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Collectivity vs Connectivity: The techno-historical example of motorway peripherization in former Yugoslavia

Abstract

The paper, based on the example of socialist Yugoslavia, would like to consider the intended and not intended effects and paradoxes of building motorway infrastructure. In 1945 J.B. Tito declared the necessity of building the highway "Brotherhood and Unity" as an instrument for the formation of a collective trans-ethnic Yugoslav identity. The start-up of the highway (understood at the time of its construction as a two and three lane modern road) was in 1948 and it had to connect Ljubljana - Zagreb - Belgrade – and, in part, Skopje. It was officially opened in 1963. The main argument of the paper is that the building of motorways produces opposite or at least spin-off effects – main highways always connect major cities and respectively reinforce periphery. A second argument will be that the goal of fostering connectedness through auto-transport infrastructure is to create collective identities. Yet, the outcome appears to be different – it preconditions individualization through personal auto-mobility. In the case of former Yugoslavia the highway connected the capitals of Slovenia, Croatia and Serbia and peripheralized Bosnia and Herzegovina, Montenegro, Kosovo and, partly, Macedonia. Thus, it additionally reinforced the already industrialized regions and neglected the less developed ones. The result was autonomization of the republics, tensions among them, which created conditions for future conflicts. The well planned politics of connectivity through motorways could not predict the possible future developments of individual automobility. The conclusions reached in this paper are based on empirical data and technical figures from former Yugoslavia.

1. Theoretical approach

The paper, based on the example of socialist Yugoslavia, will analyze the intended and not intended effects and paradoxes of building motorway infrastructure in socialist Yugoslavia. The main argument of the paper is that the building of motorways produces opposite or at least spinoff effects – main highways always connect main cities and respectively reinforce periphery. The second argument will be that the goal of fostering connectedness through auto-transport infrastructure is to create collective identities. Yet, the outcome appears to be different – it preconditions individualization through personal auto-mobility.

The role of transport infrastructure for national identification

The theoretical approach I am following is related to the field of Science and Technology Studies (STS), but not only, because my research tackles issues from the fields of imaginary geographies and identity studies.

The starting point of my study is Langdon Winner's argument in his article "Do artifacts have politics?" that "the things we call 'technologies' are ways of building order in our world ... technological innovations are similar to legislative acts or political findings that establish a framework for public order that will endure over many generations"¹. In the planned economies of socialism the interrelation between technologies and politics is apparent, as the construction of infrastructure is usually justified by specific ideological arguments.

The concept of infrastructure has many meanings, but the commonality among them is that the infrastructure is perceived as a mediator linking and integrating people. Dirk van Laak wrote: „...daß Infrastrukturen gesellschaftliche *Integrationsmedien* erster Ordnung darstellen. Dabei sind sich von technokratischen Staatsauffassungen als Steuerungsinstrument genutzt worden und müssen insofern neben staatsrechtliche und politische Integrationsvorstellungen des 20. Jahrhunderts gestellt werden.“²

The integrational role of infrastructure fully applies to the transport infrastructure and in particular to the auto-transport one. Roads are often perceived as the arteries of a country, enabling the functioning of the economy, facilitating territorial mobility, and connecting the various regions and sites, thus, ensuring the national homogenization of the modern state. Though all the authors who deal with the genesis of the modern nation state argue that it

1 Langdon Winner. Do artifacts have politics? In *Daedalus* 109 (1980), 121 -136, 125.

2 Dirk van Laak. *Infra-Strukturgeschichte*. In: <http://www.jstor.org/discover/10.2307/40186014?uid=1072312&uid>, accessed July 7, 2014: 368

emerges as a unitary authoritative center that strives to homogenize a given territory in economic, political, administrative and cultural terms³, when speaking of the formation of nations and national identities, they usually focus on the role of symbolic systems uniting people in one "imaginary community" (B. Anderson). For instance Ernest Gellner pays special attention to the role of culture defined as "a system of ideas and signs and associations and ways of behaving and communicating"⁴; as well as to the social infrastructure, understood as education; Benedict Anderson - to the print texts and their influence on the establishment of national languages⁵; Michael Billig - to the impact of "banal nationalism" - the use of flags in everyday contexts, sporting events, national songs, symbols on money etc⁶. As far as I know, there are not many studies on the role of transport infrastructure for the formation of national identities. Anthony Smith includes territorial mobility as a key component of national identification along with the cultural and political features. According to him "the fundamental features of national identity" are the following: "a historical territory or homeland, common myths and historical memories, a common mass public culture, common legal rights and duties for all members, a common economy with territorial mobility for members."⁷

I agree with Benedict Anderson's widely accepted definition of nations as "imagined political and sovereign communities"⁸. The theoretical challenge of my text, based on the case of socialist Yugoslavia, is the study of the interrelation between auto transport infrastructure and the imagining of the Yugoslav community. The research hypothesis is that the construction of motorways in SFRY is an important ideological argument as well as a tool for the formation of a Yugoslav identity. I use "connectivity" in the sense of auto transport infrastructural connectedness of different location sites on the territory of SFR of Yugoslavia; and "collectivity" is the equivalent of "imaginary community".

Automobility

³ For instance Ernest Gellner, *Nations and Nationalism*. (Ithaca: Cornell University Press, 1983); Eric Hobsbawm, *Nations and Nationalism Since 1780*. (Cambridge: Cambridge University Press, 1990); Anthony Smith, *National Identity* (Reno, Nevada: University of Nevada Press, 1991)

⁴ Ernest Gellner, *ibid.*, p.6

⁵ Benedict Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism* (Revised and extended edition) (London: Verso, 2006)

⁶ Michael Billig, *Banal Nationalism*. (London: Sage Publications, 1995)

⁷ Anthony Smith, *National Identity* (Reno, Nevada: University of Nevada Press, 1991), p. 14.

⁸ Benedict Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism* (Revised and extended edition) (London: Verso, 2006), p. 6.

The next concept I use is that of automobility. The concept appeared as a part of the "mobility turn" in social science, usually associated with the name of the British sociologist John Urry. John Urry analyses automobility as a 'self-organizing autopoietic, nonlinear system that spreads world-wide and includes cars, car-drivers, roads, petroleum supplies and many novel objects, technologies and signs'⁹, which, as Mike Featherstone adds, "in expanding relatively stable system generates unintended consequences"¹⁰. The automobility system, according to Urry, has six components, which in their combination generate and reproduce the 'specific character of domination' that it exercises.¹¹ For my research, the relevant component is the second one: "the major item of individual consumption after housing which provides status to its owner/user through its sign-values (such as speed, security, safety, sexual desire, career success, freedom, family, masculinity)"¹²

In the Introduction to the book *Against Automobility* Stephen Böhm, Campbell Jones, Chris Land and Mathew Paterson regard automobility as "one of the principal socio-technical institutions through which modernity is organized. It is a set of political institutions and practices that seek to organize, accelerate and shape the spatial movements and impacts of automobiles, whilst simultaneously regulating their many consequences. It is also an ideological (see Gorz, 1973) or discursive formation, embodying ideals of freedom, privacy, movement, progress and autonomy"¹³

If one presumes that automobility is related to individual consumption and the notions of freedom, privacy, autonomy, career success, family - all of them important liberal values - then my second research hypothesis is that the spread of automobility in Yugoslavia undermined the ideological basis of the constructed as egalitarian Yugo identity and served as a prerequisite for the breakdown of the socialist Yugoslav federation as an "imagined community".

⁹ John Urry, 'The "system" of Automobility', in Mike Featherstone, Nigel Thrift, John Urry (eds) *Automobilities* (London, SAGE, 2005), p. 27

¹⁰ Mike Featherstone, Introduction, *ibid.*, p. 2

¹¹ *Ibid.*, p. 25

¹² *Ibid.*, p. 26

¹³ Stephen Böhm, Campbell Jones, Chris Land and Mathew Paterson. Introduction: Impossibilities of Automobility. In: Stephen Böhm, Campbell Jones, Chris Land and Mathew Paterson (eds) *Against Automobility* (Oxford: Blackwell Publishing, 2006), p. 3

2. The Ideological Plan: Producing Collectivity through Connectivity. The Notion of "Brotherhood and Unity"

Marshal Josip Broz Tito was facing a difficult task. He and the Yugoslav Communist Party had to build a federation from six different republics with different historical and cultural heritage, some of them engaged in a bloody clash during WWII; with different religions and denominations, with differences in the spoken languages and with different levels of economic development. The repetition of the word "different" is not by accident. If one remembers the cited above definition by Anthony Smith of national identity, it is obvious that the sense of belonging to the new administrative unit¹⁴ could not be invented on the basis of "a historical territory or homeland, common myths and historical memories, a common mass public culture". Common legal rights and duties for all members could be imposed, but if state power relies only on that, its legitimacy will come into question. So there is a need of inventing something which could ensure the belief in the legitimacy of the new power and in the bright future of the Federation. Developing a prosperous economy and territorial mobility along all the republics of the Federation is a good idea, but not enough. That is why Tito decides to combine the idea of modernization of the republics with the communist notion of equality, which obliterates the differences between ethnicities, as well as between the center and peripheries, and erases economic and social hierarchies. These ideological notions rest on the anti-fascist heritage and common struggle for national liberties and social equalities. The new identity should be based on the idea of a bright communist future, on a beautiful for the moment utopia, which would soon become a reality. This utopia would be best visualized through the map of a ubiquitous connectedness and materialized by transport infrastructure, both railway and motorway. The name of the most important connecting axes should be "Brotherhood and unity", the popular anti-fascist slogan, which would become the "brand" of the Federation. To ensure that these reflections are not pure speculations, let me turn to the historical documents.

In 1945 Josip Broz Tito declared the necessity of building the highway "Brotherhood and Unity". The start-up of the highway construction (understood in the time of its construction as a two and three lane modern road and later in the 1970's partly modernized to motorway standards - two lanes for each direction plus an emergency lane) was in 1948 and it had to

¹⁴ The question whether the national and federational identity could be thought as equivalent is reasonable. I am arguing that they have similar logic, because both of them are "coupled" with a modern state, so they should ensure the existence of it as a coherent political and sovereign unity. As we shall see, Tito uses the word "one nation" when speaking of the collective binding of Yugoslav citizens.

connect Ljubljana - Zagreb - Belgrade - and in part Skopje and end by the Greek border Gevgelija. This large-scale project was meant to comprise of over 1,180 km of two and three lanes roadway. Its start coincided with the beginning of Tito - Stalin Split, which was the conflict between socialist Yugoslavia and the other socialist countries of the Eastern Bloc, which led to the economic blockade imposed on Yugoslavia by the Soviet Union and its satellites. Many previously planned Yugoslav projects had to be stopped or suspended. But the "Brotherhood and Unity" motorway presented a different case. Despite economic difficulties it was continued, and "in different ways supported by the state, despite representing limited economic value at a time when economics was supposed to matter the most. Other road and railway connections between Belgrade and Zagreb were repaired and were functional after 1946, which makes the Motorway project even less of a necessity in the conditions of economic blockade. Despite this, the section Zagreb – Belgrade was finished in 1950, the Ljubljana – Zagreb in 1958 for less than a year. The whole track to Greece was officially opened in 1963 – even in the absence of all the materials and especially the lack of road construction machines it required – with only a few months delay. It is evident that the CPY and their economic planners were led by a different logic. Why this particular developmental project was forced to its end requires explanation".¹⁵

The short answer is - due to its ideological importance. First, the motorway should be the symbol of the new life in the new Yugoslavia. This tie is evident in the following quote from a speech Tito gave in December 1945, when he hosted a delegation from the Ministry of Constructions:

"To become an advanced country, we need to build new and modern roads. First we will start the construction of the Motorway Belgrade-Zagreb and thus link not only our two most beautiful cities but many of our regions with roads that will be linked to the Motorway [...] through work we need to show which steps and on what paths will develop new Yugoslavia."¹⁶

The connection between "road" and "path" and the close analogy between "new roads" and "new Yugoslavia" is obvious in that citation. For Tito the perception of the motorway as crucial for “new” Yugoslavia was a well-considered ideology and hence he insisted that it

¹⁵ Sasa Vejzagic. *The Importance of Youth Labour Actions in Socialist Yugoslavia (1948 - 1950): A Case Study of the Motorway "Brotherhood - Unity*, (MA thesis, Budapest, CEU, 2013), p. 4

¹⁶ Quoted from Sasa Vejzagic, p. 39

should be pushed forward, regardless of its high cost in the context of economic crisis. Tito is using words like “advanced” and “modern”, but it seems the vision of a new Yugoslavia was not limited to that.

Second, the very name of the motor way - “Brotherhood and Unity” - points to the link between motor transport infrastructure and the creation of a new trans-ethnic and federative identity, a Yugoslav identity. “Brotherhood and unity” was one of the important slogans in the time of the anti-fascist resistance and was confirmed at the second session of the Anti-Fascist Council for the National Liberation of Yugoslavia in the Bosnian town of Jajce in November 1943, when decisions were made to recognize the equal rights of all nations in Yugoslavia in view of the country’s future federative structure. The building of a trans-ethnic identity would not be an easy task, considering that World War II had brought about severe inter-ethnic conflicts and bloodshed between the Yugoslav nations. The Brotherhood-Unity Motorway would materialize this famous slogan, would make visible and tangible the idea of Yugoslav identity by actually connecting all the republics in the federation, and would consolidate this identity over time. Sasa Vejzagic points out that it indeed fulfilled this function: “In 1950 it physically connected two of the most conflicting republics inside Yugoslavia (Croatia and Serbia), with plans to spread onto two more (Slovenia and Macedonia). Its name, “Brotherhood-Unity”, was not coincidental, but rather representative of a well-conceived ideological plan to strengthen and materialize the link between all Yugoslav republics and their ethnicities.”¹⁷

How this identity was imagined? And Tito's answer is - it should be constructed as national identity, based not on the common past, but on the unique egalitarian future: "We in Yugoslavia have to prove, for example, that there cannot be a majority and a minority. Socialism rejects minority and majority. It demands equality between minority and majority, but then there is no majority, no minority, only one nation - the producing one working man - a socialist man."¹⁸

That is why the motorway was planned to connect all of the republics and there should not be a privileged region. Something more - the concept of Brotherhood and Unity was operationalized through the principles of establishing ethnic quotas in the industrialization of the country. Here is one example about the distribution of factories - suppliers of components for the famous Yugo car Zastava: "This ethnic key was evident already in the original 1954

¹⁷ Sasa Vejzagic, *ibid.*, 46

¹⁸ Speech by Tito at the site <http://www.titoville.com/speeches>, accessed March 12, 2014.

contract between Fiat and the Crvena Zastava factory in which the main Yugoslav component suppliers were dispersed all over the country, despite their distance to Kragujevac: from Belgrade (141 km), Banja Luka (467 km; Bosnia and Herzegovina), Kranj (699 km; Slovenia), Borovo (302 km; Croatia) and Zagreb (529 km; Croatia). By the early 1960s the Crvena Zastava factory could boast a vast network of component suppliers which rose to sixty-three big Yugoslav industrial enterprises, but in reality their dispersal all over the country, produced constant logistical problems in supplying components. Even in instances when Crvena Zastava was in a position to invest its own funds in the establishment of the component supplier, the state always intervened and directed those investments into less developed areas of Yugoslavia, usually in the Southern Serbian province of Kosovo or the Republic of Macedonia where poor infrastructure and inadequate workforce contributed to much lower overall performance than expected.”¹⁹ But, in spite of ethnic quotas, finally, due to the market orientation of Yugoslav economy, the market logic won: "proportionally most investments went to Slovenia as the most developed republic since were expected to lead to "quickest output maximization""²⁰

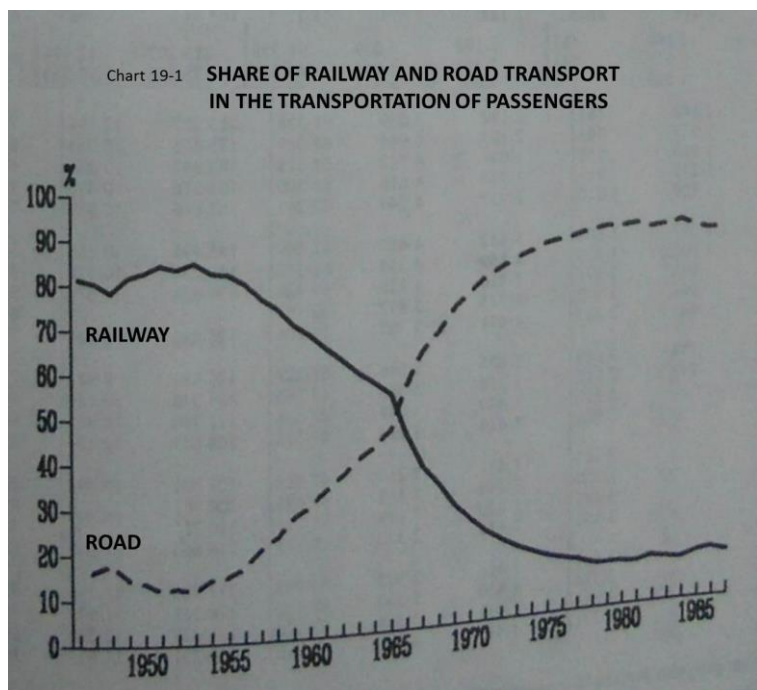
The important question is whether the ideologically motivated plan for equalizing all the regions was realized in practice? Were there any unexpected spin offs of these egalitarian intentions? I should point out that even in the initial plan with the explicated goal of creating one nation and connecting all the republics, the main axes related Belgrade and Zagreb, Serbia and Croatia, the most antagonistic states but also the most industrialized ones (together with Slovenia).

¹⁹ Marko Miljkovic. Western technology in a Socialist Factory: The Formative Phase of the Yugoslav Automobile Industry, 1955 -1962. (MA thesis, CEU, Budapest, 2013), p.87

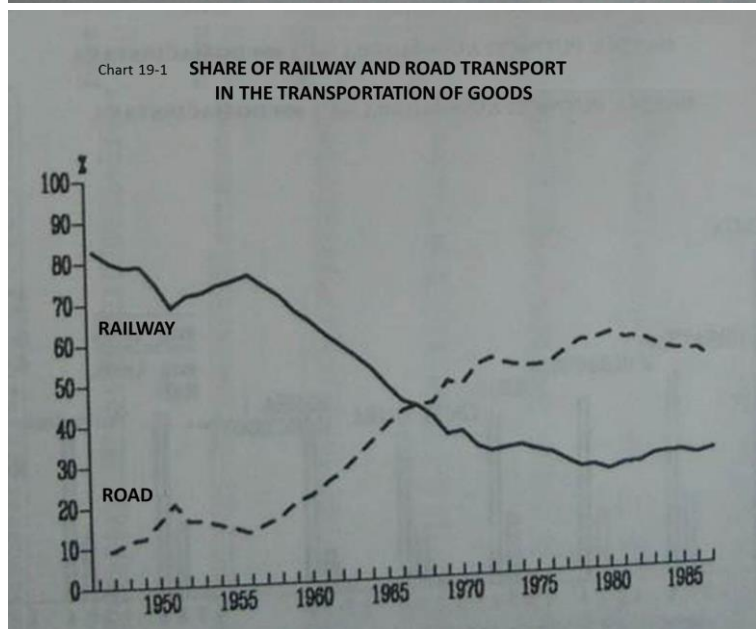
²⁰ Ibid., p.75

3. The Road Infrastructure - the Centers and Peripheries

The construction of roads, as it is evident from the following graphs, is clearly a priority for the socialist Yugoslavian Government. Railway transport was predominant at the beginning of the period, but it was reduced at the cost of increasing auto-transport infrastructure.



21



²¹ Savezni Zavod za Statistika, *Jugoslavija 1918 – 1988 Statistički Godišnjak* [Yugoslavia 1918-1989. Statistical Yearbook], Beograd 1989, 281 - 285

Let us take a closer look at the graphs. As we see in table Chart 19-2. (Share of the Railway and Road transport in the transportation of goods) we observe a clear trend. Although the biggest part of the investments for the recovery of the infrastructure destroyed in WWII was thoroughly concentrated onto the railway network, the usage of the railway system even at its very restart is commencing to fade. During the second war “over 50 per cent of the railway trackage, 77 per cent of locomotives and 84 per cent of good wagons had been destroyed...By the end of the 1946, however, 90 per cent of the prewar railway network was back in use...”²² in the context of the rapid industrialization and attempt at electrification following Lenin’s guiding light motto “Communism is Soviet power plus the electrification of the whole country, since industry cannot be developed without electrification.”²³

And yet the destiny of the railway transport had already been determined. According to the Transport Commission by the Government of FPR of Yugoslavia in a report from 1948 “The public transport is of great importance, especially in our conditions – if you take a look only 10 % of the settlements in Federal People’s Republic of Yugoslavia have access to railway or marine transport and that means that 90 % of all populated areas must be connected via transport, primary by the means of auto-transport.”²⁴

By 1966 the process of the downfall of the railway system and the arising dominance of the auto-transport for goods transportation had been already finalized. One year later in 1967, the railway era was over for the passengers as well (see Chart 19-1). The scissors between automotive and railway transport would never close again even after the Fall of SFRY.

Nevertheless, the symbolic power of the locomotives and the railway system would never stop playing a role in the Yugoslav imaginary. Such example is the forthcoming large-scale railway project of the Belgrade-Bar railway officially opened in 1975. The project was initiated by the Montenegrin and Serbian Central Committees and raised the suspicions of the Slovenian and Croatian politicians, who claimed it was a nationalistic “Great Serbian” project:

“Although it had figured in every postwar development plan, only two brief sections at each end, from Belgrade to Valjevo and from Bar to Titograd, had so far been built. The

²² Rusinow, *The Yugoslav Experiment*, (London: C. Hurst & Company, 1977), p.19.

²³ Vladimir Lenin, Volume 31 of the *Lenin’s Collected Works 4th English Edition*, (Moscow: Progress Publishers, 1965), 408-426; last accessed August 4th www.marxists.org/archive/lenin/works/1920/nov/21.htm .

²⁴ Комитет за Ауто-саобрачаја при Влади ФНРЈО Пов. Бр. 183, Београд 10 март 1948; помоћнику министра Саобрачаја ФНРЈ; Образложење ус предлог за организацију ауто-саобрачајне службе у ФНРЈ/ Опште напомене [Committee for Auto-transport by the Government of FNR Yugoslavia].

construction of the rest through extraordinary difficult mountainous terrain was clearly the main purpose of an unprecedented formal agreement on inter-republican co-operation in economics, culture and education signed in December 1963 by the Serbia and Montenegrin Party Central Committees. The agreement was inevitably interpreted by others as evidence of a Serbian-Montenegrin conspiracy by ‘Greater Serbian nationalists’, whose short-run objective was to forestall the abolition of and pre-empt the use of centralized investment funds.”²⁵

I am giving here the example of the Belgrade – Bar railway as evidence for the hypothesis that often decisions for building or not building a particular large-scale projects did not necessarily follow either rational-economic interests or the “Brotherhood and Unity” agenda. It is not a matter of coincidence that the first sections being built were the first part connecting the center Belgrade with the mediaeval Serbian city of Valjevo, which was about to become an important military industrial city, and the last section, which was connecting the coast city of Bar with the newly renamed city of Podgorica, now bearing the symbolic unifying name of Titograd. Additionally, the very realization of the whole project represents the rising tensions between the different republics and their political representatives in the context of the 1963rd and 1974th constitutions, which gradually expanded the autonomous rights of every federation unit.

Before I comment more in depth on that, let us continue a bit further with quantitative data from that time.

²⁵ Rusinow, *The Yugoslav Experiment*, 134.

19-6. MREŽA PUTEVA

u km

	SFR Jugoslavija	SR Bosna i Hercegovina	SR Crna Gora	SR Hrvatska	SR Makedonija	SR Slovenija	SR Srbija			
							svega	terit. SRS van terit. SAP	SAP Kosovo	SAP Vojvodina
UKUPNO ¹⁾										
1951	71 400	6 195	1 865	27 381	2 203	9 830	23 926	17 590	2 195	4 141
1955	81 681	11 156	2 416	18 898	5 582	18 086	25 543	18 660	2 333	4 550
1960	82 353	11 551	3 067	19 644	5 665	16 742	25 684	18 791	2 352	4 541
1965	78 505	11 661	2 621	19 169	6 482	12 624	25 948	19 141	2 366	4 441
1970	91 289	9 469	3 018	23 440	6 833	12 692	35 837	25 253	3 016	7 568
1975	100 706	10 395	3 332	26 087	7 773	14 139	38 980	27 324	3 878	7 778
1980	113 673	18 528	3 472	27 242	9 879	14 650	39 902	28 529	4 371	7 002
1985	117 744	20 590	4 145	28 669	10 417	14 113	39 810	28 719	4 958	6 133
1987	121 127	20 889	4 513	32 497	9 961	14 140	39 127	28 103	4 981	6 043
PUTEVI KOJI IMAJU SAVREMENI KOLOVOZ										
1951	2 318	42	10	944	14	652	656	343	18	295
1955	3 391	123	13	1 200	181	909	965	499	26	440
1960	6 844	537	296	1 977	508	1 669	1 857	1 081	112	664
1965	12 950	1 251	616	3 553	883	2 506	4 141	2 511	270	1 360
1970	24 214	1 973	777	7 357	1 588	3 594	8 925	5 291	743	2 891
1975	39 365	4 813	1 195	11 448	2 609	5 199	14 101	9 090	1 243	3 768
1980	56 322	7 742	1 669	16 532	3 637	7 922	18 820	12 859	1 635	4 326
1985	66 999	9 535	2 414	19 952	4 461	8 890	21 747	15 165	1 830	4 752
1987	71 225	10 382	2 655	22 193	4 577	9 403	22 015	15 210	1 904	4 901
AUTOPUTEVI										
1970	9	-	-	-	-	-	9	9	-	-
1975	101	-	-	51	-	41	9	9	-	-
1980	386	-	-	132	58	53	143	143	-	30
1985	680	10	-	311	64	93	282	252	-	34
1987	806	10	-	348	64	198	286	252	-	34

¹⁾ Nekategorizirani putevi su pod statičkim mrežom, a njihova kategorizacija nekategorizovanih puteva u kategorizovane i obrnuto. Ova kategorizacija je obično na osnovu izlaza i ulaza u puteve i stalni izvor finansiranja, te su izmene u dužini lokalnih puteva u skladu sa izmenama u kategorizaciji.

Chart 19.6 shows us the Road Network in kilometers in Yugoslavia in total and per each Federal Unit from 1951 until 1987. The last column for Socialist Republic of Serbia is subdivided in 4 parts – Total number of roads in the territory of the Socialist Republic of Serbia; Socialist Republic of Serbia without the Socialist Autonomous Provinces of Kosovo and Vojvodina; the Socialist Autonomous Province of Kosovo; and the Socialist Autonomous Province of Vojvodina. The first table shows the total number of roads, the second - the roads with modern infrastructure (understood as multiple layers of surface, mostly with asphalt/concrete on the top) and the third one - the Highways.

Following the observations from Charts 19-1 and 19-2 it could not be much of a surprise that the total number of roads, modern roads and highways (since the 1970s) gradually rises. As stated before, with the decline of the Railway structure the Road infrastructure begins to

²⁶ Savezni Zavod za Statistika, *Jugoslavija 1918 – 1988 Statistički Godišnjak* [Yugoslavia 1918-1989. Statistical Yearbook], Beograd 1989, 284

substitute it. By the end of the period the total number of roads throughout SFRY had almost doubled. And yet we have clear disproportions between the different federal republics and autonomous provinces. Throughout the whole period, regardless of the actual stand of roads after the Second World War the infrastructural backwardness of one part of the federal units has not been overcome and even has rapidly intensified. For instance, if we double the size of Kosovo and compare it with Slovenia in 1987, the former has less than half the roads of the latter, modern ones and in total. The numbers diverge even more radically if we look at highways. Montenegro (Crna gora) together with Kosovo do not have a single kilometer of highways, Bosnia and Herzegovina has 10 km of highways, Vojvodina 34 (connecting Novi Sad with the centre Belgrade), Macedonia 64 compared to 243 in Croatia, 252 in Serbia and 198 in Slovenia. Some might say that Montenegro and Bosnia and Herzegovina were very mountainous and difficult to access regions which hindered the possibility of road development. Yet, this logic could not explain why the lowlands of Macedonia and Kosovo were in a similar position throughout the whole period. Furthermore, considering the example of the Belgrade – Bar Railway, which I have mentioned above, regardless of the difficulty of this project, it was brought to realization in 1975. Even only on this basis we can conclude that the declared “Brotherhood and Unity” motto, which was the main principle for all Yugoslavs since 1943 until its disintegration, has never been realized in terms of auto-transport infrastructure. We could observe a constant trend of ‘peripherization’ of the federal units of Macedonia, Bosnia and Herzegovina, Kosovo, Montenegro and partly Vojvodina as opposed to the centers Belgrade, Zagreb and Ljubljana. The reasons for that radical difference within SFRY are diverse and here I would not be able to consider them all. My aim in this paper is to focus the scholarly attention on understanding former Yugoslavia, but also other socialist/communist societies, through the infrastructural optic, which enables us to understand phenomena such as the hidden power hierarchies in the infrastructure, expressed in such distinctions as Centre - peripherization, backwardness vs. forwardness, national identity and conflicts.

In order to leave the reader’s curiosity not completely unsatisfied I will provide some possible arguments for these drastic divisions within former Yugoslavia. In the first years of the FPR of Yugoslavia there was a huge problem with the lack of cadres, many of which were killed during or after the war or were imprisoned or expelled from the country for their German origin or presumable collaboration with the fascists. That led to unintentional centralization of the infrastructure development bureaus in the cities where still some number of professionals

were living. By definition those were Belgrade, Zagreb and Ljubljana. In a document called “On the organization of the transport spheres” by the Commission for Transport at FPRY (in practice the Ministry of Transport of FPRY) from 1950, one reads: ”The bureaus, institutes or establishments for planning of roadways and bridges must be organized in those people’s republics, where there is already a developed road infrastructure. In the rest of the people’s republics instead of opening particular units we must form branches and strengthen the departments for planning of roads and bridges by transforming them into permanent planning organizations.”

Another possible explanation is the emerging tensions between the political and economic elites of the different federation units. These decentralization attempts carried the name “republicanism” from the 9th Party congress in 1969, but were de jure defined already in the 1963 constitution and reaffirmed and expanded with the forthcoming constitution of 1974. “The once monolith Union of the Yugoslavian Communists (my remark - CPY) has differentiated itself to 6 + 2 national parties. The Federal Executive Council has transformed from a Union Government into a coalition government.”²⁷ These tensions triggered a process of more protective and cautious policy by the individual republican governments and parties and, thus, undermined the redistributive functions of the Central government of Yugoslavia in Belgrade. “To the mission of the Transport committee pertains the endeavor for developing the road network of FPRY – on first place the Union roads.”²⁸ Yet, we can assume that the priority of building Federal roads in the first place was gradually either circumvented or used for reenforcing internal republican networks.

Finally and curiously, my initial supposition that there is a correlation between the origin of the members of the Central Committee and the auto-transport infrastructure development of each federal socialist republics proved wrong. The proportional number of the Montenegrin members of the Central committee was the highest compared to the size and the population of the republic and yet it did not have much influence in terms of road infrastructure.

Such documents and the cited above data show that the goal of building a Brotherhood and Unity transport network as a tool for overcoming regional differences was not achieved; on the contrary, the newly build auto-transport infrastructure deepened the already existing

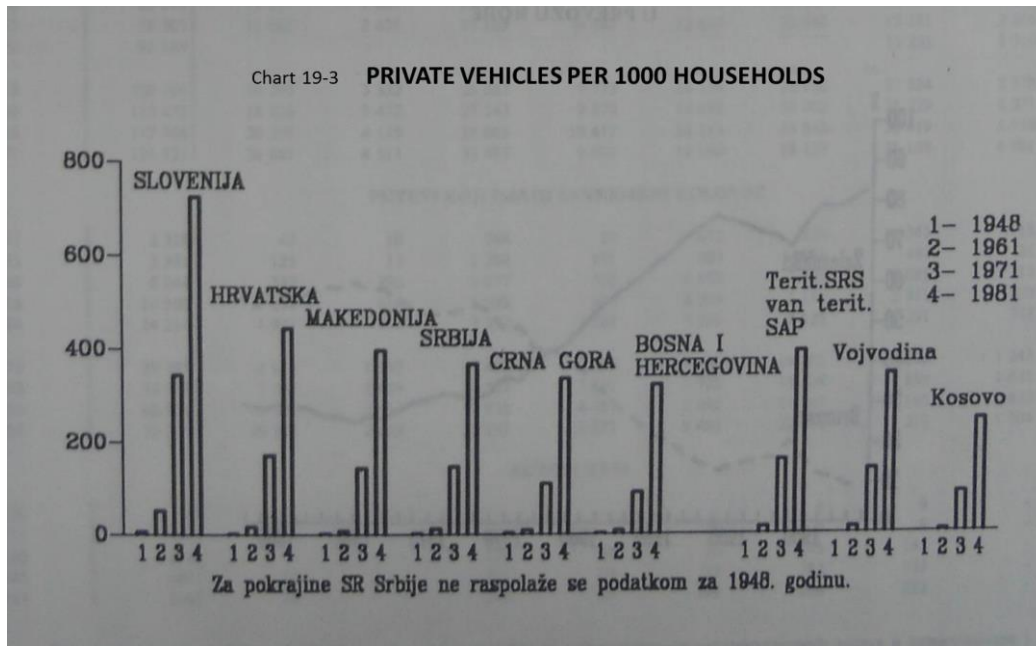
²⁷ Branko Horvat, „Nacionalizami nacija,“ *Gledišta* 12(5/6), (1971): 773 [Nationalism and Nation]

²⁸ Комитет за Ауто-саобрачаја при Влади ФНРЈО Пов. Бр. 183, Београд 10 март 1948; помоћнику министра Саобраћаја ФНРЈ; Образложење ус предлог за организацију ауто-саобраћајне службе у ФНРЈ/ Опште напомене [Committee for Auto-transport by the Government of FNR Yugoslavia].

economic and symbolic differences among republics and various localities of socialist Yugoslavia. The notion of universal connectedness, ensuring equal access to all, or at least to most Yugoslavian settlements, turned out to be a utopia.

4. The Expansion of Automobility and its Consequences

29



Contrary to the picture we have seen in the previous part, the situation with the transport vehicles is different. If we take a look at Chart 19-3 and 19-9 we could again see some clear trends. At first glance it becomes clear that the gap between the most developed People's Republic of Slovenia and the least developed one – the autonomous province of Kosovo is comparable to the state of auto-transport infrastructure throughout the whole period. As shown in Chart 19-9 the possession of personal vehicles in total numbers continues to be in favor of the Centre – Belgrade, Zagreb and Ljubljana as opposed to the Periphery – Kosovo, Macedonia, Montenegro, Bosnia and Herzegovina and in part Vojvodina. Still, the total numbers of private automobiles increases everywhere as a result of the mass production of the affordable Yugoslav car “Fićo”. If we examine table number 19-3, the differences between the republics in regard to number of vehicles per 1000 households is relatively stable except for the bottom and the top – Slovenia and Kosovo. For instance Macedonia climbs up to the third place, surpassing Serbia, despite the poor infrastructure as shown previously. The same applies also for Montenegro and Bosnia and Herzegovina. In total, with the exception of

²⁹ Savezni Zavod za Statistika, *Jugoslavija 1918 – 1988 Statistički Godišnjak* [Yugoslavia 1918-1989. Statistical Yearbook], Beograd 1989, 286

Kosovo, over one third of the households in all of the Republics were in possession of a private automobile. That leads us to the paradox that even in an underdeveloped infrastructural environment the possession of personal automobiles was increasingly growing. Furthermore this paradox was in correspondence of the above mentioned decentralization process under the name of “republicanism”. The concept of the decentralization of the single republic units is equivalent to the emancipation of the individual from the socialist collective body. The more liberal Yugoslavia was becoming, the less collective idea of Yugoslavia was possible to continue existing. In the words of the Yugoslav scholar Laslo Sekelj: “For possible turn to dictatorship, party monopoly *is not acceptable in present form* of polycentric statism for two reasons: since dictatorship cannot be polycentric, it requires classic type of Bolshevik centralism, which cannot function in form other than monolithic, strictly hierarchical party and classic unitarian state. Another reason is legitimacy: a basis for legitimacy of dictatorship is *work and order*.”³⁰

³⁰Laslo Sekelj. *Jugoslavija Struktura Razpada*, (Beograd: Izdačko preduzeće rad, 1990)

Chart 19-9 REGISTERED MOTOR PRIVATE AND AGRICULTURAL VEHICLES PER REPUBLICS AND AUTONOMOUS PROVINCES

	SFR Jugoslavija	SR Bosna i Hercegovina	SR Crna Gora	SR Hrvatska	SR Makedonija	SR Slovenija	SR Srbija			
							svoga	tent. SRS van terit. SAP	SAP Kosovo	SAP Vojvodina
PRIVATE VEHICLES										
1946	6 238	344	102	1 648	207	1 994	1 943	...	...	...
1947	6 634	574	153	1 452	286	2 077	2 092	...	...	...
1948	7 195	710	195	1 804	340	2 511	1 635	...	...	...
1949	7 252	775	206	1 931	360	2 414	1 566	...	...	...
1950	6 455	841	206	1 840	320	2 060	1 188	...	...	...
1951	6 916	295	122	2 031	320	2 071	2 077	...	...	...
1952	8 542	648	196	2 347	353	2 522	2 476	...	...	...
1953	10 171	901	245	2 910	395	2 785	2 935	...	...	...
1954	11 290	947	282	3 139	506	2 898	3 518	...	...	...
1955	12 622	1 334	337	3 199	612	3 202	3 938	...	...	...
1956	14 664	1 398	401	3 595	694	3 557	5 019	...	...	...
1957	21 570	2 039	484	5 983	912	5 123	7 029	...	...	...
1958	28 394	2 417	504	7 907	1 065	7 440	9 061	...	...	...
1959	39 022	2 982	700	10 585	1 265	11 184	12 306	...	...	...
1960	54 257	4 065	735	15 323	1 552	14 528	18 054	...	...	...
1961	78 085	5 886	1 185	21 638	1 745	22 607	25 024	...	...	...
1962	97 942	6 660	1 364	25 139	2 963	30 874	30 942	...	...	...
1963	112 534	7 399	1 759	28 499	4 179	35 200	35 498	...	...	...
1964	141 792	9 782	2 186	34 530	8 189	43 065	44 040	31 418	1 286	11 336
1965	187 842	13 558	2 511	46 438	11 220	55 391	58 724	41 122	1 756	15 846
1966	254 344	19 802	3 246	61 034	14 230	68 022	87 010	62 009	2 812	22 189
1967	355 875	27 509	4 685	90 587	18 165	85 014	129 915	92 933	4 356	32 626
1968	439 892	34 902	6 275	110 532	23 645	94 774	169 764	121 809	6 312	41 643
1969	562 509	44 855	8 592	147 270	31 077	122 279	208 436	147 469	8 088	52 879
1970	720 874	60 883	12 032	184 068	40 975	150 807	272 109	191 606	11 443	69 060
1971	875 365	77 275	13 504	222 737	51 163	177 284	333 402	232 124	16 162	85 116
1972	1 001 596	95 683	16 449	256 546	58 338	198 493	376 087	259 122	17 031	99 934
1973	1 140 532	111 353	18 812	286 589	70 573	227 981	425 224	292 523	18 992	113 709
1974	1 332 972	139 047	21 747	324 008	92 103	251 110	504 957	344 146	23 727	137 084
1975	1 536 677	173 779	26 158	368 788	100 032	270 732	597 188	401 782	29 789	165 617
1976	1 732 131	194 734	29 412	405 471	115 126	306 015	681 373	453 488	34 311	193 574
1977	1 923 904	219 032	33 906	463 606	127 365	323 554	756 441	508 541	35 162	212 738
1978	2 132 327	237 849	37 050	521 722	132 806	366 394	836 506	560 472	39 635	236 399
1979	2 259 966	261 123	36 462	549 258	150 720	389 192	873 211	611 426	44 590	217 195
1980	2 433 922	303 848	45 794	584 173	167 281	416 448	916 378	641 508	49 590	225 280
1981	2 567 961	334 230	48 313	633 753	173 157	430 132	948 376	658 407	56 117	233 832
1982	2 702 628	327 861	53 122	679 162	207 410	448 315	986 758	684 578	54 833	247 347
1983	2 770 739	347 259	54 219	652 705	218 842	466 003	1 031 711	717 554	57 153	257 004
1984	2 874 010	360 283	56 157	679 317	235 311	489 373	1 053 569	718 775	64 072	270 722
1985	2 824 267	364 860	54 114	652 625	243 099	480 277	1 029 292	721 358	54 401	253 533
1986	2 957 116	372 021	58 051	712 795	248 872	490 312	1 075 065	757 834	57 741	259 470
1987	3 023 693	353 579	54 088	716 268	262 069	514 456	1 123 233	781 889	70 275	271 069

31

The fast development and quick spread of automobility in all the Yugoslav republics could be regarded as a sign of orientation of Yugo society towards consumer culture. This is confirmed by the fact that as early as "1959 roughly 45% of all contracts were oriented to the production of mass consumer goods which is important proof of a structural change in Yugoslav industry, which during the 1950s switched from heavy and military industry to a civilian program and consumer goods.³² This is due to the fact that workers themselves wanted to produce consumer goods, not those, related to military industry: "According to the official history, on August 26, 1953, 94 % of roughly 5,000 workers of the Crvena Zastava factory decided on a referendum held on one of the workers councils to change the existing program of weapons and ammunition production and to start the production of passenger automobiles."³³

³¹ Savezni Zavod za Statistika, *Jugoslavija 1918 – 1988 Statistički Godišnjak* [Yugoslavia 1918-1989. Statistical Yearbook], Beograd 1989, 286

³² Marco Miljkovic. *Ibid.*, 63.

³³ Marco Miljkovic. *Ibid.*, p. 63

Consumer culture is related to liberal values such as individual freedom, personal and family strives for prosperous life, good social status and standard of living. Those values reject collectivist utopias of the new socialist nation based on "producing one working man - a socialist man." - see the above mentioned Tito's citation. This is in line with Marco Miljkovic argument in his forthcoming book *Automobile is Freedom: the production and spread of the Yugo Fiat, called Zastava and having the nickname Fica*, influenced the development of personal and civil liberties in socialist Yugoslavia.³⁴

The number of private vehicles per 1000 households shows the rise of consumer and liberal values on the one hand. On the other, it represents the differences in the quality of life among the different federal republics, in spite of the declared egalitarian values. All the republics start with the same small number of private vehicles per 1000 households in 1948, and then it is clearly seen that Slovenia is developing way too fast while in the back are Kosovo and Bosnia and Hercegovina. Perhaps, when travelling through Yugoslavia, these differences became evident, so this again undermines the notion of a "Yugo" identity, as declared a leading postulate in the Brotherhood and Unity agenda. Regardless of the lofty modernization attempt the auto-transport politics of Yugoslavia will never stop to reflect Orwell's phrase from *Animal Farm*, paraphrased by me, "All republics are equal, but some are more equal than others".

5. Conclusion

The construction of auto transport infrastructure could not fulfill its ideological functions of connecting all the republics. Something more, it embedded the hidden political and social hierarchies, linking the capitals of the most influential, but also historically hostile republics on one side; on the other, the building of infrastructure was dependent on the will of the politically strong figures of the day. The impact of the built infrastructure increased with the orientation of Yugoslav economy, after the Tito - Stalin split, towards specific market relations, giving advantages to already developed regions, provoking economic tensions among the Yugoslav republics. In that way the socialist egalitarian ideology clashed with the logic of market orientation and the egalitarian perspective lost the battle; thus undermining the "Yugo" identity and the notion of imagined "Yugo" community. Additionally, the utopian map of the new society, trying to equalize all the regions and places, was blown up by the

³⁴ Marco Abram. Zastava Car is Freedom. Interview with Marko Miljkovic, in *Osservatorio Balcani e Caucaso*, Febr. 24, 2014

reality of the consumer society, whose symbol became increased automobility. Automobility, together with the development of consumer culture, enhanced new liberal values, such as focus on individual freedom, personal and family strives for prosperous life, good social status and standard of living. This also led to the breakdown of the collective “Yugo” utopia.

In the case of former Yugoslavia the “Brotherhood and Unity” highway and the first class road network connected indeed the capitals of Slovenia, Croatia and Serbia and peripherized Bosnia and Herzegovina, Monte Negro, Kosovo and Macedonia. Thus it additionally reinforced the already industrialized regions and neglected the less developed ones. The result was autonomization of the republics, tensions among them, which created prerequisites for future conflicts.

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