CHANGING EVALUATION OF THE PROBLEMS
IN URBAN TRAFFIC MANAGEMENT:
THE CASE OF BUDAPEST

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INTRODUCTION

The concepts, ideas and analyses on the urban traffic of Budapest generally reflect the conviction of their authors that the problems are well-known and that the ‘management’ only has to be concerned with implementing the solution. Consequently, the overall evaluation of the current situation tends to be rather general and, more often than not, tends to emphasize as a main cause of the problems the general lack of funds for not taking the necessary measures.

I would like to call attention to Figure 1. which shows the ratio of urban traffic investments in Budapest in proportion to the rest of the country between 1961 and 1990. The figure clearly shows that 60 to 70 per cent of all investments were concentrated in the capital city that represents only 20 per cent of the overall population of the country, and that this percentage has not, in spite of a decreasing tendency, dropped lastingly below 50 per cent.

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1 Paper read at the 24th scientific conference on urban traffic planning and management held between April 27-29, 1993 in Budapest, organized by the Hungarian Association of Transportation Science

2 Institute for World Economics of the Hungarian Academy of Sciences
Figure 1. The ratio of transport investments in Budapest in proportion to all transport investments in the country

This figure shows that even assuming a more equal areal distribution and a considerably higher level of investment, the urban traffic of Budapest can hardly expect support exceeding that of the previous years. It would, on the other hand, be worthwhile to analyze how previous funds were used and whether the allocation of these funds plays a role in the increase of tensions in spite of considerable inputs.

I would like to quote an example of the mechanism of how these funds are used. I would emphasize that our perception of what problems need to be solved greatly influences the steps that we are likely to take and can, in a given situation, put our ‘solutions’ on an emergency orbit.

THE AXIS OF BUDAPEST

Figure 2. shows Elizabeth Bridge and how, on the Pest side of the bridge, traffic squeezes its way into the inner city area in six traffic lanes.

Elizabeth Bridge was rebuilt in 1964, originally with two pairs of lanes for traffic and with one pair of tram tracks. The second metro section was completed in late 1972, resulting in the discontinuation of the tram on Rákóczi street. (In order that I should not be seen as criticizing only others I would here refer to my investigation,

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carried out jointly with Csaba Koren, before and after this event, in which we found - as a prove of developing traffic quality, - that the average speed of traffic increased by 10-15 km/hour on Kossuth street, and by 5-10 km/hour on Rákóczi street.) Since 1973, then, there are six lanes allowing a considerable part of the traffic between Eastern and Western Hungary to squeeze through at this point, and thus pry apart the inner city area of Budapest.

Figure 2. Elizabeth Bridge and the inner city area of Pest.
As a minor detour allow me to show on *Figure 3.* that this solution should by no means be seen as unique to Budapest. The Danube bridge at Bratislava was completed in the late 1960s and it can be clearly seen how brutally it cut through the inner city area and the castle district there: several buildings, including the Old Synagogue, were sacrificed to this end.

*Figure 3. What were we so proud of?*

Returning now to Budapest, the traffic had to be channelled into the inner city area to make full use of Elizabeth Bridge - because without that the expected traffic...
could have not reach the bridge. This task involved the forced development of a number of junctions between Budaörsi road to Baross square.\textsuperscript{4}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{map.png}
\caption{How many times does lead pollution exceed the allowed amount? Data from a few traffic congested points of Budapest (1991)}
\end{figure}

The results are illustrated by the map on Figure 4., showing the extent of lead pollution measured at several points throughout Budapest in 1991; namely that to what extent this pollution exceeded the allowed rate. There are hardly any values below 4; the boulevards show a value of 6 to 7, Kossuth Lajos street has a figure of 11 (with known figure of 19 too); whilst there is no average value for Rákóczi street, just one figure of 27!

\textsuperscript{4} Observation made by Bertalan Benyó.
Briefly, what has happened is that we have managed to ensure unhindered traffic conditions for allowing the maximum possible amount of lead into the inner city compared to the cross-section possibilities. What should be clearly seen is that above-surface investments in themselves would have been insufficient for this type of 'solution' to the traffic problems. A third dimension was also necessary, namely the 'elimination' of public transportation.

Figure 5. The underground network of Budapest

Figure 5. shows the underground network of Budapest. All underground lines meet and intersect at the edge of the inner city, at Deák square. This structure enabled the freeing of the above-ground routes leading into the inner city for the general traffic: the tram tracks on Rákóczi street, on Váci road and on Üllői street were systematically removed and now one can easily approach the inner areas of Budapest from motorway M3, and from Road 2, 3, 4 and 5. This is not yet as easy in Southern Buda and from road 6; but this problem will shortly be addressed by the construction of the planned South Buda metro which is forced through the inner city area.\(^5\)

\(^5\) Observation made by Endre Miklóssy.
TWO SETS OF VALUES: THE FORMULATION OF THE PROBLEM

As a kind of generalisation of the above-mentioned, the following table shows two markedly opposed sets of values: the first underlying the traditional traffic planning approach, the second underlying an environment oriented approach. The table highlights the problems considered most important by the proponents of these two diverse approaches.

<table>
<thead>
<tr>
<th>KEY ELEMENTS</th>
<th>Traditional traffic planner approach</th>
<th>Environmentally oriented approach</th>
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</thead>
<tbody>
<tr>
<td>Urban road network</td>
<td>missing capacity</td>
<td>over-centralised structure</td>
</tr>
<tr>
<td>Metro</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passenger car traffic</td>
<td>lack of traffic lanes</td>
<td>air pollution</td>
</tr>
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<td></td>
<td>lack of parking places</td>
<td>waste of energy</td>
</tr>
<tr>
<td>Public transport operation</td>
<td>missing maintenance</td>
<td>high expenses, tariffs</td>
</tr>
<tr>
<td></td>
<td>missing subsidy</td>
<td>non-attractivity</td>
</tr>
<tr>
<td></td>
<td>(of the company)</td>
<td>(for the people)</td>
</tr>
<tr>
<td>Bicycles &amp; Pedestrians</td>
<td>danger of accidents</td>
<td>missing lanes</td>
</tr>
<tr>
<td></td>
<td>undisciplinarity</td>
<td>danger of health</td>
</tr>
<tr>
<td></td>
<td>vulnerability</td>
<td></td>
</tr>
</tbody>
</table>

Table 1. Transport problems in Budapest

The traditional approach sees the main problems of urban traffic in the lack of the capacity of urban (underground and road) networks, the shortage of parking places, the missing traffic lanes which should be addressed by further investments. In contrast, the environment oriented approach tends to underline the inadequacies of the network structure, the energy wasting nature of, and the pollution caused by, passenger cars concerning these elements.

The evaluation of pedestrians and bicycle traffic is characterized by the same contrasts in approach. The traditional approach underlines the danger of accidents, vulnerability and the lack of discipline, which turn pedestrians and cyclists into obstacles in terms of the general flow of motorized traffic. In contrast, the
environment oriented approach feels the constraints of the circumstances and possibilities of cycling and notes the lack of bike lanes and the health problems to pedestrians and cyclists. According to this approach priority should be given to the non-motorized human being, and the obstacles are posed by cars and vehicle traffic, – the road network serving them, and whose development should be restricted.

Whilst these arguments are more or less symmetric, it needs to be pointed out that there are differences in how these arguments exert an influence on actual processes. There are considerable financial interests and strongly organized interest groups behind road constructions, car and vehicle production, as well as the servicing of car traffic and the sale of cars and vehicles, etc., whilst there is hardly anything comparable behind pedestrians and cyclists.

Public transport is not so easily fitted into this formula. The public transport company represents a major force which needs to be reckoned with also in traditional planning. In certain cases, if the interests of the company lie in that direction, it will represent the interest of passengers. As a general rule, however, we might say that the traditional traffic planning approach tends to give priority to supply side rationality and operation factors in management, whilst the environment oriented approach tends to give priority to the interests of the passengers.

SUMMARY

I would finally like to point out that we are dealing with two sets of diametrically opposed values. These should not be confused with issues of expertise/lack of expertise. I have no intention of encouraging the participants of this conference to start debating "which approach is the right one", mostly because I do not believe that this is an issue in traffic management.

What we are truly in need of is to make it clear, that there are possibilities for the elaboration of efficient traffic management techniques that incorporate the priorities of the environment oriented approach. I believe that this is one of the main task of experts, rather than labelling proposals calling for considerations differing from the routine solutions of the traditional approach as inefficient and lacking expertise. On the contrary: only with the elaboration of correct and efficient alternative solutions for traffic management, worked out too on value sets differing from the traditional one, could make the real effects of various development projects comparable, and could offer viable alternatives and choices both for politicians and laymen.

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