

NEW OPPORTUNITIES FOR THE RESIDENTIAL ENVIRONMENT

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Abstract. The present article considers the processes caused by the COVID epidemic as a starting point for the development of a new intermediate form of living – the alternative one. It combines the positive aspects of constant concentrated living in cities, as well as the realities of life close to nature. The alternative form has the potential to ensure decentralization of living in the state, which would support the decentralized development of other basic functions – work and leisure, equal use of a significant part of the built material environment – implemented with clear ideas of planning and polycentrism.

Keywords: residential environment, regional development, urban development, spatial planning, permanent living, alternative living, concentrated living.

1. NECESSARY INTRODUCTION

Urban planners, as well as citizens living in the urban centers, tend to look for solutions of the problems of overcrowding within the city. Most of the reasons for that decision can be found in the attractiveness and economical power of the large settlements.

This paper presents a new phenomenon in Bulgaria, driven by the COVID epidemic, where people themselves are establishing a new alternative form of dwelling outside of the city with a potential to improve urban life. The article outlines the preconditions and explores the potential of that alternative. More ambitiously this paper hopes to pay attention to experts and specialists to new possibilities of revitalizing villages and alleviating city problems.

The citizens of Bulgaria (territory of 111 thousand sq. km) are 7 million people, the settlements are 5 255, of which 255 are cities and 5 000 villages, distributed in 266 municipalities (2011 census). The settlements are evenly distributed in the territory, the relief and the climate of the country suggest

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easy access, including rail transport. Most villages originated before the Liberation War (1878). Their location, size and remoteness are determined by practical reasons for their time – sunshine, protection, access and distance to arable land. Many of the new cities do not have urban way of life and character, but the livelihood of the villages as a whole has less and less to do with agriculture and animal husbandry. Agriculture is unified as possible, small farms are so far exotic, as the specialized agricultural programs on television claim. Depopulation of villages is a global trend. In Bulgaria it can be reversed.

In pursuance of one of the communist ideas of “leveling the village with the city”, most small settlements today have roads, street pavement, lighting, plumbing, electricity in all homes (and until recently – public transport), and there have long been untapped opportunities for extraction of solar energy, own sources or reservoirs for collecting and storing rainwater (the first sign of any civilization). The building stock in the villages is represented by massive buildings built in the second and third quarters of the twentieth century (mostly single-family), as well as by hereditary dwellings (with a wooden skeleton). In many villages the yards have an area of more than a 1000 sq. m, with preserved buildings for additional purposes: stables, garages, barns, farms, granaries. Almost all buildings that are not used for permanent (year-round) living need ongoing repairs, but in general are a rich resource for good living¹, Figs 1 and 2.



Fig. 1. Village of Karpachevo, Lovech District



Fig. 2. The same yard without agricultural activities but with Wi-Fi

¹This fact was underestimated by the Bulgarians. After the country's entry into the EU, some British and Japanese bought properties in the villages, renovated the old houses and showed the potential and positive aspects of this life.

According to the data from the 2011 census, the total number of residential buildings in the country is 2 060 745, the number of dwellings in them is 3 887 149. As a number, the state has enough housing for its population.

The municipality with the most settlements is Gabrovo – 134, that one has the largest number of depopulated villages in the country. In 2021, Gabrovo won the European Commission's European Green Leaf Environmental Award and became the only city in Central and Eastern Europe to win the award in its five-year history, Fig. 3. (The other winner of the prize is the city of Lappeenranta in Finland).



Fig. 3. Village of Popovtsi, Gabrovo District – a property for sale. Currently demand exceeds supply

2. LIVING IN CITIES, LIVING IN VILLAGES FOR THE LAST 30 YEARS. CHANGES

In the nineties of the twentieth century, the tendencies of living in urban and rural settlements determined that cities should be a place for work, culture, study; the village – for rest and life of the oldest, with sporadic visits (of the young to the old) on holidays. Given the episodic use of the buildings in the village, the care of the properties in it was not in the focus of their heirs. Today, the “new aging” generation prefers the conveniences of the city despite its shortcomings, Figs 4 and 5. Elderly help raise children.

The dual nature of life (peasants – proletarians) further burdened the population roaming rhythmically between town and country. At least for those “citizens” who did not completely break with their home villages (see “The Peasant with the Bicycle” – a story and film by Georgi Mishev, writer). Since the beginning of the twentieth century, big cities have attracted a significant part of the working age population through economic opportunities, entertainment, anonymity and the deceptive “sense of prestige”. Several centers have



Fig. 4. City of Sofia – panoramic view with smog



Fig. 5. Multifamily residential buildings in Sofia. Keeping safe COVID distance is impossible in the lifts

been formed in the country – Sofia, Plovdiv, Varna, Burgas. (The other county towns became more of a springboard to them and abroad.) The new facilitated conditions for travel and work in the European Union have further drawn able-bodied people from their homelands and directed them abroad. These migrations left small settlements without functions, with empty dwellings. The opportunities of the big city centers have absorbed the population of the country. The vital connection with nature remained for the few hikers.

The busy way of life in the city created a search for the tranquility of nature and the village. During the holidays the city is left in search of places for recreation, rural properties are bought for vacation. Separately, in the cities complexes of the so-called gated type have been built, which should offer the comfort of independent living, but in turn caused additional urban problems (sprawl).

The COVID epidemic, which started in the spring of 2020 for Bulgaria, stimulates the demand for rural properties, but not only for leisure, but also for permanent alternative living. The demands imposed on the protection of public health have given rise to a natural desire for isolation, even without quarantine constraint. At the same time, conditions were created for remote exercise and development of basic activities of everyday life – work from home; trade through on-line sales, home delivery; distance learning; the electronic form of many household and banking services was developed. The search for free space and a healthier environment under the new working and training conditions has led to a shift of the active population from multi-family residential buildings in large cities to single-family buildings in smaller settlements in a far richer natural environment.

During the lockdowns of the COVID epidemic, many people in the big cities, but owning single-family houses in the villages, changed their current address from the larger settlement to the smaller one. The second home received a major role and from a place for recreation and tranquility for the elderly provided an alternative to the young. After the severe restrictions on the measures were lifted, the families kept the new way of life. Some employers have retained the remote form of work².

The anti-epidemic situation created an internal need to seek the qualities of the village. Gated complexes and sprawl-neighborhoods are investment initiatives imposed from the outside in (by investors and administration) and are the result of planned actions. The houses of the village offered sun, space, nature, and the remote forms of practicing the main activities gave the village some of the amenities of the city.

This situation may be the starting point for the development of a new intermediate form of living-alternative-intermittent, temporary, but with a much longer duration than the “old visit” to the village. Alternative living can combine the positive aspects of constant concentrated living in cities, as well as the realities of living close to nature. The alternative form has the potential to ensure: decentralization of living in the state (political advantage), which would support the decentralized development of other basic functions – work and leisure; equal use of a significant part of the built material environment (economic advantage) – necessarily implemented with clear ideas for planning and polycentrism (urban advantage). Alternative housing gives hope for ensuring resource (energy and water) independence of the dwelling (economic advantage)³, it would introduce another rhythm of life – significantly more equitable compared to the strong contrast between busy workdays for families and the two days off (health advantage). “Compressed” urban living is being made easier by new opportunities. The alternative form opens a chance for a radical change in the life of the nation.

²Employers also took into account the positive aspects of remote work (on-line): no need to maintain and pay for a workspace: rent, utilities, parents are able to be close to their children.

³Most rural properties have a well or spring water nearby. The southern slopes are preferred, as well as a location with good sunshine for hygienic reasons. The area of the property together with the building and its service buildings allow the use of renewable energy sources for own needs. Installing renewable energy sources on the roof of the renovated old house and adjoining barn is shown in Fig. 21. The renovated barns and farms ensure large space suitable for a day-zone, Fig. 22. In most cases all rooms in the old houses are used for bedrooms and bathrooms.

3. EXISTING PRECONDITIONS FOR THE NEW FORM OF LIVING

Remoteness: Small settlements are at short distance from the main urban centers, if necessary, the city with its inherent variety of functions is accessible. Most families have a car (s).

Climatic, resource conditions: The location of the villages was chosen with the idea of providing healthy conditions for their inhabitants in mind and the development of livelihoods: good exposure (mostly south, hidden from strong winds, away from floods, fires), sunshine and ventilation, proximity to water source, nature providing conditions for the main livelihood: agriculture and animal husbandry⁴.

Space: The villages offer properties with sufficient area, in which are located or can be done constructions with acceptable density 10–15% and less. They have good exposure, plumbing, electricity. The future of high-rise housing in cities (gradually, according to the shelf life of the existing high-rise housing) is inevitably replaced by more independent, more individual, easier to maintain (repairs, construction and firefighting), easier to management, easier to transform and develop – that is: low, “green” and non-compact.

Connectivity: Small settlements are close to the existing social infrastructure: schools, kindergartens, doctors’ offices, clinics and hospitals... Most small settlements have public transport – bus, some rail. The Internet has a large coverage in the country.

Potential: There are opportunities for construction of RES-installation, for the implementation of “passive and green” measures to improve the energy performance of homes, own water production.

The new form of living also has a social effect: creating a livable local community, meaningful children’s free time: outdoor activities, more movement, raising animals, cycling. There is also reviving of the space between the buildings: vegetable gardens, a place for craftsmen, for practicing hobbies, children’s play area, outdoor office, Figs 6–9. Figure 6 notes: *Ivan, iron craftsman, owns a flat in Sofia but prefers to live in the village of Bregare – 250 km away from Sofia. His commissions are and he buys his materials mainly in Sofia but he prefers to work at his yard. Usually he travels twice a week*

⁴When planning and building the old houses in the villages, the old masters took into account the realities of the property and used the natural light, the slopes of the terrain to achieve healthy and economical living in the location and distribution of the building. Thus, the living rooms use the maximum sunshine during the day, there is natural ventilation of the “wet” (sanitary) rooms, the dwelling is not exposed to currents, visibility from the house to the yard is provided.



Fig. 6. Iron craftsman - Ivan, in the village of Bregare, Pleven District



Fig. 7. In Ivan's yard – an everyday visit



Fig. 8. The best order for the rural craftsman



Fig. 9. The “well-organized” working space – Ivan's yard

to Sofia and back for a day. He has a car and a truck. In a separate part of his yard he raises animals: chickens, turkeys, pigs, owns a vegetable garden, produces honey. He is very active in the social life of the village – supported and organized the restoration of the old church in the village with its park, he is currently organizing the villagers to apply for funding to restore the village school and cinema. Ivan ran for a mayor during the last elections. For years before the epidemic Ivan has been living this independent and fruitful way of life. After, more people would do the same.

Many villagers do not throw away anything – they keep the old junk in their large private yards and use it for something new – like a stair, note Fig. 9.

The new living uses the area adjacent to the residential buildings, making a healthy connection with inside and outside area in contrast to the big cities, where living is mostly closed – in the apartment, in the office, in the transport.



Fig. 10. Village of Karpachevo, Lovech District – renovation of country house in process



Fig. 11. Village of Karpachevo, transformation almost done



Fig. 12. In most cases repairs start with the roof



Fig. 13. Village of Krushuna, Lovech District

The new form provides opportunities for improvement – hence development and economic initiative: (i) in the field of infrastructure – gasification, development of environmentally friendly rail transport, promotion of renewable energy, separate collection and recycling of garbage; (ii) in the social sphere – a new learning system through distant and present form (both already provide equal conditions and opportunities); (iii) in the field of services – shops, repairs, gardening, Figs 10–13. Figure 13 notes: *A newly renovated and isolated house but with inappropriate “urban” architecture; no barns or farms, so no good living rooms.*

4. WHAT WOULD CONTRIBUTE TO THE CITIES

The reduced traffic (only now the traffic on weekends decreases by 25%), solves the problems with parking, garbage collection and transportation, as well as improves co-ownership relations.

Alternative housing would alleviate the burden on urban structures by creating networks that reduce the pressure on urban centers. These ideas are not new – the garden city movement emerged with the development of industry after the discovery of the steam engine offers visions of the concentric cities with satellite sub-centers of Ebenezer Howard [1–3] and the linear cities of the Russian city planners, Arturo Soria y Mata. (The models have been applied in England – Letchworth (since 1903), Hempstead (1907) and others). This approach to building with green belts, wedges in the urban fabric, as well as regulating the size of major settlements is known.

Differences are found in the stimuli of the processes. In the ideas of the early twentieth century, they are promoted and presented by experts seeking better housing, while the COVID crisis has created internal needs in the population itself to look for a model suitable for the imposed restrictions. But the two processes, more than a century apart, are based on one idea – overcrowding is harmful.

There is a difference in the approaches to the implementation of the old and the new decentralized models. Howard's plans are for "clean" land – the implementations are mostly suburbs, providing housing and parks for workers in factories located nearby. The new alternative housing uses the existing looser structure of the village and its available building stock. In Bulgaria, much of the ownership of housing (97%) and land in villages is private. An entirely new planning would not be possible, as well as reasonable, given the provision of housing for the population in the country. Additionally, built infrastructure and building stock, as well as property, set a small scale of approach and thinking for the areas where these ideas could be reconsidered and implemented.

Another territorial difference is in the definition of the functions of the spaces. The models of garden cities determine separate zones for the main functions: work, living and recreation, while the COVID situation provides an opportunity not to create a specific space for some of the activities. It became possible to work at home.

Here comes the main difference with the models of green "dreamers" from the beginning of the XX century. Garden cities are professional planning solutions, expertly designed from the outside and prepared to be laid on a certain territory. The processes of the alternative form of living require a

rethinking of the living environment not as a closed area within the city, but as a community of territories of settlements that are actively used and formed by their owners “from within”. These processes give rise to the consumption of the old territories of the village, their activation and open new opportunities for the use of the abandoned built stock in the villages. The development of small settlements, even while preserving the existing urban centers, has positive aspects for health, but also for the maintenance of property. The dual use and new connections “city-village” require a rethinking of the planning of the development of settlements: from the scope of an individual settlement to the regional scale. The relocation of housing would attract activities and services between permanent housing and alternative housing. Some of the city’s services would be able to be used remotely in small settlements. People love and seek entertainment. On the one hand, the COVID epidemic limited gatherings, visits/stays in large enclosed spaces, on the other hand, it created an additional feeling of depression and sadness. The renovations of the old country houses to adapt them to the new life offered alternative entertainment, a new horizon, new dreams, Figs 14–22. Figure 16 notes: *The walls of the new house are formed by the inner skeleton of the barn and the new exterior structure. The space between is used both for integrated wardrobes, staircase, installation shafts, WC, storages; the new volume provides better isolation as a whole.* Figure 20 notes: *The old village school in Plana is bought by a citizen of Sofia and transformed into a single family-house. The second floor, where the two classrooms were, is redesigned into a large day-area: a kitchen with a dinning zone and a living room. The first floor (former canteen and washrooms) with lower ceilings welcomes the night zone.*



Fig. 14. Village of Karpachevo, Lovech District – old farm transformed into a house with green roof



Fig. 15. Old barn in Zemen, Pernik District on a sloped yard



Fig. 16. The barn is going to be incorporated into a new house



Fig. 17. Building in process



Fig. 18. Turned into a single-family house

It is possible that the “urban power” of cultural and entertainment centers will change if the conditions for gathering many people in one place are limited in the future⁵. Cities are unlikely to lose their leading role, but these would be new types of cities – low, green and “loose” – the unattainable dream of

⁵Long before the COVID epidemic, attitudes towards entertainment changed dramatically – watching a show/sporting event at home in front of the TV or computer, providing more details and information, displaced the desire to be present in the theater/stadium.



Fig. 19. Village of Plana, Sofia District
– 34 km away from Sofia



Fig. 20. The same building – the old
village school in Plana



Fig. 21. Village of Karpachevo, Lovech
District



Fig. 22. The renovated barns and farms

generations of urban planners.

In terms of governance, the polycentric development of the country is recognized as a plus (on paper). It can be stimulated through various policies at central level: infrastructure construction, building renovation funds, distance learning programs and access to healthcare.

5. CONCLUSIONS

This article reports on processes that are undoubtedly not just a world phenomenon. It is based on territorial and residential assets of Bulgaria. The prepared conclusion, which was written for a conference in 2021, was: “Bulgaria is a small country with sufficient natural resources and economic potential, with unparalleled anywhere else in Europe private ownership (of

individuals) over housing and real estate – urban and rural. It could be a happy country. The only thing it lacks is self-confidence”.

As a general conclusion, it can be noted that behind the processes that moved the people from the densely populated cities to seek free space and to form (not always through urban planners and architects) a new alternative housing, are related to a change of values that drive the choices and decisions individuals make. Health and care for loved ones have become a major line in making decisions concerning housing, because the new conditions have forced us to spend more time in our homes. The leading preferences in choosing a home have changed: from prestige to freedom of living; from proximity to highly paid work to proximity to nature. The “culture of congestion” Koolhaas wrote 50 years ago could be overcome for natural reasons.

Architects, urban planners in turn (after few non-populist politicians and administrations) can help create a healthier way of living.

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