Standardized houses have been for a long reason for the inhabitants’ lack of satisfaction towards their house. Several authors have studied this topic and concepts like Open Building and processes of participatory design in architecture emerged.

Nevertheless, the current situation of the housing market still lacks customization and a direct collaboration between architects and inhabitants. Combining architecture knowledge and the inhabitants’ will to participate in the customization of their own houses is a current gap in the field. Effective solutions for the development of mass customized housing co-design do not exist.

In this scope this PhD project main aim is to synthesise the potentials of generative design to address the customization of houses in a co-design process. Specific goals are: i) systematizing the existing solutions for delivering customized house design; ii) defining the requirements that enable inhabitants to co-design their house; iii) defining and testing a framework for house co-design.

Publications:
1. eCAADe 2020
2. 5th Formal Methods in Architecture