URBAN TRANSPORT IN TBILISI (GEORGIA) – TRAITS FOR THE PORTRAIT OF CHAOS

Tbilisi – the Capital of Eastern Georgia (Iberia) since 502 A.D., was founded at the place of hot sulphur springs in the dramatic ravine of river Mtkvari. The City had created self-distinctive Urban Culture during the centuries, distinguished by its ethnic and confessional tolerance, susceptible to the cultural influences, by its original arts (poetry, music), with unique, extravagant social fellows, numerous Guild Corporations, with strict moral and behavior Code of the townsfolk. In the middle ages, it was indeed “Liberate Town,” at one time (in XI- beginning of XII c.c.) performing Self-governmental practice, in other times enjoying privileges granted by the Georgian Kings.

Today Tbilisi – prior being called Tiflis – the Capital of Georgia with the population of 1.081.679 (according to the Census of 2002) and with the area of 366 km. q. Some morphological zones are precisely detached in spatial structure of the City.

- Feudal Town (till XIX c.);
- “Capitalistic” Town (XIX – beginning of XX c.);
- “Socialistic” Town (1920 years – end of XX c.);

Ten years of independency practically have no reflection on the spatial structure of the city and limited itself only to erect different buildings and complexes.

Historically formed City is taken in the Zone of State Protection; buffer part is covered by the Zone of Development Regulation; there is a Protective Zone of Natural Landscape as well. All Zones are made up in 1985. General Plan of 1970 is still performing as de jure, which has been prolonged by the Decree of the President of Georgia until January 1, 2004.

Tbilisi is divided into 5 administrative districts. Self-Governance is carried out on the City level through the City Parliament; the Head of executive Body – Mayer – is appointed by the President of Georgia.

During the Soviet period major matters of the transport service of the City were regulated by the General Plan and by its component – Complex Transport Schemes. Ideology of the urban development gave priority to the restriction of transport mobility of citizens (s.c. “Method of secluded labor balance”) inside of a large-scale self-sufficient planning units – after the analogue of
Swedish system ABC – Arbeiter Bustad Centrum) and public transport. The Standards and Rules of Construction determined perspective amount of private automobiles.

Simultaneously all kind of public transports had been extended in Tbilisi – Metro, bus, trolleybus, train, mobile pavement, taxi, and taking into consideration the relief of the City – cableways. There is cable railway built by Belgians at the beginning of XX c. In any case, transport system in Tbilisi worked quite adequately.

Today transport service in Tbilisi could be characterized only by one word – chaos; the prospects for its improvement is indeterminate. It is obvious to make a reliable diagnose it requires detailed examination; the present report is just dedicated to that purpose.

**Spatial Planning Aspects**

Tbilisi belongs to the category of Linear Cities, to which were striving the most inspired urbanists as had been – Soria-i-Mata in Spain, Ladovsky in Russia, Kenzo Tange in Japan. Despite of chronological and geographical “scattering,” they were all moved by one common sense – theoretically, Linear Cities better fit transport service, than their typological antipodes - Compact Cities – being either radial-circular or “Chess board” type.

However, this immanent advantage of Tbilisi not only is utilized but also is being wiped out due to the irreversible unintelligent activities of Government and irresponsible decisions of architects.

In Georgia, it is custom to be proud of transport-communication functions of the country. In fact, such a large-scale international initiations and projects as Great Silk Road, TRACECA and others really come true. Though, in the case of referring to Tbilisi, trucks and lorries do not use roundabout of highway because of its deplorable condition, but transit through the only City’s highway – embankments of the river Mtkvari.

Tbilisi is developed along the main longitudinal vector with double parallel berries – natural one (r. Mtkvari) and artificial one (railway). This peculiarity also obstructs diametrical connections and functional-spatial integration of the City’s territories. Thus, within the bounds of central part of City latitudinal connection is impossible at the distance of approximately 5 km. of railway. The City had a good opportunity to improve this condition even in Soviet epoch, “To drown” the Central Railway Station under the ground, like it was being done just even then in the European cities. Though, the new building of station had been erected aboveground, which finally fixed the division of the City territory.

Dramatic relief and formed structure of Tbilisi make trouble to the intersection of transport links. One of such links roundabout the center were considered by the General Plan between two huge
settled districts – Saburtalo and Vake. Though, multistoried living house had been directly erected at the mouth of the presented highway, which “corked up” this idea forever.

Dramatic relief of Tbilisi had been wonderfully utilized by urbanists of previous epoch – there were left some ‘Channels” securing convection, cool mountain stream. Now, commercial constructions shielded these channels, remarkably worsening aeration of housing blocks including the pollution. In general, ventilation problem of Tbilisi is an essential matter of life –windless days the heavy smog like a bowler stagnates over Tbilisi, which affect badly on habitants health.

Meanwhile, the central districts of Tbilisi already experience upgrading transport freight, those territories, which could secure the system of Park and Ride or to build new bridges, the commercial buildings or different kinds of units are under constructions.

In the last period of the Soviet regime a new trend of settlement were mapped out - massive constructions of cottages in the suburb zone. A spendthrift triangular made a shape according to the World Standards: flat in Tbilisi – garage in the yard of multi-flat house, cottage in the country. There it is made as a rule, to build garages separately in the yards violating all Norms and Rules of construction, at the expense of greeneries, children playgrounds and public spaces. It is paradox, but the legislation of Georgia implanted such immoral practice as Civil Code of Georgia (1977 y.) which justifies infringes of public interests: “Automobile parking lots are deemed separate if their boundaries are outlined as a result of longtime use” (p. 208.4).

New developments ignore interests of City transport system. Outward trade permitted by authorities actually without any limitation, makes paralyzed the center of Tbilisi, decrease transpass availability of City transit highway – embankment of river Mtkvari, occupies green areas, sport facilities - even such ones as National Stadium is. All streets in the central zones are actually turned into parking lots.

Underground passages are being privatized and are under constructions, which results turning them into narrow labyrinth or unsanitary hearth; public spaces in front of Metro Stations; even the pavements at the cross roads, that deprives drivers from the visibility and cause some accident situation.

Some international bus terminals are appointed by the owners of bus companies themselves at casual places; despite, that there are special well-appointed bus stations in Tbilisi.

Peculiar transport troubles are produced by new commercial multistoried living houses, which are squeezed into historically formed structure in the prestigious districts of City. Residents of these districts are already felt themselves extremely uncomfortable from such adjusted neighborhood,
what begins to reflect at the market price of flats. These new houses could be named as “Houses-suicides.”

A lot of living premises, particularly on the ground floors at central streets are being adapted as Offices, Bureaus, Restaurants, Casinos, Beauty Salons, etc. However, the parking lots are not considered either in front of them or somewhere nearby.

In the whole from the position of semiotics, Tbilisi is losing architectural-planning articulation and is turning into provincial-delinquent slang.

**Legislative Base**

According to the Organic Law of Georgia “On Local Self-Governance and Governance” (1977): “To exclusive competences of local self-government bodies belongs: <...> assistance for organization of transport services of population; <...> repair, reconstruction and building of local roads.”


The Law of Georgia “On the Road Fund” defines the sources of financing this special non-budget Fund:

- Tax for usage of common roads;
- Tax for owners of traffic facilities;
- Tax for entry of traffic facilities on the territory of Georgia etc.

What concerns to the design and construction normative for the city street network they have not been changed since the Soviet period.

**City Street Network**

Street network of Tbilisi prior was classified according to the Soviet standards, though these demands for Tbilisi yet even then were unrealistic due to its complicated relief and formed structure. Now, shift down has happened in this classification – outward transit from roundabout highway moved to the embankments, while inner traffic – at the central streets.

Condition of pedestrians zones and pavements of the City streets are worsening catastrophically, particularly outside of downtown. But even at the central streets drivers happen to maneuver not to plunge either into the open hatch or into groove and along with it not to crash against a car to the next row. Marked line of the traffic part, in general absents, as well as night illumination.
Pavements and crossing ways are unfitted for invalid’s carriage transportation; and what is more, a great number of new owners arrange obstructive stairs on the pavements in front of their premises.

**Management/Administration**

For the regulation of road traffic in Tbilisi is responsible special subdivision of police – Traffic Police. According to the information presented by WB, this is the most corrupted sphere in Georgia (It should be mentioned that the number of bribes for construction permits follows them.). In spite of impressive number of traffic policemen – they do not appear in streets as traffic-controllers, throughout such a frequent switching off electricity. Instead of traffic regulation, they are engaged in making traps and ambushes to drivers to collect bribes.

Technical inspection of cars in the whole takes formal character. Traffic signs are losing among the brightness of advertisements and the crowns of trees. Traffic police operates with the most primitive forms of traffic regulation – for example, some traffic-lights are abolished at the central streets of Tbilisi, as a result there is no passageway for pedestrians at the distance approximately 500 m (one underground passageway has been poured over for some years); double separating axis line is made without future consequences.

Under these conditions self-organization of the traffic gets ugly character. For sample, trolleybus rolling ends by 7 o’clock p.m. to turn traffic road into parking for casino; taxi drivers push away public transport from country zone terminal; despairing habitants of houses, which were damaged seriously by Tbilisi earthquake of 2001 year, by their own way lock the traffic in the streets, as they are scared of collapsing the wrecked houses in result of traffic.

Information component of transport system is beneath criticism, all the more that our language, at the first place inscription of letters, belong so called “closed” languages, absolutely inaccessible for the rest Nations. Such informatics approach is not favored the development of tourism at all.

**Economic and Finance**

It is habitual to blame the modest budget of the City for the deplorable condition of urban environment and transport service. But it is not so - to be exact, transport system is enabled to bring in significant income for the City. Due to the official data, the sum collected in Tbilisi budget in 2002 from parking lots compiled at all 209,500 $US (instead of planned 380,000 $ US), 574 $US per day. No special survey has been conducted to find out the possible income from the most spread and expensive public transport – mini-buses.

It is characteristic that the price for travel by all kinds of public transport (but taxi) is not defined in the consequence of distance. In taxies the meters do not work, payment happens on the bases of verbal arrangement with drivers.
Professional Training

At present there are no experts in urban transport systems in Georgia, having ability to solve the appropriate problems during elaboration of new General Plans. Even earlier then, all Complex Transport Schemes Included in General Plans were elaborated by invited experts. Therefore, the need of local personal training and foreign experts consultations exists sharply.

Ecological Problems

According to some estimation, Tbilisi is recognized in the mean of ecology unfavorable city in Europe.

Today, for the reason of industry stagnation, major polluters of air-basin in are considered automobiles in Tbilisi. The causes of it are well known:

- Low quality and high toxicity of petrol;
- Continual disrepair of car-engines, most of them secondhand, imported from Europe;
- Reduction of green spaces;

Social-Psychological Aspects

Social-psychological aspects of transport system functioning at the time of the Soviet regime were not taken into the consideration. Today, in the independent Georgia, it is clear, that type of culture has the significant meaning – culture in the sense of sociology. In this context it is essential, that the majority of population in Tbilisi are marginal, the first-second generation city-dwellers, yesterday’s rural migrants. If for urbanites law obedience is internalized demand (let’s remind a proverb – “Who desires freedom, should obey Laws’), for the marginal law, as well as order in the whole, is just inconvenience. Such situation has an effect upon the special behavior of the population, upon the City atmosphere and the transport systems. There are obvious trends of functional profanation in Tbilisi – crossing the central avenues at will – prior unthinkable –have become habit, traffic police does not pay any attention to it, the automobiles feel free themselves on the pavements. There is a sign of desacralization of Metro, which in the Soviet period had a status of “underground temple.” The personal of order security bodies – for instance, police - are violating traffic rules more often than others - this “right” has become component of theirs professional ethic. In state of intoxication at wheel turned into social norm and is not condemned by society. Neither pedestrians nor drivers pay any attention to traffic lights signals at most.

Types of City Transport

A short revue of main types of City transport in Tbilisi is given in table №1. A brief comment according to the transport types are as follows:
a) **Railway** under the conditions of Tbilisi has not become city transport means, though significant parts of City’s districts are “thread” on it. Moreover, railway does not play essential role even in agglomeration connections, commuter’s service, so as by the series of urban planning conceptual reasons

b) **Metro** – by its immense work throughout the most difficult period of independency rescued Tbilisi from functional-spatial disintegration. At that times practical absence of surface transport, radius of Metro service had enlarged and covered significant part of the City. Even today, Metro carries out a major part of passengers’ transportation from mass dormitory suburbs to the downtown.

c) **Tram** is considered as archaic kind of transport in Tbilisi, in spite of its revival in the countries of Europe. There are left only several routes of tram peripheral zones of the City.

d) **Trolleybus** very “contradicted” and capricious transport - despite of obvious ecological advantages it does not play essential role for the reason of low speed, frequent stoppage caused by electricity breaks, poor conditions of contact nets, long running traffic intervals (approximately 20 minutes). It is actually social, charity transport, which mainly is used by retired persons, IDP’s and other socially unprotected categories of population – only 20% of them are available to pay scanty price for traveling. Interesting indicator – pickpockets shifted from trolleybuses to the taxies on a fixed root.

e) **Bus** – in the case of Tbilisi this is non-guaranteed type of transport because of long intervals between running (about 20-25 minutes). It is also essential as well, that buses purchased by the City are more suitable for excursions then dynamic urban rhythm.

f) **Minibuses (taxi on a fixed root)** – basic and the same time, the most problematic above-ground public transports. At present more than 3,000 minibuses are working. Actually routes are appointed at owners will – without consideration of urban situation, or coordination with other transport facilities. A great number of transmits are running via downtown, for that reason minibuses are running throughout the central streets like conveyer. Any attempts to optimize minibuses traffic come across to the confrontations with their owners, among which are well known representatives of all branches of authorities. It is habitual, that minibuses are accepted to be halt immediately whenever passenger likes – on the second and even on the third traffic line, which is the cause of accident situations. The particular theme is minibus salon. It is overloaded with additional rows of seats, small stools, collapsible seats etc. Ergonomical standards as well as security regulations are absolutely ignored.
g) **Cableway** – very convenient kind of transport for Tbilisi - almost abolished in the whole after the tragic crash of one of them. Some cableway stations have been change their function privatized.

h) Usually student-architects are confused with the answer – what kind of transport carries most of passengers in large cities? Actually it is **elevator** in multistory buildings but elevator stock collapsed in Tbilisi. Instead of launching new forms for elevator management with involving of Home Owners Associations, municipal authorities are undertaking occasional populist measures - repairing elevators in some houses at the expenses of municipal budget.

i) **Walking zones** – hardly any in Tbilisi; they are mainly intended for tourists and does not play remarkable role in daily urban life. Even there, where was observed self-organized streams of pedestrians, they are interrupted by privatized lots of land. As to **bicycles paths** there are not practically any.

On the above mentioned background population of Tbilisi not only feels discomfort from transport chaos, but they themselves see the way to overcome it. - For instance, sociologic survey undertook by NGO - **Association of Urbanists of Georgian** - developed that the bulk of respondents realize the necessity of taking away many minibus transmits from the central streets, as well as decreasing of their number and reestablishing such kinds of public transports as bus and trolleybus.

X                X
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X

Transport service in contemporary city is a complex matter enveloping many systems of urban organism – from political will of authorities up the control of environmental quality. Current Workshop will greatly assist in solving these problems of each our cities. Among of Seminar beneficiaries will be my wonderful but sick city – Tbilisi. I do hope, before long we would be able to convert our “bad practice” into “the best practice”.

Thanks a lot for attention.
### Dynamics of Some Characteristics of Tbilisi Public Transport System (1990-2002)

<table>
<thead>
<tr>
<th>Kind of Transport</th>
<th>Years</th>
<th>Amount of transmits</th>
<th>Whole distance of routes (km.)</th>
<th>Units of rolling stocks</th>
<th>Amount of carried passengers (ml/y.)</th>
<th>Price for travel</th>
<th>Ownership</th>
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<tbody>
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<td>Trolleybus</td>
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<td>1990</td>
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<td>53.8</td>
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<td>1990</td>
<td>137</td>
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<td>1,037</td>
<td>193.0</td>
<td>0,05-0,1 Ruble</td>
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<td>1,477</td>
<td>423/168*</td>
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<td>0,2-0,3 GEL</td>
<td>State/Municipal LTD; Private</td>
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<td>Minibus (taxi on a fixed route)</td>
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<td>33.7</td>
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<td></td>
<td>1990</td>
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<td>Verbal agreement</td>
<td>Private</td>
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*Source: City Transport Administration of Tbilisi Municipality, 2003.*

1 Numerator indicates the total quantity of the rolling stock units, while denominator shows the number of movable ones.
2 Data is given for year 2000.