

URBAN PATTERNS OF A COMMUNIST INDUSTRY. CASE STUDY: THE NEW TOWNS OF BEIUS LAND, ROMANIA

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Abstract: Defining the urbanization process in Beius Land, one of the most representative mental spaces in Romania is maybe the best way to deconstruct the *glorious urban future* myth. The present paper highlights urban issues linked to the communist heritage and the post-communist present of the three new towns in this area. The central idea of the study is to show if the three towns are engaged in a restructuring process or they are just going along with a spatial inertia, generated by the local development pole, which is the city of Beius.

Key words: small towns, forced urbanisation, industrialisation policies, Beius Land,

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INTRODUCTION

Probably the most powerful catalyst, industry played a major role in the urban spaces production mechanism. The old boroughs, which often appeared beside an abbey, became towns, with the factory for central attraction, surrounded by workers slums. Although this is a general 19th Century urban Western Europe image, it is not until the mid-20th Century that this image arrives to Eastern Europe, replacing a mostly agriculture based economy. Leaning on different political ideas, the East has created a new giant urban network relaying not on population growth scenarios, but on the presence of raw materials. Thus, it has completely altered the spatial structure of the old traditional urban network.

Two of the three towns analyzed here, Stei and Vascau were born from the very heart of the namesake communes (parish like structures) in 1956. The third one, Nucet was built from scratch in 1952 beside the Baita uranium mine. Along with the territories and the resources of the communes, the new towns had to take over their administrative structure too, meaning that they had to govern the belonging villages. Meanwhile, the local population, mostly occupied in agriculture was trained within the industrial schools to become industry workers

and staff. Physically, transforming Stei and Vascau communes into towns meant the rise of new *civic centres*, with modern concrete buildings and large boulevards, maintaining however a rural pattern for the outskirts. Concerning Nucet, the urban pattern seems to have followed a very austere plan, showing a central zone reserved for the public institutions, a block of flats neighbourhood and some two story building streets. In the three cases, one can observe a loss of the local identity in terms of architecture, occupation and culture.

The economical breakdown which followed after the fall of the system seriously affected the three towns. Even nowadays, 22 years later, the old regime's mark is deeply printed in their development pattern. This fact makes us wonder if the regime really had a great plan for the new towns inhabitants' welfare, or was it all just a measure of enrolling the local people in the proletariat's lines, for an optimal capitalization of the local resources.

ECONOMIC POLICIES VERSUS SOCIAL POLICIES. FROM RURAL COMMUNITIES TO COMMUNIST TOWNS

The studied cities are located in the southern part of Bihor County and of Beius Land (figure 1), in catchment area of Crisul Negru river. Stei and Vascau are located along the European road E79 and Nucet along the national road DN75. The three towns represent 3 of the 4 urban settlements within Beius Land. The choice of analysing them together relies on their common origins - all appeared in 1956 in the same context as a result of socialist industrialization, unlike Beius, true polarizing centre of Beius Land which was dated as urban settlement already in the 15th century (Țucra, 2000).

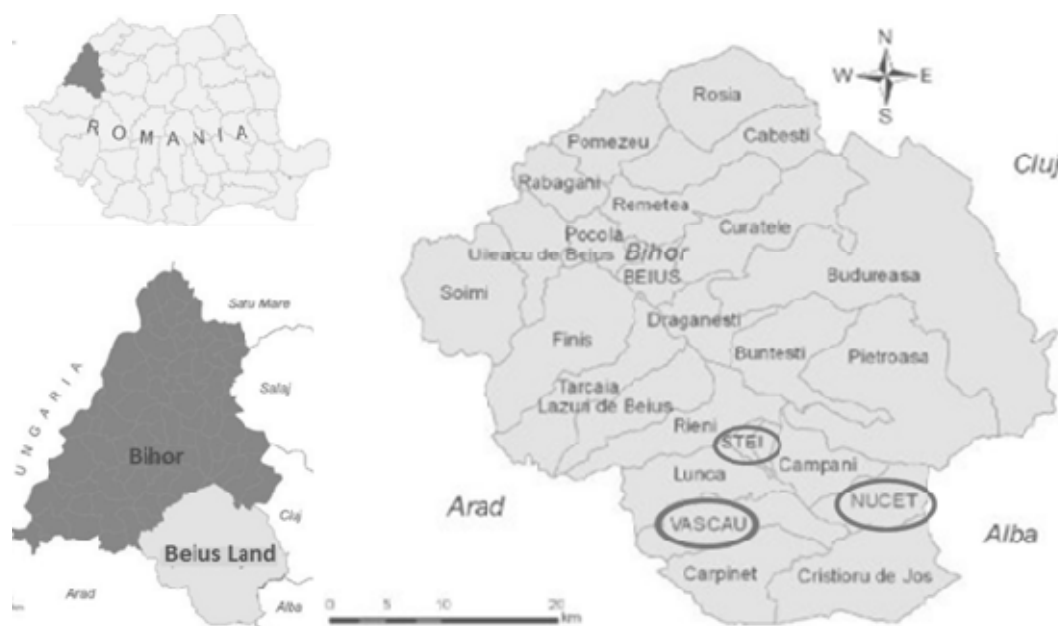


Figure 1. Location of the analysed towns

In the second half of the 20th century, social and economic development of Romania registered radical changes as a result of development policies promoted, with two major periods of transition: 1950-1962 transition from capitalist to the

socialist economy based on centralized planning system and post-communist period after 1989, when the market economy took over the obsolete socialist (Ianoș, 1987). The effects of these socio-economic major changes are reflected primarily in the spatial configuration of cities, fact noticeable especially in case of small towns resulted from the implementation of massive programs of industrialization and urbanization that led to the transformation of peasants into workers in newly established factories and mines.

Measures of socialist development policies generally caused the increase of the number of people, but without shaping an identity for the newly formed cities (Tălângă, 2008). These new towns were facing also problems with the transport infrastructure, the insufficiency of sewerage networks and water supply networks and low comfort specific to newly built apartment blocks, and all these problems became acute in the post-communist period after the shut-down of the most industrial activities.

In 1951, when rare mineral deposits were discovered in Bihor Mountains, following the prospections made by the Ministry of Geology from USSR (SDL Nucet), in 1952 the Romanian-Soviet society Kvartit starts the exploitation of uranium deposit (the largest in the world located on the surface). At that time, according to statistics, beside Soviet workers and specialists, 17,000 Romanians worked along (PUG Stei, 2009).

Thus, to solve the problem of accommodation for thousands of people from all over the country and from Soviet Union, the villages of Vascau and Stei were transformed into towns in 1956, and a brand new dormitory town –Nucet– has been built close to the Baita mine during 1952-1956. The three new towns of Beius Land, as well as other small towns (56 in total) that appeared in Romania in the period 1945-1968 are a result of the soviet socialist policies (Sageata, 2010), they having a Soviet-inspired urban typology.

Soviet influence manifested on the urban landscape is evident in case of Stei town, by the considerable size of new buildings, the lack of private space, apartment buildings with a high height regime, but with minimal apartments and also the rectangular shape of the streets in order to make space and to reduce maintenance costs (Cooke, 1997). Given the conditions at the time, in a period of four years, Stei village (figure 2), a small linear village (less than 1000 inhabitants), famous for growing vegetables was transformed in a town, dozens of blocks, an administrative palace, five cinemas, three dance floors, two schools, one in Romanian and one in Russian, clinics, a sports complex, restaurants and shops being constructed (www.scrieliber.ro, 2012). Thus, Stei becomes the administrative centre of mining exploitation, the place of residence for the management staff of the mine and also the main link point with Russia, reaching 6,000 inhabitants in 1956 (Filimon, 2007).

Nucet was built from scratch between 1952-1956, as a dormitory town and a socio-cultural center of uranium exploitation miners from Baita and Baita Plai (figure 3). In these four years the number of population increased from 772 to 9878 inhabitants, but later in 1966 (after the withdrawal of soviet population) the exploitation activity was reduced and in the town remains only in the local population and some people who came from neighbouring villages, a total amount of 2768 people (SDL Nucet).

Because the forced industrialization led to acceleration of urbanization process, the living conditions available to workers were not among the best, new created urban landscape being far from the standards of healthy urban spaces.

Initially, Nucet workers were living in makeshift housing (shacks made of wood), until the constructors have placed into service the blocks of flats and the infrastructure (water network first and then the sewer systems). Majority of the blocks being classified "comfort II, III and IV", some of them having common utilities (Filimon et al, 2011).

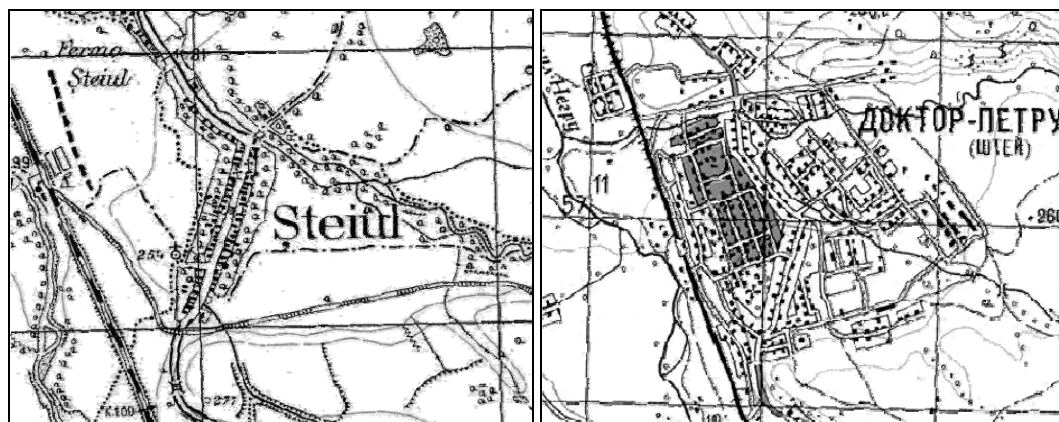


Figure 2. Cartographic representations of Stei on the 1924 Alignment Plans (left) and on the 1976 Russian Maps (right)
(Source: <http://earth.unibuc.ro>)

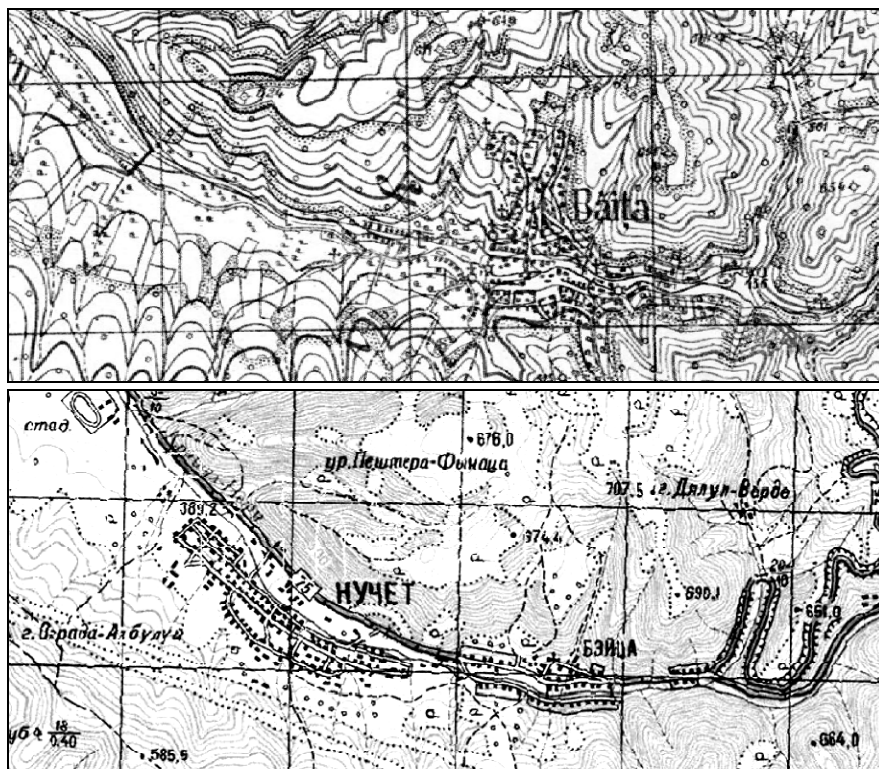


Figure 3. Cartographic representations of Nucet on the 1924 Alignment Plans (up) and on the 1976 Russian Maps (down)
(Source: <http://earth.unibuc.ro>)

In case of Vascau, the locality keeps its predominantly rural character even after 1956, interventions on the structure and the shape of the town being not major (figure 4). Prevails individual dwellings and a low height regime, also the number of population did not registered significant growth, remaining constant between 1930 and 1956, to approximately 4500 inhabitants. (INS)

Rural character is given also by the fact that to the town itself were added some rural localities situated at long distances (up to 8 km), in order to gather a large number of people and thus to corresponds to demographic urban standards (Ianoș, 1994).

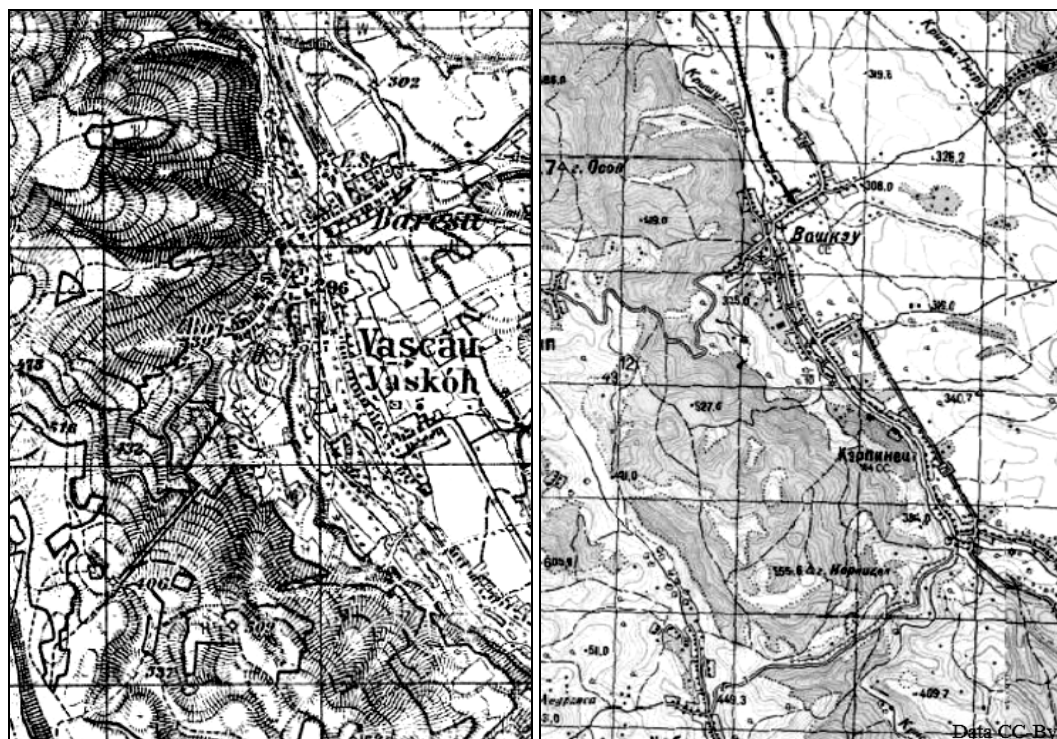


Figure 4. Cartographic representations of Vascau on the 1924 Alignment Plans (left) and on the 1976 Russian Maps (right)
(Source: <http://earth.unibuc.ro>)

After the '70s, with the withdrawal of the Russian population the need and the urban influence of the soviet model will be reduced, but the legacy remains: three new towns, including two mono-industrial cities - Nucet and Vascau - (with over 50% of the active population employed in the extractive industry) (Dumitrescu, 2007). Since 1974, the continuity of socialist development policies is ensured through the implementation of the Systematization Planning Law for urban and rural localities. Regarding the studied towns, the law supports an urban development based on the same principles as in case of the Soviet model (restriction of the building areas, more complete use of built-up area, high height regime, and high density of built surfaces). Implementation of urban development policies were made on the basis of general plans and sketches of systematization, the Popular Councils through the Local Commissions of Systematization being responsible with the achievement of these documents

(Law 59/1974). However, since the 80s Nucet and Vascau have faced a demographic and economic decline, which translates into a minimum of intervention on their spatial configuration. Stei on the other side saw a certain dynamic of urban form and structure, due to its function mix.

It is noted that the emergence and development of the three towns, especially of Nucet and Stei is due to the resources of rare metals and to their exploitation, but because the major transformations were carried out in a relatively short period of time (1955-1975), their impact was a brutal one on short term and with negative effects on long term. Mono-industrial character is arising problems regarding the conversion of these areas, even 20 years after the fall of the communist regime.

CONTEMPORARY READING OF THE THREE TOWNS' URBAN PATTERNS

Analyzing the urban patterns of the three new towns in Beius Land might not clear up entirely the whole philosophy that stood behind the communist urbanization and industrialization policies, but might however give us a clue about what the tremendous change meant to the local communities.

The after WWII urban development must be seen as a natural attempt to move on from war economy to peace economy. The territorial pattern imprinted by the industrial take-off is most obvious when talking about the urban network. Mining and processing of raw materials the heavy industry was relaying on demanded a hasted process of inadequate rural settlements transformation and the rise of new, industrial towns in the immediate vicinity of the mining areas.

Hardly neglectable, the international urban context becomes more and more standardized on both sides of the Iron Curtain. We are talking here of an era where urban planners like Le Corbusier and architects like Oscar Niemeyer were giving a lead on both the major restructuring of existing urban areas, and the planning of new towns and cities.

Shortly after the war, when both winners and beaten had to reconstruct their cities – some of them entirely destroyed by the bombings (Warsaw, Dresden, Stalingrad), very little attention was paid to urban planning. The main reason of this is due to the shortage of manpower and especially urban planners. By the beginning of the 50s however, a new way of thinking has taken over the old planning principles. In fact, this new planning seems quite similar to the ideas of the Marxist urbanism school, which was opposing the expansion of existing cities, advocating instead the building of brand new cities. The new cities were supposed to be located in the vicinity of industrial equipments and not exceed 50 000 inhabitants (French, 1995). The rationale behind the location and the limited size of new cities lies on the attempt to achieve the highest degree of efficiency on both land and energy consumption. Thereby the land-use zoning should ensure walkable distances between housing and industry areas. The residential area would be inevitably shared by the proletarians within collective housing (mostly blocks of flats) and common public spaces such as parks and civic centres.

Concerning the three new towns in Beius Land, the most representative for the aforementioned model is definitely the town of Stei. The issues we considered for analysing were *initial urban structure*, *development pattern* and *actual urban fabric* as primary indicators. In terms of secondary indicators we considered some issues regarding the actual urban fabric such as *land-use zoning*, *built form* and *residential-industrial land ratio*.

The physical shape defining the initial urban structure of Stei was linear development alongside the main road (fig. 5a). Considering the simple structure of the village, the incoming works didn't affect the existing housing. However, all the adjacent lands used for horticultural purposes were occupied by the new development. On both sides of the old village new shapes are featuring different development patterns. The west side of the main road (fig. 5b) was reserved for the residential area with housing, cultural, educational and social facilities, whereas the east side (fig. 5c) was intended for industrial use. The resulting structure (fig. 5d) is hence a mix of the traditional countryside households, a new 'modern' residential area and a fully operational large scale industrial area.

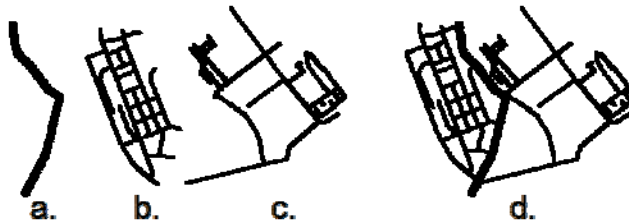


Figure 5. Stei's urban structure

Coming to the issues regarding the actual urban fabric has hardly changed. The land use zoning is featuring 13 distinctive uses, such as: public services and commerce central zone, special destination zone (fire brigade), low and medium (up to 4 storeys) collective housing, commerce and services mixed zone, low (up to 2 storeys) individual and collective housing with adjoining gardens (the pre-existing village), low and medium (up to 4 storeys) collective housing zone, high (up to 8 storeys) collective housing zone, industry and store-house zone, green spaces, sports and leisure zone, forest zone, railway zone, communal husbandry zone, water supply and waste water facilities zone and water courses zone.

The built form of the towns (fig. 6) reveals a mixed urban silhouette limited by industrial buildings at the fringe (fig. 6a). Walking from west to east, one can distinguish administrative buildings (fig. 6b), tall blocks of flats (fig. 6c) and low blocks of flats (fig. 6d). The street pattern consists of a rectangular grid which dictates uniform land parcels. Although this kind of pattern provides for good connectivity, it does not allow the slightest intimacy, the land plots being exposed on the four sides. On the other hand, the straight, large streets do allow a simplified water supply and sewage system, as well as tree rows. Moving on eastwards, one can see the traditional households on the main road (fig. 6e), placed perpendicularly to the street which is quite narrow (12 m) if we take into account that it is a national interest road (DN 76).



Figure 6. Stei's urban silhouette

The key figures (figure 7) of the built environment are the town-hall building (up left), the tall and medium height blocks of flats (up right), the two storeys blocks of flats (down left), the wooden two-family houses (down right)

and the industrial buildings. Maybe the most representative of indicators that we analysed here, the *residential-industrial land ratio* is showing an almost balancing situation of 1.13:1.



Figure 7. Stei's built environment key figures

LOOKING TOWARDS THE FUTURE: STRATEGIC OPTIONS, PUBLIC AND PRIVATE INITIATIVES.

The strategic planning process in the three towns had only started in 2006. Intended for the 2007-2013 period, the plans are perceived more like an imperative of the EU integration than a commitment to the communities' future. The scarcity of preliminary analyses and the low level of expertise, besides the fully understanding of the process' importance are the main reasons of the unrealistic and incomplete visions and objectives of the strategies, especially for Nucet and Vascau. The main guidelines of the plans are targeting infrastructural actions, and some declarative objectives like *enhancing local activity and competitiveness, HR development, increasing the use of EU funding, encouraging tourism, increasing community involvement* etc., without the slightest attempt of local tuning.

Regarding the land use planning, the new documents were issued some years after the regime change (1995 Stei, 1996 PUG Nucet and 1997 Vascau). Shortly after (2000) they were all revised, but only Stei redid it lately (2009). The meaning of these facts is that neither Nucet, nor Stei included into their land-use plans any of the strategic options they exposed in their development strategies.

CONCLUSIONS

The transition process from planned to market economy in the 90's Romania is casting the shadow of incertitude on the industrial small town's future. The long period of forced industrialization and urbanization policies that produced them is acting like a brake when trying to implement whatever restructuring initiatives.

The large scale industrialization process lead to dramatic long term effects, 20 years after they are still straining to make a future. The socio-economic decline due the functional shift and the declining urban landscape strongly contrasting the natural surroundings represents implacable doubts on their urban attributes. This is mainly the case of Nucet and Vascau in our study, which are facing more and more ruralising tendencies. Only the blocks of flats in the central areas and the industrial platforms are witnessing the industrial past of the two so called towns. The fact that the town-hall's planning office isn't issuing planning permits shows that there's no demand for new housing, on the contrary, one can notice a pronounced migration pattern.

On the contrary, Stei had the opportunity to pass from the mining and processing to food industry. This fact guaranteed a somewhat smoother passage to the market economy, although the prevalence of a single food chain can be perceived as a weakness on a long time span.

Regarding the demographical changes, only Stei has reached a maximum after the 90's, although it's actually facing a slight decrease. However the enlargement of the built-up area shows a clear need for extra housing, which is a positive indicator if not too extensive.

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