

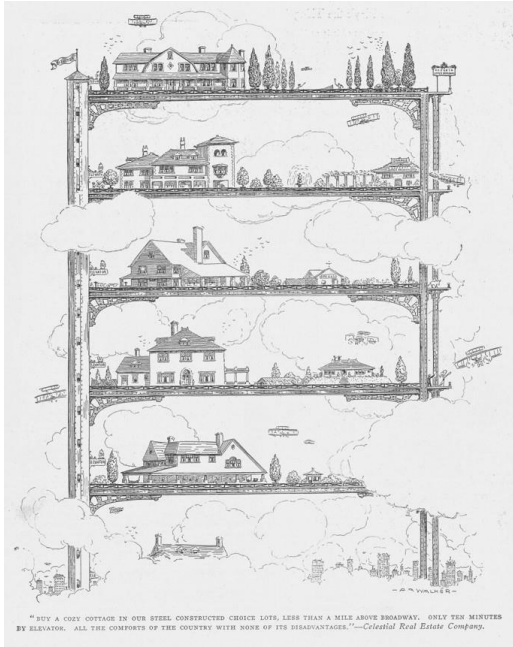
## Flux-City House

### 2022 THEOREM

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### 2022 Theorem



In the long treatise that the Dutch architect Rem Koolhaas (1978) dedicates to the city of New York, he introduces an emblematic image that embeds many characters of the new urban device: the skyscraper. The imagery represented by an anonymous cartoonist in 1909 (Fig.1) emphasizes the prefigurative value of art through the depiction of a section of a skyscraper. Here, the levels, autonomous and heterogeneous, are superimposed and interrupted by clouds. The structure introduces several possibilities of access, crossing and connection between the private and the open space. From this imagery it emerges on a hand the desire to represent the heterogeneity of functions at different floors and on the other, the com-presence of distinct ecosystems, through single-family houses with gardens. Also Le Corbusier explored a similar theme in 1930 with the Plan Obus Alger, in which he placed numerous dwellings with vernacular characters and local materials on the superimposed floors of a continuous building along the coast of Algiers. This approach to the theme of mixed-use within a single urban device emphasizes the need for research on housing in the urban environment for a large number of inhabitants.

Fig. 1: 1909 Theorem. Image shown in Koolhaas (1957), *Delirious New York*, Oxford University Press.

#### 1. Thematic overview: Agri-ecture

Future urban strategies, especially those related to metropolitan centers around which large production and distribution chains orbit, are now called to take into account the issue of ecological transition also through the production of basic necessities. Furthermore, the recent Covid-19 pandemic has made evident, on the one hand, the need for an enhanced system of communication infrastructures (physical and virtual) and, on the other, the need for small or medium-scale autonomous and self-sufficient systems. For this reason, in the area of the SoHo district, on which a rezoning plan has been already approved by the municipality of New York, the group '2022 Theorem' proposes to address the issue of densification through agricultural self-production within the block. The great height envisioned by the municipal plan is deemed to respond by enlightening the mixed use typology, consisting not only of places of commerce and services, but also production. This approach refers to a recent strand of research that has its roots in the thought of Dickson Despommier (2011) and Henry



Fig. 2: Le Corbusier on the roof of Lingotto, Turin.

Gordon Smith who in 2011 coined the term 'Agritecture' to identify the application of architectural design in the definition of agriculture for the built environment. This prefigures the imagery of a building capable of self-sustaining itself, within an urban ecosystem that recalls the idea of a continuous productive landscape (Viljoen et al., 2009). This configures the idea of a vertical infrastructure capable of connecting the internal spaces, the building and the city, with the external ones, the city and the territory. The goal is therefore to develop a 'project concept' in the shape of a toolbox, helpful to identify the tools to transform the contemporary metropolis, in this case the city of New York. To do so, an innovative and experimental approach is needed, that could be at the same time the manifesto of

the ecological transition. This research-through-design project tries to verify the hypothesis -formulated in other metropolitan contexts- that attributes to agricultural production (e.g. hydroponic, aquaponic and aeroponic) the plus value of the transformation and redevelopment of the existing urban and architectural fabric. In the case study of the SoHo district, new production spaces are envisioned, detached from the classic layout of the existing block (Fig.2), and integrated with the various other functions, in order to give rise to a complex ecosystem that makes density as the strong point for collective and social development.

### 2. Urban: Flux-City House

The urban theme of the project proposal refers to the well-known approach of the '*ville sur la ville*', tested in the European cities and especially in existing urban contexts. Among the emblematic examples, the scheme of the urban structure by Alison and Peter Smithson, as well as the Spatial City by Yona Friedman, are the starting point of a reflection on the future of the city, starting from the existing. Thanks to their strong conceptual imprint, these projects underline a strong interest toward community in relation to architecture. The latter, today does not hide the risk of a dystopian imaginary of the possible future, due to the strong housing density, shown in the series of illustrations 'Shining Dark Cities' (Fig. 3) by Alessandro Melis (Lecardane, 2020). Starting from these topics, the concept of the Flux-City House project finds in the Smithsons' interpretation of the urban structure a new three-dimensional reading of the intervention of the urban block with high density housing that is hybridized through new activities intended for leisure, agricultural production and urban market at high altitude. On the new vertical spines flow the flows of the community in a renewed relationship between the existing city and the prescriptions of the municipal plan.

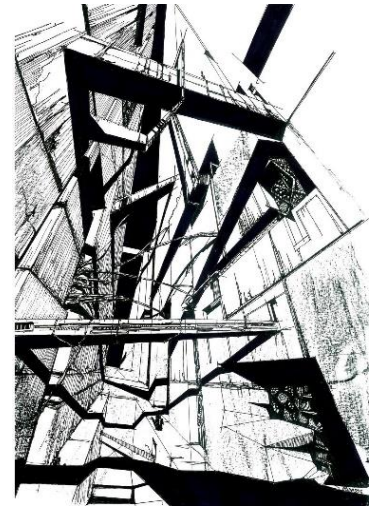


Fig. 3: Alessandro Melis, *Shining Dark Cities* series\_Termite Nest IV\_Ink\_2011

### 3. Architecture: Flexible Plug-in

The concept of the Flux-City House project is therefore configured through the relationships between the horizontal planes arranged at different heights, the backbone of the crossings and the complex system of housing and services (Fig.4). A complex section of buildings and blocks is defined, within which the system of production and trade of foodstuffs tries to integrate with the main demand for affordable houses. At a conceptual level it is considered to place an intermediate space between the existing and the new, strongly characterized by collective activities for temporary use. It is a space accessible from the outside with a system of lifts arranged along the facade of the block to emphasize the entrance to the public space at high altitude.

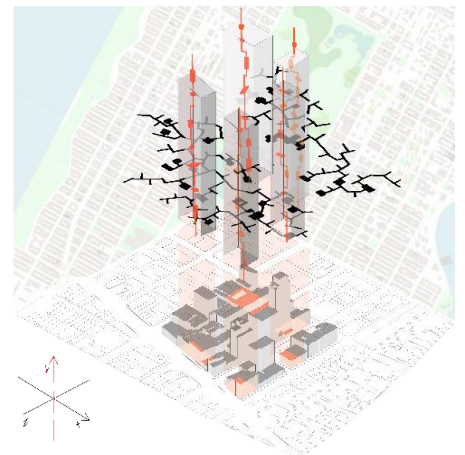


Fig. 4: 2022 Theorem, *Flux-city House, Philosophy and Idea*

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