

Findings

On-site measurements proved that Plaza Pormetxeta's canopies and shields decrease temperatures up to 2 °C on hot days. However, these elements produced other effects such as darkness and threat that dissuaded people from staying at the plaza. Some residents defined the perceived environment as "dark" and "cold," referring not literally to the thermal environment, but meaning "unfriendly" and "unwelcoming." As a result, the climatic environment generated influenced negatively the built and the social realm. The public space was rarely used and remained empty for most of the time. People stayed in nearby public spaces and used Plaza Pormetxeta as a pedestrian pathway to move through the city but did not stay there. Consequently, Plaza Pormetxeta did not fulfil its role as a public space for the community.

CONCLUSION

Metropol Parasol in Seville decreased temperatures beneath the canopy, providing a more comfortable climatic environment. However, other spaces, such as Plaza del Cristo Burgos, decreased temperatures further with humbler and simpler techniques such as vegetation. In addition, the Metropol space was not used by citizens as much as other nearby plazas due to its lack of social facilities. Ecobulevar in Madrid generated three different microclimates at three points spread along a boulevard, all of them more comfortable environmentally than that found in nearby public spaces. The vegetal tree was the most popular, although it did not provide the most comfortable climatic environment. Finally, Plaza Pormetxeta offered a less comfortable climatic environment, influencing negatively the social environment and discouraging people from remaining there.

The study suggested that, while a comfortable climatic environment is necessary to generate successful urban public spaces, it needs to be combined with other physical and social aspects of the design. The microclimatic environment of a specific urban space has the potential to attract people to or repel people from it. However, it has to be understood as an integrant of the entire design and needs to be treated together with other requirements of the social environment. In fact, the study indicated that the perception of the climatic environment by citizens is not only determined by its physical properties. A further understanding of the socio-cultural and psychological factors influencing outdoor comfort will help producing successful urban public spaces that foster integration and improve quality of life in cities.

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