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Urban Activity and Children: Strategies to Promote Mobility

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Introduction

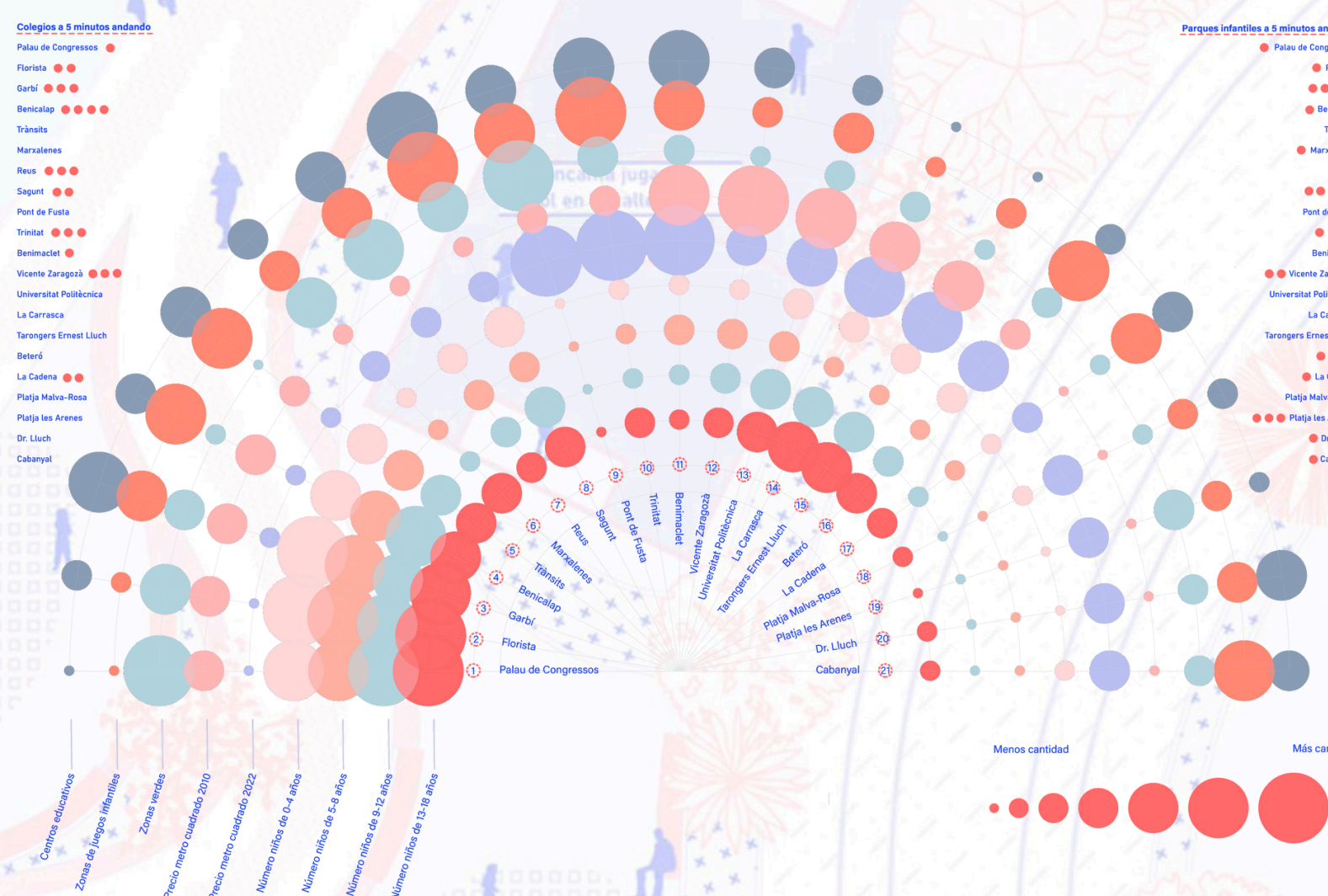
Inclusive urban design is essential to ensure the development of accessible cities with sustainable mobility and the integration of all age groups within public space. This research focuses on children and the environments surrounding public transport stops. At present, public transport settings lack planning and design approaches that address children's needs, despite their potential to function as nodes of social interaction and urban mobility.

Objectives

- O1. To develop a child-centred evaluation framework for public transport stop environments through the synthesis of academic literature, public policy documents, and international design guidelines, incorporating participatory inputs from children to contextualize the resulting criteria.
- O2. To assess the applicability and diagnostic capacity of this framework through a mixed-methods evaluation of tram stop environments in Valencia, identifying spatial patterns, deficiencies, and priority areas for intervention that affect children's mobility and the everyday use of public transport.

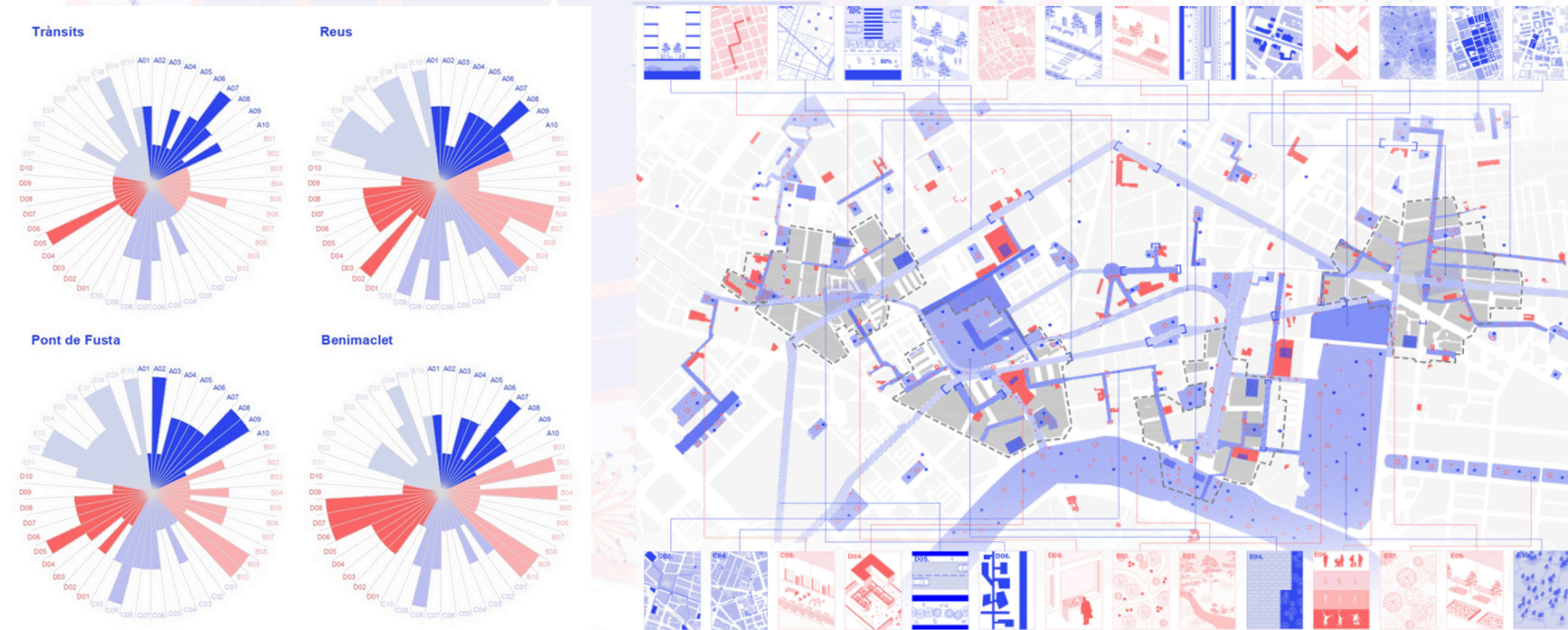


Method and Results



The analysis of urban environments using cartographic data within a 15-minute walking radius reveals clear territorial inequality in the distribution of infrastructure, green spaces, and services in relation to the child population. Stops located in central and coastal areas show higher land values and a lower presence of children, while peripheral areas concentrate a larger child population and display a significant lack of adequate urban facilities, evidencing unequal access to key infrastructures that support children's mobility and well-being. Based on this analysis, four representative stops were selected for a detailed assessment of their immediate surroundings. The application of the criteria framework reveals a generally low level of compliance. None of the stops exceeds 50% of the maximum possible score. Criteria related to sustainability and green spaces achieve the highest scores, while those linked to urban design, planning, and child-oriented visual communication are the least developed, confirming the absence of strategies that integrate the child population into urban space.

The study advances urban diagnosis by combining conventional methods—field observations, spatial analysis, and user surveys—with contemporary user-generated digital data obtained from social media. This mixed methodology improves the evaluability of urban space by capturing both its physical configuration and its patterns of use and perception. The methodological process was divided into four consecutive phases: (1) literature review, (2) development of a catalogue of criteria, (3) analysis of the study area, and (4) evaluation of stop environments. The study addresses a gap identified in the literature and provides practical and transferable insights for the design of more inclusive, child-friendly, and sustainable urban environments.



Conclusion

Through the literature review and field study, it is shown that public transport stop environments should incorporate urban design strategies that support the integration of children, increasing their mobility and autonomy. The study presents a catalogue of criteria that brings together contributions from different authors and projects on the design of child-centred stop environments, along with a replicable evaluation method. This tool can guide urban policies and plans, improve the quality and attractiveness of spaces around stops, and help identify shortcomings in urban design. Its application in Valencia reveals

inequalities in access to infrastructure in peripheral neighbourhoods, where a higher concentration of children is found, and confirms that current stop environments do not incorporate strategies for child integration. The research contributes to knowledge on how inclusive design of tram stop environments can enhance children's well-being and urban sustainability. It also suggests that transforming stops into nodes of urban activity encourages public transport use from an early age, helping to reduce private car use and its environmental impacts.

Bibliografía

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Future Research

Future studies could incorporate a more ethnographic and sociological approach, integrating citizen participation processes into urban environment diagnostics. Exploratory exercises conducted in schools near the case study areas have demonstrated the potential of these processes.

