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THE CHRONOLOGY OF BUILDING AND PHYSIOGNOMY OF
THE DANUBE BASIN LEISURE AND RECREATION
SETTLEMENTS ON THE MIROC MOUNTAIN1

Abstract: Brief review has been presented in the introduction on the related foreign
researches, of the greater holiday resorts concentration, which are situated on the
attractive localities, within the reach of the usual trip-recreational movements of the
urban population, from many industrial European centres. It has also been underlined
that along the coastal part of our Danube-Basin, following Grocka-Kladovo direction, 49
localities are to be found on the already formed settlements for holiday and recreation.
The very same are, in that area, considerably unbalanced territorial distribution, since
that they are present in an uneven number at the outskirts of the municipal territories that
touch the coastal Danube line.

They are much further from its coastal zone. The exception is the locality of Petrovo
Selo which is located in the north-western territory part of the municipality of Kladovo.
Three clearly close holiday resorts (“Dobra Voda”, “Bare” and “Poljana”) have been
gathered spatially on relatively low (400-450 m altitude), north-eastern slopes of
mountain Miroc. Thus they make the region of Miroc very attractive for resort and
recreation, which is being treated mainly from the aspect of important geographical
touristic characteristics. They are consisting of different number recently built and
previously inhabited old houses, which have been refurbished (remodelled). They are
also distinctive regarding their spatial disposition, considering its particular settlement
spreading. Therefore they are mutually differentiated as by their chronological
characteristics of building, general spatial physiognomy so in the respect of morpho-
typological modification in the sub-mountain terrain of mountain Miroc.

Key words: Resort and recreation settlements, number and arrangement of various
objekts for resort and recreation, general physiognomy of area, morpho-tipological
modification of settlements

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1 This article happens to be the result of the scientific research within the project named
“The Danube – Morava Corridor as the main axe of the development and integration og
Serbia in its surrounding in South – Eastern Europe” which is being financed by the
Ministry of science and environmental protection of Republic of Serbia.
Introduction

Among first articles, dedicated to this sort of holiday-recreation centers very simplified and sometimes even general remarks have been stated, since they have been firstly notified only in the urban sense, but to be soon enough expressed (Linkoaho, 1963), as groups of “summer” buildings. That used to be called as “summer settlements”. Later, it has been noticed in them (Ruppert, Maier, 1969), that the same “leisure centres”, are mostly determined by summer relaxation and recovery from the professional obligations in the big European cities. Parallely with some later researches, that had the same aim – where it was also pointed to some (Barbier, 1965; Ruppert, 1971, Görgmaier, 1976) notion definitions and adequate terminological determinations of these periodical resorts, some reports were realised sporadically (Clout, 1972, Jersic, 1968, Ruppert, 1973, Cuppock, 1977) by which the subject matter of their territorial “dispersion” was being worked out. Many hints on the periodical resorts phenomenon were offered in larger and attractive enough sub-mountain and mountain areas (Popovic, 2001) of much wider parts of the European and North-American continent.

Out of this problem area, some more thorough analyses have been published separately, dealing with some huge topics, since they have been considering adequately the subject matter of the current events in the transformation of the former structure of the spatial units. That is how the chronology (Lingenauber, 1978, Lichtenberger, 1980, Thelin, 1983) of the changes of the areas discussed have been backed up, because of the incorporation of the successively situated resorts for holiday and recreation. At the same time it became obvious, that the bigger or smaller groups of such centres, were at first “to be found” on the attractive locations, within the reach of 20 to 30 kilometres, that used to be the “usual” picnic-recreation destination of the numerous urban populations, of the big town settlements, but of the other industrial centres of the major European part, including its Balkan part as well. Being the part not only of the central, but the south-eastern (Balkan) Europe, both closer and further part of our Danube coast is a narrow-stretched vast land of the huge dimensions, within which a considerable number of such resorts is concentrated. Although the majority of them has already been explored (Romelic, Curcic, 1993, Popovic, 2003) from the geographical-tourist view, still it can be said, that the certain groups of such resorts have remained outside the scientific treatment, especially when it comes to up-to-date issues, for which it has already been claimed (Gosar, 1988) that they are significant enough and represent the suitable, appliable knowledge. Since among such Danube localities the Miroc region excells as the most
interesting for holiday and recreation, the same has been treated respectfully here as the subject of suitable views.

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Within the coastal area of our part of the Danube Basin, following Grocka-Kladovo direction, even more than 49 holiday resorts have been registered (Popovic, 2003). These contemporary resorts are also unevenly present in the outskirts, of those municipal territories, within the reach of the Danube coast. That underlines their unbalanced distribution in the region nearby this great river flow. They are much further from its coastal zone. The exception is the locality of Petrovo Selo which is located in the north-western territory part of the municipality of Kladovo. All of them, together, form, by all means, attractive holiday region. That has already been mentioned (Popovic, 2005) in the scientific circles, since its three settlements (“Dobra Voda”, “Bare” and “Poljana”) have been discussed only from the aspect of its topographic location and its traffic characteristics within the natural environment, of the low-range area of mountain Miroc (400-450 m altitude).

On that occasion, the thorough research of its geographical-touristic features, didn't take place, so that is the main reason, why we mostly focused our attention on its exploration and analysis. Having performed on the ground itself, by the method of close inspection, the examination of the main qualities of this area, from the angle of the settlements already mentioned, a serious scientific task has been carried out, using this methodical procedure. The same has been done, with a single goal, to find out and interpret chronological and accessory qualities of its building process and to establish its consequential, general physiognomies, especially in the view of its morpho-typological modification on the examined, north-eastern sub-mountain terrain of mountain Miroc within our Danube-Basin.

**Chronological characteristics of building**

As they are situated solely within the private property, the construction of facilities in these localities depended not only on the first realized property transactions concerning such sites, but also on their “formation by division of inherited immovable property” (Popovic, 1999). Therefore, when the first property transaction of the site took place in the settlement “Dobra Voda” in 1973, its first building was already erected the following year. In 1975, another
one was built, and they are considered to initiate the building development in that settlement. Three years later, the first building was erected in the settlement “Bare” as well, and another one was added to it in the following year (1979), so that the building development in this settlement was also initiated. Interestingly enough, in the same year, the first building was erected in the settlement of “Poljana”, which, together with another facility built a year later, initiated the building development in the settlement. It turns out that the initial building in the parts of Miroc region stretched over seven years’ period (1974-1980).

What followed was its post-initial building development, which also happened successively in these settlements, for in the settlement of “Dobra Voda” it lasted for fifteen years, in the settlement of “Bare” it lasted for thirteen years and in “Poljana” for fourteen years. Although it was not simultaneous, the building development in all the settlements in the Miroc region went through a four-year phase of spontaneous (slower) building, which was preceded by uneven, unplanned (faster) building. This is supported by the fact that firstly there was unplanned (faster) building under way over eleven years (1976-1987) in “Dobra Voda”, nine years (1980-1989) in “Bare” and ten years (1981-1990) in “Poljana”. After that the phase of spontaneous (slower) building ensued for the duration of four years, which took place successively, because first it started in the settlement “Dobra Voda” (1988-1991), then in the settlement of “Bare” (1990-1993) and, finally, in the settlement of “Poljana” (1991-1994).

During the unplanned process of building development in the settlement “Dobra Voda”, twelve buildings were erected, which makes 80 % of all the new facilities. Almost simultaneously, somewhat slower reconstruction of six (representing 75 %) old blocks of flats was under way, which had formerly made up a little hamlet (Dobra Voda) belonging to the above-mentioned Petrovo Selo, which is depopulated nowadays. Thus the settlement was enlarged by 18 or 72 % of all the facilities, which makes the average annual figure of 1.7 facilities (Popovic, 1999). During the same building phase, in the settlement of “Bare” 11 buildings were erected, or 78.7 % of all the new facilities. At the same time the reconstruction of 9 (or 75 %) old blocks of flats was under way, which were situated in the hamlet of Bare, also belonging to Petrovo Selo. Thus the settlement was enlarged by 20 or 71.4 % of all the facilities, which makes the average annual figure of 2.2 facilities. In the settlement of “Poljana” as well eight or 72.7 % of all the new facilities became functional. Almost at the same time the reconstruction of 6 (or 75 %) old blocks of flats was under way, which formerly belonged to that village. Thus the settlement was enlarged by 14 or 66.7 % of all the facilities, which makes the average annual figure of 1.4 facilities (Popovic, 1999).
From this account we can draw the conclusion that in the last mentioned settlement the unplanned building development had the lowest intensity (1.4), in the settlement of “Dobra Voda” it was a little higher (1.7) and the highest intensity was exhibited in the settlement of “Bare” (2.2). On the whole, before the slower (spontaneous) building phase in the Miroc region, over 3/4 (or 77.5 %) of the facilities had been built, with an average annual figure of 1.8 facilities, which was to be expected. The remaining number of facilities of the region in the district was built over the period of the settlements’ further formation and it was lower in intensity. So, in the defined four years’ period, in the settlement of “Dobra Voda” three new buildings were erected (or 20 %) and two (or 2 %) of old block of flats were adapted for providing leisure and recreation services (Popovic, 1999). This indicates that at the time the settlement got 5 or 20% of the facilities, which equals the average annual figure of 1.2 facilities. The same relations of the defined facilities apply to the settlement of “Poljana”. It got 5 (or 23.8 %) of the facilities, and by consequence, it had the same average annual figure of 1.2 facilities. In addition, in the spontaneous building phase it got three (or 27.3 %) newly built facilities and two (or 25 %) old blocks of flats were adapted for providing leisure and recreation services (Popovic, 1999). The settlement of "Bare" differed from them only in that it got more (6 or 21.4 %) facilities and, consequently, it had a higher average figure of 1.5 facilities. Three (or 21.4 %) new facilities were erected there and also three (or 25 %) old blocks of flats were adapted for providing leisure and recreation services (Popovic, 1999).

As the Kladovo settlements in the Miroc region have the total of 74 functional facilities, it may be noted that this area is spatially determined by as many facilities as are fitting for little settlements in the Danube Basin. This is understandable when we take into account the fact that the region is made up of three extremely small settlements. Regarding the general process of development, this region mostly resembles only those Danube-basin settlements that were formed firstly through a longer (more dynamic) building phase, followed by nearly three times shorter unplanned (less dynamic) building of leisure and recreation facilities.

**Determinants of the morpho-typological modification**

Each of the analysed settlements of Kladovo has got specific spatial determinant reflected in the different distribution of facilities. Namely, situated alongside formerly major and now absolutely minor Kladovo-Tekija road, the settlement of “Dobra Voda” is almost to the same extent oriented towards southwest-northeast, and northwest-southeast, respectively. In the first part there are
facilities in criss-cross layout, while in the second part there are facilities with both linear and criss-cross layout.

Mostly lying in the direction southeast-northwest, the settlement of “Bare” is characterised by the facilities being set further apart, especially in the southeastern part. They exhibit curvilinear layout. In contrast to the northern part, where they are rather dispersed, the facilities in the centre of the settlement are laid out in a criss-cross curved row.

Lying in the direction southeast-northwest, the settlement of “Poljana” has got different distribution of facilities. Namely, in the southeastern part they have got a discontinuous linear distribution alongside the road, while in the southwestern and far northwestern part they are laid out in a criss-cross curved row (figure 1).

![Diagram](image)

**Fig. 1** - The spatial dislocation of the contemporary resorts for holiday and recreation in variously shaped settlements on the north-eastern slopes of the Mountain Minc. Moreover, the settlements in question differ in their morphotypology. The settlement of “Dobra Voda”, which branches off from the most northerly point towards south-west and south-east virtually to the same extent, acquired branching morphology, in the shape of a letter V turned upside down. The settlement of “Bare”, which lies on the same latitude in the southeast-northwest direction, acquired trapezoid shape, morphologically defined by the nearly equal dimensions of the sides. Taken globally, in the settlement of “Poljana” the
facilities are dispersed in three directions, so that it is morphologically in a triangular shape with different dimensions.

So far there have not been recorded any facilities in multiple ownership in these settlements, so that all the facilities in the Miroc district are in private individual ownership, which is a rare feature in the Danube-basin settlements. In each of these settlements, the owners are predominantly permanently settled in Kladovo (23 or 92 % in “Dobra Voda”; 26 or 92.8 % in “Bare” and 21 or 100 % in “The Poljana”, with the distance of 16.9 km, 18.6 km and 18.1 km, respectively, whereas only a small number of the owners 4 or 5.4 % (2 or 8 % in "Dobra Voda"; 2 or 7.2 % in “Bare”) is permanently settled in Belgrade (at a distance of 281.7 km – 282.9 km). The implication is that 9/10 (70 or 94.6 %) of the owners of the facilities are drawn towards the central area of the recreation district (0 - 60 km). The rest of the owners, small in number (4 or 5.4 %) comes from a distant area (180-240 km), which clearly demonstrates that the Miroc region of the settlements of Kladovo is of local importance.

During important religious and public holidays as well as at weekends in the warmer seasons, more than a half (42 or 56.8 %) of the owners of the facilities in the settlements stay with their families. Moreover, every tenth owner (8 or 10.8 %) stays there for the summer holiday and almost as many of them (7 or 9.5 %) spend time there from mid-April till the end of October. According to available data (Popovic, 1999), there are twice as many (17 or 22.9 %) of those who stay in these settlements for a short period of time, that is, from mid-June till the end of September.

This kind of occasional or periodical stay on the part of the owners is mainly caused by twofold motives. Thus in more than a half of the cases (38 or 51.7 %), basically family stays, the prevailing inclination is towards environment, which is much different from their permanent residence. There are much less cases (30 or 40.5 %) of people staying in these settlements for personal reasons, because they have an emotional bond to the place (Petrovo Selo) of their immediate ancestors’ origin. Naturally, there is the smallest number (6 or 8.1 %) of the cases of people staying in these settlements for reasons of investing in a facility to be used in their retirement.
General physiognomy indications

In these three settlements in the region (“Dobra Voda”, “Bare”, and “Poljana”), 74 different facilities were established, which became fully functional in the beginning of 1995. In each settlement there is a different number of newly built facilities (46 or 62.1 %) and adapted blocks of flats (28 or 37.9 %). A typical representative of the Miroc region in that respect is only the settlement of “Poljana”, since it has an equal proportion of newly built facilities (13 or 61.9 %) and adapted blocks of flats (8 or 38.1 %). In the settlement of “Dobra Voda” there is twice as many newly built facilities (17 or 68 %) as adapted blocks of flats (8 or 32 %), whereas in the settlement “Bare” there is a higher number of adapted blocks of flats (12 or 42.9 %) at the expense of newly built facilities (16 or 57.1 %). Such a high proportion of adapted blocks of flats (more than 1/3 or 37.9 %) represents a special spatial feature pertaining to this leisure and recreation district, due to which these settlements receive a unique treatment in the Danube basin. But that is not the case with the remaining part of Serbia, insofar as we know for sure that the majority of such leisure and recreation facilities are situated in Sumadija and its surroundings.

From the perspective of spatial physiognomy determinants, in the settlement of “Dobra Voda” there is only one (or 5.8 %) facility built of logs in the form of a log cabin, while the rest of them (16 or 94.2 %) are built of common building materials (carved stone, concrete elements, brick, tile, etc.). Some of the adapted blocks of flats (5 or 62.5 %) are built of hard building materials, and the remaining three (or 37.5 %) are repaired using wood paneling in addition. The settlement of "Bare" has got a similar structure, since there is only one (or 6.2 %) prefabricated newly built facility, while the rest of them (15 or 93.8 %) are built of hard building materials. The same type of building materials is used in constructing nine (or 75 %) adapted blocks of flats, while the remaining three (or 25 %) also made use of wood. The settlement of “Poljana” differs from the others in that both its newly built facilities (13 or 61.9 %) and adapted blocks of flats (8 or 38.1 %) which are built of hard building materials.

Thus defined determinant of the spatial physiognomy of the region is complemented by enclosure of sites, which is similar in many respects in all three settlements. First, it is manifested as a derelict but in some places repaired wooden fence enclosing former yards of the old blocks of flats. The sites of newly built facilities are for the most part enclosed by wire-netting fences with wooden or concrete poles. Hedges are very rare as well as the sites, which are divided only visually.
By realization of private land transactions on the one hand and inherited private property on the other, the settlements in the region, which are situated in the south-eastern part of Petrovo Selo municipality, cover the area of 757.8 ares (Municipal Geodesic Board, 1999). This includes eight sites in which facilities have not yet been built. By implication in the Miroc district as a whole there are 82 sites that measure not more than 10 ares in area (9.2 ares on average).

As it could be expected, the settlement of “Poljana” occupies the smallest area in the region (211.3 ares), (Municipal Geodesic Board 1999). There are also four middle-sized sites (7-8 ares) that remained “unbuilt” although they were bought for the purposes of leisure and recreation. This settlement is comprised of 25 sites which average size (8.4 ares) is smaller than in the region as a whole. Moreover, in the settlement of “Dobra Voda” there are two sites similar in size with no facilities although they were bought for the purposes of leisure and recreation. As a whole, in this settlement there are 27 sites measuring 267.3 ares (Municipal Geodesic Board, 1999). Hence their average size (9.9 ares) is larger than that of the Miroc district as a whole. The remaining land in the district is occupied by the settlement of “Bare”, measuring nearly one third of it (279.2 ares). This includes two ‘empty’ building sites. By implication there are 30 sites with an average size (9.3 ares) almost equal to that of the whole district.

These three settlements, as we mentioned before, are situated within the municipal territory of Petrovo Selo, which is now depopulated. At first they were individually connected to the main power line that reached the above-mentioned village. Toilet facilities, in the majority of newly built facilities built of hard building materials, are connected with properly constructed septic tanks by means of local drainage system for liquid waste. Moreover, in these settlements there are shallow WC holes, dug close to adapted old blocks of flats. Although even before care was taken considering avoidance of making local depots, still the field research data have shown that it is only recently that people have started insisting on that by a special engagement of people, thereby contributing to the protection of the environment.

Conclusion

Being formed by the various, more than two decades long construction, the treated extremely small settlements for holiday and recreation (“Dobra Voda”, “Bare”, “Poljana”) are on the north-eastern slopes of Miroc, well-distinguished not only in the number of the built constructions present (newly erected or adapted), but in its spatial location as well. After the initial, temporally (11.9 that is to say 10 years) exposed (random) construction work, lasted parallel, in all
three settlements, only through the period of (1981 to 1987), with the very fact that the building process in the centre “Dobra Voda” began much earlier in (1976), while the resorts “Bare” and “Poljana” were finished some time later in 1989 or more precisely in 1990. After that, they were simultaneously included by the spontaneous (slower) construction work only in 1991, but a part from that one, since it lasted two-three years later (to 1993, that is to say 1994) in the resorts “Bare” and “Poljana”, and some three years earlier (since 1988) in the “Dobra Voda” settlement.

Disposing of such building features, the settlement “Bare” was established with 28, “Dobra Voda” 25, and the centre of “Poljana” with 21 various resorts for holiday and recreation. Obviously, different location provoked their eye-catching spatial disposition, reflecting in its uneven morphological formation of the settlement. Their general physiognomy is enriched by its outer appearance and the construction-architectural shape of the resort, as well as the presence of heterogenous vegetation on the lots, in most cases visibly separated.

Being located, a part from the suburban position (about 16 km) towards Kladovo, and in the close vicinity (1,4 km) of the previously pretty busy, but with the war crisis of five years ago, quite died-out, open holiday resort “Kraku Balta”, the settlements “Dobra Voda”, “Bare” and “Poljana”, have partly replaced the basic recreational features of their most important contents (pretty cured, newly-planted and obviously taken care of free-range vegetation, separately arranged spaces for passive recovery and relatively active recreation). Strikingly different in its appearance from the both closer and further Miroc landscape, they became and remained attractive even for different tourist-seekers, so its quite understanding, why it’s being visited even during the working days, in the warmer season, till late in the evening. In that low-range Miroc terrain those settlements distinguish themselves regarding, periodically frequent habitation, which we must bear in mind, not only in the further research of such specific, spatial contents, but in the same future planning of exploitation use of Miroc surrounding and thus of the part of our Danube Basin as well.

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