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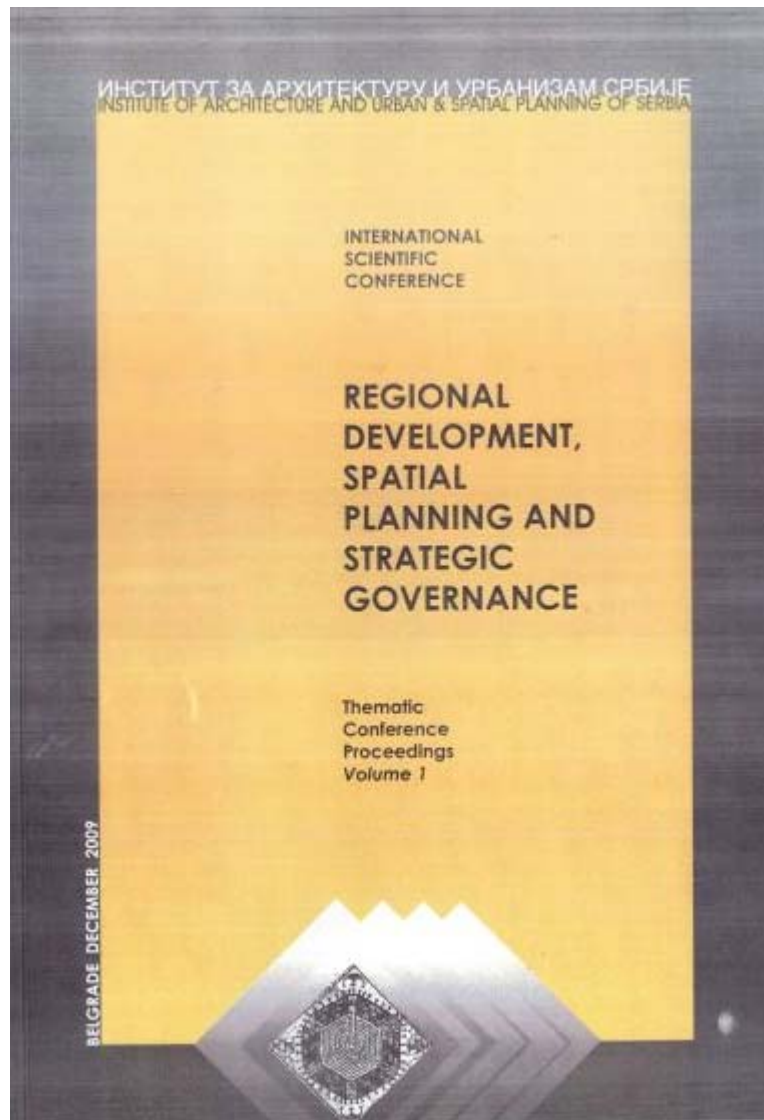
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KEYNOTE PAPERS

UNDERMINED TERRITORIAL CAPITAL OF SERBIA. SOME FUTURE PROSPECTS AND PREDICTIBLE SCENARIOS

**Miodrag Vujošević,
Slavka Zeković,
Tamara Maričić ***

Abstract: *The unfortunate events following the late 1980s and the early 1990s directed Serbia (first the FRY and then S&M) towards rather bleak development prospects. During this long period, the country was isolated from the mainstream trends of European integration and convergence. Its comparative advantages and competitiveness have worsened in two key aspects, that is, in terms of its structural qualities (1) and in terms of its territorial capital (2), whereby the country's "endogenous capital" and "territorial capital" lost a large part of their value and potential. The "soft territorial capital" has especially worsened, in parallel with a disappearing capacity for strategic research, thinking and governance. In particular, Serbia grossly missed the wave of "economic and ecological modernization" that took place in the EU, and which left the country lagging even further behind contemporary mainstream trends. Thus, Serbia has been "moored" even deeper in the periphery of Europe; that is, it became a part of the new "inner peripheries" of Europe. The economic recovery from 2000 onwards, while fairly dynamic, has still been insufficient, and has more or less assumed the form of "growth without development". Serbia still shelters one of the most dissipating and non-sustainable economies and social services in Europe, paralleled by inadequate spatial development patterns. Now, the country has found itself in the position of an economic, ecological and financial (debtor) semi-colony of few powerful international political, economic and financial actors, also reflecting the ideological model of the post-socialist transition reforms chosen.*

Recently a new Spatial development strategy of Serbia until 2021 has been completed, which deals with two scenarios for future development, viz.: "further growth recession, under crisis management"; and "sustainable spatial development". However, much more research of future development prospects is needed, vis-à-vis the current dire development fixities and givens. Namely, the Serbian "post-socialist Argonautics" has faced a number of difficulties, also exacerbated by a lack of adequate institutional and

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organizational adjustments for strategic development governance, and an almost total collapse of strategic thinking, research and governance.

Key words: *territorial capital, unsustainable spatial development, semi-colony, improper institutional arrangements, strategic research, scenarios of spatial development, Spider method, indicators, thinking and governance*

INTRODUCTORY REMARKS

Since 2000, considerable material and institutional progress has been accomplished in Serbia. However, overall progress has still fallen short of the expectations of the overwhelming majority of the population. Although dynamic economic growth has taken place (at an average annual growth rate of more than 5%), it has grossly not been directed toward spatial and ecological sustainability, and has thus largely perpetuated many deficiencies of the obsolete “paleo-industrial” structure of the Serbian economy and services, making the problems of future economic, ecological and other restructuring even more complicated. Often this direction has varied from that of the mainstream development scene in the EU and other European countries, a direction also reflected in the most recent generation of European documents of sustainable development (Vujošević, 2008a). Although transition reforms in Serbia have progressed at a more or less steady pace (though not equally in all spheres), the political legitimacy of reforms is poor, since veritable societal dialogue has not been established so far either, nor has societal consensus been reached on the key issues. Serbia has followed a path of “economic growth without development”, largely as a result of the poor legitimacy of transition reforms and an unsustainable development pattern. Particularly, the so-called “territorial capital” of Serbia has shrunk, and is still endangered.¹

Until very recently, the legitimacy of strategic planning has nearly been lost, largely because of this lack of political dialogue on broader social issues. In sum, Serbia, still one of the most un-developed European countries, faces a vast number of very complex developmental problems and faces many challenges. Its development prospects, at least over a mid-term period, are not bright. Perhaps, a more pessimistic development scenario (“Cassandra”) is more plausible than a bright one (“Pollyanna”). For that very reason, more strategic thinking and research is needed so that the predictable future prospects of Serbia are preferably based on various development scenarios. Apart from that, Serbia will

¹ For general discussion on the notion of territorial capital and similar concepts see Camagni (2007); Camagni (2002); Giffinger (2008); OECD (2001); and Waterhout (2008). Vujošević (2009a) applies this concept in estimating the territorial capital of a particular European country (Serbia), while Giffinger (2009) discusses its possible application in the case of a European macro region CENTROPE, including regions and cities in Austria, Hungary, Slovakia and Czech Republic.

most probably face a long period of “Europeanisation outside the European Union”, which will place additional challenges on its development.

In this paper, we first discuss key problems of post-socialist transition in Serbia, as reflected in its existing level of development, and which are also commented upon from the standpoint of sustainable development. We then discuss the problem of the endangered territorial capital of Serbia, and, in parallel, comment on some particular aspects of this issue, the first of which are those regarding “soft territorial capital”. Next, we bring forth some basic elements of the prospective future through the use of the scenario approach and method. Following that, we consider future development scenarios, outlining and evaluating three scenarios of territorial development in Serbia through 2020 by the method *Spider*, and in the final part of this contribution, we conclude with a number of proposals for a new research agenda and institutional and organisational adjustments.

POST-SOCIALIST TRANSITION IN SERBIA: POOR PREMISES, GREAT HOPES, FALSE PROMISES, AND BLEAK FUTURES

Transition in Serbia has been occurring since the end of 1980s, under one definition until the year 2000, and under another definition beyond that. During either period, the broad societal legitimacy of transitional reforms has been rather low. As to the tendencies and content of reforms, a rigorous social analysis of expenditures and revenues has not been conducted, nor have the reasons for single options and reasons against, macro SWOT, etc., been examined (for detailed discussion see Vujošević, 2008b).

The results of following “post-self-governing-socialistic” transition in Serbia have been described as a “process of transition from one disaster to another”, as “post socialist capitalism as the last phase of capitalism”, as “Serbia as a part of new ‘wild East’”, and as an “economy of destruction that covers a stumbling abyss between consumption and production”, etc.

After almost two decades of reforms, with uprisings and inclines, great numbers of people are the objective losers due to an application of contemporary models. A majority of the winners are opposed to any further sequence of reforms, while there is still no basic political consensus on goals, content and modalities of transitional reforms. The main economic consequence of this period is a stunning redistribution of social wealth, accompanied by a total destruction of the former economic system and the creation of new interest groups formed in an isolated semi-martial economy. This redistribution has been made on several occasions, where the state apparatus/machinery was the moderator between citizens and a narrow circle of the ruling political party and its satraps (persons, companies, etc.). Since 2001 there have been attempts to improve the effects of that economic distribution by measures like a tax on extra profit, but they were unsuccessful due to the absence of other measures of political transition: the

reform of the security sector, the reform of the tribunal and prosecution, restitution and denationalisation, etc.

It has shown that “pink scenarios” are impossible to achieve in a fast and easy way, which points again to the difficulties and complexity of the social, political and economic social realms. A significant contribution to the problem is the fact that the government in Serbia from the end of the 1980s until today, and especially after 2000, applied stale dogmas in conceptualising the social transformation, instead of using new and creative approaches. New dogmas, mainly of neoliberal provenience, are usually assigned to “econocrats”/“economicists” among experts, as well as to the part of political and economic elites. This proceeded, since the year 2000, from the domestic “interpreters” of “shock therapy” (an approach developed by Jeffrey Sachs, a Harvard student and later professor), of whom Hofbauer (2004) wrote “... as the most brutal scion of M. Friedman’s liberal Chicago school...”. What we have today is – a “second-rate, half-permeable liberalism” that creates huge numbers of social and economic problems (Hofbauer, 2004), and which has so far resulted in “growth without development” and the largest deindustrialisation among all countries of former socialism-communism – “Serbia now being a strange mixture of premodern, modern and post-modern development strands and elements” (Vujošević, 2009b). Serbia is a country of plundered economy, a society in anomy, with impoverished citizens on the one side, and very tiny layer of wealthy on the other.

Especially problematic was the imposition of the privatisation model. According of adult Serbian citizens (excluding the area of Kosovo and Metohija), carried out by the Institute of Sociological Research at the Philosophy Faculty, University of Belgrade in 2003, only 19% of those interviewed unconditionally supported the privatization of all social and state-owned companies/ enterprises. In general, the majority questioned opposed the privatization of electricity (71%), health protection institutions (68%), the water supply and sewage system (67%) and oil (62%), and around one fifth of those questioned proposed that privatisation in these economic sectors should stay within 49% of capital value. Similarly, another research study of social consequences of privatisation in Serbia from 2001 till 2006 carried out by the Center for education, research and privatisation of United sector syndicate „Independence“, in cooperation with „Progetto Sviluppo“, found that when surveying 50 of a total of 2,115 privatised companies, that 62.5% of those questioned were unsatisfied with the results of privatisation (Vidojević, 2009).

As a result of applying the neoliberal concept of forced and accelerated privatisation, Serbia has been transformed into an over-indebted, semi-colonial market for imported goods, with its own industrial production nearly destroyed and its citizens disempowered, ridden of property in many sectors of real economy, disqualified and unemployed.

At the regional level, the crisis brought on by the neoliberal model has moved toward the concept of new capitalism, "...in the direction of strengthening the state, state interventionism, dependence or a nexus between big companies and state and political power and models closer to a guided economy, state protectionism and models of neo-socialist policy" (Arvanitis, 2009).

On the global level, in the latest period there can be seen a renewed application of neo-Keynesian measures of a re-statisation of financial institutions and industrial corporations in the centres of the world capitalist system, especially if the crisis continues to escalate. This reflects a search for a new model of governance within the framework of contemporary capitalism. Joseph E. Stiglitz (2009), as a president of the Expert Commission for Reform of the International Monetary and Financial System, established by the UN, emphasizes that, while there have been some faint signs of economic recovery of USA, the situation in many countries worsens, and especially so in less developed countries.

Serbia is in a deep and comprehensive crisis, whose dimensions have been potentiated by the global crisis. In Serbia, there is not enough concrete and wide social dialogue about the way to get out of the crisis. Also, there is none of the kind of public mobilisation which is needed to overcome the difficult circumstances. Instead, various feigned "discussions" and "strategies" are reduced to political marketing, improvisations and the like. The main question remains, whether the Serbian elites can meet the complexities both of the current situation and of future prospects, when over the long-term they have been demonstrating inferiority and incompetence in strategic thinking, research and governance.

THE STATE OF SERBIAN TERRITORIAL CAPITAL AND THE SUSTAINABILITY OF SPATIAL DEVELOPMENT PATTERNS

The so-called "endogenous" or "territorial capital" of Serbia has significantly decreased, as have its comparative advantages and concurrent ability, placing the country into the so-called "inner European periphery", namely, in the circle of countries that possess significant differences between developed and undeveloped areas, especially between the metropolitan area and other regions, as well as significant regional fragmentation, as key attributes of their spatial structure (up to Goler, 2005). Despite dynamic, but also insufficient and inadequate recovery ("growth without development"), this capital also hasn't been significantly restored during the period after 2000. Since the beginning of the 1990s all crucial social and economic indicators worsened, along with the majority of environmental indicators, so that the country, despite partial recovery, is still in a social, political and economic crisis with consequences on its spatio-ecological development. Serbia has one of the lowest values on the *Human Development Index* (HDI) in Europe (with a rank of 30th out of 35

countries). Globally it ranked 57th out of 178 countries in 2004, which indicates the level of degradation of cultural standards (Human development analysis of Serbia, 2007).²

Sustainability of production, spatial and consuming patterns in growth and development

This segment best reflects the scope and depth of development problems of Serbia, viewed from the aspect of its territorial capital, the un-sustainability of growth and development and international competitiveness. The majority of those models are not sustainable, as obsolete models and development forms still dominate compared to more sustainable ones, as a consequence of Serbia lagging behind in European processes of “economic and ecological modernization and restructuring”. For example, the dynamic economic growth with, on average, an annual rate of over 5% during the period from 2000 onwards (until the financial crisis) was achieved mainly as a result of the growing import of raw materials and durables, as well as the growth of activities which “service” import (i.e., infrastructure, trade, bank services, insurance services etc.). On the other hand, the “eco-eco” restructuring has been very modest and, over all, insufficient. Only a small part of revenues has been used for restructuring, while most has been used for different consumption/expenditure models, and in the meantime, a huge external debt piled up. We point first
šević,

Spasić, 2007):

Serbia has one of the most unfavourable demographic structures: it is in a phase of emphasized demographic recession, it is a part of the group of ten countries in the world with the fastest rate of population aging, as well as of the countries with the largest differences in key demographic parameters.³

The differences in development among Serbian areas are among the largest in Europe, on the local, sub-regional or macro-regional level, with a continued further concentration of inhabitants and activities in the wider metropolitan areas of Belgrade and Novi Sad (namely in this part of the Danube-Sava belt, the “Serbian spatial banana”), while there is a further demographic, economic and other weakening in the majority of other areas.

The culture of construction (*Baukultur*) is extremely low, with a terrible spatial chaos.

While the overall urbanisation rate continues to grow, it is very different on the regional level, and only five regions have an urbanization rate greater

² We especially emphasize the problem of the growing external debt of Serbia. According to the latest data (2009), Serbia’s total external debt has achieved 22 billion EUR (i.e., around 32 billion USD), and it will predictably continue to grow fast.

³ For detail discussion see: Vukmirović, Prokić (2005).

than the average. The majority of rural areas are experiencing hard demographic, economic and other recession.

A huge level of illegal construction (estimations go from 400,000 to 1,000,000).

A large fall of GDP and industrial production: as of 2008, Serbia had reached only 80% of GDP from 1989, and the participation of industry in GDP has been drastically lowering, from 44.5% in 1989 to only 17.4% in 2008. The bad concept of privatisation has ended in the process of the liquidation of big industry enterprises. The smaller number of successful privatisations is not enough to stop the dramatic stumbling of Serbian industry. A large part of industry is still outdated (in technical, technological, environmental, informatic and other ways). Economic and other stimulations for restructuring in this area are still lacking, especially concerning pertinent environmental impacts.

Low resource productivity as a consequence of an obsolete economic structure. For example, less than 4,000 €/km² territory is being created (which is among the lowest levels in Europe), while to generate 1,000 EUR GDP in Serbia we use around 1t of oil, which is considerably higher than the world's average. The so-called "material intensity" and "energy intensity" of production is very high.

Similarly, a lot of waste is being created: for every 1,000 EUR GDP around 140 kg of solid waste is being generated, which points to a high intensity of waste production. Solid waste is collected in an organised way only in only in urban areas, totally around 60%. Even in these areas it takes a long time to create regional centres for waste collection and treatment, so of 29 planned regional centres (as foreseen by the *National strategy of waste management*, 2003) only a few have been created. Over 3,000 illegal and uncontrolled dumps have been registered.

As a result of former development and the continuation of ecologically substandard and inferior industry practice, and additionally, as a consequence of the bombing in 1999, there are still large polluted areas (e.g., Bor, Majdanpek, Pančevo etc.), which haven't been recovered. Water pollution in the Danube – Tisa – Danube channel in Bačka is among the highest in Europe.

Water consumption per inhabitant is 400 l in urban areas, and around 80 l in rural areas, which is 100% greater than the average for EU countries. Households spend 55%, industry 20%, and so forth.

Only 46% of households are connected to the sewage system. Systems for water purification exist only in 28 settlements, and only in 5 settlements do they function correctly (data for 2006).

The share of renewable resources in the total amount of used resources is still pretty low, and that also holds true of the share of low-carbon activities in the economy.

Annual emissions in Serbia are: 47,244 million tons SO₂, i.e., 4.49 ton per capita, which is 14 % more than global average (in 2002). Measured in relation to generated GDP, it is double than the global process.

In the period 2001-2005 the share of “ecological” investments in GDP was 0.3%.

Serbia has very rich biodiversity in qualitative terms, namely, there is considerable genetic, species and ecosystem diversity. In quantitative terms, it is not very rich, as biological resources are relatively small. Together with geological, geographic and landscape diversity, Serbian diversity is large and creates one of its most important natural comparative advantages and the basis of its competitiveness, especially for the development of a larger number of so-called “alternative” (“sustainable”, “ecologically favourable” etc.) activities, in almost all areas, but especially in tourism, agriculture, forestry, water-economy etc. Biodiversity has been under-utilised and it is very threatened (especially in the case of fragile and/or most precious ecosystems), as result of eco-spatial unfavourable development models which have been implemented in the past and which still continue (Stevanović, Vasić, 1995; and

Planning system, planning practice and “planning culture”

Beside that, reformers didn't deal with *ex ante* evolution of macro options, and they haven't considered predictable regional and spatial-ecological implications of post-socialist reforms, nor of previous strategic decisions (Vujošević, 2008a, and Vujošević, Spasić, 2007b):

Until several dozens of national, regional and local development documents (strategies, plans, policies, programs, strategic projects etc.) were adopted during the last couple of years, among reformers (in political and economic elites) an eminently anti-planning and anti-developing attitude dominated, rarely much different from open aversion towards any planning or other development steering (strategic thinking, research and governance, social mobilisation etc.). Namely, among the reformers dominated F. von Hayek's construct on the importance of “katalaxia”, thereby neglecting the importance of new forms of planning and governance.

Since 2000, all key strategic documents adopted in the previous period have been ignored, such as the *Spatial plan of the Republic of Serbia* from 1996, which hasn't been considered at all (in reform packages, development policy, macroeconomic policy, institutional and organisational adjustment in the spatio-ecological sphere, etc.).

In these questions ideological and political zealots dominated, mainly neoliberal gurus, mostly local epigones of international vendettas, and often neophytes from the period of the “socialistic market economy”.

Especially after 2000, the so-called “planning culture” (cf. Sanyal, 2005) has experienced significant deterioration. Planning practice is not developing up to the ideals of the democratic, participative and emancipatory-modernising model that aspires to communicative-collaborative planning as “an asymptotic ideal”. Instead, in practice manipulation, clientelism and paternalism dominate, and as a consequence have those communicative models that look alike what T. Sager (1994, adjusted) described as a paradigm of manipulation, namely, the so-called “strategy of persuasion”, in the “enemy” model. This, though, represents only one of the manifestations of wide-spread “systematic and organised mobilisation of bias and interests”, as a dominant model of communication on the public scene.

The existing system and planning practice are following, actually, the way of thinking in institutional and organisational adjustment of many decades, and large numbers of existing institutions are so-called “institutional zombies”. One new syndrome, the so-called “management-agency”, cannot be an adequate solution for the complex challenges of strategic thinking, research and governance in the 21 century. Planning legitimacy is low, and planning practice remains as part of a mixture of elements from different “models” (Vujošević, 2002):

Planning as crisis management.

Planning as a mechanism for rationalisation and support of “uncontrolled privatisation and wild marketisation”, with the domination of big projects rather than strategic development schemes.

The least practised, though, is that type of planning that is, otherwise, the most precious and needed, and that is the institutional frame and mechanism which may more properly stimulate social, economic, cultural and ecologically-spatial transformation of society in the transition period.

In sum, in the last twenty years in Serbia there has been a particular breakdown of strategic thinking, research and governance. State authorities have almost totally neglected problems of sustainable spatial development. Until recently, instead of maintaining its strong role in the area of territorial (regional) development, the state has retreated more and more from this sphere, according to the dictates of neoliberal discourse.

Regional question and demographic recession

Serbia is a country which has the highest regional differences in respect to its achieved development level, somehow remotely similar to the trends in the EU over the last decade, where there has also been an increase of regional differences (especially after the inclusion of the less developed ex-socialist countries and regions). In respect to institutional adjustment, the latest legislative changes in the

sphere of regional development policy don't indicate either that they will contribute to solving this issue. This way of resolving the main questions of regional development and regional governance doesn't indicate that the solutions will work in the common interest, but as, it seems, a compromise between the governing parties, and the republic and provincial centres of one of the governing parties.

When the *Act on regional development* was prepared, it was insisted that suggested regions form the statistical units (following the model of the European statistical-territorial system *NUTS*). Although now it is not the priority, *the Act* actually establishes some eminent developmental and administrative regional functions.

Regarding the demographic issue, Serbia is among ten countries in the world with the oldest citizens, and fourth in respect to emigration of its most talented people (citizens). Serbia is today the state with highest number of refugees in Europe, and in 13th place in the world.

Consequently, in Serbia more options with regard to the institutional and organisational adjustment of regional development and governance should be taken into account and evaluated, especially pertaining to its decentralisation, in order to initiate a broader and deeper public deliberation of this issue, possibly as follows:

Retain the existing arrangements (that is, all or some national, regional and local initiatives and schemes), without introducing any major change.

Retain national planning policy only as a general strategic framework and a number of strategic frameworks or key projects, based on corresponding European development initiatives and schemes (that is, when decentralisation is not possible and/or recommended).

Discontinue the existing relative isolation from broader regional and European contexts, and, in general, introduce more European development categories, at all levels, and in all sectors.

Retain the existing arrangements, also introducing more correspondence to the existing pan-European, EU and macro-regional development initiatives/schemes.

Decentralise decision making to the regions, through more devolution of power, or through maintaining the dominance of the centre.

Continue decentralisation of decision making at the local government and community level, based on the plan-led system (formal and informal, socio-economic, spatial, environmental, etc.).

Discontinue the existing practice, by encouraging new approaches in integrating bottom-up planning initiatives, and top-down guidance, all centred at two or more regional levels.

Poverty and unemployment

According to reviews of official statistical data, the number of people living in absolute poverty has risen to 7.9% in 2008, from 6.6% in 2007, and apparently it will be even larger in 2009. It is certain that a significantly larger part of the population is in the category of the relatively poor, i.e., just a little bit over the line of absolute poverty. Dimensions of poverty in Serbia are much higher than the official statistics show. Evidence of this lies in the category of so-called “subjective poverty”, which is at least double than shown by official statistics, apart from too low level of “objective” relative and absolute poverty. The main reasons for the greater poverty of the population are war, the economic crisis, unemployment, bad privatisation, forced migrations, workers’ deprivation, systemic/structural disqualification of a great portion of the work force, and a downfall of incomes and the population’s purchasing power.

It is quite similar with unemployment, where official estimations have oscillated about 20% (for the last couple of years), while many independent commentators claim that it cannot be under 30%, if we apply a standard definition of employment that comprises permanent work, all contributions paid, etc.

In summary, when we consider poverty, unemployment and connected socio-economic problems, contradictory to “transition architects”, mainly economists of neoliberal transition, who up to recently were emphatically liable to glorify the results of transition in Serbia, and nevertheless to interpret some failures with “slow and unfinished privatisation and transitional reforms in other areas”, critics from the left of the ideological and political spectrum point to a large number of negative consequences of the post-socialist transition. For example a picture emerges of ‘boss’ capitalism, without development capabilities, with an emphasized role of plundering privatisations (as “piratisation”), and accompanying dissatisfaction of an impressive majority of citizens with the changes in ownership relationships, because all privatisation incomes went to the current expenditures). Instead of “pink pictures” of “controlled poverty and unemployment” (what the politicians emphasize), in Serbia the rule is – hard material pauperism, human humiliation and social desperation for a growing number of people, along with the enormous growth of a number of so called “social desperados” (“society desperates”).

Societal (“social”) capital

Notions about so-called Serbian social capital are very rudimentary, as until today there hasn’t been any systematic and encompassing research of this issue. For better insight into this question we need to compile new and additional research studies. There are several concepts applied in this domain, based on the approach of a large number of authors (up to Golubović, 2007), such as: social capital defined as the, “total real or potential resources connected with belonging to social group, and belonging to the group ensures support to the individual in

the form of access to resources possessed by that group”; or, the “total existing and potential resources that a certain societal group can mobilise through its members”; or the concept that comprises “trust, behaviour, rules and networks (business relations), that encourage cooperation for the common benefit”; or a “peoples’ ability to work together, for a common purpose, in groups and organisations”. Social capital may also include the meaning of social connections, as when there is a “replacement of existing or formal group rules that stimulate investments and other financial transactions” (which, again, indicates an important thing, namely, that through a concept of social capital we include non-economic components in the economic analysis, just as in the Marxist tradition). These researches should be “crossed” with alternative concepts, in which is the concept of social capital confronted with conceptual “behaviour patterns” (Robert Solow), or the notion of “social network” (Kenneth Arrow). The concept of social capital is complementary, and in one part also compatible, with the concept “institutional culture” (as part of the “soft territorial capital” of a given area, because social capital has a positive impact on economic growth and significant benefits for the majority of individuals). We should also combine approaches of reducing “social exclusion”. Creation or renewal of social capital is a long-term process, as renewal needs time and other resources (such as institutional capital and a “planning culture”), and it can be destroyed fast and easily.

RESEARCHING THE FUTURE THROUGH SCENARIOS

Basic remarks on scenarios and specific reasons for choice and application of scenarios as planning approach and methodology

A scenario is a heuristic method based on the logical relation of “if...then”. It consists of alternative hypothetical event sequences that are “constructed” *ex ante*, to put attention on the cause-effect connections in hypothetical processes and critical/key decision spots. Compilation and comparison of alternative scenarios should, in a systematic, ordered and logical way, give better insight into:

Activities that should be supported; whose realisation should be eased.

Those activities that should be avoided.

Chronological intersections for making key decisions.

Key implications and consequences for other issues and decisions.

A scenario is a research instrument for:

Balancing cognition, will and the interaction/communication aspects of preparation, decision making and implementation.

Suitable structuring of analytical insight and intuition and imagination, namely for structuring positive (hopes) and negative (fears) expectations of different actors.

Balancing optimism and pessimism, namely maximalism and minimalism, e.g., in the shape of the so-called “skeptical possibilism”, through rigorous *ex ante* evaluation of main options and their possible – or also apparent – implications and consequences.

Creation of research substance for different variations of consequential and possible social activism and mobilisation around the understanding of development problems and their solution.

Focusing on key problems/questions/aspects.

The purpose and aim of common applications of the scenario method include the following:

To take into consideration more possibilities and show them to a wider public and individual actors.

To allow a drift from static abstraction when judging development possibilities and restraints – namely in solving problems in general.

To lower the possibility for manipulation in the usage of knowledge/information.

To sketch costs and benefits for different alternatives.

To come to trustworthy insights in scale of preferences and probability patterns of actors’ behaviour/reaction and to create implications concerning possible implementation instruments.

To improve planning communication /interaction.

To improve conditions for applying compromise and consensus in conflict resolution, preventing them from becoming destructive, i.e., “translate” potentially destructive conflicts to those that are constructive, “encapsulated” (Etzioni, 1968).

The circumstances of political democratisation, ownership privatisation and the development of market institutions and mechanisms emphasize the importance of one of the key constants in strategic thinking, research and governance. Namely, there is almost no planning activity, rather, there are hardly any decisions beneficial for all, or equally beneficial for all (even if it is about a “planning game with a positive zero”, and especially in the case of a so-called game with constant/zero sum). This creates a new standpoint with regard to the traditional approaches and asks from planners and other experts to envisage the spatial-urban community in advance – in an objectivised, organised and systematised way – along with the probable consequences of different alternative possibilities (decisions about the future). It is advisable to make potential positive and negative consequences explicit (reasons for and against, costs and benefits) for certain areas (i.e., from the stand point of possible common/public interests), and also for special territorial interest groups, although that is not always possible, mainly due to the lack of time, data and other resources. Therefore, the particular reasons that support the necessity to

apply alternative scenarios in Serbian transitional circumstances are the :

Generally speaking, the planning research base is incomplete and of insufficient quality, especially concerning long-term trends and actors' behaviour patterns. Strategic thinking, research and governance in Serbia has been so neglected, that Serbia at this moment doesn't have knowledge base for defining all the necessary "exit strategies" from the existing development crisis, which is being accentuated by the spreading and deepening of the global financial, economic and other crises.

Conventionally, models characterised by "objective uncertainty", traditional deterministic and probabilistic models offer small prediction power.

While development documents compiled in the period up to 2000 are mainly *passé*, firstly because they were made on economic, ideological and political assumptions which have radically changed in the meantime, the documents that were adopted after that year mainly were not elaborated based on deeper development options and their rigorous *ex ante* evaluation.

Numerous changes concerning actors' values, interests and aspirations, and in institutional-organisational arrangements that happened in the latest period acquire a compilation of totally new future hypothesis.

In particular, scenarios create one of the key instruments of "non-manipulative persuasion", which is necessary for any movement towards better forms of good democratic planning and other strategic governance, as they can support the essential renewal of strategic thinking and research, especially in circumstances where one political scene dominates "wry public discourse", namely, "systematic and organised mobilisation of interests and bias", combined with different forms of manipulation, paternalism, clientelism etc.

This approach also helps to avoid unproductive tensions and discussions between those belonging, respectively, to the cataclysmists-apocalyptists and the "optimist-enthusiasts".

The scenario approach helps to achieve balance between rational and irrational approaches, in the frame of the so-called "quasi-pseudo-rational continuum".

Above all, after only partially successful transition reforms, that have also brought a large number of negative consequences, Serbia expects a comprehensive process of economic, ecologic-spatial and other restructuring, in accordance to the principles and criteria of sustainable development. This renewal, modernisation and emancipation won't bring the same benefits to all social groups, nor will it imply equal costs. Therefore – and differently from transition reforms in which aspects are not *ex ante* explored and estimated – the approach with alternative scenarios provides strong possibilities of finding an adequate balance between "technocratic"/"econocratic" approaches

and criteria, on the one hand, and those that are “sociocratic”/”policratic”, on the other. Beside that, we don’t know any other way to solve one of the oldest and most basic problems in planning-development evaluation in the Serbian context, and that is the harmonisation of efficiency and effectivity, on the one side, and rightness and equity, on the other.

Scenarios and some other approaches and methods: a brief comparison

Scenarios belong to the group of analytical aids to judgement (Jungermann&Thuring, 1987: 245) that describe alternative hypothetical futures, that is, devices for exploring, determining and creating the future. However, they do not describe what the future will like, but rather what possible futures we might expect, depending on our actions – or inactions – in the present. Thus, they are conditional, that is, based on the logical sequence “what...if”, as they allow the search-inference process to constrain, in a structured and organised way, the alternatives without the necessity to form a premature judgement concerning their relevance and plausibility. Although scenarios may be corroborated by a number of more rational techniques proper, they center more on the intuitive end of the cognitive “quasi-rational continuum”, by using so-called “disciplined intuition”. As this kind of intuition cannot be controlled by any scientifically justified techniques, the produced scenarios cannot systematically and rigorously be evaluated in terms of soundness, completeness, roundedness, “objectiveness”, and similar techniques.

Analogous to other similar approaches and methods, scenarios are based, to a larger or lesser extent, on past events and present conditions. Apart from scenarios, such methods largely feature visions, forecasts (predictions), plans and projects (or programmes). In this sense, scenarios represent a preparatory device for subsequent planning policy decision-making. In this regard, scenarios lie somehow at the centre of this continuum: while, on the one hand, visions are more focused on anticipating and projecting the future (“What if...want X?”), while on the other hand, plans, programmes, and projects primarily deal with issues such as “How do...we do X?” Scenarios are used to span this logical and actional gap, in analysing and building the answers to – “What if X happens?”, and “What if we do X?” (*op. cit.*, 80-82, modified).

Therefore, as K. Heiden puts it (1994: 549-575), while probabilistic planning is based on decision-making theory (comprising a number of “predetermined” arising for some cause-effect reasons), scenario planning goes further, and, in addition to these “predetermined”, and building upon them, it develops uncertainties which can not be predicted (in a formal and rigorous way), and expresses these in terms of their multiple possible outcomes. Consequently, scenarios operate with a plethora of “plausible futures”, each of which reflects the same predetermined, but incorporate outcomes of different likelihood for the uncertainties. However, there are also some similarities between probabilistic planning and scenario planning, for which further distinctions seem here to be in

place, viz. (*op. cit.*: 568-571, modified): 1) Probabilistic and scenario planning are to some extent complementary, addressing different parts of the decision-making process (that is, the preparation, decision-making, and implementation). 2) Scenario planning is more attractive in affairs having to do more with intuition-based deliberation, than with those which necessitate more formal exercises. Namely, the scenario method does not set (formal or other) boundaries for thinking and research so narrowly, as it also allows for speculation. 3) Contrary to probabilistic planning, scenario planning is more relevant for realms carrying significantly higher cognitive dissonance. 4) Scenarios are more helpful in an institutional-and-organisational negotiation context, as they allow for fair room for rational reasoning on the assumptions about the future.

In broader terms, scenarios may serve a number of particular and specific purposes, from, on the one end of this continuum, a conversation tool (that is, talking about “relevant-and-difficult” issues in a safe-hypothetical way), via a series of more proactive modes, such as testing an existing strategy, initiative, priority, and similarly; a tool of oversight tool, i.e., adding new insight and perspective to other planning processes; as an integrative tool, i.e., applying judgment into complex and various strands of thinking and action; as a generative tool, i.e., producing innovative ideas, programmes, products, and services; a scanning tool, i.e., as a heuristic device for generating better and deeper insights into some phenomena and processes; and so forth. In other, rather more determined actions scenarios may function as: a timing tool, that is, for defining how and when to react to certain events; as a decision-making tool, i.e., in the “future proofing” of a portfolio of activities and proposed actions; and, at utmost, as a prioritization tool to determine where and how to allocate finite resources.

Scenarios and visions

The importance of visions, actually, of “visioning”, as a planning approach and technique, has emerged in Europe since the beginning of 1980s, as one of the “answers to the crisis of spatial, urban and environmental planning, namely, as an attempt to identify difference and correction regarding earlier comprehensive, deterministic and similar approaches. It became especially popular in so-called “informal visions” and related development concepts, as open and adjustable categories, in the attempt to reach professional and political consensus in the planning process. It is about interaction that attempts, usually “mechanically” and one-sidedly, to “connect” the concepts of different sectors. As they have been constructed with a common orientation and abstract conception, the majority of those visions contain little of the strict chronological and other structuring of planning-development categories, i.e., these remain unspecified concerning goal types, concrete measures etc., and individual sector policies remain equally mutually weakly coordinated and incoherent.

In planning approaches where the “product” itself is the most important (i.e., the plan, or another appropriate document), in the West during the last 10-15 years accent has gradually shifted from plan preparation and enacting/promulgation to *ex ante* evaluation of different development options and their realisation. Compiling an answer to the question “how?”, which firstly refers to the measures, instruments and support for decision making, and to connected questions of “who?”, “how much?” and “why?”, was compared to other, previously more important questions that are less important today, as “what?”, “where?” etc. If we continue to use visions as a primarily tool, then we need to precisely define and delimit their role, sense and content, as otherwise they won’t have great importance. Once again, there is special risk that the use of unspecified visions can cause them become/remain just fantasies/phantasmagorias (“chimeras”, “untamed dreams” etc.), and therefore strengthen the so-called “debilitation of the public discourse”.⁴

Generally, we can choose between more visions types, for e.g. (up to Shipley

In a substantive view: 1) Predicting/forecast. 2) A mere prophecy. 3) Fantasy/utopia (positive or negative). 4) Strategy, namely a “master plan”. 5) Implementation (“introductory”) tool for some other concept.

In a procedural view, visions can have different roles: 1) As a tool for creating an arena/forum to discuss key problems and define common attitudes, in the sense of so-called “problem legitimacy”. 2) As a tool for determining priorities. 3) As a tool for achieving at least some ultimate solutions. 4) As a tool for creating consensus and identifying common obligations between interest groups. 5) As a tool to inspire and motivate inactive and uninterested actors. 6) As a tool to simplify participation and create common attitudes about a certain question.

Types of scenarios that are used in this paper

Practical and other reasons prescribe that experts/analysts/planners should not envisage too many scenarios for an urban community. The largest number of alternative possibilities can be suitably identified as an outline of several basic scenarios. Until approaching the concrete planning stages, alternative possibilities are often explored, and appropriate implications deduced within the framework of three basic scenario types:

“Continuation of existing” - this scenario draws on what will likely happen if a community doesn’t start planning interventions and other decisions targeted to change current conditions and routine processes.

⁴ We insist on differences between scenarios and visions, especially concerning their productive potential, because in Strategy of spatial development of Serbia until 2021, normally poorly grounded and corroborated, visions received much greater attention than elaborated scenarios.

“Ideal changes” – this scenario is in minimalistic in a way, but often draws out the best possibilities.

“Rational and possible changes” refer to that complex of aims and tools whose application could lead to incremental changes for the better, in frames sketched by an “ideal” scenario.

In this paper, we are, in a rudimentary way, combining the following methods, which comprise a mixture of elements from three approaches/dichotomies (Jungerman and Thüring, 1987):

Exploratory-anticipatory scenarios, that is, we start from the present and explore what consequences may result if certain events occur. Anticipatory scenarios describe a final state and speculate on what events are required to create it. Thereby, explanatory scenarios are forward-directed, i.e., they start from some known or assumed states or events and explore their predictable implications and consequences. The anticipatory scenarios are backward-directed, as they start from some assumed final state, and search, often by applying the so-called “backward mapping”, for the possible preconditions which could produce these effects.

Descriptive-normative scenarios, that is, we start from insights into possible futures, by making no account of their (un)desirability, or to any normative demands, that is, on the basis of certain, often clearly explicated values and desirable goals.

Trend-peripheral, in which trends are projections based on the basis of known past events (that is, “a surprise-free course of events or state of affairs that one might expect if nothing spectacular were to happen or if no particular action were taken”). Here, the peripheral scenarios are created to explore less probable futures, indicating a break in the stabilised chain of events.

EMPIRIC ANALYSIS AND EVALUATION OF THREE SPATIAL DEVELOPMENT SCENARIOS FOR SERBIA

Basic remarks about the Spider model

The *Spider* model is an analytical tool used to compare and visualise relative advantages and shortcomings of a territory or of different development scenarios based on many factors (Deakin et al., 2007). The model represents a tool for presenting larger areas, or different development options, and provides an evaluation of suggested development policies. The most common and broader model application in scenario analysis is in regional development, transport and metropolitan areas (Bruinsma et al., 2001), as well as in evaluation of “hypothetic scenarios” in spatial planning and governance. In model usage, the numeric data about each factor (indicator) are standardised, after which they are mapped on axes, starting from inner to the outer edge of the “spider”, while the lowest values are at the center of the axes crossing, and larger values are closer

to the “Spider’s” outer edge. Absolute and relative data values are aggregated on 10-point scale (Zeković, 2009).

The first step comprises the standardisation of quantitative data. Common data (area, land use, socio-economic data such as population, density, (un)employment, income etc.), and derived data on indicators are used. In the second step, standardised values are shown on a 10-point “spider” scale for every indicator, including their visualisation. The method is based on the calculation and visualisation of expected changes, and Spider analysis enables the visualisation of extreme development routes, defined by different scenarios, as well as the exhibition of expected and wanted development options, through the standardisation of their relative preferences and weaknesses (“continuation of existing”, “ideal changes”, “rational, possible or expected changes” etc.). This method simplifies the process of decision making for complex questions of spatial development planning, and in that way enables consequent defining of measures and policies for different development options.

Similar to the scenario approach, the evaluation and visualisation of possible development options with *Spider* is appropriate for opening discussion with actors on decisions about development planning questions, respectively about policy options and measures about how to come to the expected (to one of the possible) scenarios desired for development. At the same time, this tool enables the evaluation and comparison of “desired” scenarios with “unwanted”, cataclysmic spatial development scenarios, whether possible, or just valued as possible.

To illustrate we present the empiric results of valuating three scenarios of Serbian spatial development until 2020:

Scenario 1: “continuation of existing trends”;

Scenario 2: “ideal changes”, on the road of sustainable territorial development; and

Scenario 3: “cataclysmic” scenario of spatial development.

Next, we conducted a comparative analysis of basic indicators from three scenarios, compared to EU-27 averages.

Evaluation Results of three scenarios of spatial development of Serbia until 2020

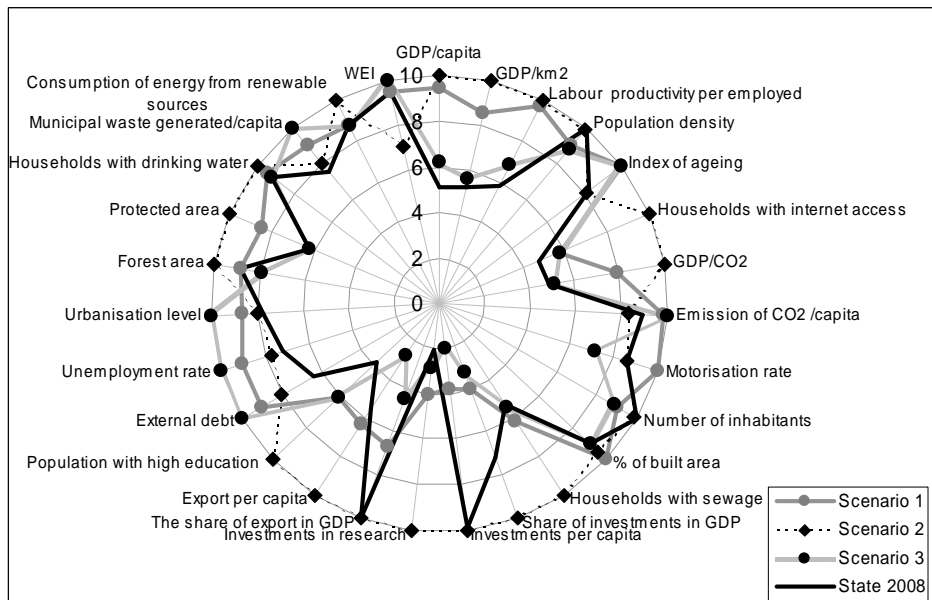
The empirical evaluation of three scenarios of spatial development of Serbia until 2020 has been conducted based on a comparative analysis of the absolute and relative values of 29 indicators that were transformed into standardised *Spider* values for each scenario (Graphs 1 and 2). Indicators have been ranked in several groups: economic-spatial-ecological, socio-demographic and infrastructure (Table 1). They indicate the absolute and relative differences in efficiency of using the territorial capital for each scenario. The choice of indicators has

been conditioned by available documentation and statistics, namely, with available strategic-development documents, studies, reports and other sources.

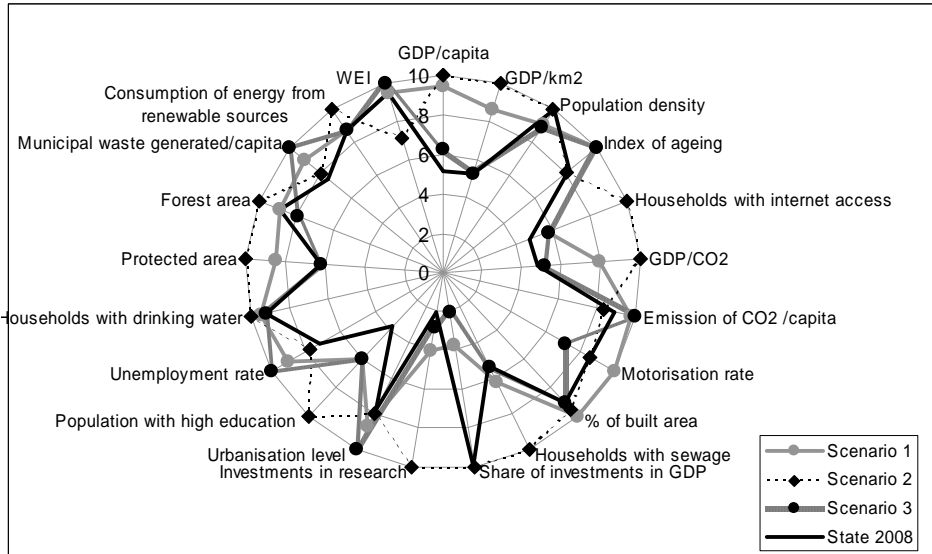
Table 1. Review of total indicators for three scenarios of spatial development in Serbia until 2020

Indicator	Status 2008.	Scenario			Status 2008.	Scenario		
		1	2	3		1	2	3
	Absolute values				Spider values			
GDP per capita (€)	4,597	8,469	8,985	5,592	5.11	9.42	10	6.22
GDP/km ² (in 000 €)	441.4	725.4	843.5	469.19	5.24	8.59	10	5.56
Labour productivity per employed person	17,137	28,820	29,704	20,194	5.76	9.7	10	6.79
Population density	94.66	85.64	93.87	83.9	10	9.04	9.91	8.86
Index of ageing	0.9	1.092	0.88	1.092	8.24	10	8.05	10
% households with internet access	33.2	40	70	40	4.74	5.71	10	5.71
GDP/CO ₂ (€ /t)	643.3	1055.2	1333.7	682	4.82	7.91	10	5.11
Emission of CO ₂ (t/capita)	7.3	8.02	6.73	8.19	8.9	9.8	8.3	10
The rate of motorisation (number of vehicles per 1000 population)	300	350	300	250	8.57	10	8.85	7.14
Number of inhabitants	7,334,000	6,635,325	7,272,944	6,500,000	10	9.04	9.9	8.86
% of built area	9	10	9.5	9	9	10	9.5	9
Households with sewage system (%)	34.4	40	65	35	5.29	6.15	10	5.38
The share of investments in GDP (%)	18	10	25	8	7.2	4	10	3.2
Investments per capita (€)	840	844	2245	446	9.9	3.75	10	1.98
Investments in research and development (as % of GDP)	0.5	1	2.5	0.7	2	4	10	2.8
The share of export in GDP (%)	30	30	45	20	10	6.66	10	4.4
Export per capita (€)	1,400	2,532	4,042	1,107	5.52	6.26	10	2.73
% population with high education	9.3	15	25	15	3.72	6	10	6
External debt (% GDP)	63.6	90	80	100	6.36	9	8	10
Unemployment rate (%)	14.4	18	15.5	20	7.2	9	7.75	10
Urbanisation level (%)	58	65	60	75	7.73	8.66	8	10
Households with access to drinking water (%)	80	82	87	80	9.19	9.43	10	9.19
Protected area (% of total)	8.45	10	6.19	6.19	8.45	10	6.19	6.19

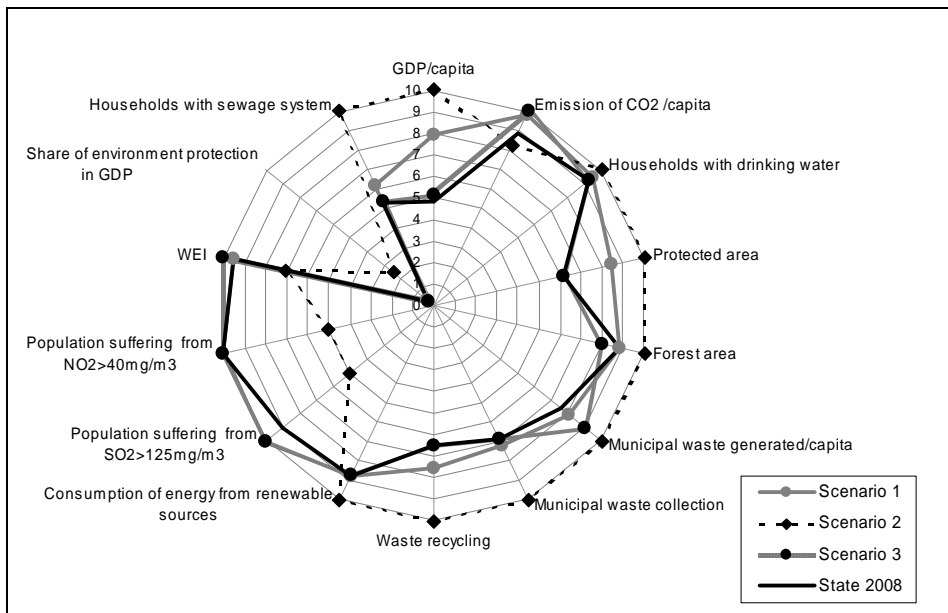
Indicator	Status 2008.	Scenario			Status 2008.	Scenario		
		1	2	3		1	2	3
	Absolute values				Spider values			
Forest area (% of total)	30	34	27	30	8.82	8.82	10	7.94
Municipal waste generated (kg/capita)	450	400	500	376	7.52	9	8	10
Consumption of energy from renewable sources, including big HPP (% from total consumption)	34.2	39	34	34.2	34.2	39	34	34.2
WEI (water exploitation index)	81	60	85	81	9.52	9.52	7.05	10
% of population suffering from excess of daily concentration of SO ₂ over 125µg/m ³	20	10	20	18	20	10	20	18
% of population suffering from excess of daily concentration of NO ₂ over 40µg/m ³	10	5	10	10	10	5	10	10



Graph 1. Comparative analysis and review of indicators of sustainable development scenarios for Serbia in 2020 (values gained by applying the Spider method).



Graph 2. Comparative analysis and review of chosen ecological-spatial indicators of spatial development of Serbia until 2020 (values gained by applying the Spider method)



Graph 3. Comparative analysis and review of chosen ecological indicators of spatial development of Serbia until 2020 (values gained by applying the Spider method)

Also, it may prove necessary to include elements of the concept of “regional lions and gazelles”⁵ in considering the scenarios of Serbian spatial development.

⁵ See: Nijkamp, Zwetsloot and van der Wal (2007).

Though, metaphorically speaking, “African”, this approach is very relevant for the formulation of alternative scenarios of Serbian spatial development, especially when it is imperative to mitigate relatively large territorial development differences (huge territorial imbalances). Namely, the scenario in which undeveloped regions need to realise faster growth, respectively, economic growth that is larger than the economic growth of the Belgrade or Novi Sad metropolitan areas, is hardly imaginable and even less possible. In accordance to that, we can draw a parallel to the regional relations of “predator and prey”, appropriately illustrated by one spatial development scenario in the research-cognitive, prognostic and normative sense (“cataclysmic scenario”). From the point of social acceptability, this scenario has a pessimistic-realistic character that firstly needs to serve as orientation in the arrangement of the “Serbian jungle” and regional relations, in which the main product from the standpoint of regional development is the “Serbian spatial banana”. Beyond that, it is especially relevant from the standpoint of imperative to establish new policies, measures and instruments for steering and controlling regional spatial development, as it is obvious that current instruments have proved to be inefficient.⁶

In the part of the “Serbian spatial banana” that comprises the Belgrade and Novi Sad metropolitan area, on 6.67% Serbian territory is concentrated 2,054,341 population (27.1% of the total population), 832,402 employees (41.6% of total employees), that realise 45.6% of national income (Table 2).

Table 2. Basic data on territorial population concentration, employment and public income in the Belgrade and Novi Sad metropolitan area

Municipality	Area (km ²)	Population (2002)	Share in total (in %)	Employment (2007)	Share in total (in %)	Public income (in million RSD, 2005)	Share in total (in %)
City of Beograd	3,222	1,552,151		617,737		310,015	
City of Novi Sad	699	261,121		148,585		77,455	
Indija	385	42,849		9793		4056	
Stara Pazova	381	55,871		13544		5848	
Pečinci	489	19,865		3727		2667	
Pančevo	755	122,534		39016		18816	
Total metropolitan area	5,901	2,054,341	27.1	832,402	41.6	418,857	45.6
Serbia	88,361	7,576,837	100.0	2,002,344	100.0	918,732	100.0

⁶ Belgrade, as the metropolitan knot of the “Serbian spatial banana“, has its “Gazelle“, as one of the so-called “urban linchpin markers” of territorial capital.

Though the development gap between European regions is slowly shrinking and national differences diminishing, the differences between regions and cities mainly grow in parallel, especially after the recent enlargements of the Union.⁷ This trend can be assumed in future Serbian spatial development. Market neoliberal policy has a tendency to enlarge spatial differences at the expense of undeveloped, “less talented” and more neglected regions, with unintentional polarisation on all spatial levels.

Comparative review of indicators of three scenarios for Serbian spatial development: comparison with EU-27 averages

The EU territory occupies 4,324,782 km², with 497.65 million inhabitants (according to some data, 495.4 million). The GDP in EU-27 in 2008 was 13,000 billion euros (estimation), and the average GDP per capita came to 33,400 €, with significant differences between member countries. Among EU-27 countries, there were 224,400,000 employed in 2008 (according to some data, 223,800,000), with the unemployment rate at 7.4%. The total CO₂ emission in EU-27 achieved in 2008 was 5,045.37 million tons, or 10.13 t/capita. The average income in this area is 2,937.4 €/t CO₂.

Up to Tötzer (2008), more than 25% of EU territory is directly occupied with urban land use. There are 305 large urban zones covering 1,987 km², or 15% of the total European area, where around 50% population lives (The European Urban Atlas, 2008). A bit more than 70% of the European population lives in urban areas, with an expected urbanisation growth to 80% in 2020 (EEA, 2006). In the European area the so-called “pentagon“ London-Paris-Munich-Milano-Hamburg, dominates and comprises around 15% of territory, with about 25-30% of the population who earn around 50% of the GDP of EU-27. An analogous concentration of the population and economic activities is also recognisable in the so-called European “spatial blue banana”.⁸

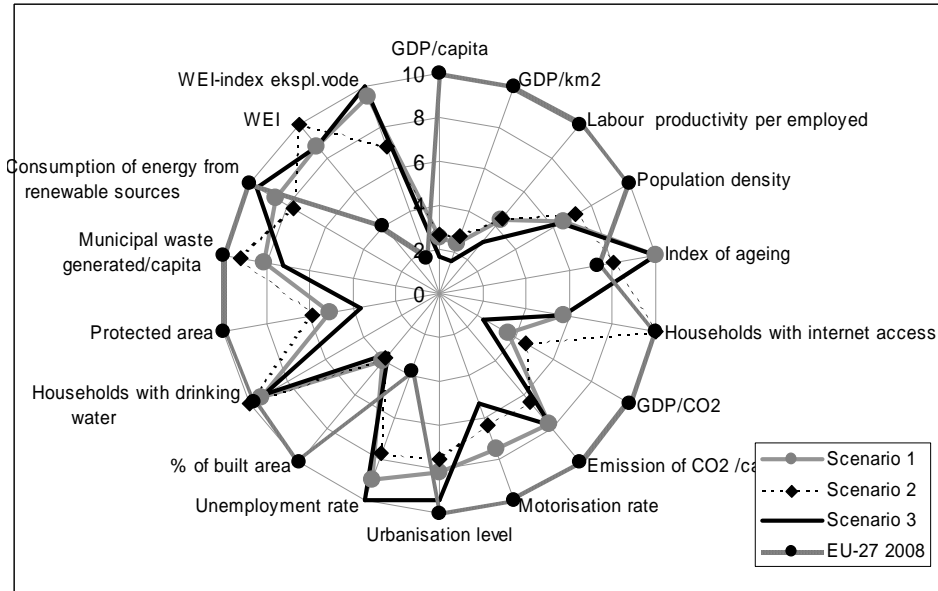
In Table 3 and on Graphs 4 and 5, the results of comparative analysis of relative and standardised *Spider* values for chosen indicators for Serbian and EU-27 countries in 2008 are shown.

⁷ For detailed discussion see: Petrakos (2008).

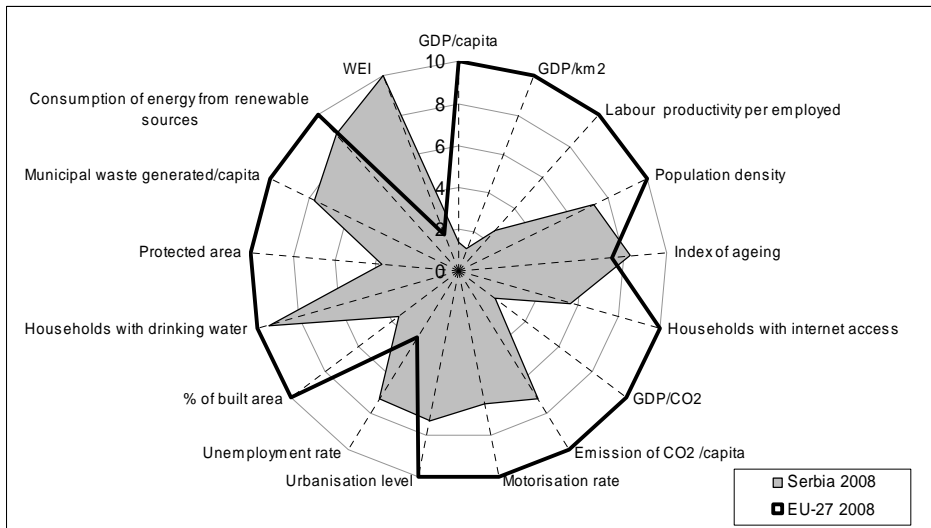
⁸ Dominant European spatial patterns are approximated with different spatial metaphors and include, beside “pentagon”, “blue banana”, “bunch of grapes”, “red octopus”, “concentration poles and corridors”, etc.

Table 3. Comparative analysis of indicators of spatial development of Serbia until 2020 with EU-27 (values gained by application of the Spider method)

Indicator	Scenario 1	Scenario 2	Scenario 3	EU-27 2008	Scenario 1	Scenario 2	Scenario 3	EU-27 2008
	Current values				Spider values			
GDP per capita	8.469	8.985	5.592	33,400	2.53	2.69	1.67	10
GDP in 000 €/km ²	725.4	843.5	469.19	3006	2.41	2.8	1.56	10
Work productivity	28820	29704	20194	66.222	4.35	4.48	3.04	10
Population density	85.64	93.87	83.9	115.1	7.44	8.15	7.28	10
Index of ageing	1.092	0.88	1.092	0.8	10	8.05	10	7.3
% households with internet	33.2	60	40	60	5.53	10	6.66	10
GDPE /t CO ₂	1055.2	1333.7	682	2937.4	3.59	4.54	2.32	10
Emission of CO ₂ t/capita	8.02	6.73	8.19	10.4	7.71	6.47	7.87	10
Index of motorization: number of motor vehicle/1000 inhabitants	270	240	220	466	5.79	5.15	4.72	10
Urbanisation rate (%)	65	60	75	80	8.12	7.5	9.37	10
Unemployment rate (%)	18	15.5	20	7.4	9	7.75	10	3.7
% built up area	10	9.5	9	25	4	3.8	3.6	10
Households with access to drinking water (%)	80	87	82	85	9.19	10	9.42	9.77
Protected area (%)	6.19	10	6.19	17	3.64	5.88	3.64	10
Forest area (%)	30	34	30	37	8.1	9.18	8.1	10
Municipal waste kg/capita.	400	500	450	522	7.66	9.57	8.62	10
% energy gained from renewable sources (including big HPP)	34.2	39	34	15.5	8.76	10	8.71	3.97
WEI-water exploitation index	81	60	81	15	10	7.4	10	1.85



Graph 4. Comparative analysis of indicators from the spatial development of Serbia until 2020 scenario with averages for EU-27 (2008, Spider values)



Graph 5. Comparative analysis of spatial development of Serbia in 2008 indicators with average for EU-27 (2008, Spider values)

CONCLUDING REMARKS: SCENARIO TYPES THAT SHOULD BE FURTHER RESEARCHED AND EVALUATED IN THE SEQUEL TO THIS EXERCISE (FOR A FUTURE RESEARCH AGENDA)

In this paper, the analysis of results gained by the application of *Spider* method has indicated, obviously, poor prospects for further Serbian development, if it continues with the currently dominant pattern of growth and development. Along with that, it is indicated that there is necessity for more detailed elaboration of this issue through the combined application of further approaches/scenarios. Here, we briefly refer to the types that are mentioned in the following discussion.⁹

Regarding the **evaluating impact of factors from the global context**, a main skeleton would be based on two possible common scenarios:

Fast attainment of candidate status for joining the EU and undertaking comprehensive preparations in order join: the spatial-ecological aspects of Serbian development.

“Europeanisation of Serbia outside the EU”: the implications and consequences on spatial development and spatial structures.

It is possible to also include an additional basis for an *ex ante* evaluation of the above-mentioned alternative scenarios, and that includes the: **prolonged financial, economic, debtor and other crisis /relatively fast crisis termination**.

Regarding the estimation of the **type of transitional reformations** that need to be implemented in the future period (continued transition), at least three scenarios are possible:

“Remaining at the ‘inner European periphery’”: prolonging the status of “economic and environmental colony”, and now also “financial and debtor colony”. This alternative assumes: a) “Soft” environmental and spatial-urban legislative. b) Giving up sophisticated planning, strategic thinking, research and governance, except in sectors of priority resource exploitation. c) Insisting on minimising the real costs of natural resources exploitation and easing the approach for foreign investors to exploit domestic natural resources, mainly multinational companies (with depressed resource prices, smaller constraints in the level of exploitation, smaller commitments concerning rehabilitation of the negative consequences of exploitation etc.).

“Consumerism, ‘wild market’, ‘social Darwinism’, ‘social anomy’ etc. – consequences to spatial development and spatial structures”: development of

⁹ Once again, this has been emphasized by insufficient scenario research for work on *Strategy of Serbian spatial development until 2021*, so we need to do all we can in order to address this shortcoming during work on the national spatial plan, over the current and next year.

a consumer-orientated market economy, with a presumed low level of planning and other regulation.

“Development of modern, just and spatially balanced society”: Though this scenario is the most desired from the standpoint of the long term interests of the majority of individuals, social groups and society as a whole, on the short and mid-term it has the least possibility, given the ecological, spatial, urban and social sustainable economy and society. With widespread poverty, so called “social Darwinism” and social differentiation and polarisation, there are still very few groups in Serbia dealing with this problem, and dominant political and economic interest groups politicize these questions and tend to present them mainly as political and economic. Of prime importance are economic and political reasons, transformation principles and criteria (e.g., through dogmas and mantras and “primate of macroeconomic stabilisation”, compared to all other questions, “a necessity of completing the privatisation necessity”, “construction of unrestricted market”, “further de-etatisation and liberalisation-deregulation” etc.), while the wider social and spatio-urban-environmental implications of economic and political reform moves “are systematically pushed under the carpet”.(Vujošević, 2002).

All scenarios need to be rated from the standpoint of **favourable/unfavourable**.

The main skeleton that the **favourable scenarios** present (especially concerning implicated implementation sources, namely, an institutional and organisational adjustment):

Creation of a modern post-socialistic state with a democratic legitimisation of development policy.

Creation of democratic regional and local coalitions, to strengthen regional planning and governance.

Developed private sector and cooperation (“partnership”) between all ownership types.

Developed institutions and mechanisms of social-market economy.

Selective strengthening of the allocative and implementation role of the regional level and achievement of an appropriate balance in regard to selectively kept central competences.

Integration of socio-economic development policy and environmental policy within the framework of spatial planning (up to the model of spatial planning that has been recently developed in the EU).

Maintenance of so-called “proactive” planning control, as a combination of a series of indicative and directive measures and instruments, within a framework of renewed strategic thinking, research and governing.

On the opposite end, **unfavourable scenarios** comprise:

Prolonged status of “pre-modern” state.

Weak regional coalitions and insufficient strengthening of regionalism (regional planning and governance)

Further growth of a “wild /uncontrolled” market.

Further conducting of one-sided and unjust privatisation.

Neglecting strategic research, thinking and governance, and reducing the role of planning and its reducing to the status of “junior partner of an undeveloped market”.

Regarding the development scenarios in a spatial-urban-ecological sense proper, as has been mentioned, defining a preliminary evaluation of scenarios provides a full sense of important spatial-urban-ecological categories/concepts, such as the above-mentioned: “territorial-spatial balance”; “spatial concentration and polarization”; “spatial fragmentation”; “spatial integration”; “urban structure”; “spreading of the periphery of cities and towns”; “spatial distribution of inhabitants and activities”; “territorial-spatial capital”; “concentration, or dispersal of public services”; “ecological regimes in space usage”, etc. These elements need to be combined with elements from different commonalities (favourable and unfavourable) and transitional scenarios and thus conduct an appropriate *ex ante* evaluation.

No doubt it would be beneficial to research the implications and consequences of the fast construction of the “**South Stream**” Pipeline, firstly on the Serbian spatial structure, and compare that to its slow construction, and to abandoning the construction.¹⁰

Regarding the **role of Port of Belgrade** in strengthening the Serbian territorial capital, future research certainly needs to conduct a comprehensive *ex ante* evaluation of selling and, actually, later eliminating The Port of Belgrade, against its huge, and maybe determining importance for the reconstruction of the Serbian territorial capital. The strategic resolution of The Port of Belgrade issue is a linchpin in the reconstruction of the demolished Serbian territorial capital.

There are also other **infrastructure-geographic opportunities** that are important for defining an *ex ante* evaluation of alternative scenarios of Serbian territorial development, and which should be examined in more detail, firstly, regarding the effect of spatial and settlement development on the key development corridors. Regarding their influence on the spatial structure, we should keep in mind that these effects oppose one another. On the one hand, they rebuild international road connections and conditions between capital cities, thus attracting capital and qualified work forces in production, trade and logistics, and for establishment of new businesses and locations of new activity. Whole new areas of land and

¹⁰ Namely, already after this first and rudimentary appraisal, we may safely estimate that The “South Stream” Pipeline could play an important role in improving the territorial capital of Serbia, somehow as a *deus ex machina* in this “narrative” about Serbian development *Argonautics*.

contact zones along highways are being created that used to have other purposes (mostly agriculture and water economy), and which now contribute to a rising GDP through other activities. But, on the other hand, these corridors accelerate discharge and further weaken the position and socio-economic development of remote areas on the periphery, and impact the rise of spatial differences (a typical example is evident in the “Serbian spatial banana”). All that, however, functions against one of the key goals of EU regional policy, namely, against mitigating regional differences, something now occurring in developed West Europe, but even more in the Balkans. In that context, we need to examine in detail whether future priorities require main road axes, or modern “by-roads”, as well as railway axes (on main corridors and other strategic routes).

In this very context, a further work on the predictable scenarios would be in place regarding the **integration of Serbia in broader Balkan space**. Pertinent scenarios should cover a range of options, from a soft cooperation of Balkan countries in specific issues, via stronger coordination of national sectoral policies (viz., environmental, technical infrastructure, and similar), to more integrated national strategic schemes within – why not? – **a common strategy of sustainable spatial development of the Balkans**.

We conclude: the continuation of research that applies additional development scenarios could significantly contribute to ending the so-called “debilisation of public discourse” in Serbia. Namely, the restoration of strategic thinking, research and governance, seems to be an important precondition for the establishment of wider professional and political dialogue to find the way out of the current crisis, and solve key development issues. The preparation of new *Spatial Plan of Serbia*, to be expectedly launched soon, will put forth the proper challenges in this respect.

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