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## Humanisation and Modernisation of Substandard Housing Estates

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### Summary

The housing estates built in Poland during the sixties and seventies are now estimated as substandard, cultural and social degraded. Using as an example Piasta Estate in Bialystok, where we live, we would like to prove that rehabilitation of such estates is possible. Our proposition of humanization and complex modernization contains:

- modernization of existing buildings (improvement of dwelling standard and enrichment of architectural impression),
- transformation of urban composition in order to create legible urban interiors,
- structuralization of space (separation of public and semi-public spaces),
- enrichment of functional program.

### 1. Functional, spatial and social value of Piasta Estate

Piasta Estate in Bialystok is a typical Polish housing estate designed and realized in seventies in conditions of a socialist country. Firstly - it is characterized by a huge space and demographic scale - this estate occupies the territory of 60 hectares and 22 thousands inhabitants live there. Secondly - its functional and spatial conception is a result of ideological statements of 'social estate' and modernistic doctrine of town planning. And thirdly - all housing buildings located on the territory of this estate were built using large-size board prefabrication technology 'OWT-67', that was the only one obligatory in this region.

Dwelling architecture of Piasta Estate is an example of extreme uniformization and unification, manifested not only by external form buildings, but also by apartments' structure limited to seven types, copied thousand times. Moreover, the utility standard of flats is very low: the most popular 3-rooms apartment of 48 m<sup>2</sup> area.

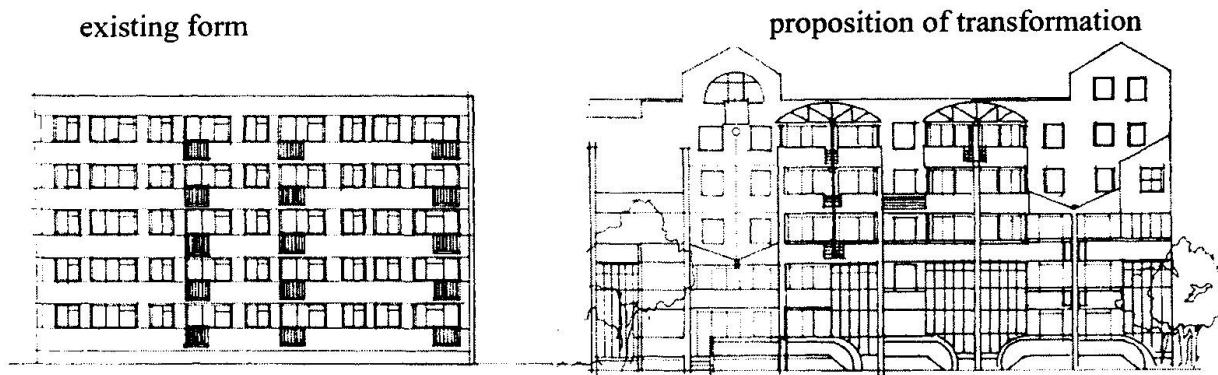
### 2. Proposal for humanization and modernization of Piasta Estate

Our design concerns part of Piasta Estate, named Piasta II, which seems the most neglected. In our modernization idea we can distinguish two directions:

- transformation of existing buildings and their close environment,
- transformation of functional - spatial structure of the estate and its connection with surroundings.

**Transformation of existing buildings and their environment has following goals:**

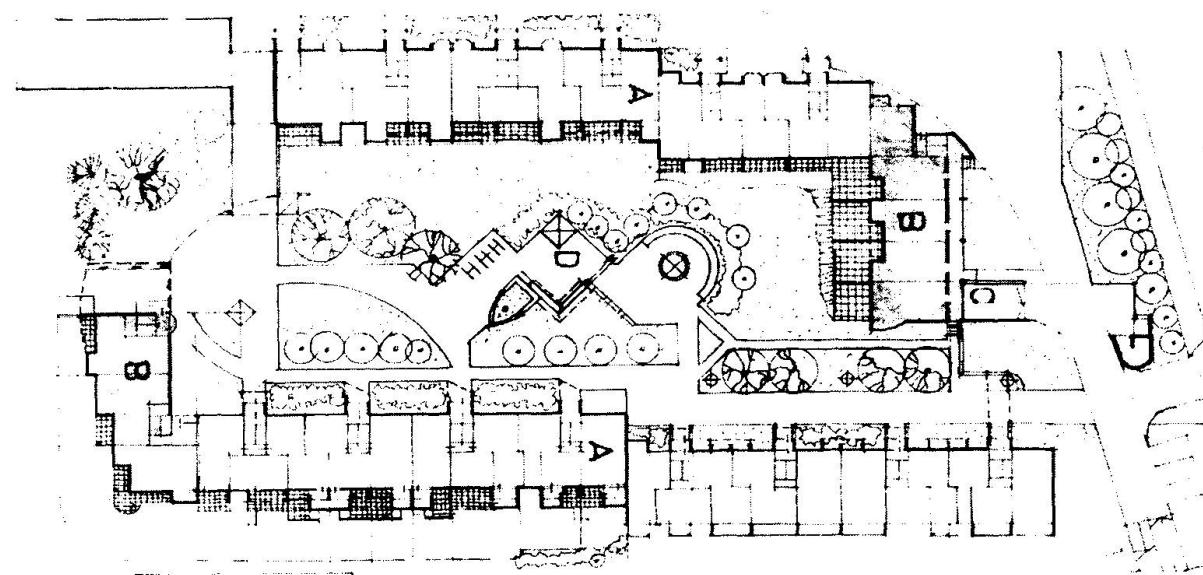
- improvement of dwelling standard of apartments,
- enrichment of architectural expression of the buildings,
- improvement of technical standard of the buildings, mainly referring to better insulation properties of exterior walls,
- creation of 'intermediary zone' between private interior of houses and outside common space.



*Fig. 1 : Transformation of existing building - an example*

**Transformation of functional and spatial structure of the estate concerns:**

- separation of semi-public spaces for definite groups of residents,
- creation of attractive public (social) space,
- transformation of estate composition in order to create clear urban interiors,
- enrichment of functional program and achievement of higher comfort of the vehicle service.



*Fig. 2 : A courtyard between apartment houses - an example of semi-public space,  
A - existing buildings after transformation, B - added buildings, C - garage under new house,  
D - playground.*