

POLITECNICO DI TORINO
FIRST SCHOOL OF ARCHITECTURE
Master of Science in Architecture (Construction)
Honors theses

Renovation of an informal settlement in Istanbul

The gecekondu of Armutlu

by Gianluca Discalzi

Tutor: Matteo Robiglio

The starting point of my thesis is a significant fact for the urban planning: since 2007 more than 50% of the world population lives in cities, of which 70% live in situations of informal habitat as slums, favelas or gecekondu.

Istanbul is a city booming: it is a city of 15 million inhabitants, with 2500 years of history, but with a recent urbanization. It is a city of contrasts, where the urban patterns are characterized by shapes, structures and different densities. This great expansion and urbanization has led to the explosion of informal habitat which represents 75% of the settlements of Istanbul.

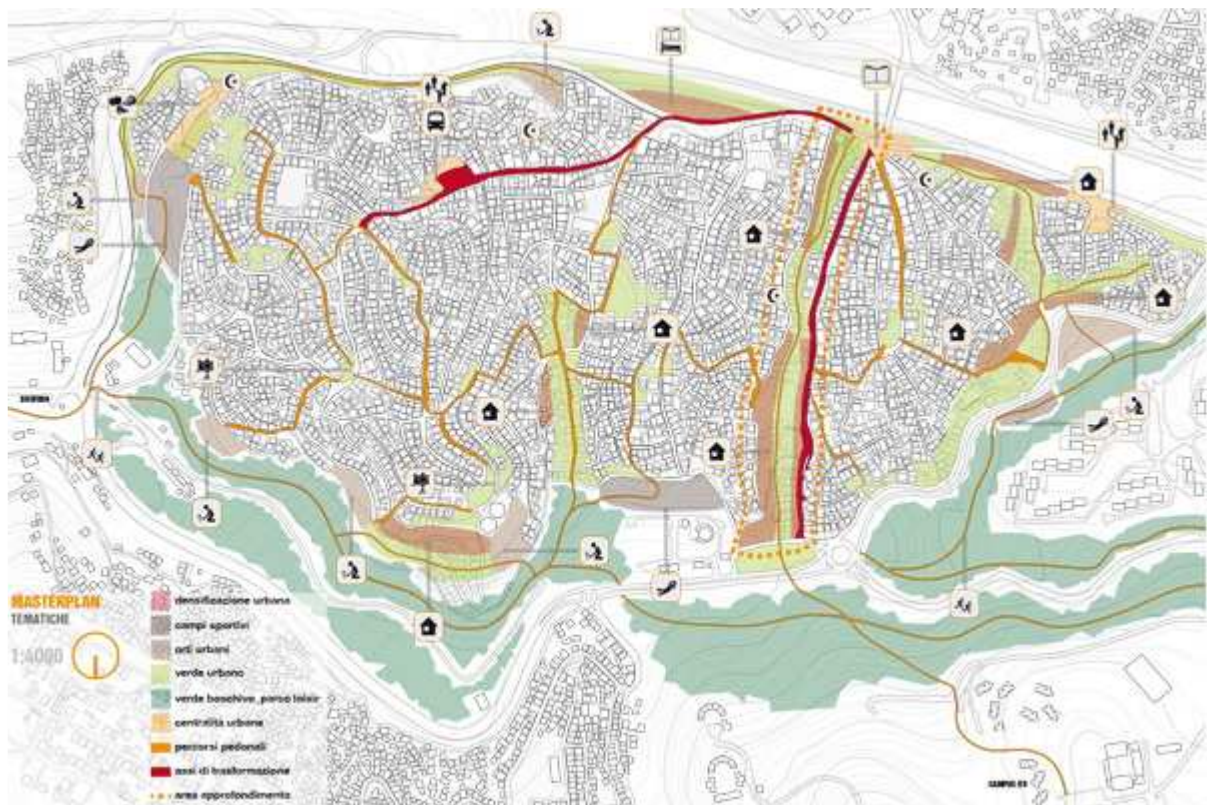
The informal habitat in Turkish cities is defined as gecekondu, literally it means built over night before the arrival of the authorities. This practice made it possible to let born a large amount of illegal, unplanned and self-build settlements. In few years the first barracks have now become multi-storey buildings, and they have created a parallel market. The gecekondu are located in the suburbs as in the heart of the city, these settlements are connected, intertwined and integrated with the formal city and often it's not possible to see any difference. The main features of this form of living are the self-construction, the strong sense of community and the continued evolution of space.

The response of the municipalities in this phenomenon, that affects many Turkish cities, is TOKI, the agency for the housing development, which achieves entire neighborhoods of residential towers in areas at the boundaries of the city. Interventions are implemented in a short time and sold at low prices, but they are of poor quality. The system is a failure from the functional, the economic and the social point of view.

The gecekondu of which I have been involved at the design level is Armutlu which is located in the northern part of the city near the second bridge on the Bosphorus on a hill property of the university campus ITU.

Formed mostly in the 80s during the construction of the bridge, has built some public buildings and some commercial and productive activities, but it is mostly a residential area where you can find independent houses 1 or 2 plans, up to 7-storey apartment buildings, mixed with some slum areas.

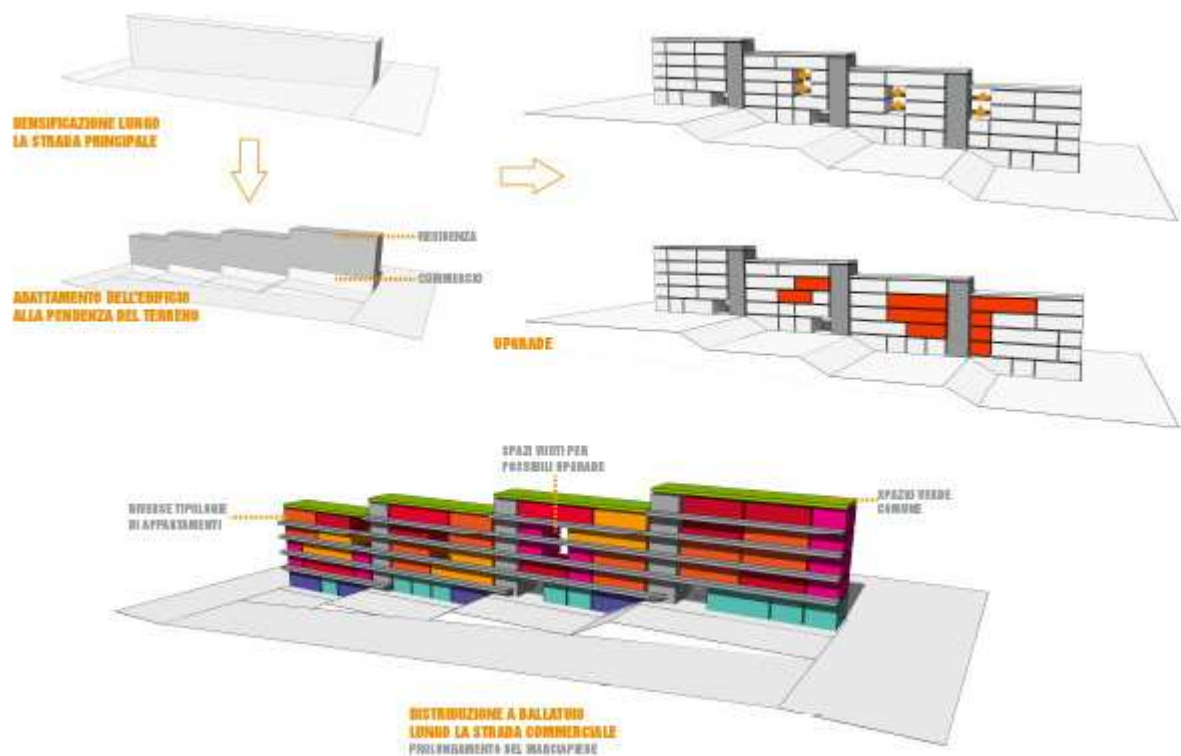
My project for Armutlu started with a series of site analysis: the topography, the uses of the buildings and the urban situations, which allowed to develop a master plan for the neighborhood. The focus of intervention is the control of the hydrogeological risk, the increase of public services, the design of urban green spaces and the densification.



The attention of the project was then focused on an area along one of the main commercial street. The hydrogeological risk is particularly significant in this area that is located in a natural basin, and the proposal is to build a canal which is spaced out by some catchment areas that contribute to define the shape the project. The design concept proposes to demolish the middle area to give space to the canal and then to densify the edges.

The project proposes two types of buildings. A high-density multi-storey building which mix residential and commercial functions for the new inhabitants of Armutlu and are built along the main road. A second type is characterized by a low density and is destined to local residents who would lose the house by the demolitions. Two-storey house for two family take advantage of the lay of the terrain to give a private green space in both apartments.

The common thread that binds the entire project and links it to the main aspects of gecekondu is the concept of upgrade: the form of buildings low density is designed to accommodate future extensions, as well as in high-density buildings are planned within the structure some gaps to allow the apartments to modify their space and dimension in the future.





For further information, e-mail:
Gianluca Discalzi: gianlucadiscalzi@gmail.com