

Workshop: Affordable,
decent and healthy housing

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Micro-districts transformation concept and New resilient housing typologies

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& PARTNERS**



БУДОВА ::::

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Co-founder of the Ro3kvit: Urban Coalition for Ukraine

Aims



What has left?

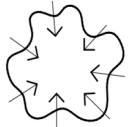
1. Destroyed communities
2. Lack of services and jobs within the districts
3. Absent of public and semi-private spaces
4. Not inclusive transport system
5. Energy inefficiency of buildings and supplying networks
6. Lack of resilience to climate change and emergencies
7. Outflow of professionals from construction sector and other fields

What can be changed?

1. Community involvement in decision making
2. Local jobs, services and production (food, energy, goods)
3. Articulated and developed public and private spaces
4. Dense and inclusive transport system and build environment
5. Energy efficiency, local energy production and exchange
6. Resilient environment to climate change and emergencies
7. Automation of the construction industry and the use of prefab technologies

Planning strategies

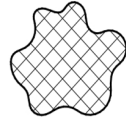
1.City scale



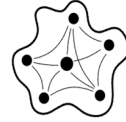
Compact city



Eco-Friendly city

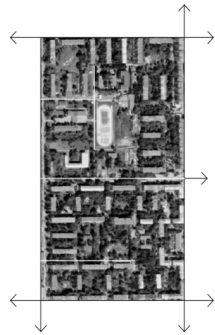


Homogeneous city



Polycentric city

2.District scale



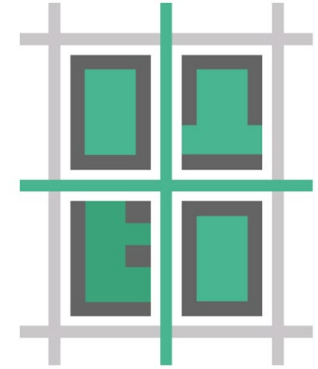
Enclaves



Connected district

3.Superblock

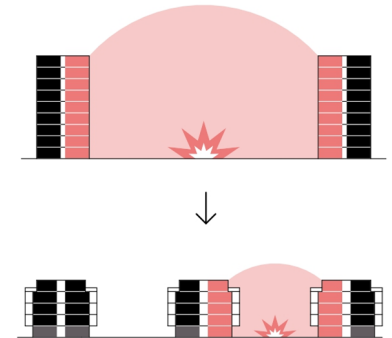
- pedestrian-prioritised inner streets
- semi-private green courtyards
- Private spaces on the ground level
- Safety and traffic control



4.Density and scale

(reconstruction and new development)

- reducing overall height
- reducing blast wave radius
- shortening evacuation time
- creating comfortable streets and human scale



Micro-district transformation concept



- Unarticulated spaces
- Inconvenient transportation system
- Monofunctional areas
- Low energy efficiency and dependency
- Incoherence and chaotic parking
- Lack of public and economical life

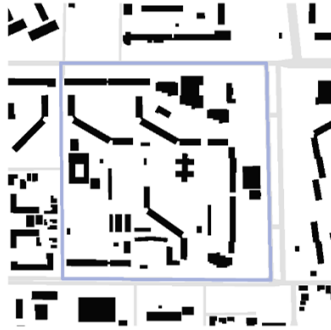
- clear zoning of public and semi-private spaces
- shaping a comfortable street profile
- social diversity
- denser and more connected street network
- ecological and recreational framework
- preservation of important buildings and places
- goods and food production facilities integration

Universality of the strategies

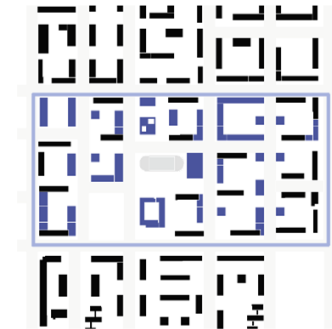
Kharkiv



Mariupol



Sievierodonetsk

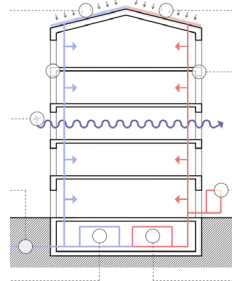


Flexible principles that allow to create micro-districts transformation projects in other cities of Ukraine, taking into account the local context

Pilot project in Hlibodarske, Odesa region

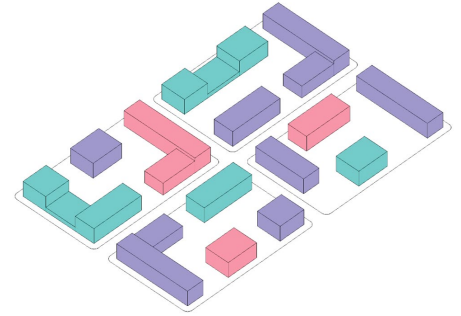
- plot size and street configuration as part of Superblock structure
- defined and car-free courtyard
- low-rise development
- variety of housing typologies
- apartments on the ground floor

Passive house technologies



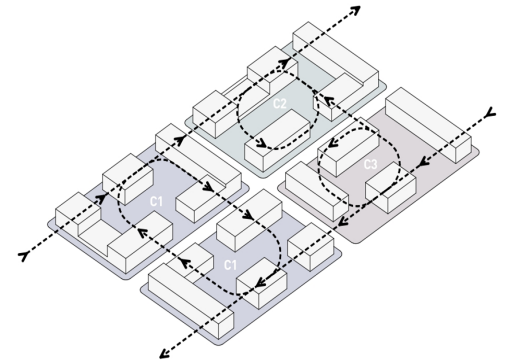
Social diversity and variety of ownership models

Mix of municipal housing, real estate development projects, housing cooperatives and other ownership models which create diverse social environment



Energy communities

- local energy production
- accumulation of produced energy
- energy community as an economic entity that can trade energy
- network of communities that can autonomously support themselves in the event of a military or technogenic threat



New typologies

Variability of housing typologies with unique features, energy efficiency, fully designed as prefab buildings which in combination allow to create living environment.

Block section



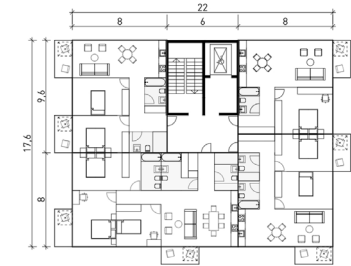
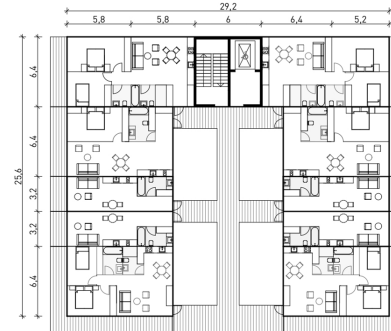
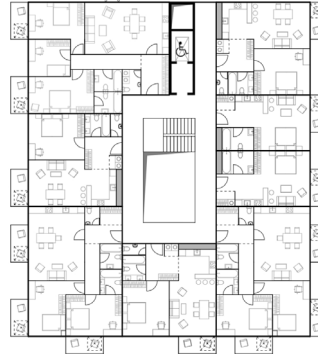
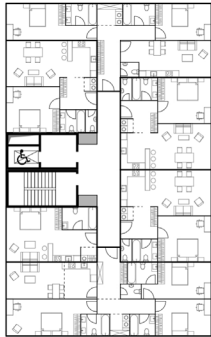
Atrium housing



Gallery housing



Urban villa



- modularity and variety of apartments
- possibility to create closed quarters

- highly effective
- atrium space as a communication place
- corner apartments

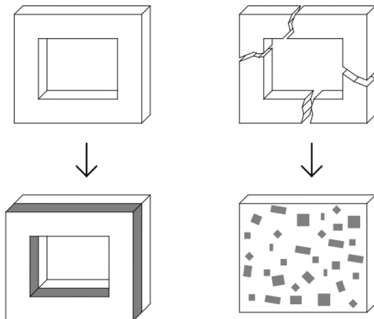
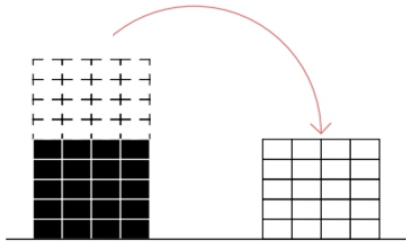
- natural cross ventilation
- galleries as an additional sun shading
- variety of apartments

- compactness and corner apartments
- versatility of placement on the site

Prefab technologies and local production

LOCAL PREFAB PRODUCTION LIFECYCLE:

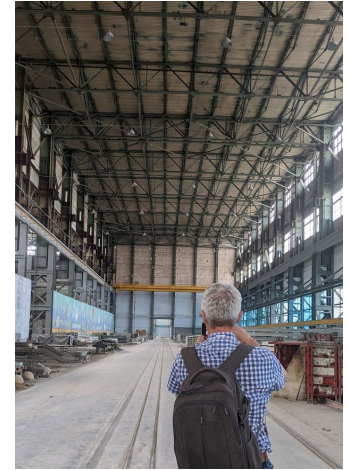
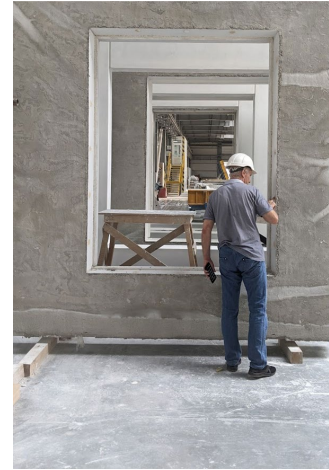
1. Construction of high-tech factories around damaged cities for the production of prefab solutions
2. production of panels and construction of buildings
3. transformation of the factory into a public function after the transformation program ends



PANELS RE-USE

Intact panels can be upgraded to be used for new construction

Damaged panels can be recycled as filling material for infrastructural projects



Construction facilities of the Budova company, which specializes in the production of prefab solutions