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Housing reconstruction of war damaged towns and villages in Eastern Croatia

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Abstract

A rough estimate brings the total damage in the 1991/92 war in Eastern Croatia to nearly 24.000 dwellings (houses and flats). Many protected historical inner city cores as well as complete traditional villages suffered serious damages or were completely destroyed.

If one can state that every region not only in geographical but also in spiritual sense corresponds with physical and spiritual sphere, begin realized and lasting through time, then we must conclude that this time element was by physical war destruction systematically removed from the towns and villages of Eastern Croatia. The main task of reconstruction therefore should have been in bringing back this time element by rebuilding those physical links with the past.

This paper deals with reconstruction of these towns and villages where on one hand there was tendency to abandon the traditional model of a row-village and to replace it with buildings adopting models from models from another culture, completely strange to this particular region. In order to speed the return of the refugees the tendency continued after the war and the villages were rebuilt with off-the-peg houses of quite different character to the traditional one, modeled on different cultural model. The possibility of interpreting in a creative way the great qualities of traditional villages: ecological, economical, sociological and last but not least architectural qualities was lost in reconstruction.

The reconstruction in the historical towns besides complete reconstruction of the buildings in the very city cores in some examples also shows a disrespect for the traditional way of life introducing housing models from another culture and other regions very rarely interpreting in a creative way the previous architectural identity of the area.

Introduction

Eastern Croatia is a country of rich and beautiful agricultural regions of Slavonija, Baranja and Srijem. Before the 1991/92 war it was dotted with white villages and ornate with old towns like Osijek and Vukovar, that used to be centers of industry.

In the war besides burnt and shelled churches, public buildings and destroyed industrial plants almost 24.000 dwellings (houses and flats) were destroyed. Many protected historical inner city cores as well as complete villages suffered serious damage.

1 Eastern Croatia towns

From the Eastern Croatian towns two most affected by war were the largest, Osijek and the smallest, Vukovar.

1.1 Osijek

Osijek is the largest town in Eastern Croatia and a university town. It was founded 11 centuries ago, near the site of the Roman city Mursa, as a market town on the main crossing point between Hungary and Slavonija and northern Bosnia. It also prospered during Turkish times as an important trade center and the most important traffic junction. After being liberated from the Turks in the 18th century, Osijek was turned into a huge star-shaped fortress surrounded by the suburbia (Upper and Lower town).In 1809 it was granted the privilege of a free royal town, the fact that speeded its further development. Osijek became one of the most important industrial towns in Croatia and was built like a typical European city with beautiful residential houses (especially the so called "Secession Street" with Art Nouveau buildings) with new schools and the second theater to be built in Croatia. After the WW2 modern collective housing was built in Osijek new parts.

During the Independence war all the 107 buildings inside the protected zone of the Fortress were hit at least twice. The National Theater was burnt down, the Cathedral and other sacral buildings were shelled as well as representative Art Nouveau villas and collective housing

1.2 Vukovar

Vukovar was inhabited since pre-historic times (Vucedol).

It used to be in its center a beautiful late-Baroque town with main arcaded street. It had both Catholic and Orthodox churches. In the new part stood representative Baroque palace of counts of Eltz.

Very close in Borovo selo is the Bata workers settlement, a fine example of Modern architecture, built before the WW2.

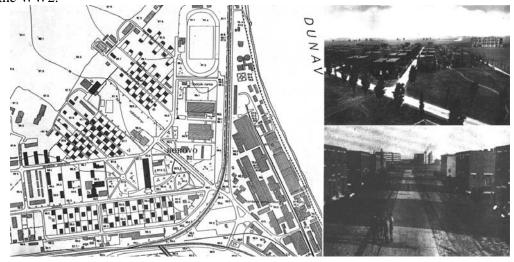


Figure 1: Bata – industrial complex

Because of its resistance during the 1991/92 war Vukovar became a martyr-town, a phantom town, a symbol of all the war destruction in Croatia, with all its population driven away.

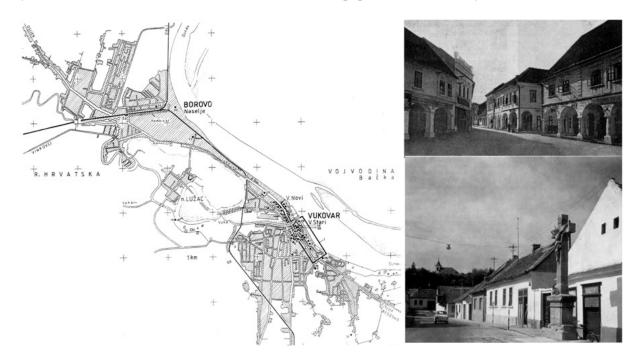


Figure 2: Vukovar – site plan and its squares

1.3 Villages

The villages of Eastern Croatia stood before the war grouped along the roads in complete harmony with the surrounding landscape

They were built in the middle of 18th century, when the Turks were driven away. The deserted regions of Slavonija, Baranja and Srijem were colonized and new villages built on the planning instructions from the Vienna government.

"The villagers should build their house in line" was the motto of the planning order, the so called "Theresian urban" from 1756. It demanded that the newly built villages should be grouped. In this way the Vienna government implemented discipline and the control of tax collection and other administrative measures. For some villages plans were also made. Most of them were built on already existent sites along the existent or newly planned roads.

A typical lot is an elongated rectangle perpendicular to the street, 20-25 meters wide and over 100 meters long. To eliminate the spreading of eventual fire, all the buildings on the plot were to be built along the fence of the next-door neighbor. Roads,25 meters wide have a carriage-way in the middle surrounded on both sides by trenches and lawns lined with trees, the pavement coming to the building line. The rhythm of white gables alternating with court-fences makes a typical "sor" village, a sort of row-housing.

These traditional villages possessed great qualities:

- Ecological fertile land is kept as much free as possible and the landscape is preserved.
- Economical -a relatively high density is obtained (around 800-1.000 residents per 1km of the street)
- sociological -possibility of private family life within the plot on one hand and the interaction with public life of the street and village on the other hand

• architectural - considerable plastic values(harmony of proportions, harmony of volumes and forms).

In the 19th century another type of houses appeared with its longer front orientated to the street but this type was mainly reserved for foreign craftsmen. They most probably introduced this typology from their home countries, but also because it enabled a better organization of a workshop or village shop, and a better status character.

After mid-1880s with the breaking of families the typical lot was usually divided into two or even three parts, always in longitudinal sense resulting in fronts of only 7-8 meters. The use of bricks and roof tiles minimized the fire danger and so even the farm buildings were built across the plot.

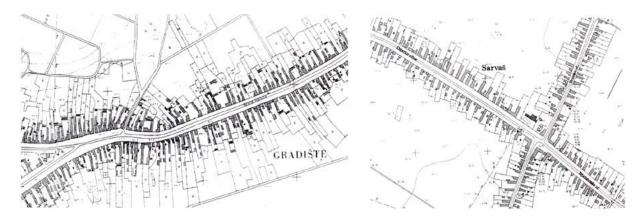


Figure 3: Typical Slavonian villages

1.3.1 Typical village house

Traditional house consists of three rooms: a great room next to the street, kitchen in the middle and a small room on the other side. This spatial composition is the result of development from the one-room house (up to the middle of 18th century), then another room was added in the second half of 18th century, finally up to the middle of 20the century a third room was built at the back and a porch was introduced.

A hierarchy of life and work was in a way transferred to the house itself as well as to the individual plot. A hierarchy started from the street - the "šor" in the building line. The building front represented the household face to the community, to the world. The big room next to the street was a family room where members of the family stayed during the day, where they ate and where they received visitors. During the winter times it was also a sleeping room and place where during the long winter nights household chores were made. The household head always slept with his wife in this room, while the other members in summer slept in the back room. The hierarchy was also introduced within the space of this big room. The main, long facade (with the porch) was mainly orientated south or east, never north.

Besides residential buildings various farm buildings were lined in the depth of the plot.

This traditional house was at the beginning built in solid wood, then because of the material shortage in timber-frame construction and finally in brick construction.

These structural elements were mirrored on the elevations, especially on the gable front on the street building line. The timber frame structure results in symmetrical disposition of windows on the gable front which was retained in the later brick construction.

The wooden porch posts received a special treatment, which was in later stages applied to the gable front which was esthetically brought to perfection and as such repeated along the street introducing a rhythm into monotony of the Panonian plains.

But already before the 1991/92 war the traditional model of a row-village was being slowly abandoned and replaced in certain places with buildings completely strange to that region, both in layout and the height, adopting housing models from another culture. This was brought about by people returning to their villages after working abroad.

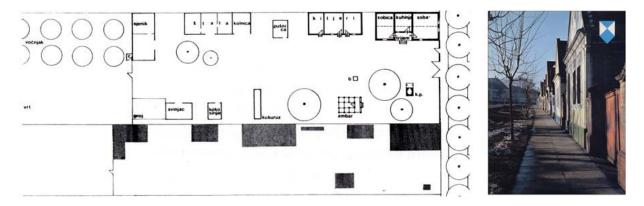


Figure 4: Typical village house and typical street in Nustar

2 Programme of Housing for Victims of the Croatian War for Independence

After liberation of Eastern Croatia in 1995. need for urgent reconstruction or rebuilding of dwellings both in towns and in villages was very present.

According to the conclusions of the Croatian parliament in 1996 and of the Cabinet of the Republic of Croatia from 1997 the Ministry for Development and Re-building was charged with the realization of the Programme of Housing for the Victims of the Croatian War for Independence.

A special Department for Housing was formed within the Ministry with aim of realizing this Programme through 6 programmatic units:

- 1. Urgent housing provision for part of war victims through buying flats on the market
- 2. Continuation of the realization of the programme of construction of family houses for 100% war invalids
- 3. Continuation of co-financing construction of flats begun by the Ministry of Defense
- 4. Construction and purchase of flats on new locations
- 5. Supporting credits for the war victims
- 6. Rebuilding of war victims houses according to the Rebuilding Act.

The main bulk of 80% of construction was included in the 4th programme and was put to tender. Ministry of Development and rebuilding (MOR) has with the technical help of the Faculty of Architecture of the University of Zagreb made "Guidelines for the design of housing construction for the victims of the Croatian War for Independence" based on the existing Rebuilding Act (the floor areas) and the "Standards for flats, buildings and settlements in the State subsidized collective housing" from 1986 (for the standards and dwelling equipment).

The maximum floor areas of the dwellings for the war victims and their family members were set as follows:

•	1 person	35m2
•	2 persons	45m2
•	3 persons	60m2
•	4 persons	70m2
•	5 persons	80m2
•	6 persons	90m2

etc.....

2.1 Tender project evaluation criteria

- basic housing cost yardstick was set very low and it represented one of the main criteria in the project tender evaluation-it was bringing up to 10points.
- architectural quality was bringing 5 points, only $1/6^{th}$ of the end sum.
- adherence to set floor areas, up to 5 points
- other criteria pertinent to the construction firm, bringing up to 12 points

It is obvious that such evaluation criteria and the permitted maximum floor areas resulted in mostly architecturally questionable solutions.

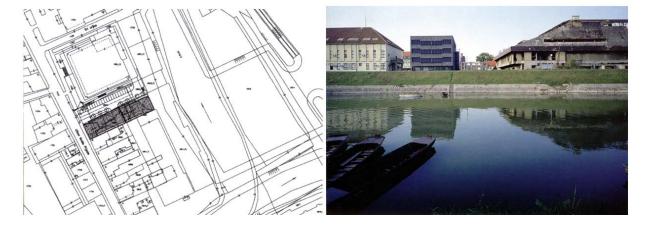


Figure 5: Penezic & Rogina architects: House for the Victims of the Croatian War for Independence in Vukovar

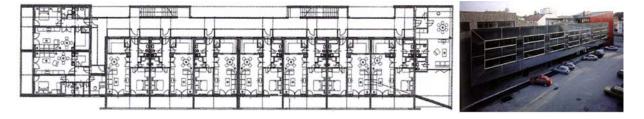


Figure 6: Penezic & Rogina architects: House for the Victims of the Croatian War for Independence in Vukovar, typical floor plan

3 The problem of reconstruction

If one can state that every region not only in geographical but also in spiritual sense corresponds with physical and spiritual sphere, being realized and lasting through time, then we must conclude that this time element was during the war systematically removed from towns and villages of Eastern Croatia. The main task of reconstruction therefore should have been in bringing back this time element by rebuilding these physical links with the past.

Just after the war it seemed that there was a clear-cut problem of reconstructing the historical town cores, whereas the reconstruction of traditional villages raised more questions.

The tendency that had started already before the war to abandon the traditional model with the return of the refugees continued and the villages were rebuilt with the off-the-peg houses of quite different character to the traditional one, modeled on different cultural model. The permitted maximum floor areas resulted in houses of different-smaller sizes and now usually placed in the middle of the plot

The reconstruction of the historical towns besides the complete reconstruction of the buildings in the very city cores in some examples also shows disrespect for the traditional way of life introducing dwelling models from another culture and another regions very rarely interpreting in a creative way the previous architectural identity.

In Osijek there was a policy of immediately repairing shell damages on the collective housing buildings. After the war the memory of shelling was shown by different colour of bricks. Fine Art Nouveau villas are only now being repaired.

In Vukovar the main arcaded street is under reconstruction, as well as sacral buildings, the Eltz Palace, but many public buildings are still in ruins.

In the very close relation to the historical city core an architecturally interesting residential building for the war victims appeared in 2001. Although supposedly playing on the theme of "sor" villages its appearance is inappropriate in Vukovar surroundings, completely alien by its mass and the treatment of its elevations, not to mention that it has proven to be sociologically unacceptable to their tenants.

4 Conclusion

In the reconstruction of villages the already slowly abandoned model of row-villages (sor) was almost completely forgotten. In the urgent need for the reconstruction and bringing the refugees back the possibility of interpreting in a creative way great qualities of the traditional villages: ecological, economical, sociological and last but not least architectural was lost.

In historical towns different approaches to rebuilding of collective housing buildings resulted, mainly because of the Ministry set criteria, in architecturally low-quality solutions. Even when it is the case of a high quality building it fails to respond to the town architectural identity.

The time element as expressed in physical links with the past was so in many cases irretrievably lost

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