

Commentary

## “HOUSING Frankfurt Wien Stockholm”: Exhibition of 1920s–1930s Housing Initiatives

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### Abstract

Frankfurt, Vienna and Stockholm: three European cities which played a fundamental role in the housing policies implemented during the inter-war period. The research projects and teaching activity carried out at the EPFL in the Laboratory of Construction and Conservation focuses on this specific historic context. The experiences of these three cities with regard to housing are well documented from a historical viewpoint that, however, show many shortcomings with regards to the architectural analysis. The provided examples sum up simultaneously the social dynamics, the cultural milieu, as well as the adopted intentions and political programme. The exhibition aims at producing fresh knowledge of the three contributions to modern housing available to students, scholars, professors and architectural practitioners. The goal is to compare a selection of remarkable housing neighbourhoods through the different scales of the project, ranging from the relation with the city till the dwelling unit layout. The produced drawings and documents show the morphological and typological variety. Frankfurt, Vienna and Stockholm equally illustrate different ways of designing the collective space—that is the intermediary space in-between the communal and private – which is a crucial feature of the “living together”.

### Keywords

comparative study; Frankfurt; Hof; housing; Siedlung; Stockholm; typology; urban policies; Vienna

### Issue

This commentary is part of the issue “Housing Builds Cities,” edited by Luca Ortelli (École Polytechnique Fédérale de Lausanne, Switzerland), Chiara Monterumisi (École Polytechnique Fédérale de Lausanne, Switzerland) and Alessandro Porotto (École Polytechnique Fédérale de Lausanne, Switzerland).

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This arrangement of dwellings and spaces which anticipates a more complete and harmonious future life—that means a better life—corresponds exactly to the technician’s challenge—today as well as in the past. As modern architects, we are attached to urban culture which, at a certain moment in its development, intervened in the life of mankind by dictating a way of living. The stages of this process are well-known and they are summed up in the names of those European cities which have regained order and harmony through planned growth in a progressive and democratic way: Frankfurt and Vienna, Stockholm

and Zurich, Amsterdam and Stuttgart. These cities have left their mark as brand-new configurations of physical spaces, but are also organic developments. (Rossi, 1961, pp. 23–24, authors’ translation).

Rossi’s provocative call to architects regarding the political and ideological objectives of housing and neighborhood design, forms the introduction to the exhibition catalogue “HOUSING Frankfurt Vienna Stockholm” held at the École Polytechnique Fédérale de Lausanne in 2018 (see Figure 1). The event, curated by all members of the Laboratoire de Construction et Conservation

# HOUSING

FRANKFURT WIEN STOCKHOLM



Project Room Archizoom, Bâtiment SG, EPFL  
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EXPOSITION DU LABORATOIRE DE CONSTRUCTION ET CONSERVATION LCC

**Figure 1.** Poster of the exhibition “HOUSING Frankfurt Wien Stockholm”. Source: Authors.

(LCC; see <https://www.epfl.ch/labs/lcc>), under the direction of Luca Ortelli, opened its doors at the beginning of the 2018–2019 academic year at EPFL’s Institute of Architecture. The exhibition’s 40-meter-long analytical panels (Figures 2–5) were available to students, scholars, professors, and architectural practitioners for approximately two months (18th September to 2nd November 2018). The event was organized exactly one year prior to the publication of this thematic issue, “Housing Builds Cities”, celebrating the 90th anniversary of the II CIAM.

What is presented in the exhibition consists of a rich selection of the LCC’s research outcomes around the role of housing in building the city. The assumption here is that housing also aims to build the cityscape through a precise typological program. In particular, two of the LCC’s research projects investigate urban policies and residential districts produced in the 1920s–1930s; Alessandro Porotto’s PhD thesis (Frankfurt and Vienna) and Chiara Monterumisi’s Post-Doc work (Stockholm). The main subject of the exhibition, corresponding to one of the LCC’s central interests and focus of their teaching, is the development of collective residential estates in different European cities.

The title of the exhibition does not indicate the time-frame within which the three cities are analyzed, nor what kind of material is used to illustrate the topic of ‘housing,’ but Rossi’s (1961) argument over the significant qualities of modern housing examples, endorses the

systematic perspective fostered by two research projects mentioned above. The objective of this exhibition including both the research investigations goes hence beyond a mere literature review which differs considerably between the cases; much has been written about Frankfurt and Vienna, but Stockholm, especially the architectural production of the 1920s, is very poorly documented. However, there are still many shortcomings as far as the architectural analysis of the three cities is concerned.

However, there is no doubt that the dedicated literature and archival items have been crucial inputs to the reconstruction of the historical framework of the three modern experiences. At the centre of the exhibition’s main gallery, a showcase containing a selection of original books and journals (many are rare samples; see Figure 6) confirms the key role of these documents. Nevertheless, the goal of the two investigations is also to contribute to a fresh understanding of the three European cities’ contribution to the modern debate on housing the masses. As stressed by Rossi (1961), indeed Frankfurt, Vienna and Stockholm played equally a fundamental role in the housing policies implemented during the inter-war period. Indeed, the three cities experimented with the two contrasting typological models that animated the debate at that time: the large courtyard block (*Hof*, largely used in Vienna) and the north-south oriented bars (*Siedlung*, mainly employed in Frankfurt). The inter-war examples in Stockholm embody an inter-



**Figure 2.** Main exhibition space with four thematic sections: on the right side, comparison with urban densities and urban policies of Frankfurt, Vienna and Stockholm; on the background, dwelling units and; on the left side, one-room scale models. Source: Authors.



**Figure 3.** Reverse shot of the main gallery. Source: Authors.



**Figure 4.** Opening of exhibition introduced by Bruno Marchand and Luca Ortelli's lectures. Source: Authors.



**Figure 5.** The main hall of the exhibition at the opening. Source: Authors.



**Figure 6.** The showcase contains original books and journals. Source: Authors.

mediary concern between the two models. In the exhibition, more attention was paid to those experimentations in the large courtyard block model, the well-known *storgårdskvarteret*.

This new knowledge corresponds to the production of typological assemblages which comprise, for the very first time, the design of collective areas as well. These fresh drawings come out from a thorough analysis of the original drawings stored in the archival holdings. Of the many housing districts build in all three cities, the exhibition illustrates a selection of the most meaningful examples. The typological assemblages are instrumental documents for the calculation of quantitative parameters (e.g., land lot, district footprint, land occupancy rate, district volume, green area, paved area, density, number of apartments, etc.). This data is critical to the appreciation of both the qualities and the disadvantages of these projects that were built almost one hundred years ago. Typological assemblages and quantitative parameters are indispensable tools for the architectural profession. Employing these tools in the research investigations, and in the exhibition, makes the results accessible to a wider audience.

Of pivotal importance is that the group of plates for each of the five thematic sections of the exhibition employ the same scales of representation and a uniform graphic code, contributing a synoptic approach to the

analysis. This permits a clear understanding of analogies and differences in a similar manner to the exhibition arranged at the II CIAM in Frankfurt where all the participants' architects displayed their housing experiments within the same plate layout.

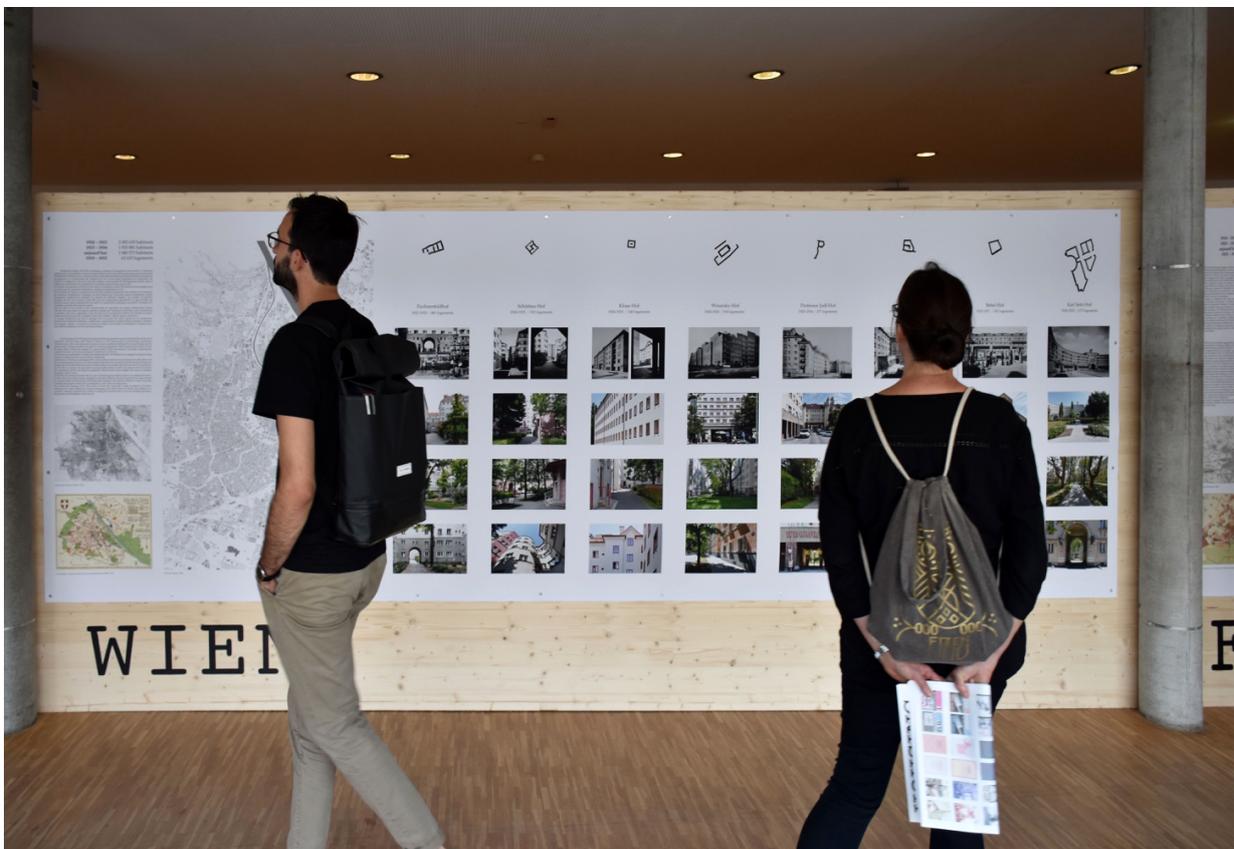
Moving to the arrangement of the exhibition, just after the entrance the first section opens with the plate of twenty-eight images of architectural models of housing neighbourhoods are inserted into the urban tissue, illustrating the density (Figure 7). Of the many quantitative parameters calculated, density still is one of the most important in the design process.

The second section outlines the urban policies and provisions adopted in Frankfurt, Vienna and Stockholm (Figure 8). Specifically, one plate for each of the three cities displays historical maps of the urban evolution, today's cadastral maps highlighting the housing districts realised in the inter-war period and, both archival and contemporary photographs of some case-studies. These last documents provide information about the architectural language and the (still) liveable collective spaces (green or paved areas) which show an unaltered consistency and quality for the daily life of the inhabitants.

The main gallery of the exhibition ends with the third section (Figure 9), that is the plate of twenty-four dwelling units. Starting with Frankfurt examples, then Vienna and Stockholm at the lower stripes, one can ob-



**Figure 7.** Section one: twenty-eight images of wooden architectural models of housing neighborhoods into the urban tissues. Source: Authors.



**Figure 8.** Second section: the panel dealing with Vienna urban policy. Source: Authors.



**Figure 9.** Third section: panel of the twenty-four dwelling units in the background. Source: Authors.

serve the differences in terms of dwelling depth (e.g., 7–10 meters for Frankfurt, 9.50–12 meters for Vienna and 12.40–15 meters for Stockholm) as well as the location and size of the kitchen and toilet.

On the opposite side of the gallery, the fourth section (Figures 10 and 11) is composed by four plates where, for the very first time, there are eighteen typological assemblages different by size and configurations, accompanied by the analytical parameters previously mentioned. Of the many analysed in the two research projects the exhibition displays a selection of typological assemblage, specifically; Frankfurt is represented by four examples (Römerstadt 1927–1929; Bruchfeldstrasse 1926–1927; Riedhof-West well-known as Heimatsiedlung 1927–1934; Westhausen 1929–1932) Vienna by eight (Fuchsenfeldhof 1922–1925; Bebel-Hof 1925–1927; Schütttau-Hof 1924–1925; Julius Popp-Hof 1925–1926; Kal Seitz-Hof 1926–1933; Winarsky-Hof 1924–1926; Klose Hof 1924–1925; Professor Jodl-Hof 1925–1926) whereas Stockholm by six (Upplandsgatan 1917–1925; Helgalunden 1911–1935; Blecktornsområdet 1918–1929; Rödabergsområdet 1907–1929; Farjån 1929–1930; Marmorn 1930–1931).

Looking at these drawings, what clearly emerges is the noteworthy peculiar approach in designing the collective areas, that is the intermediary space in-between the communal and private—which is a crucial feature of living together and the expression of democratic ideals (Secchi, 2013, p. 65). Of particular relevance is the wealth

of typological experimentations developed in the eighteen case-studies.

Although they were designed almost one hundred years ago, they still collect many individuals and families together from low social economic groups and workers, achieving a novel architectural urban unit.

The fifth and last section (Figures 12 and 13) presents ten views into one-room scale models realised by the bachelor students in LCC’s design studio. Each model represents only one room of ten different dwelling units. Next to the examples built in Frankfurt, Vienna and Stockholm there are also other modern cases such as Berlin, Amsterdam and Copenhagen. The thorough study carried out by the students aimed to compare the different ways of conceiving of comfort, the relation between surface and window and how the dwelling unit looks onto the external areas.

The exhibition catalogue (Ortelli, Porotto, & Monterumisi, 2018) requires some further remarks because it contains an anthology of insightful texts concerning the three urban policies written at that time and a selection of drawings presented in the plates. This explains the concept behind the catalogue’s tabloid layout.

In its intentions, the exhibition should not be considered a circumscriptive event, the relevance of which ends on the closing day, but rather as starting point for further comparisons with other experiences of modern housing. The aim is to progressively widen the understanding of this field through an innovative architectural



**Figure 10.** Fourth section: the four panels of typological assemblages. In foreground, there are the four housing estates of Frankfurt. Source: Authors.



**Figure 11.** Fourth section: the four panels of typological assemblages. In foreground, there are the Stockholm and Vienna housing examples. Source: Authors.



Figure 12. Participants to the opening who curiously watch into the one-room scale models. Source: Authors.



Figure 13. Selection of one-room scale model (clockwise order): Professor Jodl-Hof (Vienna), Hornbaekhus (Copenhagen), Rödabergsomradet (Stockholm) and Effen housing estate (Rotterdam). Source: Authors.

perspective and to encourage a real collective effort in building new knowledge about these cases, which still provide key suggestions for today's housing practices. The LCC conceived the exhibition itself as itinerant performance aiming to captivate the interest of other institutions, universities and research groups who would like to participate in a such collective initiative in the forthcoming months and years. The material produced is hence apt to be exhibited according other arrangement of the panels and the spatial needs of the university willing to host the following stopovers (LCC, 2018). Of even further relevance would be the goal of adding new case-studies produced by the hosting universities. This would shed new light on further housing experiments using the same templates, scales of representation and uniform graphic code.

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### Conflict of Interests

The authors declare no conflict of interests.

### References

- Laboratoire de Construction et Conservation. (2018). *HOUSING Frankfurt Wien Stockholm* [Brochure]. Retrieved from [https://www.epfl.ch/labs/lcc/wp-content/uploads/2019/02/HOUSING\\_EXPO\\_Brochure\\_ENG.pdf](https://www.epfl.ch/labs/lcc/wp-content/uploads/2019/02/HOUSING_EXPO_Brochure_ENG.pdf)
- Ortelli, L., Porotto, A., & Monterumisi, C. (Eds.). (2018). *HOUSING. Logements collectifs* [HOUSING. Exhibition catalogue]. *EPFL Scientific Publications*. Retrieved from <https://infoscience.epfl.ch/record/263905>
- Rossi, A. (1961). La città e la periferia [The city and the outskirts]. *Casabella Continuità*, XXV(253), 22–27.
- Secchi, B. (2013). *La città dei ricchi e la città dei poveri* [The city of the rich and the city of the poor]. Roma: Laterza.

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