Global Housing Graduation Studio:
Mixing Mumbai.
Affordable Housing for Inclusive Development

Redevelopment Project of Baithi Chawls in Nalasopara, Mumbai

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July 2018

RESEARCH → DESIGN

Community-oriented Housing
without Developers

Self-growing Communities
for Building-up Groups

ARCHITECTURE & DWELLING
Architecture must yield meaningful places, the reflection of a balance between an artist's design and a human dwelling.
Building
20

Human
Society
Culture

Economy

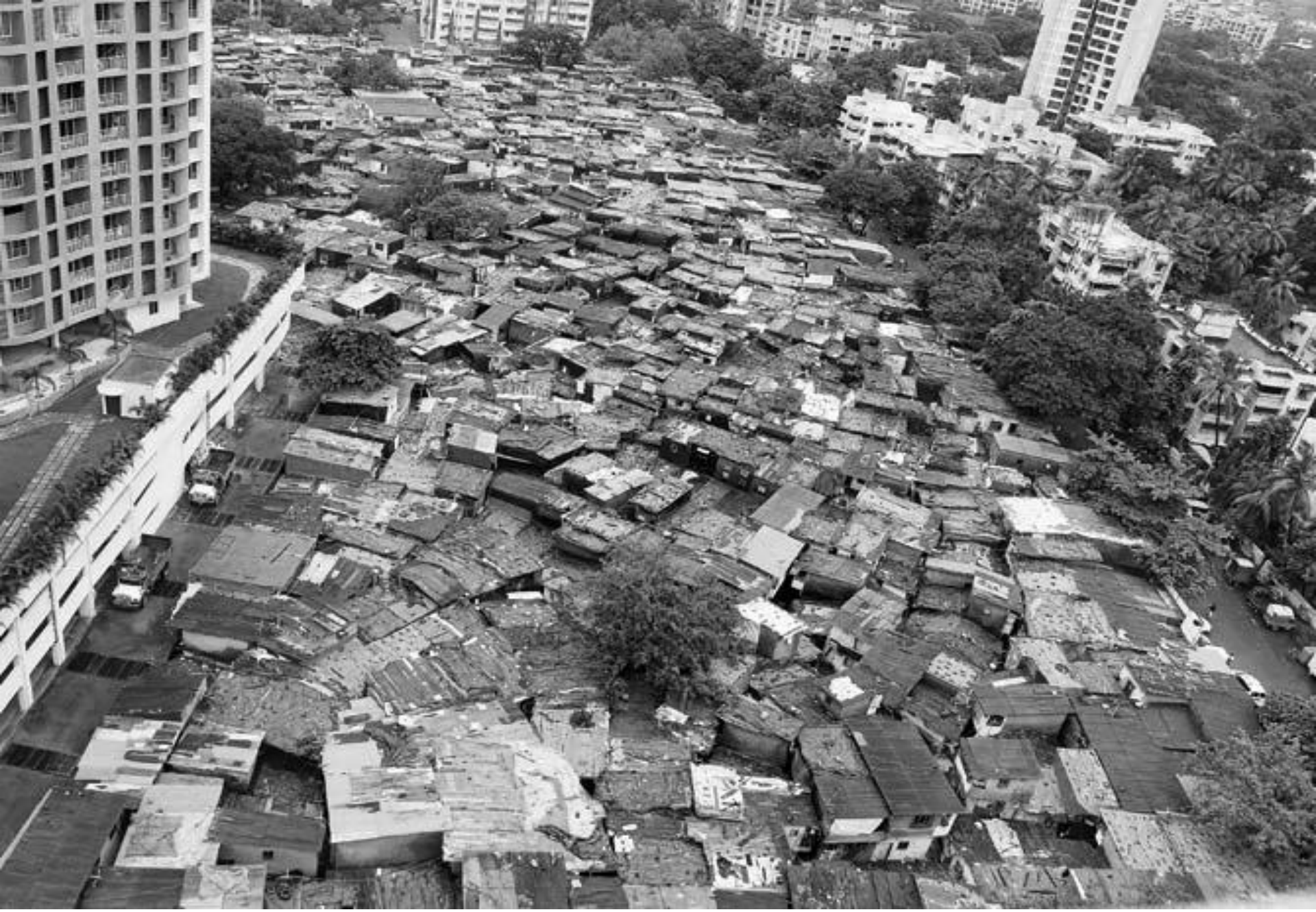
Human
Society
Culture

Economy

Self-sufficiency

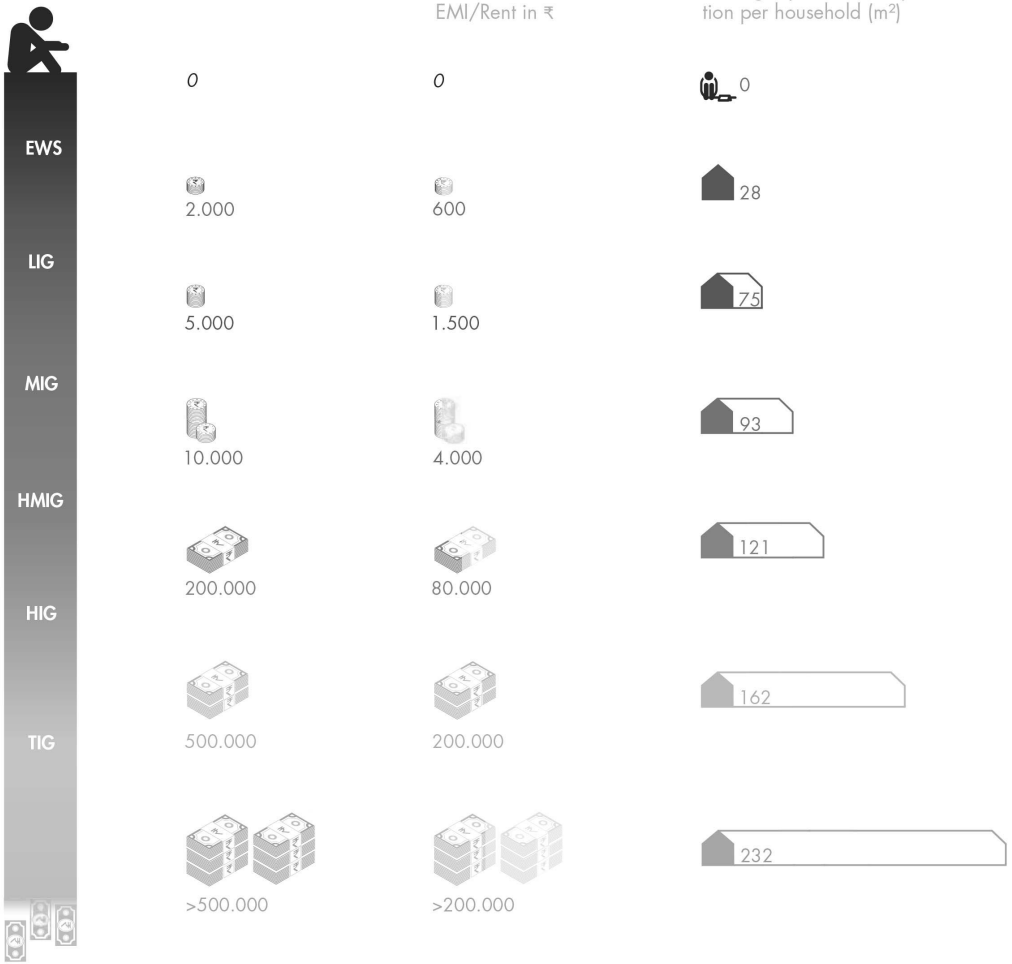
Supply and Demand

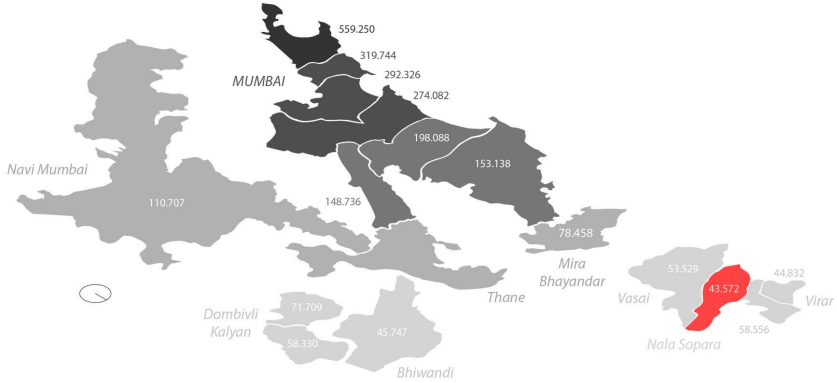
Affordability



Slums in Mumbai

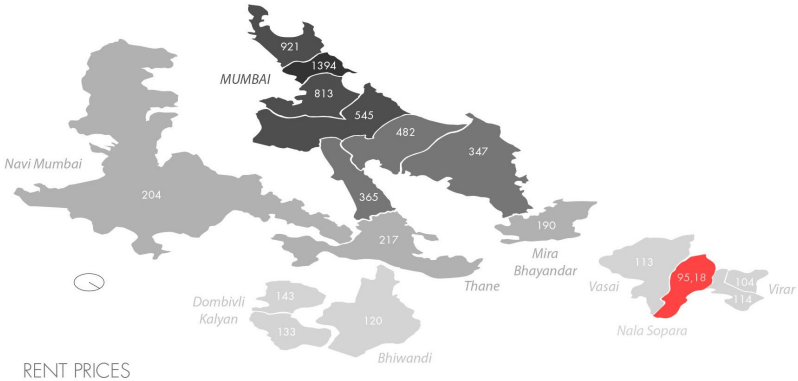
Affordability





PROPERTY RATES

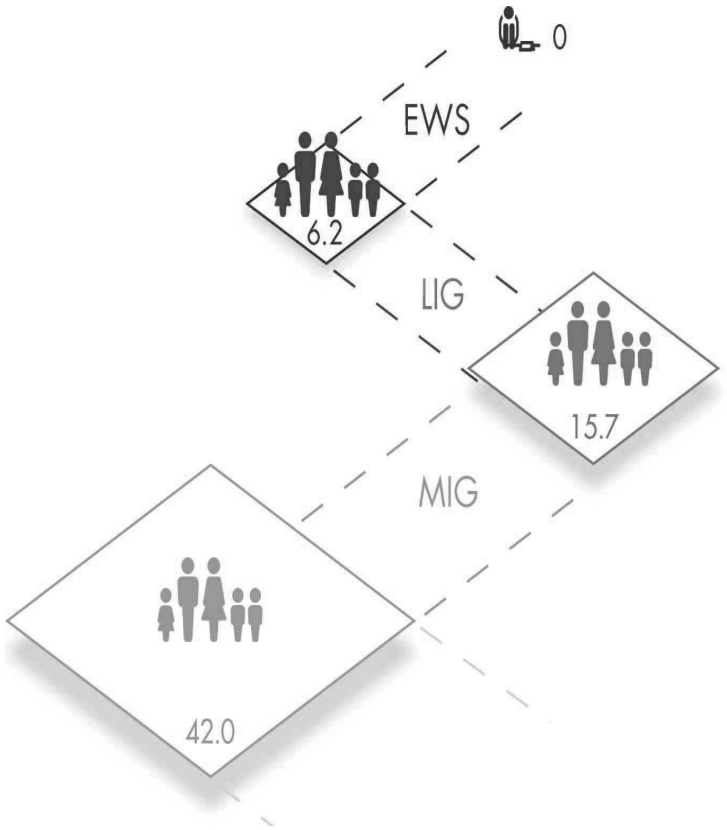
Property rates of residential apartments in the Mumbai Metropolitan Region in rupee/m^2

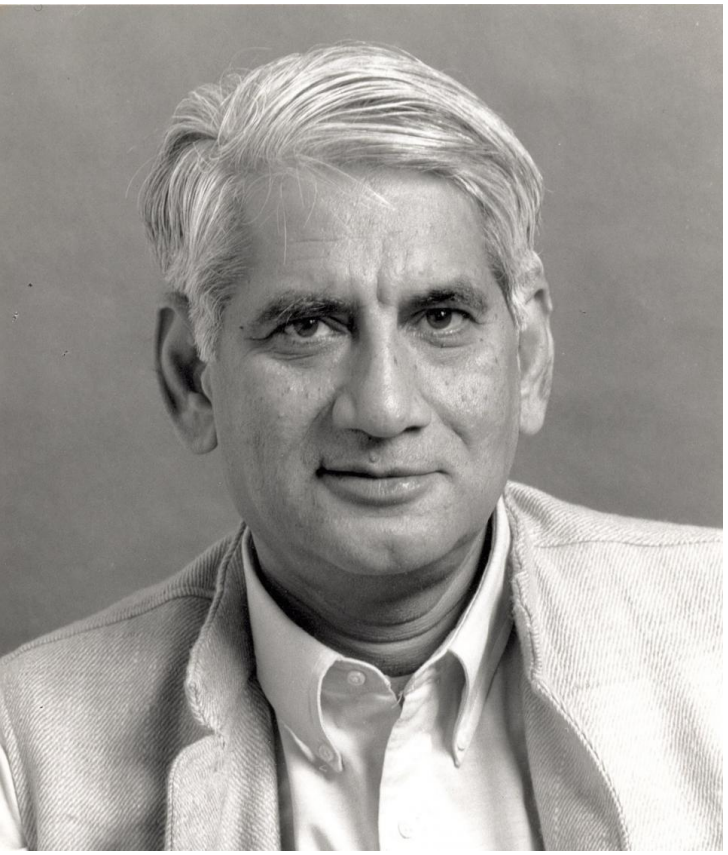


RENT PRICES

Rent prices of residential apartments in the Mumbai Metropolitan Region in rupee/m^2

Affordable areas (m2) in Nala Sapara

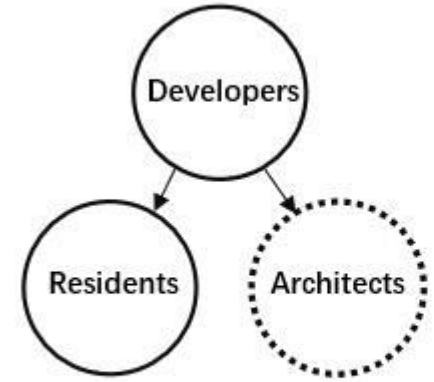




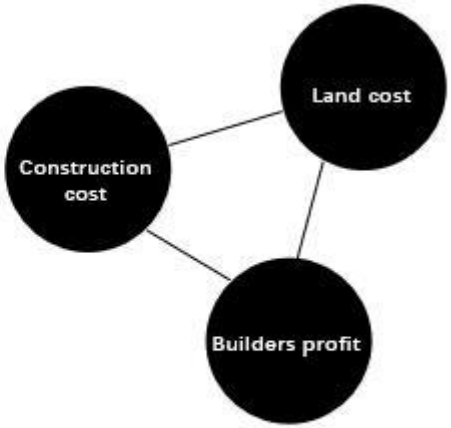
If adequate housing is not appearing in our cities it is sign that something wrong with the system.

Housing system

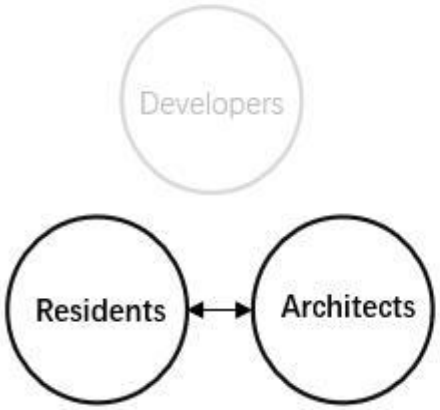
Housing policy of slum redevelopment



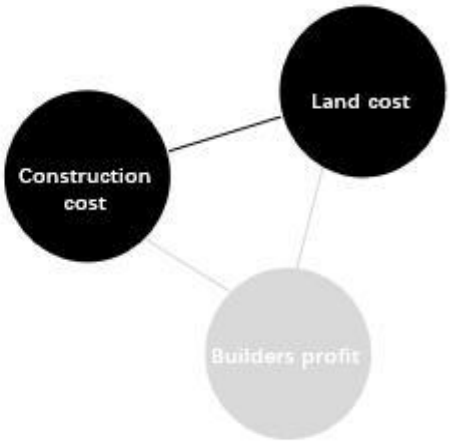
Market-Dominant Model



Housing Price

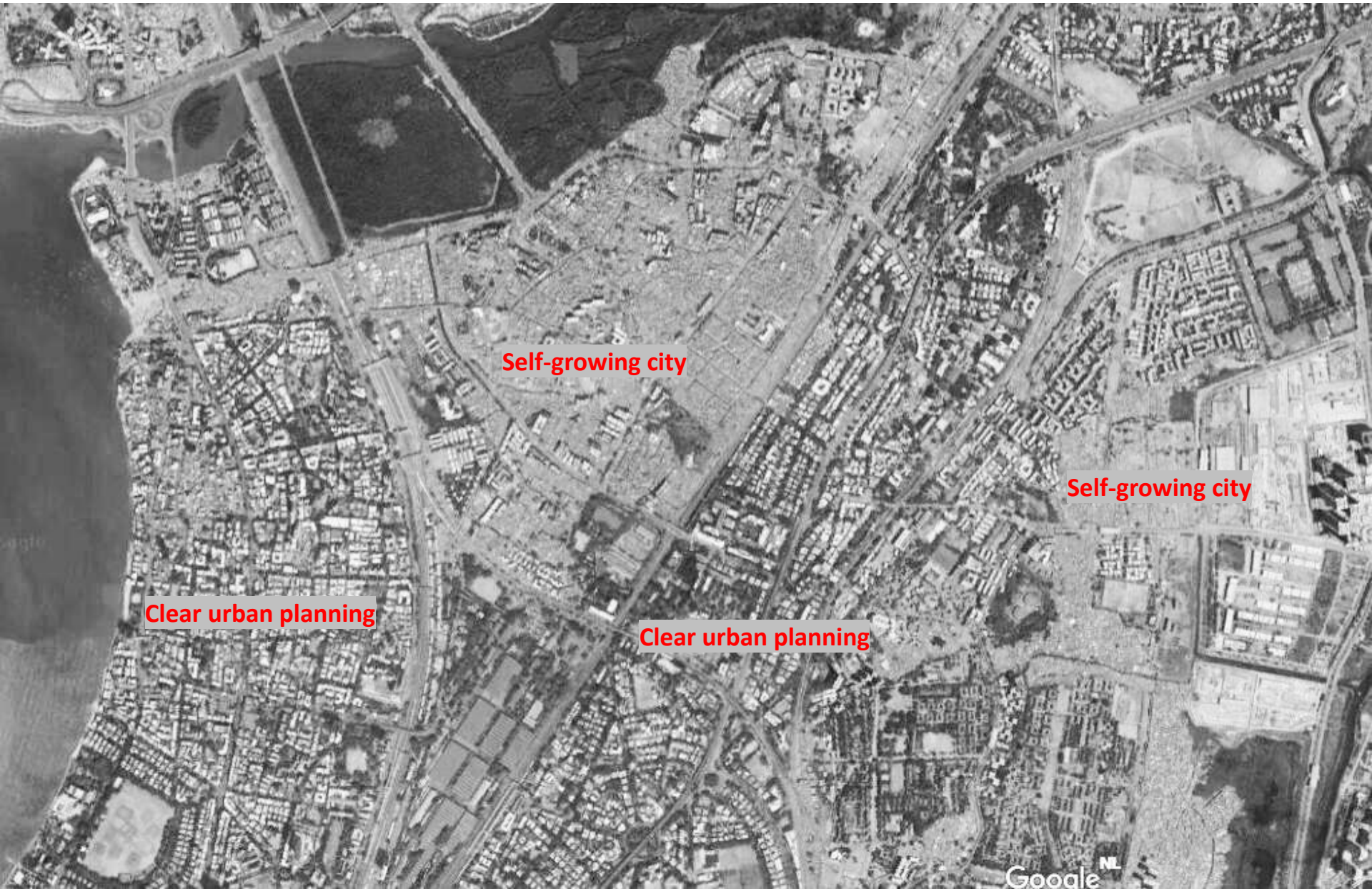


Building up group Model



Housing profit

City context


Self-growing city
Self-growing city
Clear urban planning
Clear urban planning
Google

One space and Two worlds

Spacious high-rise residence in the city

Self-built slums along the transport line

The rich's comfortable lifestyles

The poor's struggle for life

Organized big malls

Disordered street markets

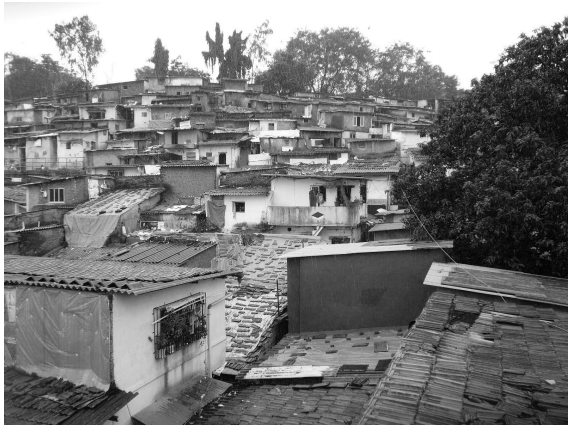
-City's messiness

-Neighborhoods' vitality

YouTube NL

round trip from

Round Trip - from Mumbai to Ratnagiri



Slums in Mumbai City

A Homegrown Neighborhood in the village

Their world evokes another narrative of imagined communities, where conceptions of home and belonging are extended beyond geographical limits.

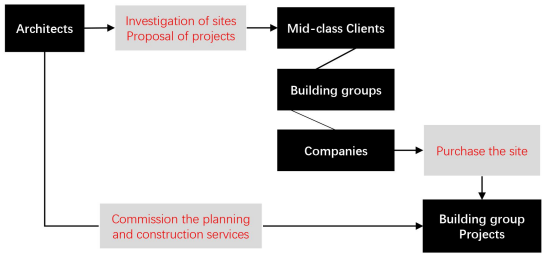
How does the Building-up Group Model accomplish a community-oriented housing to integrate the urban poor into the city of Mumbai ?

Building up group model system

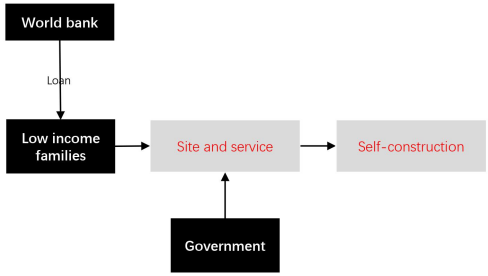
Community design strategy

Building-up group housing system

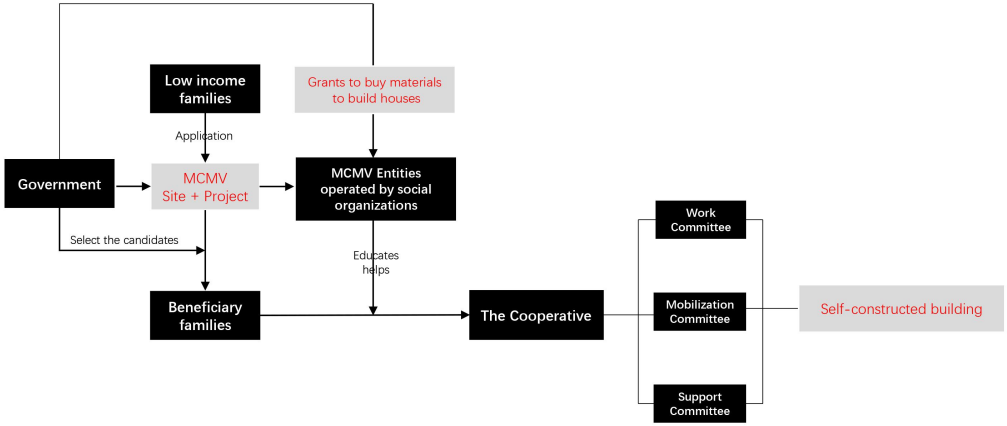
Housing system model without developers



SmartHoming / Germany

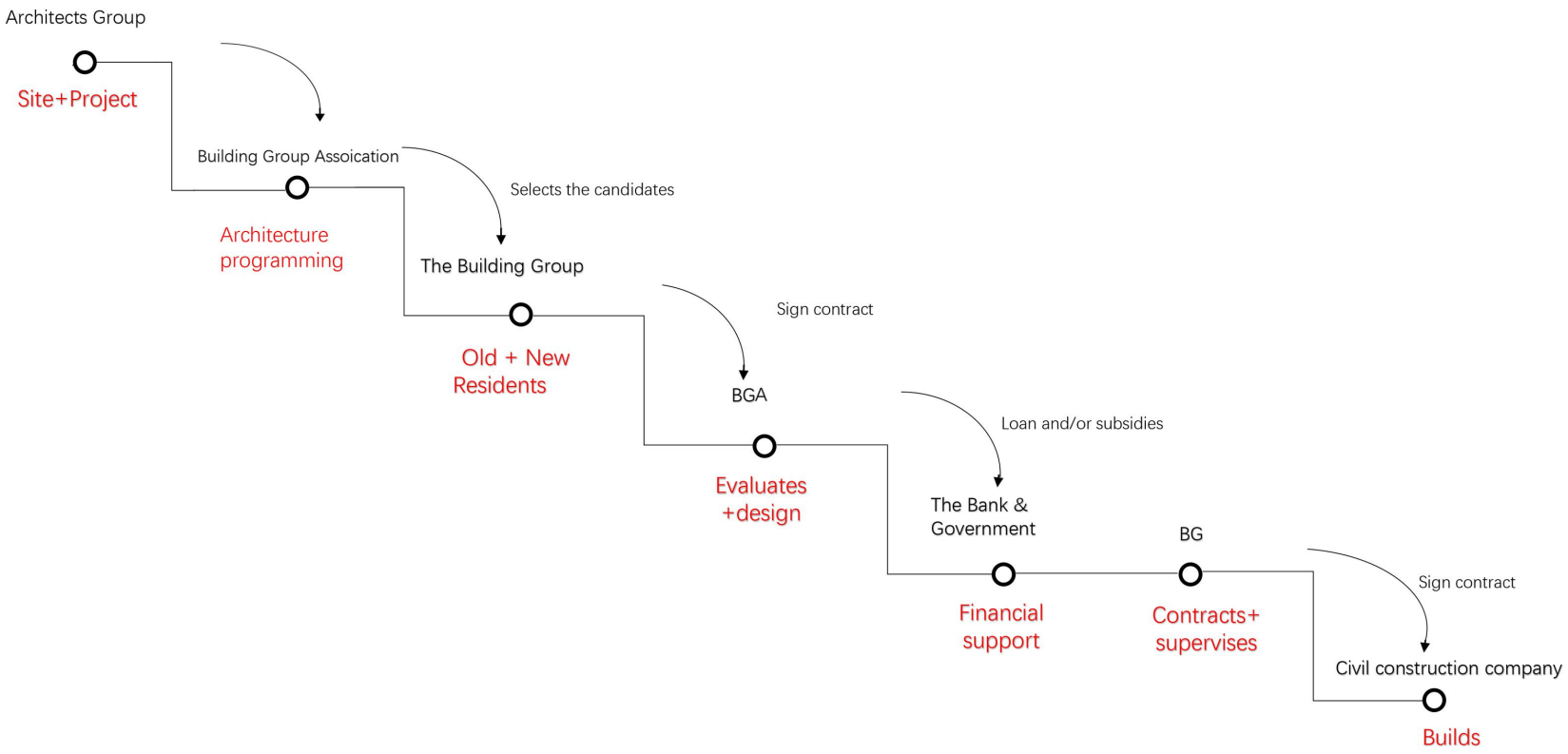


My Life, My House/ Brazil



site & service scheme / Mumbai

Building up group model system



Platform for Building group Model

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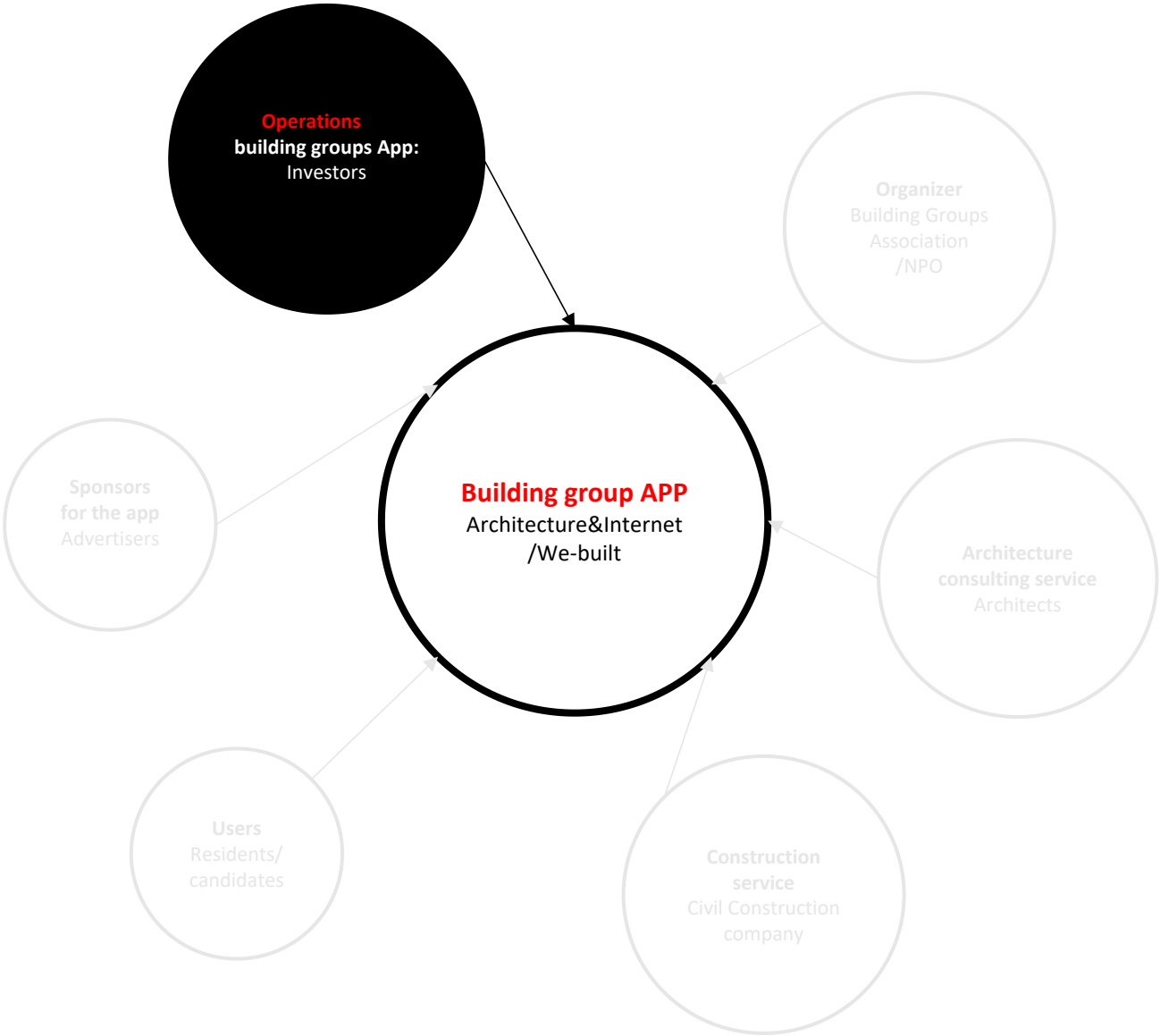
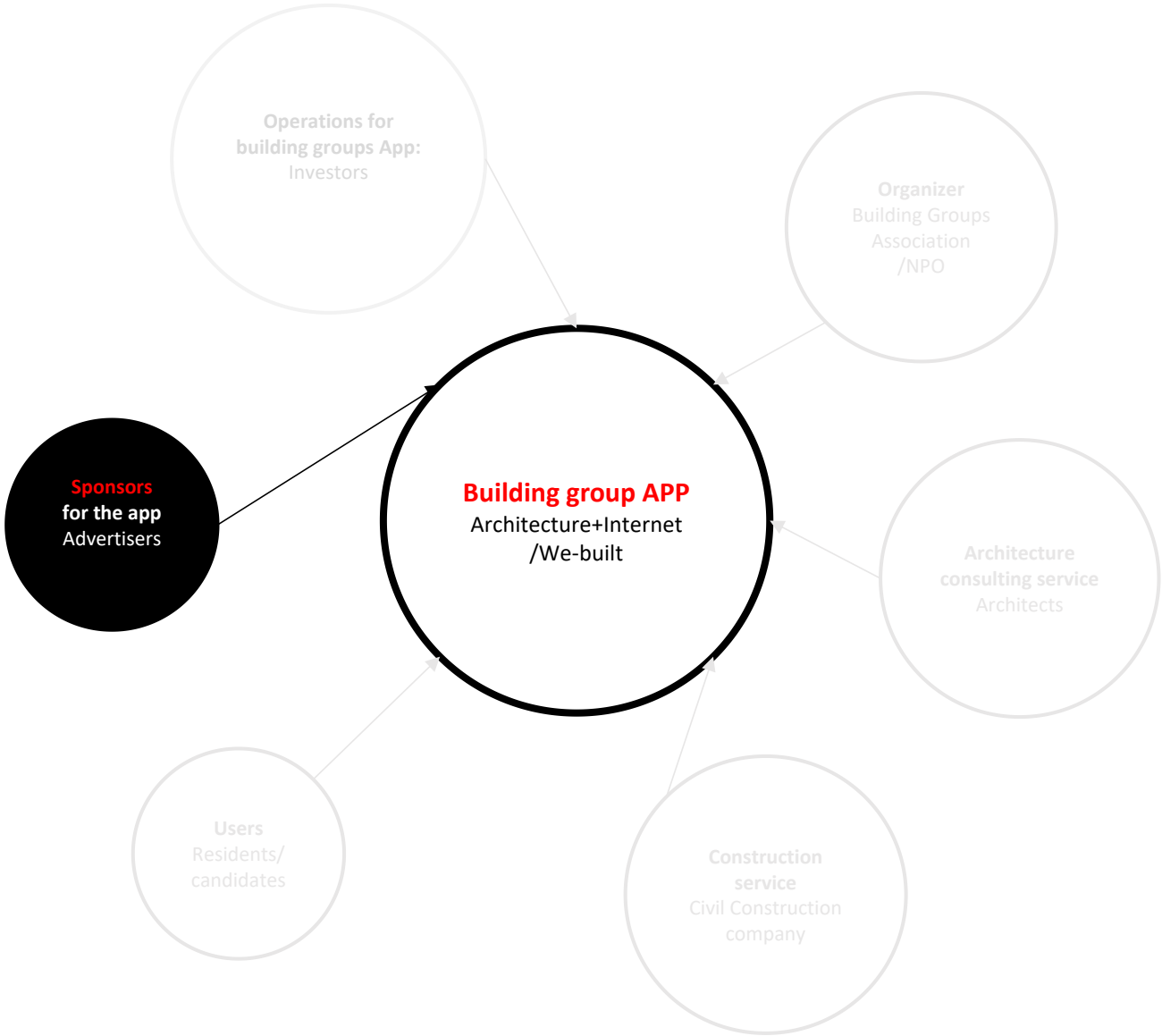


Platform for Building group Model



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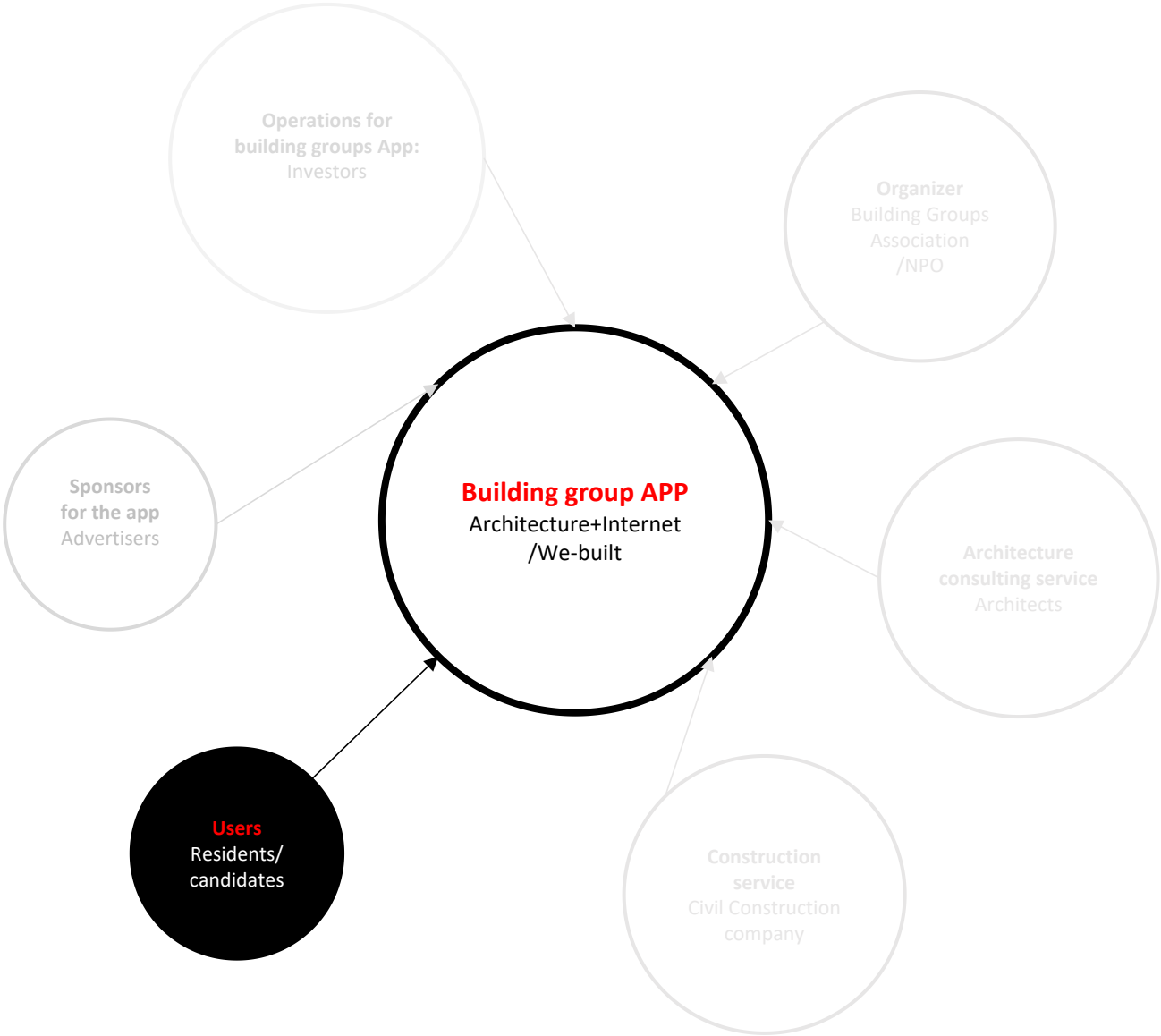
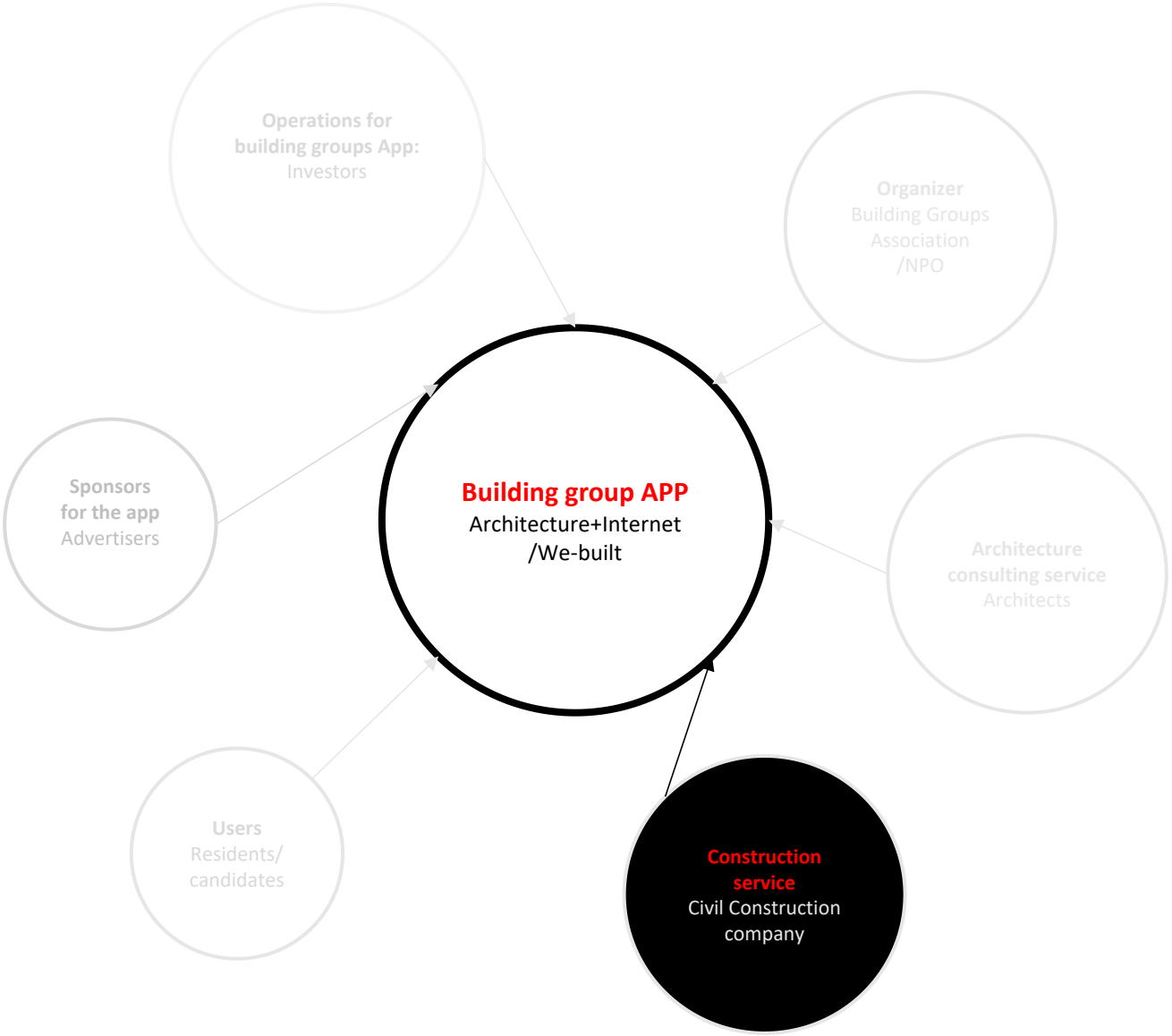
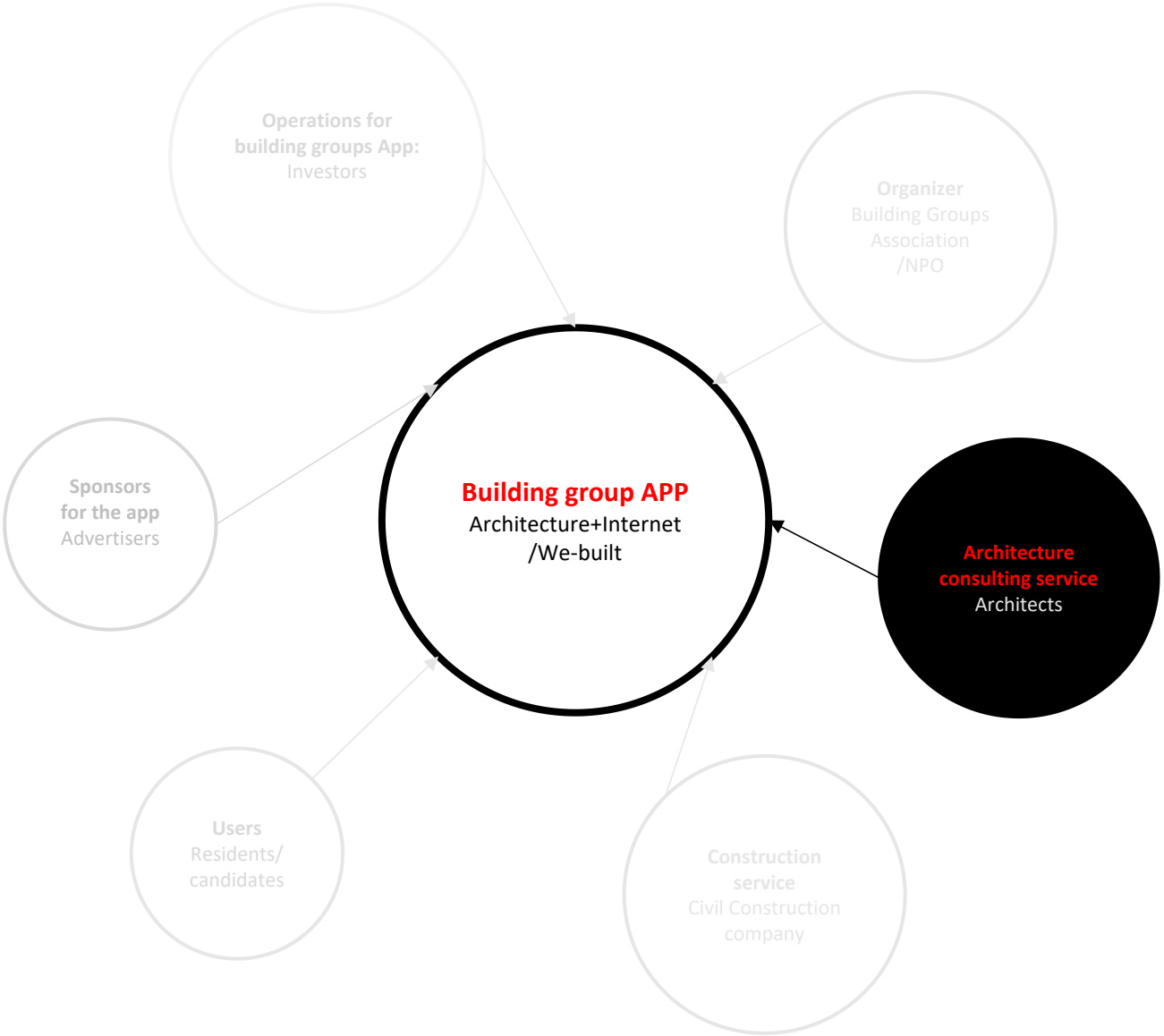


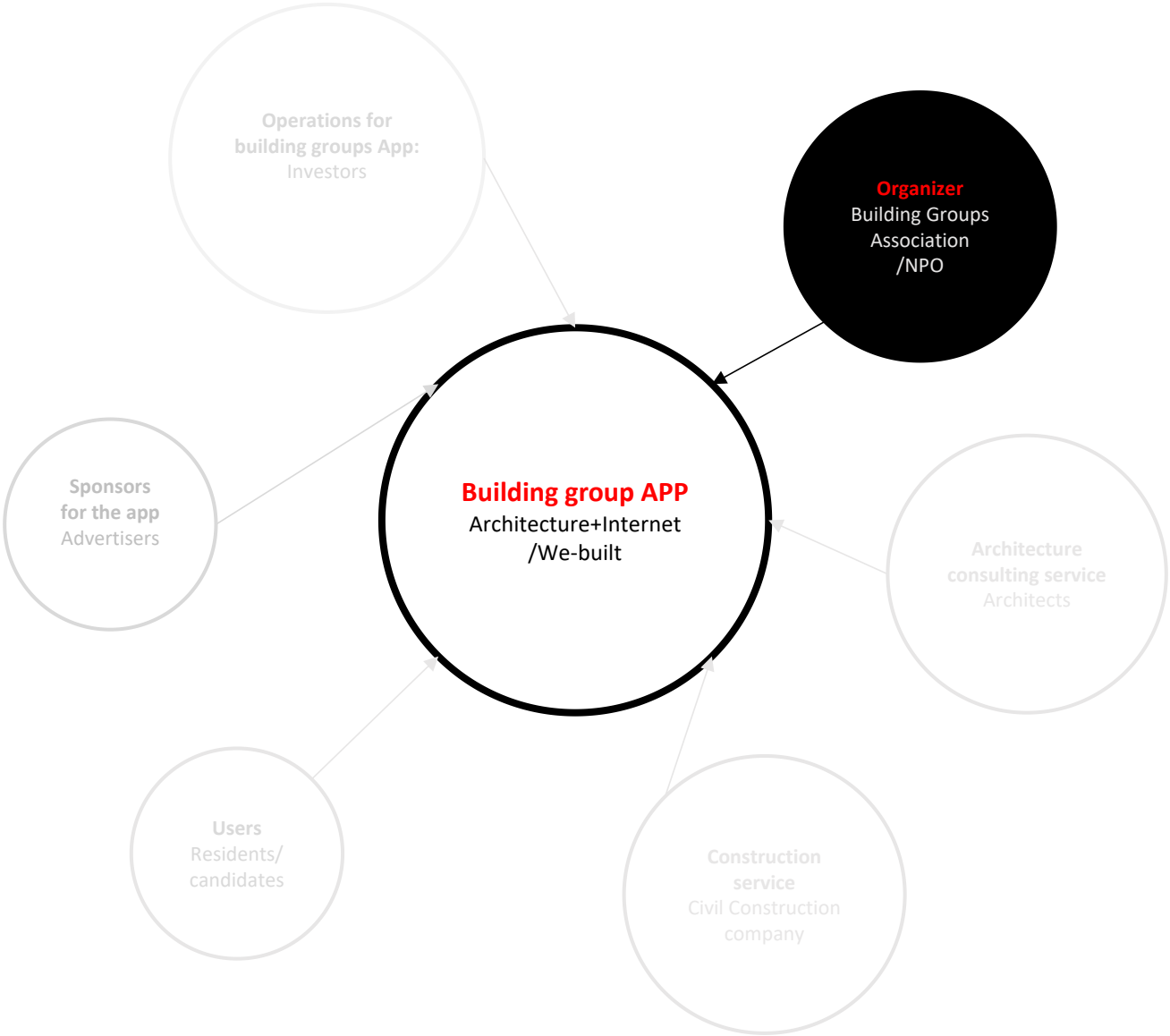
Platform for Building group Model



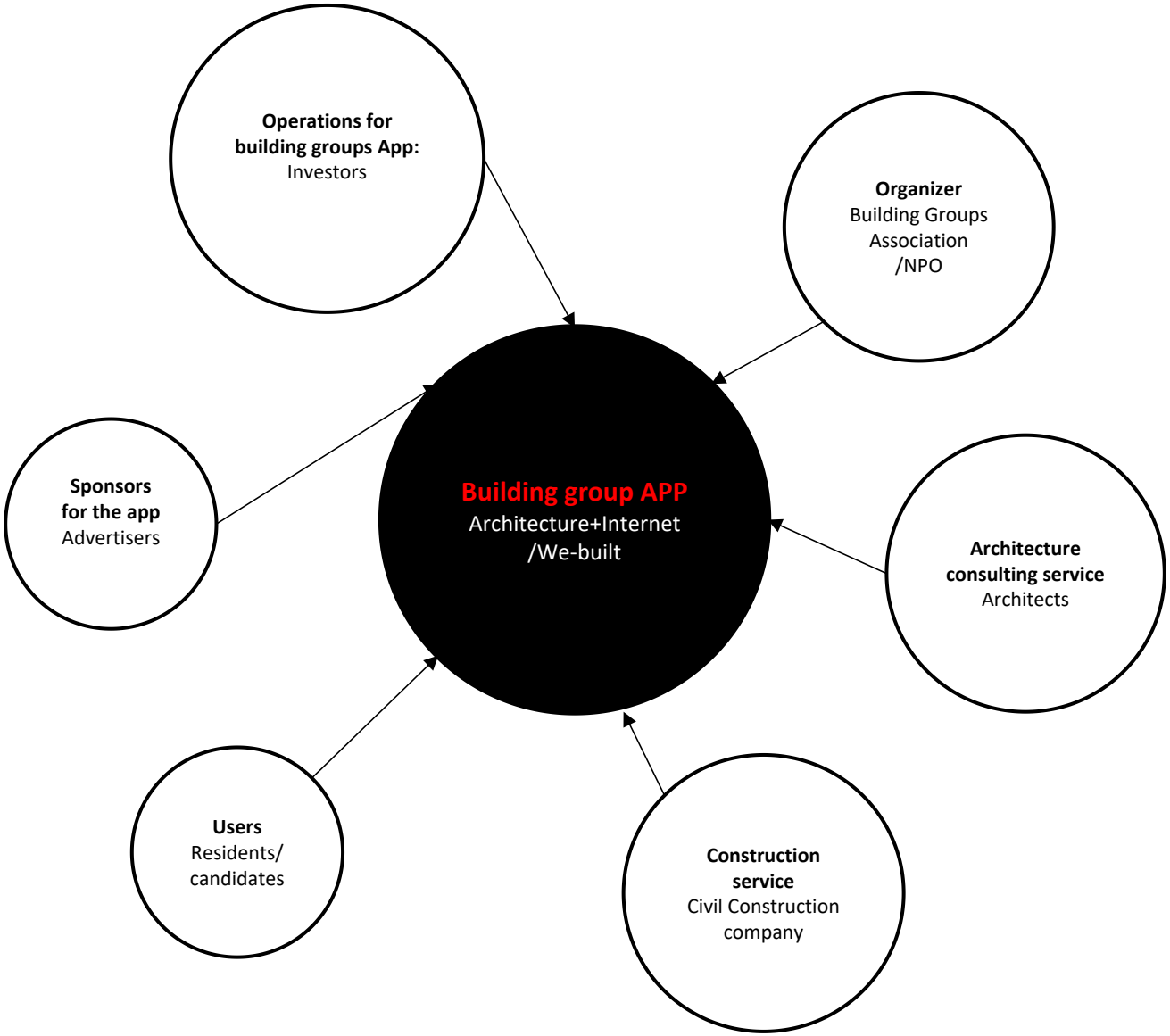
Platform for Building group Model



Platform for Building group Model



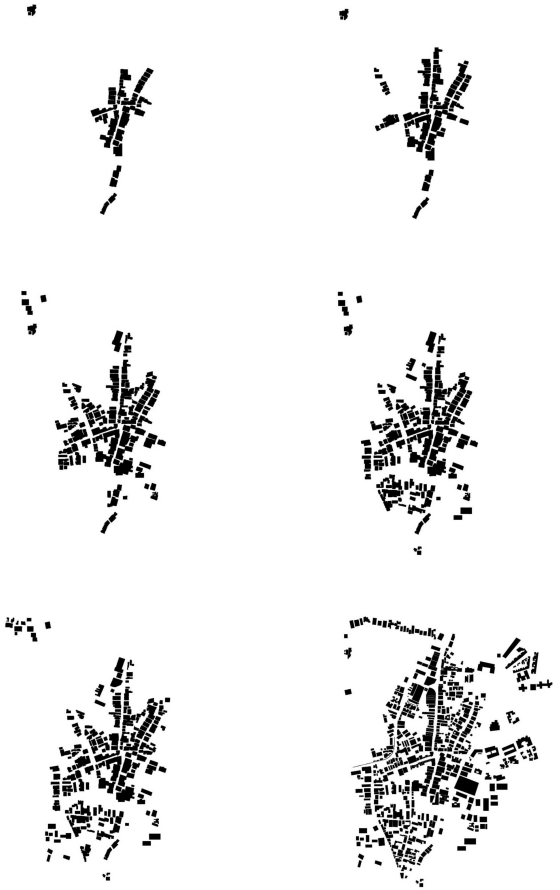
Platform for Building group Model



Community prototype

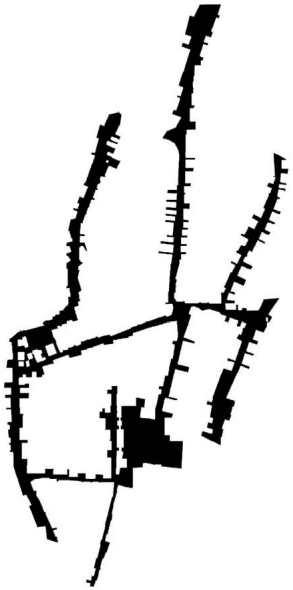
Old village

Self-growing old village of Sopara



Structure of old village

Buildings



Streets

Yards

Shared courtyard

Clusters

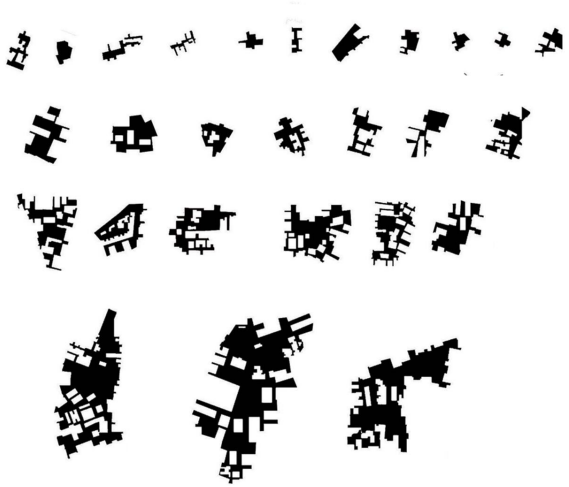
The size of different communities

Small ~ 5-10 Building units/5-20 Households

Medium ~ 10-20 Building units/30-60 Households

Big ~ 20-60 building units/70-100 Households

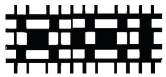
The morphology of different communities' open space



Small

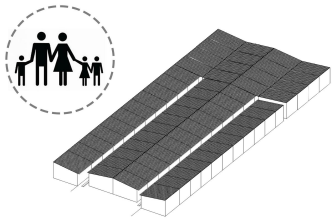
Medium

Big



Urban strategy

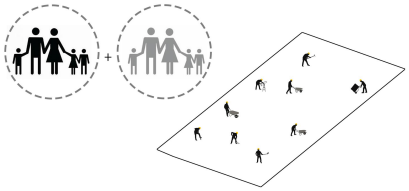
From Chawls community to Building up community



The Chawl Community

Original inhabitants living in same Baithi Chawls area have stable social interaction with each other, the chawl community has been evolving. Although the community set up is in a low income group, it has been maintaining a dignified and a safe living environment.

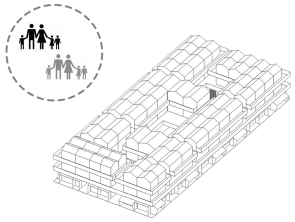
The Chawl community revolves around the concepts of living together, sharing things which are personal and understanding neighbors in deprived spaces of inappropriate proportions.



The Building up Group

The Building Group is made up of original inhabitants of the same chawl community. Also, a certain amount of residents' friends or relatives can join in the group to purchase the land together, and take charge of design and construction processes themselves with the guidance of architects.

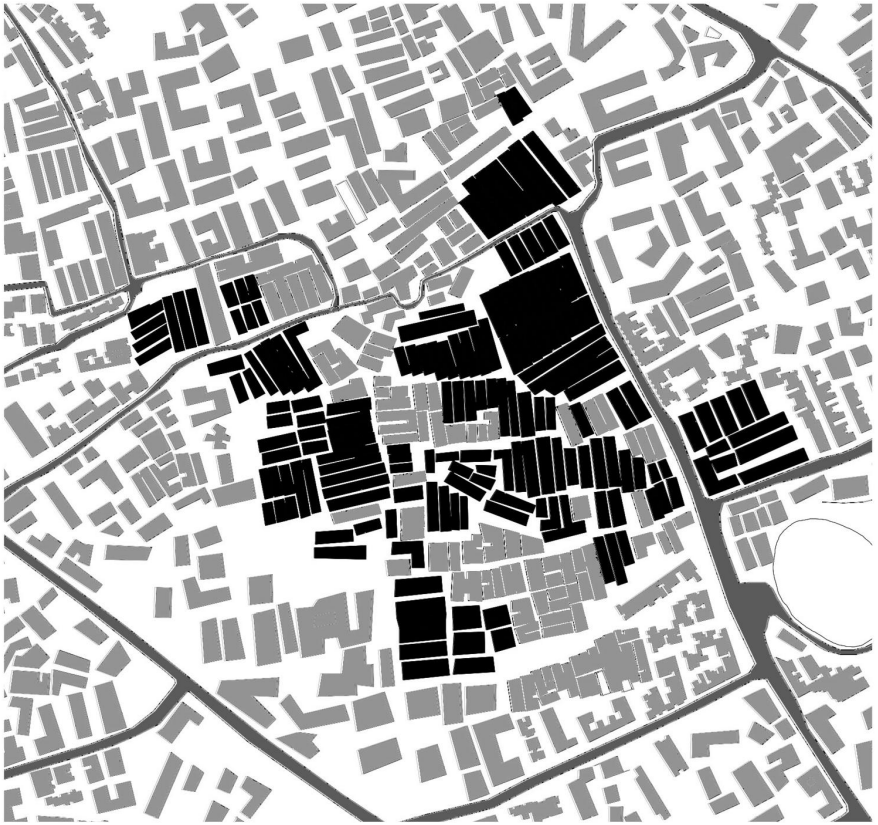
Community networks are formed and consolidated through the process of design and construction with the Building Group system. The cooperative model strengthens the social and economic relationships amongst neighbors and facilitates the establishment



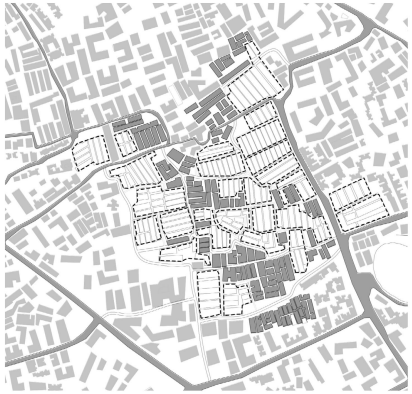
The Building-up Community

According to different sizes of the Building-up Group, various social spaces for the new community will be created in the new residence. Also, considering the various occupations and backgroup of the Building-up Group's members, mixed-use community space should be created to meet the needs of religion, commerce and education.

Architectual elements identified from local community space in Mumbai, such as courtyards, balconies, by-lane, place of worship and so on, can be added to new house typologies to design the Building-up Community.



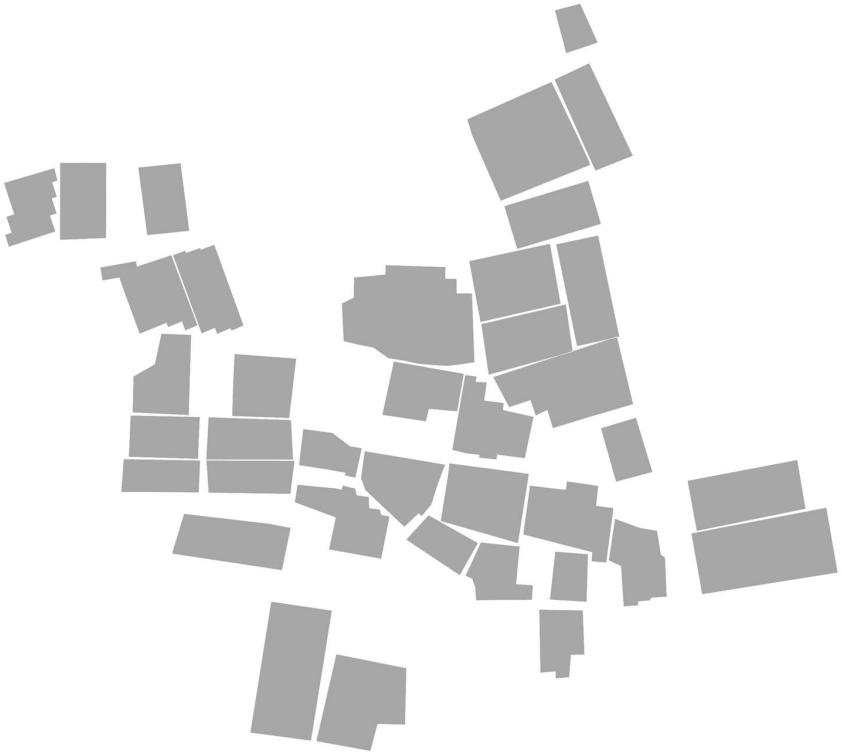
Original fabric of baithi chawls area



According to existing fabric, we can see different Baithi chawls' clusters where the chawl community has been evolving.

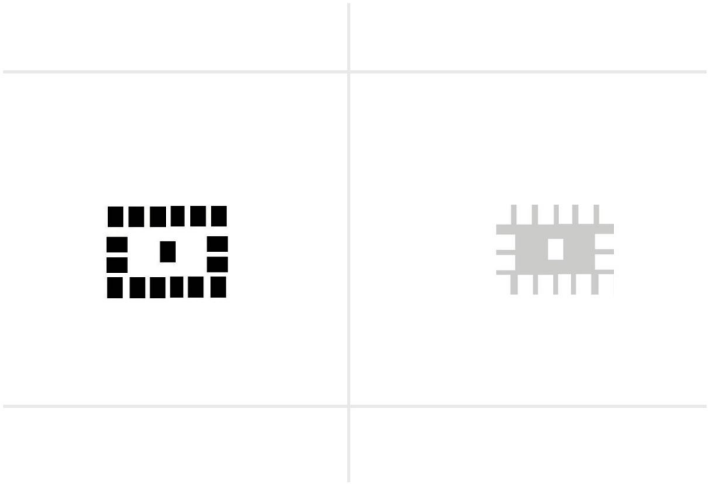
Area sizes of each cluster
(m^2)

The number of households of each cluster



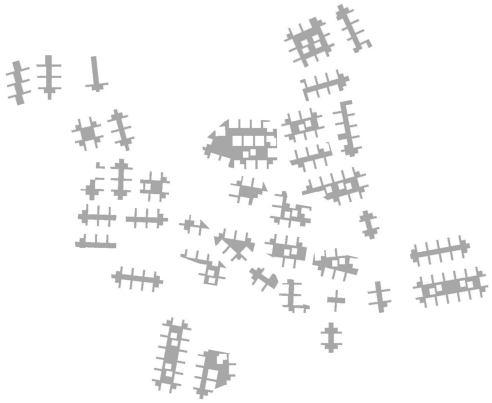
Building groups cluster

Design strategy

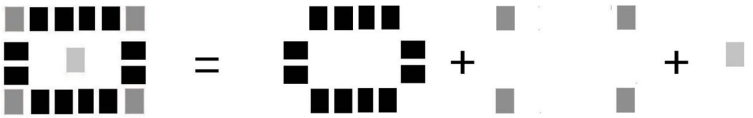


Prototype of medium community structure

Building units



Community’s open space



■ - Outer House

■ - Corner House

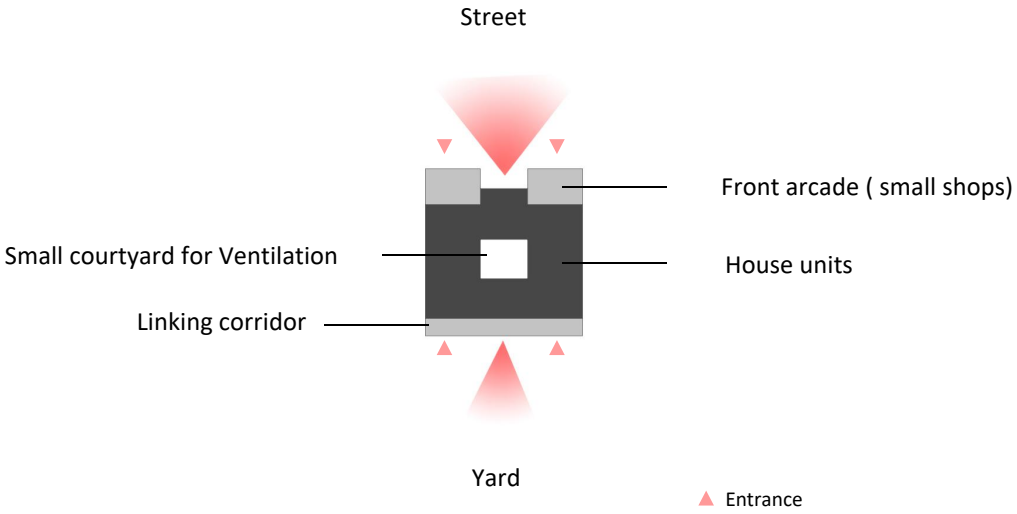
■ - Center House

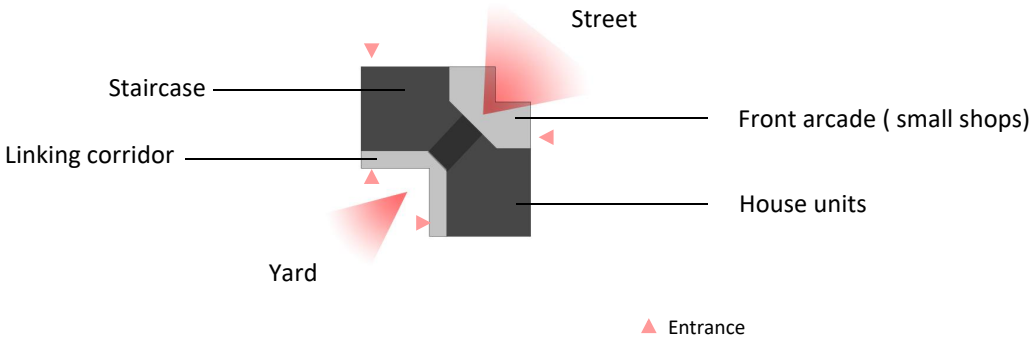
Three house types in the community

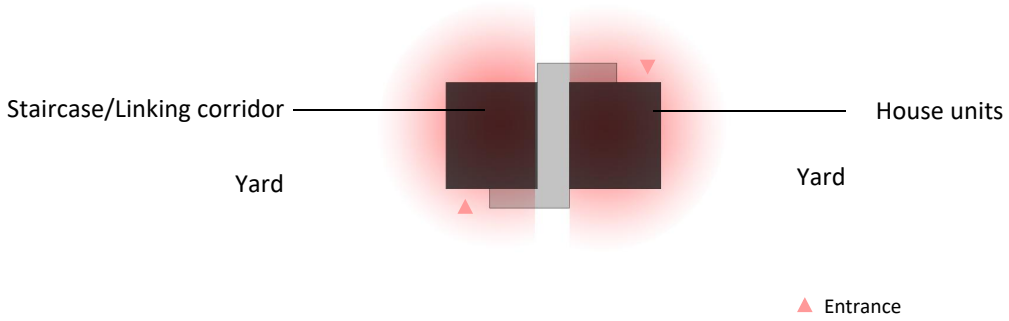
- Outer House

- Corner House

- Center House


Street
Front arcade (small shops)
Small courtyard for Ventilation
House units
Linking corridor
Yard
Entrance

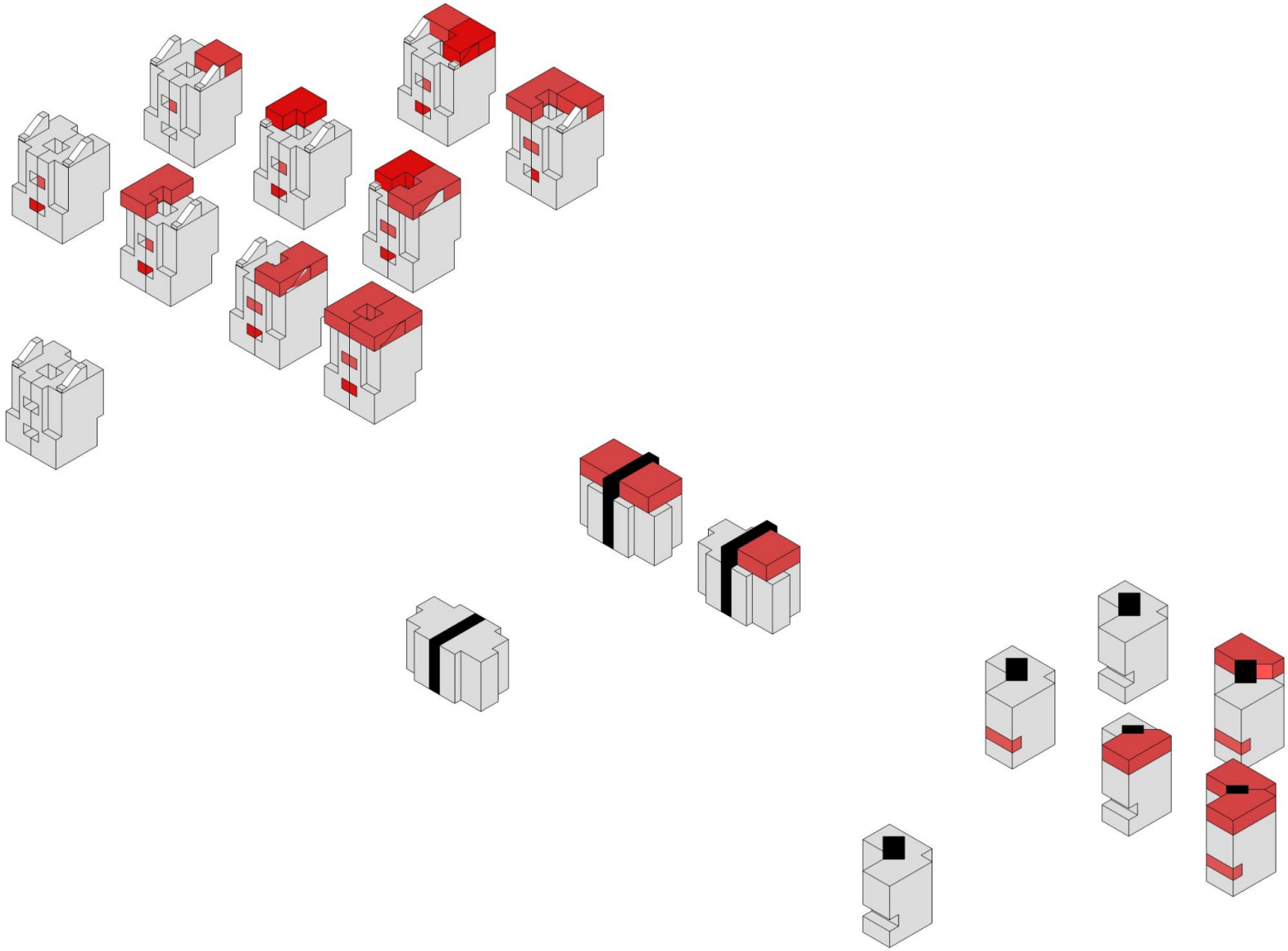
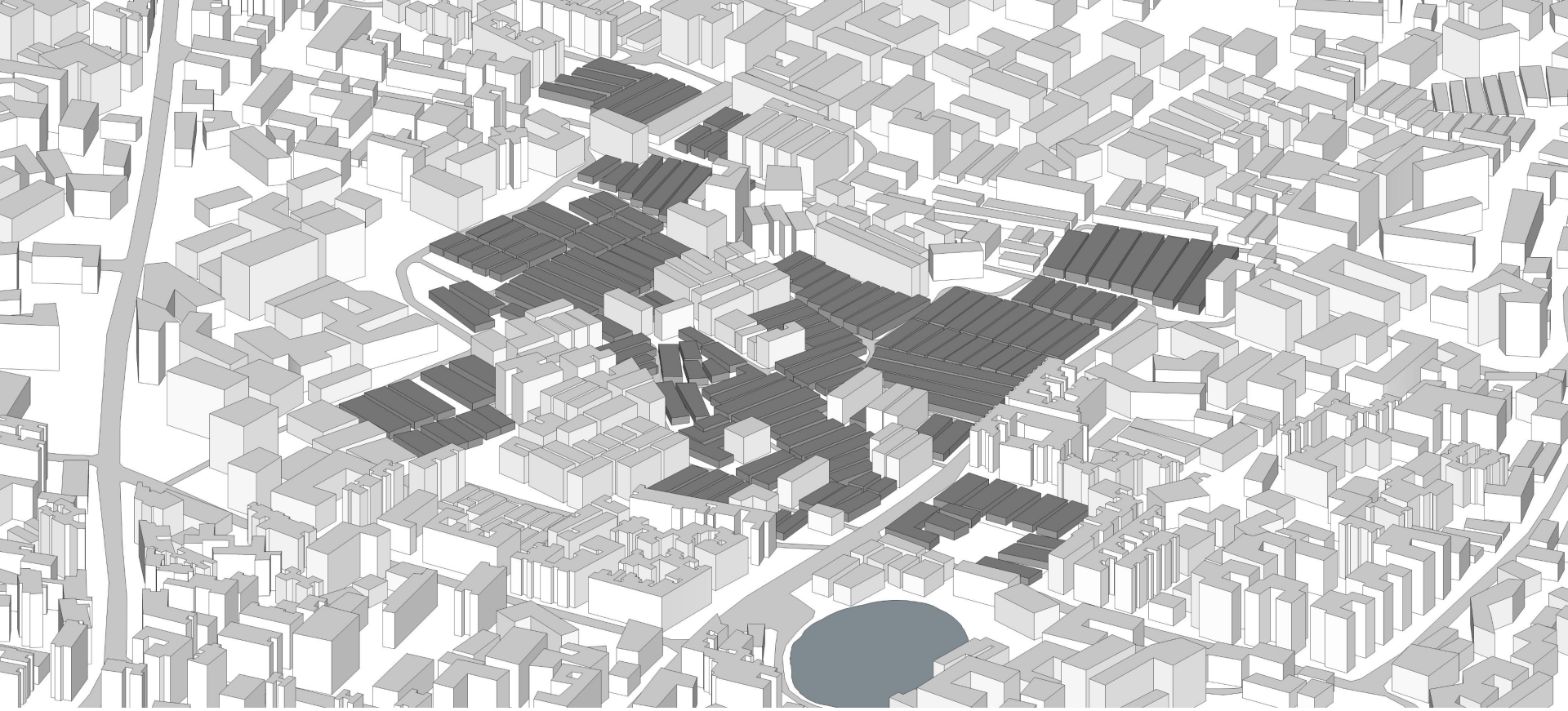
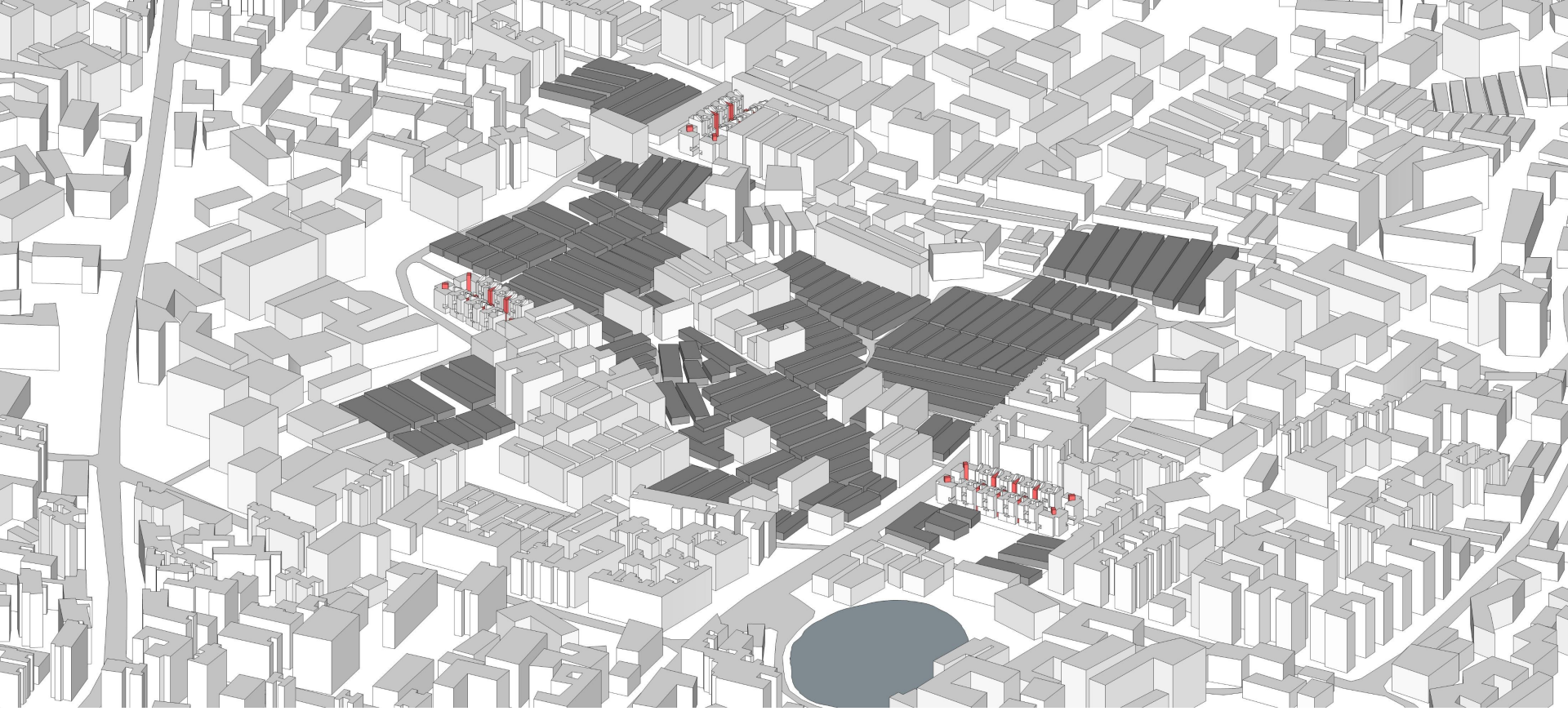
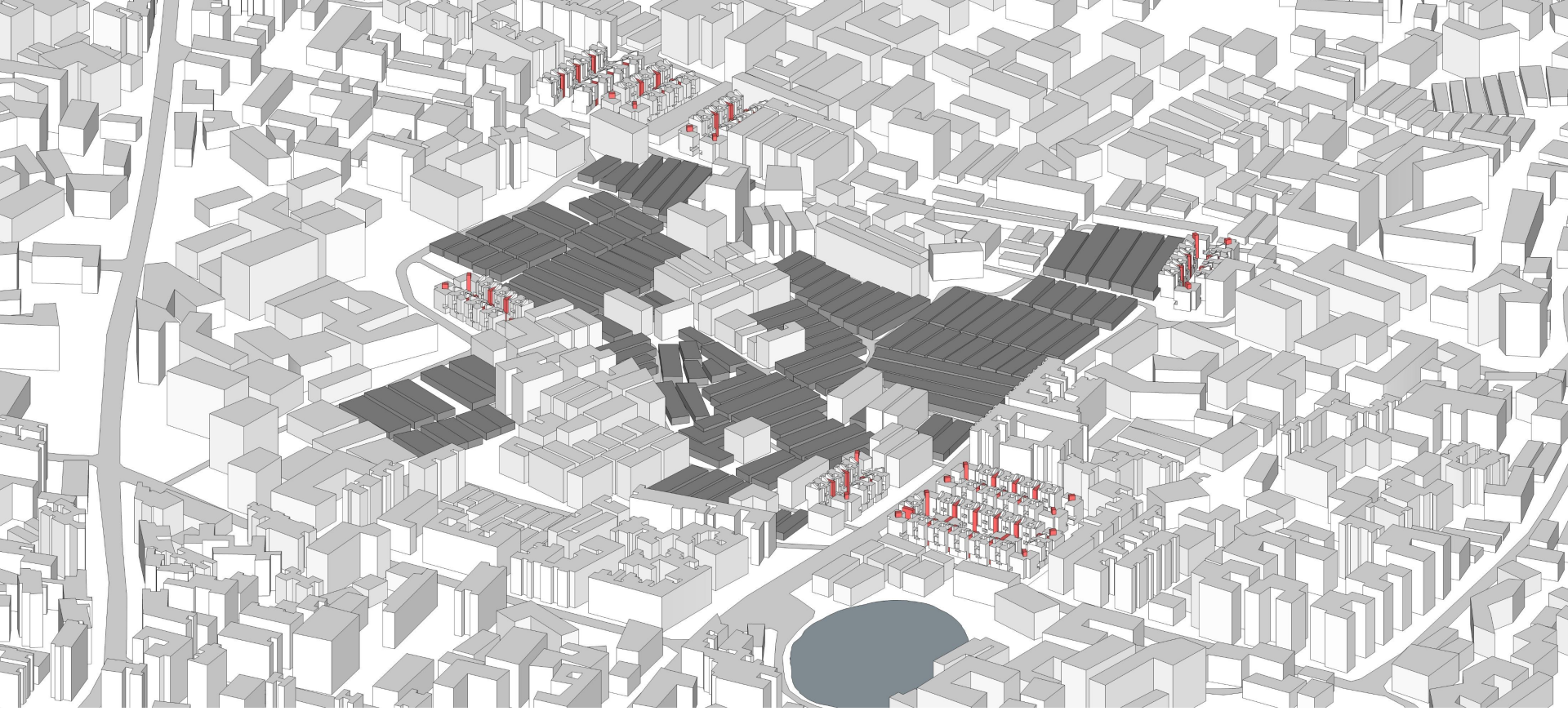
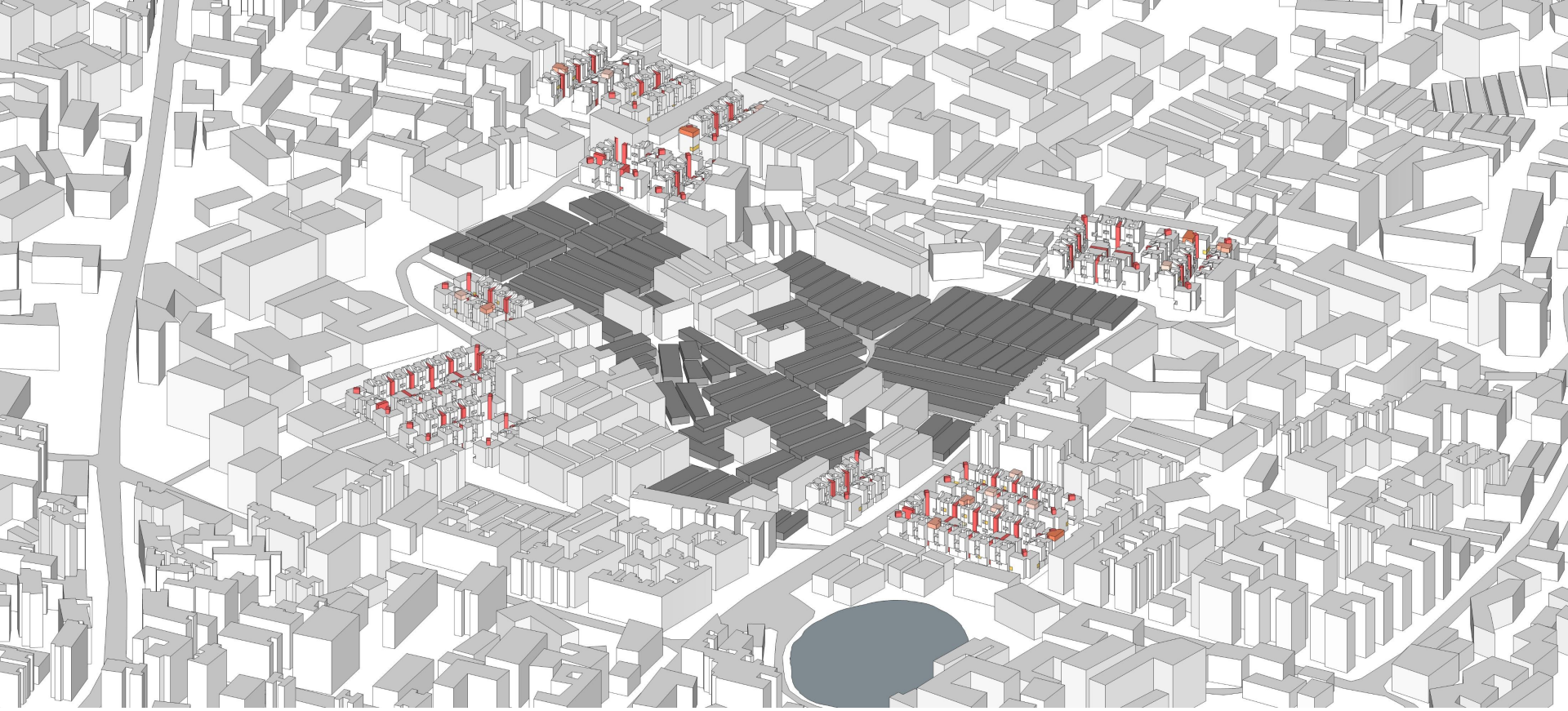
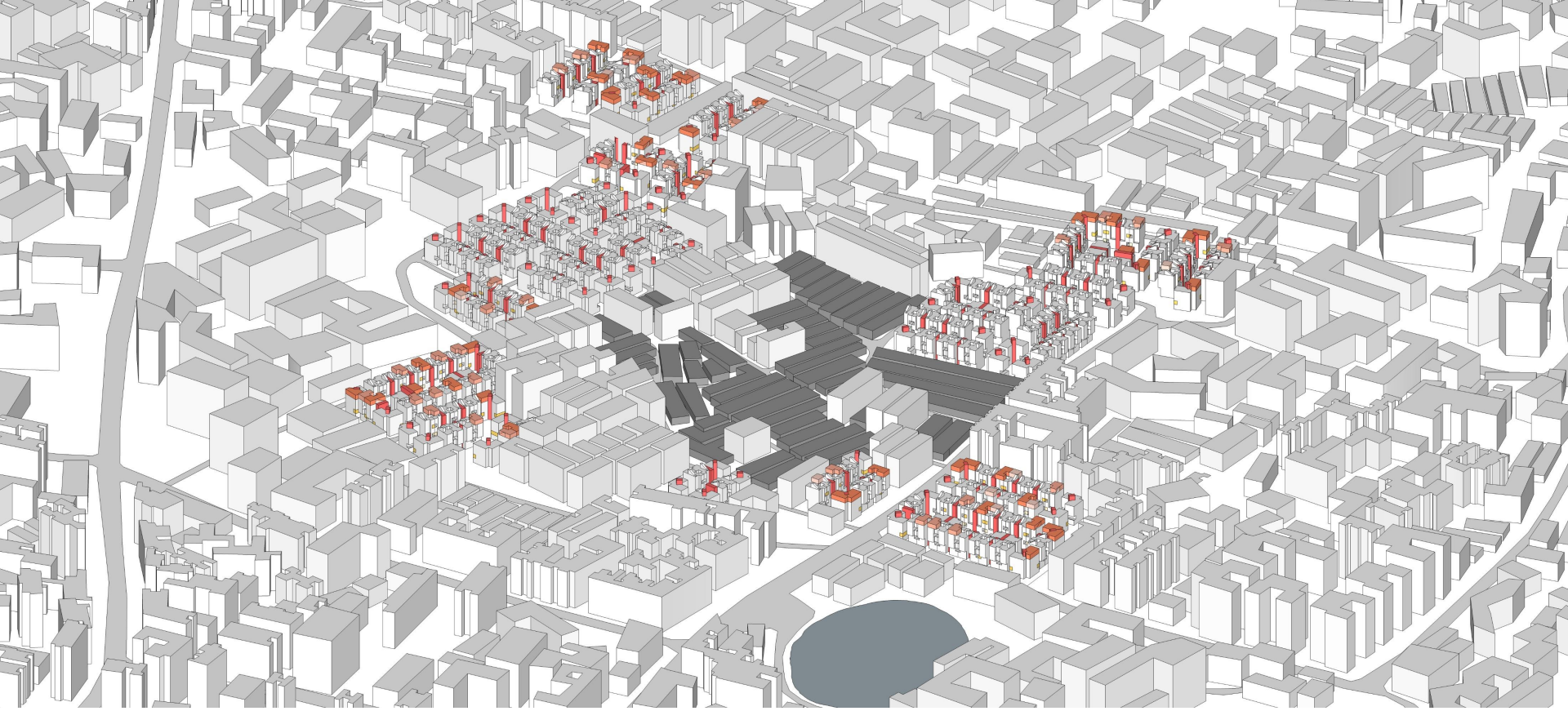

Street
Staircase
Front arcade (small shops)
Linking corridor
House units
Yard
Entrance


Staircase/Linking corridor
House units
Yard
Yard
Entrance

Building-up community

Configuration of three house types for different Building-up group community

Incremental strategy



Self-growing communities