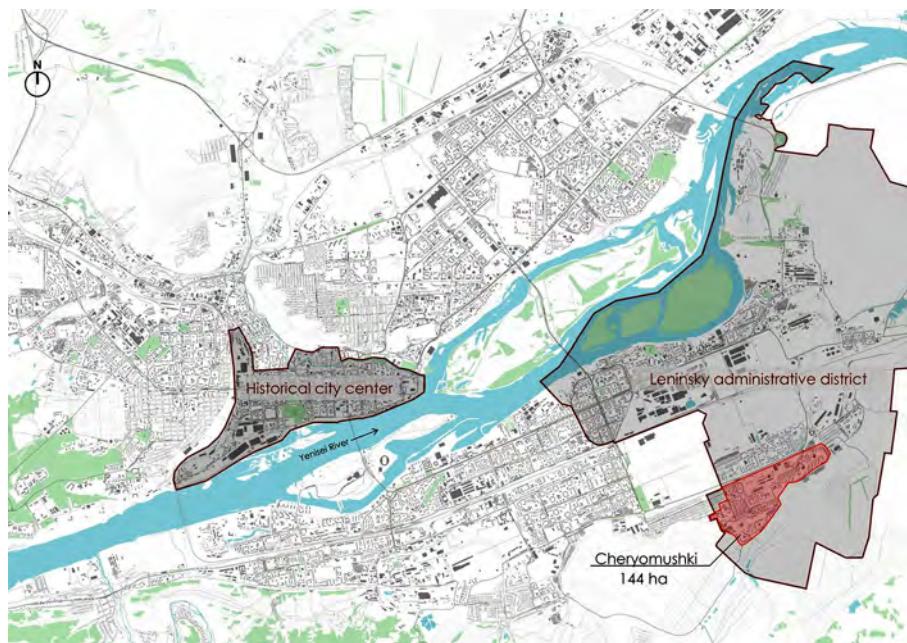


17. The Present State and Perspectives of Development of Cheryomushki in Krasnoyarsk

Klavdiia Kamalova and Ekaterina Kirichenko

Figure 1: Location plan.



Source: Klavdiia Kamalova.

Krasnoyarsk ranks third in the Russian Federation in the number of pre-fabricated housing areas. There are about 50 microdistricts and most of them were constructed in the period from 1960 to 1991, with the peak of development before 1969. Cheryomushki is one of the oldest areas of mass housing estates in

Krasnoyarsk. It is located in the Leninsky administrative district at the eastern border of our city (fig. 1). Today it occupies an area of 144 hectares, which is 3 percent of the territory of Leninsky, and it contains about 20 percent of all its residential buildings.

Figure 2: Building layout, 1960–1980.



Source: graphic by Ekaterina Kirichenko; photos by unknown photographer (left), Sergey Filinin (right).

The territory's development began in 1944 with a two-story housing settlement for workers. However, the main period of construction (fig. 2) was from 1960 to 1980, with the majority of residential buildings consisting of five-stories and belonging to the first generation of mass housing. The development of this territory by prefabricated houses began in 1970. In 1978, the first master plan was designed by the institute Krasnoyarskgrazhdanprojekt, consisting of seven microdistricts around a public core with social, cultural, and sport facilities. The public core was not implemented. After the 1980s, only two large microdistricts were built here (fig. 3). Subsequently, and to this day, there has been no further construction activity besides two residential panel buildings.

Figure 3: Building layout, 1980–2000.



Source: graphic by Ekaterina Kirichenko; photos by Klavdiia Kamalova (left), Sergey Filinin (right).

As an outcome of field surveys conducted of the area, very diverse open-space morphological structures (fig. 4) were identified. Dependent on their unique planning organizations, various forms of development by residents have developed. We identified six distinct elements of the residential layout, which includes 158 housing units in all. They can divided into four types, based on the morphology of the buildings and their functional principles (figs. 5–8).

Figure 4: Diagram of morphology of Cheryomushki residential areas.

Morphology and functioning of residential areas



Source: graphic by Klavdiia Kamalova and Ekaterina Kirichenko.

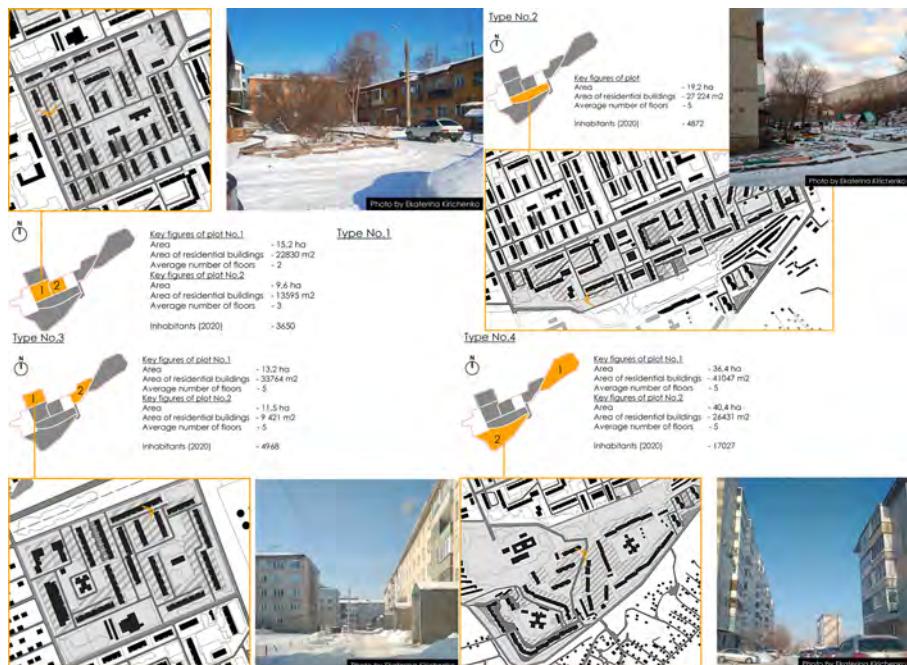
Type No. 1 is two- and three story village for workers. The main problem in how its territory functions stems from close spacing of the buildings rows, which led to a lack of courtyard spaces due to cramped conditions. Currently, these adjunct areas are not functioning. The landscaping focuses on the entrance groups and contains flower beds and small playground elements.

Type No. 2 includes blocks that fill in the gaps between the rows of residential buildings from the previous period. These integrated buildings were originally intended to form residential groups, but their close location to the low-rise houses also deprived it of space.

Type No. 3 is characterized of the openness of its territory. This allowed improvement of the sanitary and hygienic qualities of the residential structures, but led to an amorphous character.

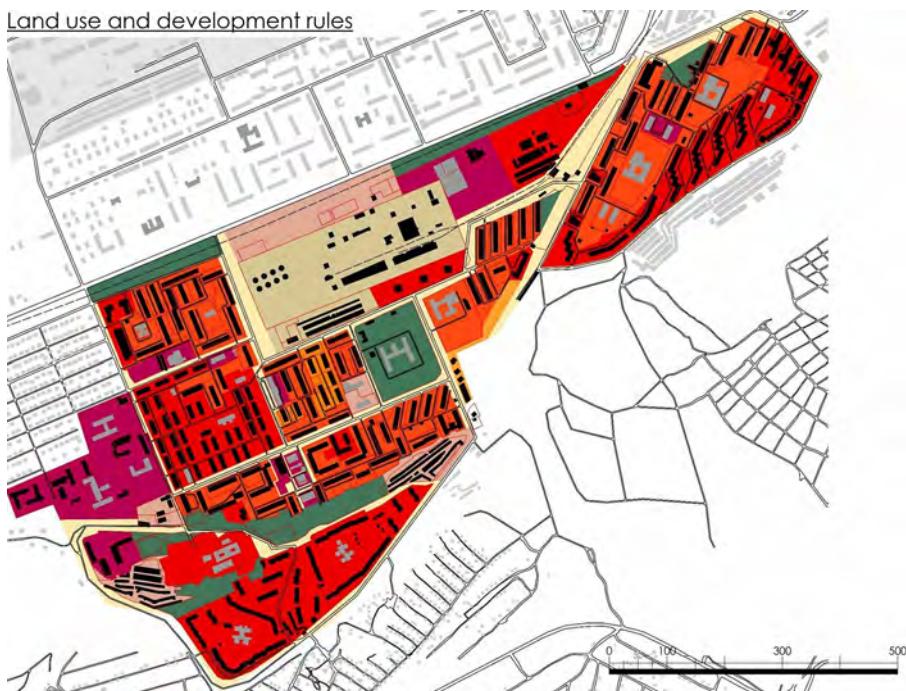
Type No. 4 began to take shape in the mid-1980s and continues today. The territories of this period are characterized by high-rise buildings, which yielded large open courtyards. The main problem of such freely organized residential estates lies in the fact that the land belongs to everyone and no one at the same time.

Figures 5–8: Fragments of planning elements.



Source: graphics by Ekaterina Kirichenko and Klavdiia Kamalova; photos by Ekaterina Kirichenko, 2021.

Figure 9: The current scheme of rules of land use and development.



Source: graphic by Klavdiia Kamalova and Ekaterina Kirichenko, based on open data from the Krasnoyarsk administration.

The unorganized living environment of the Cheryomushki district is characterized by dependence on the following points: (1) the lack of a hierarchy of open spaces and the limited ways of using open space; (2) the lack of territorial responsibility for the residents' collective property and the self-appropriation of fragments of collective property for private use; and (3) the spontaneity of the development of unbuilt land for parking zones, nonstationary garages and kiosks, household functions, et cetera. Based on the current situation of land use (fig. 9), it is becoming increasingly urgent to appropriate the areas of the microdistricts according to the principles used for the formation of the residential area, so that it functions as an additional part of the housing itself and consists of squares, streets, and alleys where the everyday household and recreational needs of the population are met.

Assets:

1. Humanly scaled green spaces. Open spaces with a landscape of rich greenery on a human scale are a most valuable and unique element that should become a “bridge” between courtyards and community.
2. Permeability of space. Modern methods of reconstruction (including our case study of the German and Dutch experience) are aimed at the revitalization of space, partly by marking the boundaries of areas of different ownership.
3. Varied levels of public and private space. According to Finnish experience, open common areas can be divided into several categories of at least four types: private, semi-private, semi-public, and public.
4. Functionally determined ground floors. The ground floor should be taken as a functionally determined part of a block, formed under the influence of the social and spatial environment and receiving its functional content in a particular place (socio-functional, urban, socioeconomic, geographic, etc.).

According to our study, residential areas of mass panel housing are currently at the stage of spontaneous self-development and self-preservation. Nevertheless, the housing estates of the period 1950–1970 contain a powerful resource for the development of the city, one that depends on planning open and public spaces. These spaces, with current land-use intensity values of 0.1 instead of the desired 1.5, should be viewed as an important component of a comfortable and high-quality living environment.

