

RESIDENTIAL BUILDINGS IN WORKERS' VILLAGES IN LATVIA IN THE 1940S AND 1970S. EXAMPLE OF BRICK BUILDINGS IN THE JELGAVA AREA

 
Aija Ziemeļniece, Una Īle

Latvia University of Life Sciences and Technologies, Latvia

Abstract. With the change of political power in Latvia after the Second World War, the country's economy changed. The devastation of the war and the post-war period in the 1940s-1970s brought a new character to Latvia's outer suburbs with workers' villages consisting of apartment buildings with root gardens, barns and cellars. The workers' villages in the suburbs, as well as the centres of kolkhozes or sovkhoses in the rural areas, began to implement new types of housing projects in the post-war years. The buildings in the workers' villages connected with industrial production (wood processing, brickworks, sand pits, peat mines, stone crushing plants, dolomite quarries, etc.) formed their own spatial structure. However, with the wave of collectivisation in the 1940s/1950s and the development of collective farm/sovkhos centres (MTS or machine and tractor stations, creameries, horse rental centres, seed etching centres, gatherers, sugar beet reception centres, grain dryers, wool carders, etc.), the spatial structure of the built environment changed. The unifying aspect of the villages remained the subsistence farming character, where the residential area coexisted closely with the production area and the farm buildings - cattle sheds, pastures, hay sheds, wood shed, cellar, root garden, potato and fodder beet field. When the Latvian state's economic policy changed in the 1990s, the transformation processes also affected the areas of the workers' villages. Today, the character of post-war Soviet housing is still preserved and should be given the status of cultural heritage.
Keywords: residential apartment buildings, workers' vilage, brickworks, production zone

Introduction

The strong development of brickworks villages in an arc around Jelgava began in the post-war period in the 1940s and 1950s, with the creation of new housing areas outside the city. Bricks, timber, lime and tiles were needed for the urban renewal. The upper reaches of the Lielupe basin were rich in clay and lime deposits, and this contributed to the rapid establishment of workers' villages, mainly for work in the brickworks, lime kilns and gateways, where logs were stacked from rafts coming down the rivers of the Lielupe basin from Selenia. The banks of the Lielupe basin contained large quantities of brick-making material, i.e. good, soft and pure clay... The former farmhouses became large villages, and before the First World War there was an 8 km long town of brickworks and workers' cottages at the mouth of the Bir River.

Historic brickworks along the rivers of the Lielupe basin were already densely established in Jelgava County before the First World War, with 39 brickworks, from which the old brickworks were extended: 1895-3 brickworks, 1897-6 brickworks, 1898-7 brickworks. The demand for bricks increased especially with the construction of Art Nouveau houses in both Riga and Jelgava. This contributed to the increase in the number of clay quarries and the change in the landscape on both banks of the Lielupe River in the second half of the 19th century [1; 2; 5; 8].

When Jelgava burned down in the summer of 1944, brick production increased tenfold in the 1950s and 1960s, changing the landscape along the banks of the Lielupe even more drastically, creating exaggeratedly large bodies of water and a false perception of the centre of Zemgale as a "land of blue lakes". Heavy machinery in the earthworks, heavy transport on the roads and the directives of the occupying power exaggerated the pressure and left an 'industrial footprint' on the landscape. The increasing production of bricks required labour. This encouraged the construction of blocks of flats and outbuildings in the early post-war years [3; 6; 7].

Labour was in short supply, so low-skilled people from the countryside and migrant workers from Belarus and Russia were used. The work in the mines and kilns was physically

very hard. There was a lack of machinery as the country's industrial sector had been devastated. Shovels, wheelbarrows, stretchers, footbridges, horse-drawn carts, muddy tracks. Work was seasonal, from spring when the ground thawed to the autumn rains when the mines filled with water [8; 9; 13; 14]. The first four brick-kiln workers' villages - Spartaks, Progress, Sarkanais māls and Kārņiņi - were established in the Jelgava region, and their production activity was characterised by the main periods of transformation processes:

- The 1950s-1970s saw a sharp increase in production and the creation of workers' villages;
- Stagnation of brick production and housing development (1980s); sectoral change in the brickworks areas;
- Former clay pits or quarries as a strong landscape element for the prospective growth of residential areas (turn of the 20th/21st century).

The aim of the study is to reflect the processes of transformation in the outer urban area in the post-war years and today, where agricultural areas have been replaced by industrial zones and workers' villages. Objectives of the study:

- to study the character of the construction of residential buildings or barracks in workers' villages in the 1940s and 1950s;
- evaluation of the aesthetic quality of the exterior of the housing estates in the workers' villages in the 20th

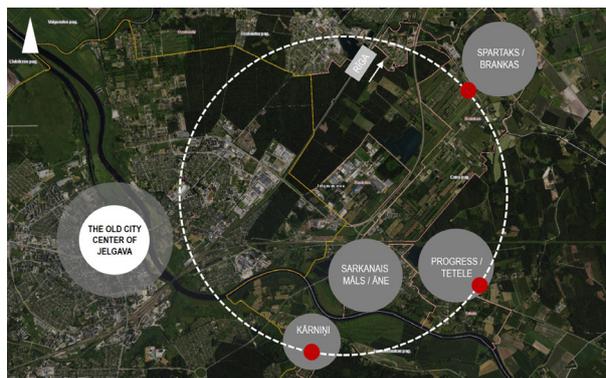


Fig. 1. A circle of brick workers' villages around Jelgava [created by authors, 2024]

century 1970s and 1990s.

- characteristics of residential development in the 1950s next to industrial areas;
- transformation of the village open space as a result of the change in national economic policy at the beginning of the 21st century.

The methodology includes a multidimensional approach based on:

- the study of literature and archival material and comparison with the contemporary situation in Latvia;
- the use of photographic material reflecting the evidence of the historical heritage preserved in the brickworks villages;
- architectural and spatial research of the construction of workers' villages in the period from the 1950s to the 1920s and the transformation processes in the changing identity of the cultural space.

Materials and Methods

The territories of the manors of Tetelminde, Āne, Vecsvirlauka and Dandāle on both banks of the Lielupe River upstream from Jelgava served the business of the brick-kiln owners Ņesterovs, Frišmanis and other large industrialists as early as the 1880s.

Half a century later, these mines were expanded, clay deposits were excavated and impressive water bodies were created. As the brick industry developed, so did the residential areas [15].

The study includes the study of the brickmaking villages of the outskirts of Jelgava to the present day, their transformation into Spartaks (Brankas), Progress (Tetele), Sarkanais clay, Karnini, located in an 8-10 km arc around the burnt Jelgava on both banks of the Lielupe River, and the development of a strong brick industry during the Soviet period. Two opposing trends in the development of building materials production in the post-war Latvian SSR cannot be overlooked: on the one hand, despite its objective importance, it was one of the industries that recovered most slowly, effectively holding back construction throughout the republic - this was particularly acute in housing, where in some cities, such as Liepāja and Jelgava, local authorities were quicker to obtain building materials from rubble than to expect normal materials from manufacturers.

The periods of construction of the workers' villages are architecturally and compositionally distinct. There are 4 periods in the spatial transformation of the workers' villages:

- 1940s-1960s - 1 and 2-storey barrack-type buildings with shared outdoor toilets, shared kitchens, living quarters with shared corridors; highly developed subsistence agriculture;
- 1960s-1970s - Brick apartment buildings with separate apartments with kitchen and dry toilet; livestock and arable farming expanded;
- 1970s - Prefabricated concrete housing with indoor plumbing, sewerage and central heating begins to be built; livestock numbers decline;
- 20th/21st century - prefabricated concrete housing with centralised utilities, reduced subsistence farming; instead of gardens, large lawns with dendrological plants and play and sports areas, terraces, pergolas.

Results and Discussion

The functional and compositional structure of the Progress (Tetele) workers' village is laconic and the built-up area is the largest of the brickworks workers' villages, covering an area of about 10 hectares. A number of buildings in the village have retained their red brick facades, emphasising the historic identity of the place.

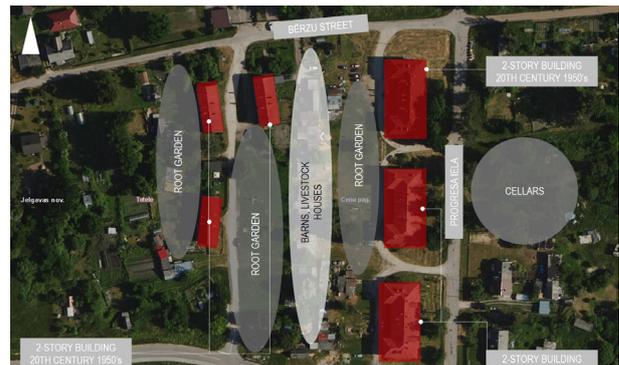


Fig. 2. Spatial functional structure of Progress (Tetele) brickyard workers' village [created by author's, 2024]



Fig. 3. Workers' village Progress (20th century, 40s-60s) [created by author's, 2024]



Fig. 4, 5. Villages Spartaks, Progress. Surface brick cellars with sod, 20th century, 50s [photos by A.Ziemeļniece, 2024]



Fig. 6, 7. Villages Spartaks, Progress. Brick houses, sheds and a former vegetable garden area [photos by A.Ziemeļniece, 2024]



Fig. 8, 9. Village Progress. 2-multistory residential apartment buildings with balconies and ventilation windows [photos by A.Ziemeļniece, 2024]

The compositional axis of the village is dominated to the south by the brickworks area on the Lielupe River. To the north is the clay quarry. The residential area forms the central part of the spatial axis. Progresa Street, the axis of the village, is the only street connected by access roads from the residential and farm buildings. The buildings and gardens of the workers' village form a series of narrow parallel functional zones with former root gardens, barns, woodsheds and courtyards. The above-ground cellars are built into the adjacent sand dunes overgrown with Weymouth pine. The cessation of brick production in the 1990s led to the disappearance of the root gardens and their replacement by extensive lawns, play areas and car parks.

The village retains its historic built character of the 1950s and 1960s, consisting of 2-storey standard apartment blocks with 4-pitch high roofs. The facades have small balconies with metalwork railings.

The layout of the one-storey brick dwellings, or huts, consists of a communal corridor leading to one-room dwellings with stove heating, a communal dry toilet and kitchen. One of these buildings was converted to serve as an outhouse for the kiln workers during the early war years, with separate entrances for digging the clay and firing the kilns. In the post-war years, the building was adapted for living quarters with a common corridor. In the 1950s and 1960s, birch trees were planted along Progresa Street, creating an avenue of birch trees that has since been thinned out by the wind. The huge birch canopy covers the adjacent picturesque Weimut pine grove and the gently undulating terrain, smothering the natural base along the right bank of the Lielupe River near Tetele Manor [13; 6; 4].

The Progress village extends 2 km further, where the 1970s workers' village Sarkanais māls is located, with typical 5-storey and 9-storey prefabricated concrete apartment blocks.

The Kārniņi village with its brick factory is situated on an area of 5 ha with some residential buildings (1-storey barracks, 3 units, built in the 1940s-50s and 2-storey buildings, 2 units, built in the 1960s). The small village is surrounded by clay pits, which have turned into huge ponds. The mines are closed and the water bodies have a wooded bank, which hides the overflowing water in the main lines of sight. The new Soviet authorities wanted to develop not only the brick industry but also the tile industry in order to obtain cheap building materials.

The spatial structure of the village is based on a compositional axis, or Pūpolu Street, which historically led to the old clay pits and kilns on the right bank of the Vircava River. In the post-war years, the first barracks were built along Pūpolu Street, using clay bricks from the kiln for the outer walls. The internal walls were made of timber framing with clay fillings to reduce the amount of work needed to fire the kilns. The layout of the buildings includes a common corridor, dry toilet and kitchen. Root gardens are close to the buildings, with sheds, barns and cellars behind them.

The workers' village was extended in the 1970s with 3-storey apartment blocks. Typical prefabricated concrete construction, excluding the historic red brick. The buildings are closely flanked by outbuildings and extensive grounds with root gardens. The spatial compositional structure replicates the subsistence agriculture of post-war workers' villages. The Vārnas (Mežciems) sawmill, 4 km from the brickworks, was also built in the 1950s, setting a fast pace for the reconstruction of war damage [8; 6; 2].

The spatial structure of the Spartaks (Brankas) workers' village is based on a similar compositional structure to the workers' villages discussed above. The axis is formed by a single



Fig. 10. Kārniņi workers' village in the 20th century, 40s-60s.
[created by author's, 2024]



Fig. 11. Workers' village Progress (20th century, 40s-60s)
[created by author's, 2024]

(Spartak) street parallel to the bed of the Lecava River. In the northern part of the axis there is a kiln flanked by several clay pits. On the opposite side of the axis is a residential area with root gardens, pastures and outbuildings. All the buildings are made of clay bricks, which are produced in the village. The northern part of the road axis is planted with fast-growing poplars. These were broken up by wind loads and new lime, maple and birch trees were planted in the 1970s. The village has expanded southwards since the 1970s.

In the late 1940s, one-storey barrack-type buildings (2 units) were built along Spartaka Street, with the front façade facing the street and an external entrance in a common corridor. The corridor leads to one-room apartments, a communal kitchen and a dry toilet. The buildings are characterised by tall, massive brick chimneys, as no firebricks are used.

Along Spartaka Street, two two-storey apartment buildings (12 flats) with two staircases and one-room flats, communal toilet and kitchen were built in the early 1950s. The buildings are characterised by a 4-pitch high roof, creating spacious attics for drying and storing laundry. Like the barrack buildings, they are oriented with the front facing the street. Both the 1-storey and 2-storey houses have root gardens by the windows [15].

In the 1960s, a new type of project was launched: 2-storey apartment buildings with a staircase and entrance from the courtyard, with brick partitions, stove heating, dry toilet. A water tower was built to provide a central water supply. The building has a pitched roof with low attics. The exterior is rendered in clay bricks.

A series of outbuildings with wooden sheds, barns and cellars, which have survived to the present day, are attached to each house. Behind the outbuildings there are root gardens and pastures. The multi-storey housing development of Spartak

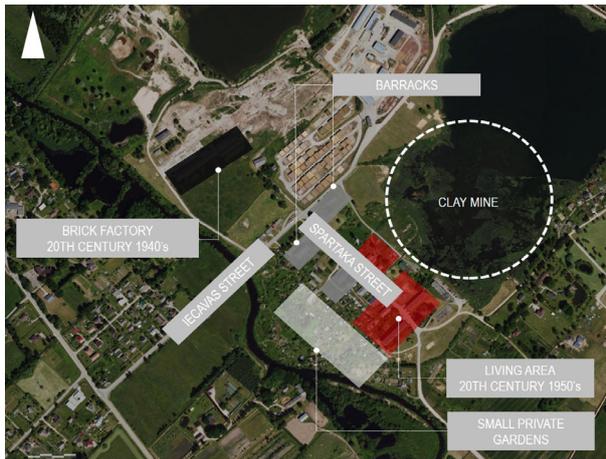


Fig. 12. Spatial structure of Spartaks (Branka) workers' village, 20th century, 50s [created by author's, 2024]



Fig. 13, 14. Villages Spartaks, Kārniņi. 1-story residential buildings or barracks [photos by A.Ziemeļniece, 2024]



Fig. 15, 16. Villages Progress, Spartaks. Workers' house was adapted to a multi-apartment building in the post-war years [photos by A.Ziemeļniece, 2024]



Fig. 17, 18. Villages Progress and clay mine overgrowth with pasture meadows and undergrowth [photos by A.Ziemeļniece, 2024]



Fig. 19, 20. Kārniņi clay mine and rows of mixed-type wood in Spartaks village [photos by A.Ziemeļniece, 2024]

Street increased in the 1970s with the construction of 3- and 5-storey apartment buildings with 3-5 staircases, with external entrances connected to the courtyard. Root gardens were set back about 100 m from the residential area. No outbuildings were built.

Brick production ceased in early 21st century, the 1990s. At the beginning of the 21st century, the root gardens near the barrack-type buildings were replaced by a grass play area and a car park, changing the functional role of the area, which was related to subsistence farming. Clay brick production was discontinued in the 20th century. In the 1960s, the production of silicate bricks increased, giving a new character to the architectural form of the buildings [6; 7; 12].

Conclusions

The period of the brick industry in the 1940s-1970s provides a vivid picture of the transformation of the Latvian landscape in the growth of workers' villages in the post-war period:

- The spatial structure and architectural form of the residential buildings in the workers' villages of the 1940s-1970s are similar; brickworks roads were built in the immediate vicinity of clay pits; 300-400 m from the production site, residential areas with an agricultural zone and a strong subsistence farming infrastructure were developed in the post-war years; the spatial layout of the villages is similar, consisting of one street with thinned out buildings; tree plantations;
- The residential area is closely linked to the farm buildings, gardens and pastures;
- The diverse ethnic, spiritual and social expression that the occupation period brought to Latvia's cultural space is reflected in the overall image of the workers' villages;
- The facades of the houses and outbuildings in the kiln workers' villages are characterised by historic red clay brickwork with lime mortar joints; the post-war workers' villages should be granted cultural heritage status;
- With the changes in the country's economic policy in the 1990s, the spatial structure of the villages changed: most of the subsistence farming - pastures, hay sheds, cellars, root gardens, potato fields - disappeared. In their place are meadows, courtyards with lawns, flowering shrubs, groups of trees, children's playgrounds and car parks.
- At the beginning of the 21st century, there is a growing demand from residents of working class villages for local authorities to improve the quality of the environment - roads, communications infrastructure, lighting, waste management, demand for sports and play areas, places for mass events, reclamation of former mines or quarries.
- In the context of the closure of brickworks, municipalities should consider the possibility of developing industrial heritage areas (industrial parks, technological facilities, infrastructure, etc.);
- With delays in municipal action, self-financing is developing in workers' villages: new parking areas, good solutions for access to the farm area, improvements to utilities, etc;
- As the economic and political character of the country changes, the housing in the historic brickworks villages retains a high blue-green landscape quality. This aspect has strongly influenced the property market, with modern single-family homes being built on these sites in the 1920s, facilitated by the proximity of the Riga conurbation and easy road connections.

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Authors

Aija Ziemeļniece, Dr. arch., is an editor of the internationally cited journal "Landscape Architecture and Art". She is a Professor at the Department of Landscape Architecture and Planning of Latvia University of Life Sciences and Technologies.

E-mail: ajia@k-projekts.lv

ORCID ID: <https://orcid.org/0000-0001-7096-5850>

Una Īle, Dr. arch., Associate Professor, leading researcher at the Faculty of Forestry and Environmental Sciences, Institute of Landscape Architecture and Environmental Engineering, Latvia University of Life Sciences and Technologies.

E-mail: una.ile@lbtu.lv

ORCID ID: <https://orcid.org/0000-0001-9410-1301>

Kopsavilkums

Mainoties politiskajai varai pēc 2. pasaules kara Latvijā, mainās valsts ekonomika. Kara postījumi un pēckara laiks 20. gs. 40.-70. gados Latvijas ārpilsētas teritorijām ienes jaunu apbūves raksturu ar strādnieku ciematiem, kurus veido daudzdzīvokļu dzīvojamās ēkas ar sakņu dārziem, kūtiņām, pagrabiem. Strādnieku ciemati ārpilsētu teritorijās, līdzīgi kā kolhozu centri lauku teritorijās, pēckara gados aizsāka jaunu daudzdzīvokļu dzīvojamo ēku tipveida projektu realizāciju. Strādnieku ciematu apbūve, kas bija saistīta ar industriālo ražošanu (kokapstrāde, ķieģeļnīcas, smilts karjeru izstrāde, kūdras raktuves, akmens drupinātavas, dolomīta lauztuves utt.) veidoja savu telpisko apbūves struktūru. Savukārt, 20. gs. 40. / 50. g. aizsākoties kolektīvizācijas vilnim un apbūvei kolhozu centros (MTS jeb mašīnu un traktoru stacijas, zirgu iznomāšanas punkti, sēklu kodināšanas centri, gateri, cukurbiešu pieņemšanas punkti, graudu kaltes, vilnas kārstuves utt.) apbūves struktūra veidojās atšķirīga. Vienojošais aspekts ciematiem saglabājās - naturālās saimniekošanas raksturs, kur dzīvojamai zonai cieši līdzās pastāvēja gan ražošanas zona, gan saimniecības ēkas - lopu kūtis, ganības, siena zārdi, malkas šķūnis, pagrabs, sakņu dārzs, kartupeļu un lopbarības biešu lauks. Mainoties Latvijas valsts ekonomiskajai politikai 20. gs. 90. g., transformācijas procesi skar arī strādnieku ciematu teritorijas. Mūsdienās ir vēl saglabājies padomju pēckara gadu dzīves telpas raksturs, kuram ir jāiegūst kultūrvides mantojuma statuss.