out targeted research actions in small-scale contexts to reach an ever-wider territory slowly. All these analyses together would lead to a unitary reading of the city and thus to the possible realisation of targeted programmes at the municipal level to be spread equally over the entire urban territory.

The children from the neighbourhoods value their spaces and are aware of the protected environment within which they find themselves. At the same time, they can list their shortcomings and demonstrate a willingness to be part of decision-making processes to improve their spaces and functions.

A possible conclusion of the research is an analytical and prospective diagnostic that aims to determine the existence of diversity. Indeed, not all children occupy the same space. The transcribed cartographies from work done with the children represent the research's conclusions, where the aim is to highlight the complexity in the public spaces of social neighbourhoods and thus in the act of neighbouring, which must be considered when approaching a child-friendly city project. The results that the research aims to achieve are an interpretation of the materials produced by the children during the urban laboratory, compared with the existing literature and reworked with critical thinking gained from the experiences of the case studies in which they took part.

The future results of this experience aim to urge urban planners, architects, and designers to re-scale and re-imagine places from a different perspective, following a methodology with principles of collective creation: active participation, reflection and action, commitment, shared responsibility, listening and a vision of the whole.

Including children in targeted programs and formulations of policies would benefit health, well-being, local economies, safety, nature, sustainability, and resilience.

Promoting equitable, inclusive and caring neighbourhoods through urban and participatory design would enable residents to co-create alternatives in contexts of social exclusion.

In doing so, making it inclusive to all.

Acknowledgment

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