



We protect schools: tactical urbanism actions in the school surroundings of Barcelona, Spain

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Abstract

Objective: To address the systemic contribution of Protegemos las escuelas program to the increase of public spaces, road safety and environmental quality; the enhancement of public facilities and their immediate surroundings; and the reduction of socio-environmental imbalances between neighborhoods.

Methodology: Case study based on the analysis of the 25 school environments transformed in the first phase of the action, aiming to elaborate a taxonomy of the interventions.

Relevance: The work discusses the paradigm shift that characterizes Barcelona in the last decade, based on the transition from the culture of “official grandiloquence” to the attention on acting in the small and the ordinary, a phenomenon inserted in the context of economic and health crisis, but also political and representative.

Results: Verification of the existence of five types of squares, in isolated or combined occurrences, with better or worse performances. After eleven months of operation, the program has already been able to generate approximately 3,500 m² of new public spaces for pedestrians in the school surroundings.

Contributions: The work contributes to the enhancement of small-scale everyday public spaces, presenting a tactical urbanism experience focused on the creation of public spaces of permanence associated with the school network.

Conclusion: Although the program is still in the testing phase, and the scope as well as the limitations for the field of urban design are yet to be fully revealed, it is possible to highlight different contributions that emphasize the various aspects present in tactical urbanism methodology.

Keywords: Tactical urbanism. Schools. Public space. Urban design. Barcelona.

Protegemos as escolas: ações de urbanismo tático nos entornos escolares de Barcelona, Espanha

Resumo

Objetivo: Abordar a contribuição sistêmica do programa Protegemos las escuelas para o incremento dos espaços públicos, da segurança viária e da qualidade ambiental, para a valorização dos equipamentos públicos e seus entornos imediatos e para a redução dos desequilíbrios socioambientais entre os bairros.

Metodologia: Estudo de caso baseado na análise dos 25 entornos escolares transformados na primeira fase da ação, visando à elaboração de uma taxonomia das intervenções.

Relevância: O artigo discute a importante mudança de paradigma que caracteriza Barcelona da última década, fundamentada no deslocamento da cultura da “grandiloquência oficial” para a atenção sobre a atuação no pequeno e no ordinário, um fenômeno inserido no contexto de crise econômica e sanitária, mas também política e representativa.

Resultados: Verificação da existência de cinco tipologias de praças, em ocorrências isoladas ou combinadas, com melhores ou piores desempenhos. Após onze meses de operação, o programa já foi capaz de gerar aproximadamente 3.500 m² de novos espaços públicos para pedestres nas adjacências escolares.





Contribuições: O trabalho contribui para a valorização dos espaços públicos cotidianos de pequena escala, apresentando uma experiência de urbanismo tático que tem como foco a criação de espaços públicos de permanência associados à rede escolar.

Conclusão: Embora o programa ainda se encontre em fase de testes e seus alcances e limitações para o campo do projeto urbano ainda não estejam completamente revelados, pode-se destacar diferentes contribuições do caso que fornecem relevo aos distintos aspectos presentes na metodologia do urbanismo tático.

Palavras-chave: Urbanismo tático. Escolas. Espaço público. Projeto urbano. Barcelona.

Protegemos las escuelas: acciones de urbanismo tático en los entornos escolares de Barcelona, España

Resumen

Objetivo: Abordar la contribución sistémica del programa Protegemos las escuelas para el aumento de los espacios públicos, la seguridad vial y la calidad ambiental, para la valoración de los equipamientos públicos y su entorno, y para la reducción de los desequilibrios socio ambientales entre barrios.

Metodología: Estudio de caso basado en el análisis de 25 entornos escolares transformados en la primera fase del programa, con el objetivo de elaborar una taxonomía de las intervenciones.

Relevancia: El artículo discute el cambio de paradigma que caracteriza Barcelona de la última década, fundamentado en el quiebre de la cultura de la “grandilocuencia oficial” para la atención sobre la actuación en lo pequeño y ordinario, fenómeno inserto en el contexto de crisis económica y sanitaria, pero también política y representativa.

Resultados: verificación de la existencia de cinco tipos de plazas, que aparecen en ocurrencias aisladas o combinadas, con mejores o peores desempeños. Pasados once meses de operación, el programa logró generar aproximadamente 3.500 m² de nuevos espacios públicos para peatones en los entornos escolares.

Aportes: el trabajo contribuye a valorar los espacios públicos cotidianos y de pequeña escala, presentando una experiencia de urbanismo tático enfocada en la creación de espacios públicos de permanencia asociados a las escuelas.

Conclusión: aunque el programa aún se encuentra en fase de pruebas y sus alcances y limitaciones para el ámbito del proyecto urbano todavía no se han revelado completamente, es posible verificar diferentes contribuciones del caso en las que se destacan distintos aspectos presentes en el urbanismo tático.

Palabras clave: urbanismo tático, escuelas, espacio público, proyecto urbano, Barcelona

Introduction

Tactical urbanism was widespread in the 21st century as a methodology which uses low-cost, short-term and small-scale actions to demonstrate the possibilities for scalable and long-term changes in the cities. The Americans Lydon & Garcia (2015) presented the movement less than a decade ago, and yet it still achieves increasing popularity, notably reinforced in 2020, during the Covid-19 pandemic, due to its application by the governments to adapt the cities to the “new normal”.

Although the already implemented worldwide actions share common characteristics, everything indicates that this is not an unified movement, but a general rubric, which encompasses a wide range of emerging urban design proposals (Brenner, 2016), used for different political purposes (Webb, 2018). These interventions, originating from groups of citizens in the last decade, quickly gained momentum in a context of crisis and economic



austerity, in which governments have been systematically failing to deliver solutions through conventional urban planning to address the problems of contemporary cities (Brenner, 2016; Silva, 2016), forcing a change in the approach of urban development (Webb, 2018).

In the specific case of Barcelona, two decades after the First Strategic Plan (1988-1992), a period marked by investments in large urban design, which turned the city into a “model of success” (Delgado, 2007), it seems that there was a saturation point. On the eve of the economic crisis, Delgado criticized:

É certo. Barcelona se transformou em um modelo. Modelo no sentido de pauta que os planejadores urbanos e arquitetos de todo o mundo imitam ou citam, suposto paradigma de crescimento, de originalidade, de harmonia. (...) Mas Barcelona é também modelo de outras coisas. À sombra da Barcelona-espetáculo, está esta Barcelona modelo de como se administra hoje a cidade tardo-capitalista e da nova desordem urbana; de como a autopromoção municipal e os elogios das revistas internacionais de arquitetura só são possíveis escamoteando a outra cara da moeda, o reverso obscuro da grandiloquência oficial. (Delgado, 2007, p. 15)¹

The current vision of the municipal government, led by Mayor Ada Colau, elected in 2015 by the electoral coalition *Barcelona en comú*, seems to turn in another direction, to small-scale everyday public spaces, putting tactical urbanism on the city's political agenda. Unlike previous administrations, “this new design is not hierarchical, nor part of finished plans, nor is made explicit in major works, since it is not thought or represented by a single person” (Montaner, 2017). In this beginning of the millennium, in a global context of economic, migratory and representativeness crises, worsened even more by the current health crisis, tactical urbanism is based on a change of the urban paradigm, tensioning the strategic planning, adopted in the 1990s, that took advantage of the synergy of the 1992 Olympics to transform Barcelona into an international center for services and consumption (Tello Robira, 1995).

To some extent, cities adapt themselves in response to society (Silva, 2016). This is the case of Barcelona and the transformations that the Cerdá Plan has undergone for 150 years, a flexible grid with great potential for revision over time. In this context, its recent urban transformations have been marked by short-term and low-cost actions, which interfere with the relatively homogeneous grid of the Cerdá Plan, creating new layers and new spatial logic.

¹ Translator's note: For certain. Barcelona became a model. A model in the sense of the agenda that urban planners and architects from all over the world imitate or quote, supposed paradigm of growth, originality, harmony. (...) But Barcelona is also a model for other things. In the shadow of the Barcelona-spectacle, this Barcelona is a model of how the late-capitalist city is managed today and of the new urban disorder; of how municipal self-promotion and the praise of international architecture magazines are only possible by concealing the other side of the coin, the dark reverse of official grandiloquence. (Delgado, 2007, p. 15)



There are several examples of tactical urbanism actions implemented by the City of Barcelona in the last five years: the *Superilles* (Superblocks), systemic actions for pedestralization of stretches of streets, prioritizing pedestrians and active transport (Rueda, 2017; Sansão-Fontes *et al.*, 2019); road conversions in zones 30 and the increase in cycle paths; the emergency actions to adapt public spaces to the Covid-19 pandemic, carried out throughout 2020 (Sansão-Fontes & Espósito, 2020) and the recent *Protegemos las escuelas* (We protect the schools) program, whose focus is on creating public spaces of permanence associated with the network of schools. All these actions are added to other small-scale ones already consolidated, such as pedestrianization and street sharing interventions, common since the 1990s in older fabric neighborhoods, and the Ensanche² indoor gardens program (Pazos, 2014), among others.

Looking at this set of actions, implemented in the city over the past three decades, it is clear that interventions related to mobility and the creation of public spaces are much older and more widespread than realized. On the other hand, the performance with schools as a focus is more recent and innovative. Thus, this paper addresses the *Protegemos las escuelas* program and its systemic contribution to the increase of public spaces, road safety and environmental quality, to the enhancement of public facilities and their immediate surroundings and to the reduction of socio-environmental imbalances between neighborhoods.

It starts with the following questions:

- Are the program's actions urgent and improvised measures, or are they part of a strategic planning for the city, accelerated by the current circumstances of the health crisis?
- Do the interventions follow any logic? Are they well distributed throughout the city and do they serve the most vulnerable areas?
- Are these actions previously tested or clearly innovative? Do they contribute to the material qualification of the city?
- Was there citizen participation in government decision-making?

The methodology was based on the discussion around the theoretical framework of tactical urbanism, seeking to fit the program *Protegemos las escuelas* within the different possibilities of action that this approach contemplates. For the analyzes, in the months of October and November 2020, observation and classification of the 25 school environments transformed in the first phase of the program was carried out in the field, using, as an

² Ensanche, in Spanish, is the name of the expansion of the city of Barcelona, to the new urban grid conceived in the Cerdà Plan.





analytical matrix, the category structure created by the *Laboratório de Intervenções Temporárias e Urbanismo Tático* (LabIT-PROURB, FAUFRJ), aiming at the elaboration of a taxonomy of interventions. This *in loco* work was complemented by documentary research, using institutional material provided by the city of Barcelona, in addition to criticism from experts on the first publication of the program, in the mainstream media. Finally, an online statement was collected with the representative of the municipality responsible for the program. Thus, there was an attempt to elaborate this study through different points of view.

The paper is structured as follows: a presentation of a brief discussion of tactical urbanism applied to improvements in school environments, followed by a detailed analysis of the program *Protegemos las escuelas*, covering a taxonomy of the proposals. Finally, an online statement was collected with the representative of the municipality who is responsible for the program. Thereby, there is a discussion on the limits of the actions implemented, answering the questions raised in this paper.

Tactical urbanism in school surroundings

The new *Protegemos las escuelas*³ program considers schools as centralities, vital points of the city, seeking to act on these spaces to bring safety to users and create places of permanence as an extension of equipment. At first glance, in the daily enjoyment of the city, these microinterventions could be read as specific actions of little expression or even improvised. However, they must be seen as acupuncture actions, sparks that initiate larger or propagable actions (Lerner, 2011). In addition, there is still a strong systemic character in these actions. It is a network of microinterventions spread across the city, which makes up a new layer on the actions already implemented and commented on previously, which reviews, resizes and reprograms the grid of the Cerdá Plan. Within this more universal and generalist character, there is a certain degree of specificity, since each school environment is different and the design seek to interpret these particularities, as exposed below.

Tactical urbanism is an approach to activating and transforming neighborhoods through short-term, low-cost interventions that allow immediate reconfiguration of the space, aiming at future transformations (Lydon & Garcia, 2015). More than creating new spaces, the action is focused on transforming existing environments in the expectation of obtaining immediate results and on intervening at the local scale, repositioning the urban design from the object (or finished product), as approached in conventional urbanism, to the process of change (Silva, 2016).

The origin of the term “tactic” comes from the work of the French philosopher Michel de Certeau (1999), who distinguishes and defines strategy as the calculation of relations of

³ *Protegem les escoles*, from Catalan language.





strengthen from the point of view of the power, and tactics as the gradual reaction from the point of view of the weak, who take advantage of opportunities and loopholes to act. This definition has been inspiring contemporary architects and theorists, unfolding in actions to create or improve public spaces in various places around the world.

It is a broad and under construction concept, which encompasses different types of activities in contemporary cities (Brenner, 2016; Silva, 2016; Sansão-Fontes *et al.*, 2019). Silva (2016) draws attention to the diversity of interventions under this heading, such as, for example, the temporary uses for the appropriation of empty land (Bishop & Williams, 2012), the informal actions that occur in legal gaps (Bermann & Marinaro, 2014), low-cost and rapid implementation test actions (Lydon & Garcia, 2015), often related to road redesign, insurgencies or guerrilla actions that express dissatisfaction with the status quo or those that recover abandoned spaces (Campo, 2014).

In the present case, tactical urbanism appears in an extremely specific way: to test the design's functioning and the population's acceptance, through the determination, in an agile way, of a new configuration for the school surroundings. Thus, an attempt is made to anchor in the neighborhoods a general plan carried out by the city hall, particularizing the overall design according to local characteristics.

It is not, therefore, a basic intervention, one that arises from processes mobilized “from the bottom up” to face urgent urban issues (Brenner, 2018). Thus, it is not in line with practices within the informality field that involve occupying and redoing the logic of power (Sassen, 2014), which usually characterizes many of these actions around the world, particularly the original ones. Mould (2014) had already attempted to “capture” the movement by governments in the context of the economic crisis of 2008.

On the other hand, Lydon & Garcia (2015) defend the diversified nature of the approach and its forms of application. According to them, such methodology usually appears in three modalities: as a citizen protest, of an insurgent nature; as a tool for community engagement, which can be formal or informal in nature and, in the case in question, in the form of design testing, of a more institutionalized nature, relativizing its exclusively informal or insurgent nature. In the case of the *Protegemos las escuelas* program, this is a formal, governmental action that does not involve citizenship, but is linked to a specific community, the school collectivity.

The program's innovation resides in aspects related to the specifics of the school as training equipment and to the generality of the network of equipment in the urban fabric. Initially, the program starts with the recognition of the school as a reference equipment, which not only demands special attention when it comes to urban insertion and the treatment of the surroundings, but also presents itself as a good place to start processes of transformation. Evaluating the equipment from the urban point of view, there is great



potential in the streets of the immediate surroundings, which can function as an extension of schools and operate as playgrounds and waiting and accommodation areas. On the other hand, from an educational point of view, schools are the incubators of new ideas, with the potential to mediate urban and environmental education processes, in addition to functioning as platforms for community support.

Just as the school network is a potential per se, regardless of the cultural context, in Barcelona, it gains specific contours, considering the high levels of air contamination, the intense circulation of vehicles and the excess of space for parking on the streets and in the street corners of Ensanche. In this context, acting systematically to increase public spaces, using the school network as a support, can bring several benefits, as will be shown.

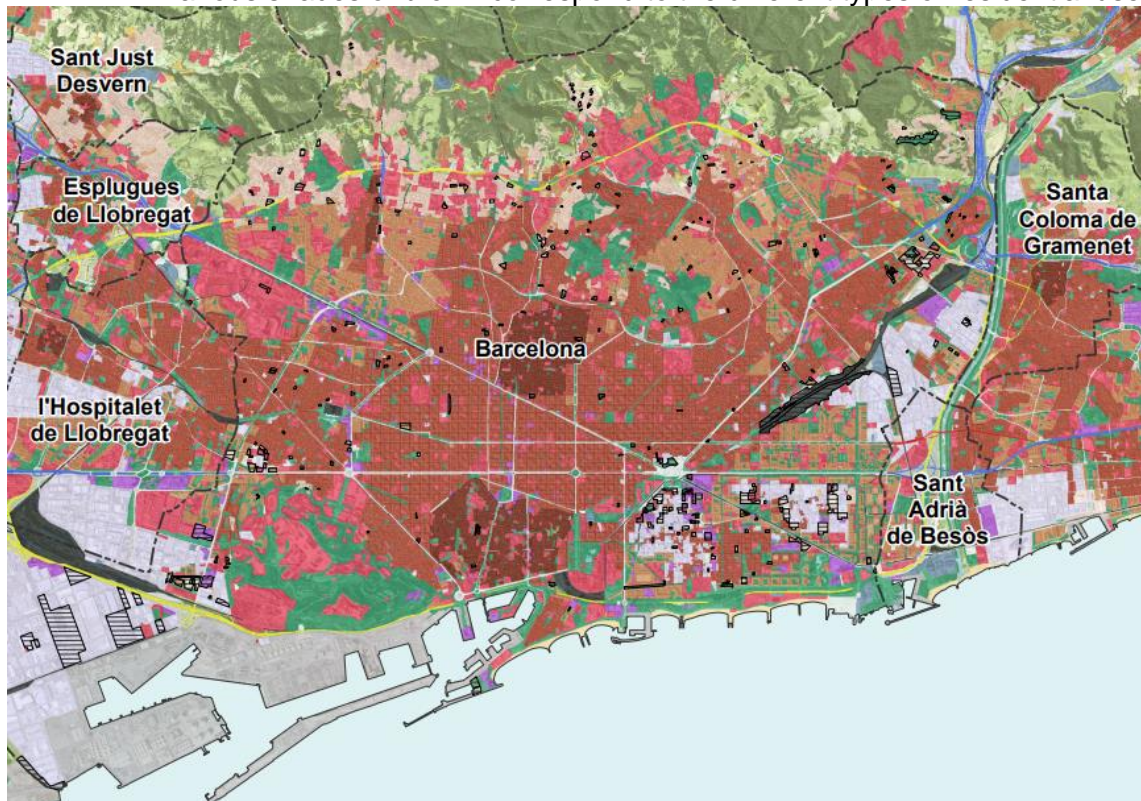
The program *Protegemos las escuelas* in detail

Protegemos las escuelas is an initiative of Barcelona City Hall that aims to create small squares in front of public and private schools, in order to bring security to users by creating a permanent extension to the schools boundary. The government's proposal is to re-urbanize 200 school environments by 2023, in all neighborhoods of the city, consolidating these areas as meeting places, safe and comfortable. For this purpose, the methodology of tactical urbanism is used, contemplating phased and scalable actions over time, so that the temporary phase of this group of schools is carried out in four years.

Pre-existing situation

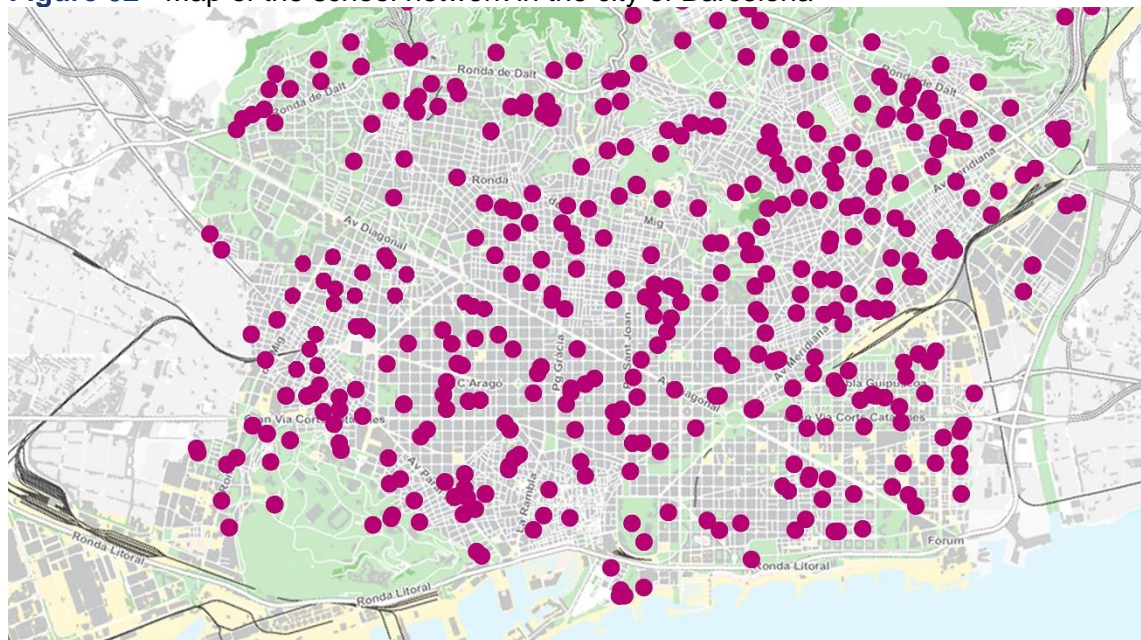
The expansion plan of Barcelona, from 1859, by engineer Ildefonso Cerdá, had as its main characteristic the multiplication of a basic morphological unit, the block, in a relatively homogeneous grid distributed throughout the territory. This structuring did not define a rigid or restrictive sector of land use, with Ensanche expanding with the presence of residential use in practically its entirety. In view of this condition, the schools are, in the same way, homogeneously distributed in the grid (Fig. 01 and 02).

Figure 01 - Zoning map of the city of Barcelona and metropolitan area. The areas in various shades of brown correspond to the different types of residential use



Source: Ruiz et al. (2020).

Figure 02 - Map of the school network in the city of Barcelona



Source: Ajuntament de Barcelona with intervention by the author.

On the other hand, it should be noted that the transformations implemented as part of the Cerdà Plan have densified the city without providing public spaces in a proportionally adequate relationship. Allied to this fact, the intense flow of vehicles, along this dense grid,



contributed to the current high levels of air contamination in the city (Sansão-Fontes *et al.*, 2019).

In this context, the *Protegemos las escuelas* program plays its part in recognizing school environments as being the most sensitive spaces in the city, fulcrum points which all actions of public space transformation must first consider (Ajuntament de Barcelona, 2020), constituting a new performance layer.

Some local precedents served as a reference for the program, such as the city's experience in pedestralization actions, practiced for decades, added to the experience with the *Superilles* program, based on the phased action that aims to monitor and measure the impacts of the intervention, which already counts on two actions carried out in Ensanche and others in the implementation phase. *Protegemos las escuelas* incorporates or articulates also the actions carried out within other previous programs related to schools, such as *Eco chaflanes*⁴, *Caminos escolares*⁵, *Plan de barrios*⁶, *Refugios climáticos*⁷, among others. Another apparent impetus for the program was the Covid-19 pandemic and the consequent need for the rapid adaptation of public spaces to offer more places for pedestrians, considering that schools started operating again in 2020, long before the start of the vaccination process.

Barcelona has 585 children's educational centers, consisting of pre-school, elementary and high school levels. The program's proposal is to intervene in one third of these institutions by 2023. Due to the impossibility of carrying out simultaneous works on the entire school network, a selection criteria was established to identify which schools should undergo intervention at first. Schools were prioritized: (1) from 0 to 12 years old; (2) with points identified as complex in terms of road safety; (3) with greater need for educational impulse, due to the environment in which they are inserted; (4) that were neighborhood demands and (5) that have a high level of environmental pollution (Ajuntament de Barcelona, 2020). (Fig. 03)

⁴ <https://ajuntament.barcelona.cat/qualitataire/es/qualitat-de-la-ire/com-es-lluïta-contra-la-contaminacio/escuela-respira>

⁵ <https://ajuntament.barcelona.cat/educacio/ca/camins-escolars>

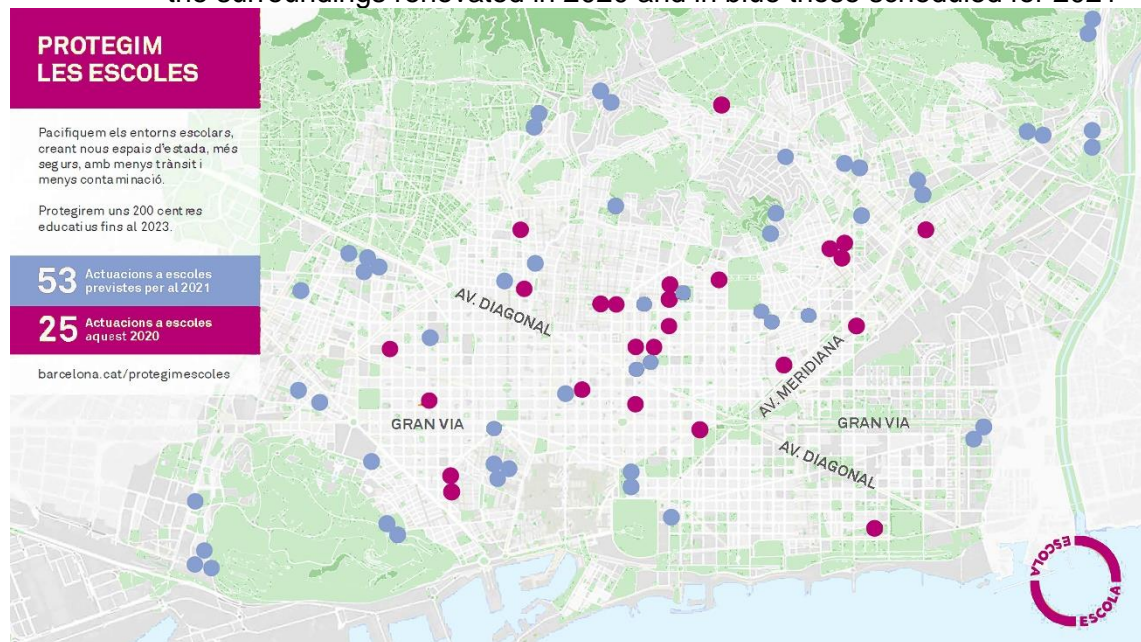
⁶ <https://pladebarris.barcelona/es/planes-de-barrio>

⁷ <https://www.barcelona.cat/barcelona-pel-clima/es/escuelas-refugios-climaticos>





Figure 03 - Map of the first two phases of the Protegemos las escuelas program. In pink the surroundings renovated in 2020 and in blue those scheduled for 2021



Source: Ajuntament de Barcelona with intervention by the author.

Goals

Protecting schools, within the scope of the program, means revitalizing school environments to calm traffic, improve air quality, reduce noise, reduce accidents, and generate more meeting spaces. Thus, the program poses these main objectives: (1) pacification of traffic on the surrounding streets, increasing road safety; (2) improvement in habitability, considering the expansion of dwelling areas with the incorporation of new urban furniture and an increase in environmental quality with the increase of green areas; (3) improved visualization of the school environment and (4) involvement of the educational and local communities in the configuration and use of the new spaces.

Types of support space

In Barcelona, the management of the public school network is the responsibility of the Catalunya government (Generalitat de Catalunya), with the city hall being responsible only for the surrounding public space. Thus, the spaces involved are the accesses to schools, consisting of the sidewalks and roads in the immediate surroundings. To make the creation of these small “squares” feasible, the actions generally operate using areas intended for automobiles, such as parking lanes along, vehicle lanes or the bevels of the Ensanche intersections, when the equipment is located on the corners. Eventually, the entire streets are used when they have a local character.

It is worth commenting on the existence of a wide variety of dimensions on the city's sidewalks. In Ensanche, in general, they are wider (5 meters), however, in older fabric



neighborhoods, they can be quite narrow (1 meter). Even on wider sidewalks, there are few public places to sit. Regarding the corners, the design of the Ensanche foresees the chamfers both in the buildings and on the sidewalks, creating an enlarged area at the intersections to favor visualization and circulation. However, this configuration makes room for car, motorbike and loading and unloading spaces, as well as favoring short pauses for vehicles in motion, but does not attend the pedestrians. After all, the presence of chamfers forces pedestrians to walk an additional 15 meters at each intersection to reach crossings.

Thus, “pacifying” the school environment means, in the context of the program, reducing traffic, speed, improving lighting in the streets surrounding the school and expanding the areas of permanence, adding greener, shade and furniture to the access to schools. In this context, chamfers and wide streets are presented as potentialities for the creation of these squares.

Actors

The program articulates few social actors, being a process top-down mobilized, initiated and managed by the public power. The design is carried out by architects of the technical staff of the city hall or through charges to architecture offices, while the school community participates, through working groups, presenting the demands, deciding on details of the paintings, and acting in the maintenance of the spaces. It is a “functional participation”, according to Cornwall (2008), occurring when the main decisions have already been made by external agents, possibly being the most practiced type of participation. Although the invitation to participate is necessary, it is not sufficient to guarantee effective participation (Cornwall, 2008).

Program and activation elements

The city has defined a catalog of actions for each proposed objective, to be adapted according to the characteristics of the location (Ajuntament de Barcelona, 2020):

The traffic pacification includes actions to reduce the space for vehicles (lanes and parking lots); speed reduction, preferably at 20 km / h; creation of chicanes to assist in this reduction; identification and protection of itineraries; vertical and horizontal signage; traffic lights; improved lighting; installation of road safety elements (fences and bollards); and implementation of the volunteer program for traffic control during school hours.

The improvement in habitability considers the attention to access and exit points from school centers, establishing that in front of them small squares will be defined with an area equivalent to a circumference of 10 meters in diameter, urban furniture will be installed in order to provide comfort so that they become a place of permanence and criteria and ludic urban elements that stimulate spontaneous children's play will be used.



The squares are delimited with protective fences that separate them from the roads, being made up of furniture, such as benches or small fences, flowerbeds, plant pots, bins and spontaneous game elements. Eventually they will have bike racks and a power point to charge cell phones or scooters. The floor surface (both asphalt and sidewalks) receives a playful painting, which varies in each case.

An important action is the accessibility between the sidewalk and its extension, normally done in the lowered curb. In the case of schools located on the corners, an asphalt-pavement connection ramp is built. It was also observed, in some cases, the planting of new trees on the existing sidewalks.

Regarding the visualization of the school environment, a set of new graphic elements was defined to clearly identify the presence of the school, as a logo painted on the asphalt, to mark the access to the pacified area, and the green color in the new incorporated spaces.

Finally, in relation to the involvement of educational communities, it is proposed that the school participate in the improvement and maintenance of the square, to strengthen the link between the community and the public space. The city government suggests that schools carry out the following actions: implantation of graphic elements on the equipment's facade, definition of playful elements for the sidewalk, customization of protection and gardening fences and maintenance of the flowerbeds.

Spatialization

Protegemos las escuelas is born as a network of actions, since the squares operate as extensions of school equipment spread relatively homogeneously throughout the city.

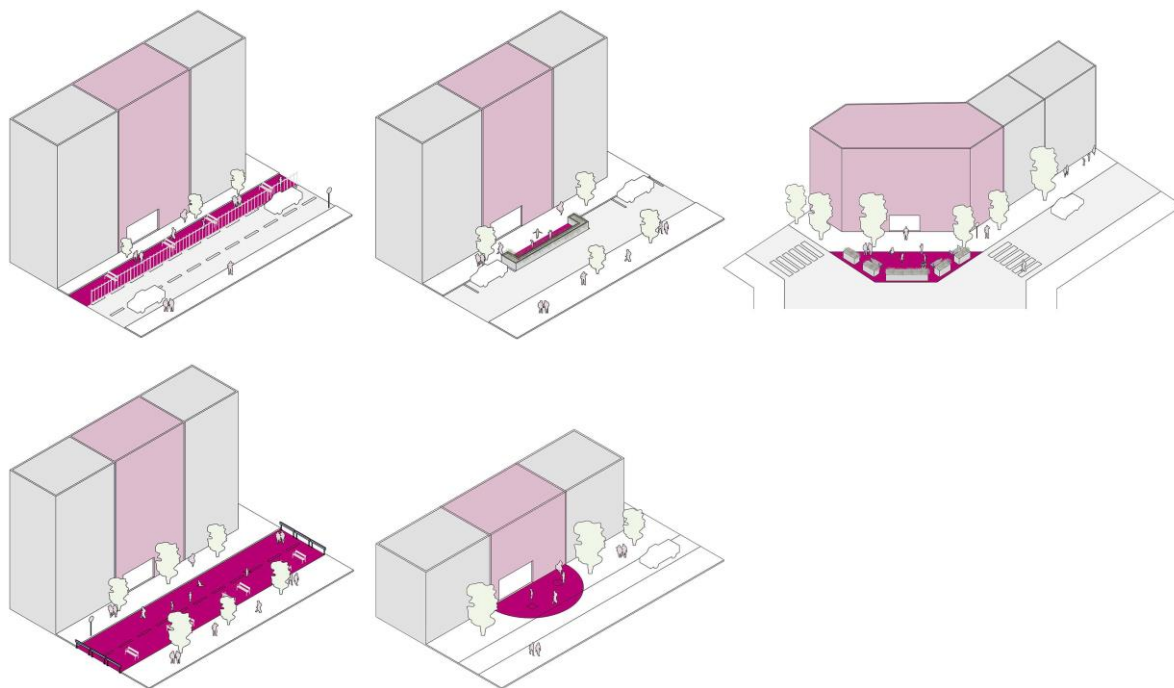
Within this system, five main types of intervention were mapped by this work among the first 25 interventions performed, namely: (1) *Extensão da calçada*; (2) *Parklet* (with or without platform); (3) *Esquina dilatada*; (4) *Rua inteira*; and (5) *Sinalização*⁸. (Fig. 04)

⁸ Translator's note: (1) Extension of the sidewalk; (2) Parklet (with or without platform); (3) Dilated corner; (4) Entire street; and (5) Signage.





Figure 04 - Types of intervention in school surroundings: extensão de calçada, parklet, esquina dilatada, rua inteira e sinalização



Source: Own elaboration.

The *Extensão da calçada* solution is made possible by converting a vehicle lane (3 meters) into a pedestrian area, which is lowered in relation to the sidewalk. The *Parklet* solution occupies the parking strip along (1.6 to 2 meters), resulting in a narrower stretch of sidewalk. There are situations in which the *Parklet* is a simple delimitation of an asphalt area, being lowered in relation to the sidewalk, but, in general, elevated platforms are built, level with the sidewalk, so that the extension is better used. In the case of the *Esquina dilatada*, the small square is configured by closing the radius of curvature of the corner, reducing the chamfer, and generating an additional trapezoidal surface of approximately 120 m² for the sidewalk. Some schools located on local roads with little movement, receive squares that arise from the closing of the *Rua inteira* or from its sharing between pedestrians and vehicles. Finally, in some cases where it is not possible to extend the sidewalk, as these are narrow streets already level with it, only a *Sinalização* action is taken to identify the presence of the school. (Fig. 05 to 09)



Figures 05 and 06 – Extensão de calçada – Grèvol School/ Parklet –Sagrat Cor School



Source: Own authorship.

Figures 07 and 08 – Esquina dilatada – 9 Graons School / Rua inteira – Doctor Ferran i Clua School



Source: Own authorship.

Figure 09 – Sinalização – Institut L'Alzina



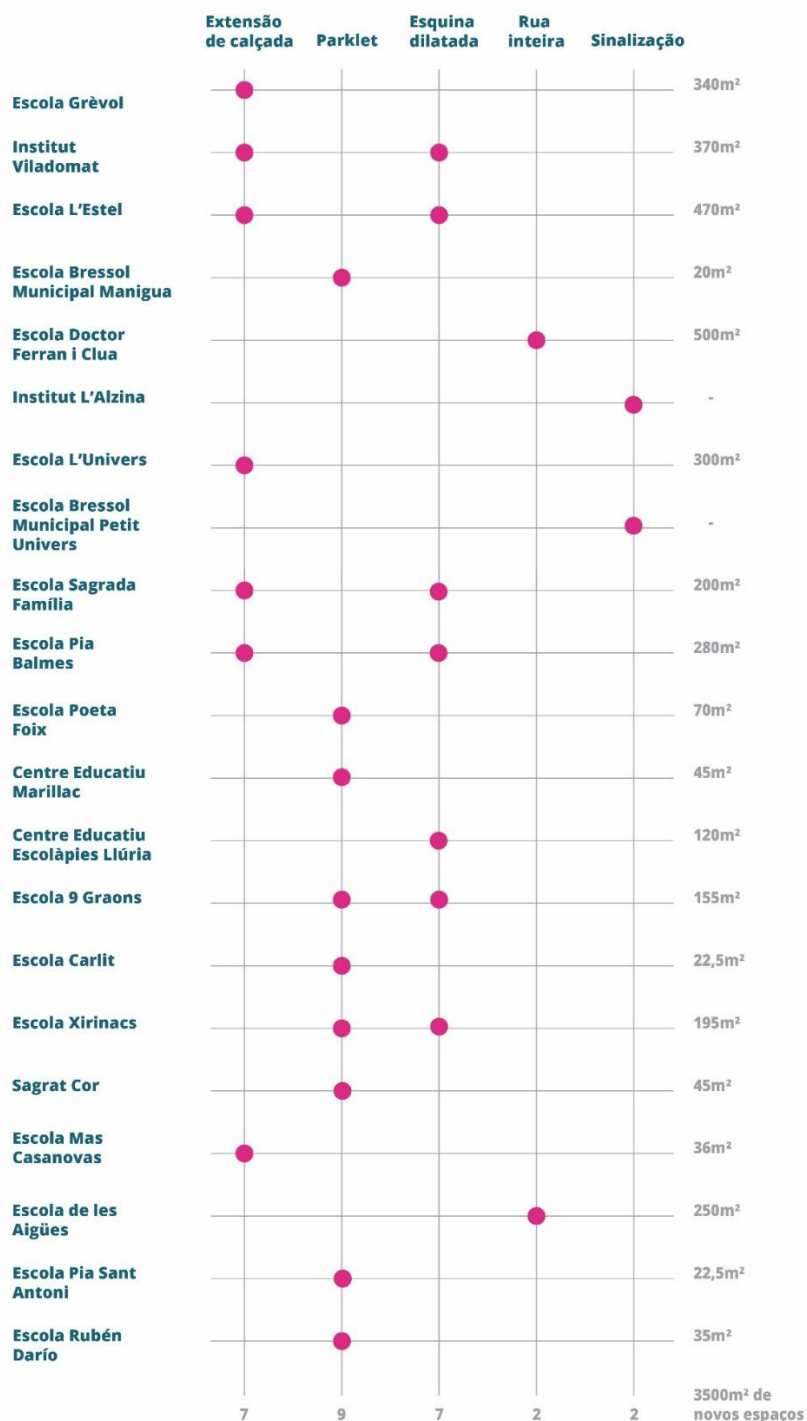
Source: Own authorship.

In many situations, the combination of typologies was also observed, mainly the association of the *Esquina dilatada* with the *Extensão da calçada* or the *Parklet* situation, enhancing the intervention. In these proposals, which are more complex and comprehensive,



special situations arise, such as the incorporation of pedestrian crossings in the new configuration. The surface gains of public spaces vary from 20 m² of a small *Parklet* (case of Escola Bressol Municipal Manigua) to 500 m² of a *Rua inteira* converted into a square (case of School Doctor Ferran i Clua) (Fig. 10).

Figure 10 – 21 Schools in the 2020 phase, by type. Four schools have yet to begin their works



Source: Own elaboration.



Deployment process

The program was designed to carry out the temporary phase, which will remain indefinitely, since there are still no plans in the schedule for the execution of the permanent phase. Thus, the actions serve as a test of space for future realization, an intervention of “meanwhile” (Leku Studio apud Archdaily Brasil, 2018), however, the approach is also due to the cost of a definitive implementation in times of economic crisis, aggravated by the 2020 health crisis.

The program works in three instances. The selection and prioritization of schools is made by the Impulse Group, composed of the following departments: Urban Model, Education, Urban Guard and Mobility and Neighborhoods. The program is monitored by the School Environment Groups in each district, meeting spaces where educational communities and district and municipal technicians can monitor the program, analyze problems in the school environment and propose actions for improvement. Finally, the Monitoring Group is made up of entities and people interested in contributing and monitoring the program (Ajuntament de Barcelona, 2020).

In four years, the proposal is to revitalize 200 areas, 25 still to begin in 2020. In 2021, it is planned to intervene in 53 more areas and, in the two subsequent years, 35 and 30 respectively.

Scope and program limits

One of the questions posed by the program is the importance of articulation between the global and local scales or between micro-scale planning and design. Within this context, the case study reveals how tactical urbanism - as a form of urban design - can be triggered by the government to reconfigure small spaces in an agile way, especially in the situation experienced during the pandemic, when public spaces have been increasingly used. The program, after eleven months of operation, has already been able to generate around 3,500 m² of new public spaces for pedestrians in the school surroundings.

Some aspects observed can be seen as limitations to the success of the program. The first is the extended temporality of interventions. Despite the speed of implementation of the temporary phase, the absence of a deadline for the execution of the permanent stage is an aggravating factor, because it can lead to the material degradation of the action or even send a wrong message to society that it is an improvisation, instead of an effective physical transformation of the intervened places. In fact, the tactical actions of adapting the city to the pandemic, carried out in an agile way in the months of March and April 2020, were the target of wide criticism from experts, who considered them improvised, frivolous, without criteria, simplistic or dangerous (Blanchar & Montanés, 2020).



In addition, there is the lack of a measurement methodology that can evaluate the successes and errors of singular actions, since, in a program with the intention of reaching almost 600 interventions, it should be considered that many actions may not have the expected performance, due to the different characteristics of the surroundings.

In fact, some qualitative imbalances have already been observed through on-the-spot analysis of the 21 completed interventions. Some solutions have been more successful, such as *Extensão da calçada* and *Ruas Inteiras*, which effectively create places on an adequate scale for meeting and leisure, although they do not always, or almost never, solve the problem of accessibility between the level of the asphalt and the sidewalk. The situation is no longer the case with *Esquina dilatada* solutions, despite an improvised aspect that could be improved on, these have also been successful and generally resolve accessibility by means of a short ramp. In the case of *Parklets*, the elevated units with wooden floors are the most effective, as they level with the sidewalks and create a welcoming and better material quality, compared to the version whose floor is in fiber cement sheet and mesh closure, much more fragile and "cold". The lowered version, in turn, does not solve the problem of accessibility and has little use due to the gap. The typology of *Sinalização* on the floor, identifies the presence of the school with greater clarity for drivers, but demonstrated less effectiveness among all the proposed typologies, precisely because it does not offer any expansion of pedestrian spaces, being closer to urban "makeup" actions.

Some criticisms are directed to the type of solution given to the new spaces, which, according to experts (Blanchar & Montanés, 2020), contain too many elements that, often, clash with a city recognized for the design and quality of public spaces, or even for "misrepresenting" the clear structure of Ensanche.

Finally, the most sensitive point seems to be the tangential participation of schools in the design definition. Presenting the demands, deciding on details of the paintings, and acting on the maintenance of the spaces is still a very limited type of participation. There could be greater integration of the school community in defining the uses of the new public space, since activities that take place inside schools (gardens and playgrounds, for example) could interact more with the collective surroundings, considering the potential of schools in urban and environmental education.

Based on these analyzes, it is possible to resume the questions made at the beginning of this paper.

- (1) Would the actions be urgent and improvised measures, or do they take part of a strategical pre-existing plan for the city, accelerated by the current circumstances of the health crisis? The lightness and provisional appearance of many materials and finishes could indicate that it is an improvisation or a simple urban make-up. However, as already discussed, this materiality is part of the procedural character of



the methodology, which uses low-cost elements, sufficient to test the functioning of the new space, before replacing it with more durable versions. According to Padilla (apud Blanchar & Montanés, 2020), many of the decisions were made so that the interventions were “more possible than perfect”, remembering that tactical urbanism has the advantage of improving the space before the final work is implemented.

The circumstances posed by the Covid-19 pandemic aggravated the need for actions to increase public spaces and effective responses in the school environment. However, the program unfolds from other previous experiences that had already been underway for some years, using the pandemic as an accelerator of the processes.

(2) Do the interventions follow any logic? Are they well distributed across the city and serve the most vulnerable areas? The program defines priorities for the execution of interventions over four years, with the need for an educational impulse depending on the environment in which one of these priorities is inserted. However, the rarer presence of interventions in the most deprived areas of the city in the first two years of the program is noteworthy, as can be seen on the right side of figure 3.

(3) Are these actions previously tested or clearly innovative? Do they contribute to the material qualities of the city? The actions take advantage of previous experiences and, in a way, merge with *Superillas* and adaptation actions for the pandemic, including joining them in some parts of the city, intertwining the different temporal layers of intervention.

There are precedents for similar actions elsewhere, which did not directly serve as a reference, but which demonstrate common affinities and concerns, for example, the *Bairro Escola* program, in Nova Iguaçu, state of Rio de Janeiro (Brazil), proposed in the 2000s which links schools to a support network composed of partners located within a radius of 1 kilometer to carry out external activities, with school environments adapted and signaled to connect it. Other initiatives, such as the *parklet* programs in several cities in the world, from the decade of 2010, can also be scored as antecedents, anticipating the possibilities of converting car spaces in favor of pedestrians.

The 21 actions carried out so far have had different impacts, as previously mentioned, and these results are important to guide the next steps, to replicate the successful actions and redesign those that were not successful, the way in which tactical urbanism operates as action methodology. However, for this, it is necessary to follow and analyze each intervention individually.

(4) Was there citizen participation in government decision-making? There was no involvement of citizens in the process, and the school community, as mentioned, had limited participation. The process could incorporate a more interactive participation,



with interdisciplinary methodologies that, according to Arnstein (1969), seek different perspectives, making use of systemic and structured learning processes, since citizen participation means empowerment. The decentralization of the process could assist in the greater integration of each singular proposal with its respective neighborhood, reducing the generalities.

Final considerations

This work discusses the important paradigm shift that characterizes Barcelona in the last decade, based on the shift from the culture of “official grandiloquence”, criticized by Delgado (2007), to the attention on acting in the small and the ordinary, which may have an impact in the daily life of the population, a phenomenon inserted in this context of economic and health crisis, but also political and representative.

It is important to note that the case is at the same time based on a specific context, of a city with a tradition of innovation in urban planning, but it also reveals a high degree of universality, since the issues raised, such as road safety, the improvement of environmental quality and the reduction of socio-spatial inequalities, are global agendas. In this sense, Barcelona continues to serve as a reference for other contexts, even if on a micro scale.

Looking at the case from the point of view of its potential for transforming public spaces, it is possible to highlight different contributions that emphasize the various aspects present in the approach to tactical urbanism, namely:

Tactical urbanism as acupuncture: the program intervenes and refreshes ordinary public spaces in the city, acting at strategic points that can trigger gradual recovery in its surroundings, in an acupuncture way.

Tactical urbanism as a system: the proposal brings as a contribution the idea of systemic action in favor of strengthening school environments. It is a performance that resizes the urban fabric, redistributes and decentralizes the public space, balancing its offer in the city.

Tactical urbanism as a methodology: the case relies on the use of phased interventions to redesign public spaces, using tactical urbanism as a responsive and validation methodology for urban design.

Tactical urbanism as an adaptation: its short-term, low-cost and high-efficiency actions reveal the power of tactical urbanism in offering alternative solutions for emergency scenarios, such as the Covid-19 pandemic.

Tactical urbanism as public policy: with continuity and improvements, the case can become a true public policy for the city, with a replicable character for other public facilities, such as libraries, markets, universities, among others, reinforcing the new layer of public spaces created.



Finally, the *Protegemos las escuelas* program is still under development, with this paper focusing on the analysis of the first year and its immediate transformations. The in-depth repercussions can only be studied in the long term, supported by the continuation of the results and developments in each environment, during the four temporary phases and the permanent works, unfortunately not yet scheduled.

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