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## The reuse of housing buildings in Barcelona The versatility of old constructive structures

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## ABSTRACT

A research project on reused buildings in Barcelona recently carried out by our research group [1] has identified 1,463 cases that have changed their use at least once since the first century to the present. Among all the original uses been classified — housing, residential, commercial, offices, industrial, health, religious, cultural, recreational, educational, sports, and institutional — housing has been the main contributor to host new programmes: 55.52% of reused buildings in Barcelona were initially dwellings.

This paper analyses, on the one hand, how housing buildings in Barcelona — with their diverse typologies and, most of all, with structures based on bearing walls — have endured various changes of use without losing their main constructive, morphological, and spatial attributes. Therefore, we are first of all interested in visualising the paradox that constructions erected with bearing walls — considered by the Modernists as an expression of rigidity and stagnation — have given rise to so many new and perfectly adapted uses, like health, educational, cultural or representative buildings. This validates that the indeterminacy and dimensional regularity of these spaces defined by load-bearing walls become at least as much flexible, on a functional level, as those housed by clear-span structures.

On the other hand, the essay conveys the influence that the urban environment has in the transformation of all typologies involved — urban houses, farmhouses, palaces, villas and housing buildings —, revealing how their location in the different districts of Barcelona is strongly related to the new use they have been assigned. Hence, in the second place, we intend to observe together the heritage value of those buildings and their structure — considering both the original and the current use — along with their situation in the urban tissue, in what we could name a 'trending' location. That is, the situation of the different typologies of housing in the city determines the use to which it will tend to transform.

Finally, we shall stop in other cases with office, industry, or sanitary initial use that have been transformed into housing. In this set of buildings, it is especially interesting to point out that the buildings which are more favourable to a new housing use are those structures whose facades are regularly punctured with windows that, after all, are the epitome of the bearing wall.

## REFERENCES

[1] X. Monteys, M. Mària, P. Fuertes, R. Sauquet and N. Salvadó. *Atlas del aprovechamiento arquitectónico. Estudio crítico de los edificios reutilizados en Barcelona*, MINECO 2016-2018.