## ПЛЕНАРНІ ДОПОВІДІ

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## URBAN CONCEPT OF THE LINEAR CITY

The linear city usually develops in narrow river valleys and presents a form in which several centres of the same rank are connected along the main traffic axis. It can be: only one city, conurbation and the ring of cities.

The creator of the linear city concept was a Spanish engineer Arturo Soria y Mata. He was inspired by the rapid development of traffic, and, accordingly, in 1882, he proposed the creation of the linear city or "the ribbon city". According to his idea, the linear city would be formed within a belt, that is, a strip wide 500 metres, through which the railway or tramway and all urban communal infrastructure would pass. Along that belt there would be two narrow belts (200 m) of residential areas in which their inhabitants would live in close proximity to each other, stress-free from all those problems characteristic of life in large, "overcrowded", polluted metropolises [1] [2].

Of course, the concept of the linear city in its original version was practically implemented in only one Madrid suburb, where just a few kilometers were built, and which were later simply "swallowed" by the amorphous expansion of Madrid itself [1]. Even less successful were the well-known Soviet urban planners Ginzburg, Levi, Okitovic, Leonidov and Milyutin, who in the 1930s tried to introduce the concept of the linear city into the official Soviet urban planning practice. This is best illustrated by the example of Nikolay Milyutin, who was one of the most influential theoriticians of architecture and urbanism in the first half of the 1930s. His concept of the linear city presented a sophisticated version of the plan of Soria y Mata, and was expanded by the principle of zoning, i.e. segregation of functions in six planned parallel zones [3].

A very interesting urban solution, inspired by the concept of the linear city, was the famous MARS plan of London from 1943, created by a whole team of experts (the so-called Modern Architectural Research Group). This plan envisioned the construction of the main railway artery parallel to the River Thames, with housing zones on both banks (about 800 m wide). The most significant feature of this urban solution was the insistence on the strong development of public transport system, which would make it possible to avoid the problems created by the rapid increase in the level of automobile use in large metropolises. However, this plan was abandoned as too radical and destructive for London [4].

It is this extreme attachment to the key traffic artery that presents the vulnerable

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point of this model, as there are no alternative, auxiliary arteries in case of major congestions, which would enable fast traffic flow.

The application of the concept of the linear city in the already developed large cities would require radical changes in the urban form and structure, which is economically extremely irrational and unprofitable, on the one hand, and that the original concept of the linear city differs so much from the usual expansion of a metropolis in concentric circles on the other. After the Second World War, various variants of metropolitan development were designed and implemented, inspired by the original idea of Soria y Mata from 1882. [4].

These modifications were drastic, which can be seen in the following examples. In the famous Finger plan (hence the term "Finger Plan") of Copenhagen from 1949 (as well as Stockholm from 1968), instead of the original, linear city, 5 directions of the railroad were constructed, which radially extend from the main city centre, with an open, green space between them. Based on the 1965 regional plan of Paris, along two parallel axes, on both sides of the River Seine, the so called "new towns" were built, which are connected by a high speed rail to the main city centre [4].

The example of the six Dutch cities is also well-known: Harlem, Amsterdam, Utrecht, Rotterdam, The Hague and Layden, which are spatially distributed along a common circular routeway with which they are connected in a unified functional whole. In recent years, in the scientific literature, the example of the Brazilian city of Curitiba is frequently mentioned (as an example of an extremely successful way of solving urban traffic problems). According to its planned urban form, Curitiba is almost identical to the original idea of Soria y Mata, except for the use of high-speed buses instead of trains [4].

The plans for the expansion of Tokyo and the rebuilding plans of Skopje, ruined in the earthquake, were also inspired by the idea of the linear city. Thus, the concept of the linear city was a source of inspiration to Russian architects from the 1930s, the MARS plan of London from 1943, the Finger plan of Copenhagen from 1949, then for the plans of Washington (1961), Paris (1965), Stockholm (1968), the regional connection of the Dutch cities, the rebuilding of Skopje, the expansion of Tokyo, the great developmental plan of Curitiba, etc. Many world famous architects: Le Corbusier, Kenzo Tange, Doxiadis, etc., as well as traffic experts (Robert Cervero), were inspired by the same source. The continuous popularity of this concept stems from "the need to exploit new lines of rapid communication, whether the classic 19th century railway or modern highways of the 20th century" [2], but also from the desire to achieve better contact with nature. The development of the linear city is simply accomplished: "building on its edges" [2] and it does not have to be limited by the creation of a green belt, as is the case with Howard-Abercombie's concentric type of development of the Garden City.

It is obvious, however, that "although this concept may enable fast journeys, they are becoming longer" [1], and the basic drawbacks of the concept are that "along with the linear development of the city, its edges are becoming ever more distant from the main city centre" [5]. Also, whether it is a railway or a highway, in practice, the "pure" linear development of the city is not achieved, but a series of "knots" developed around the railway stations or the places where the roads converge. For

this reason, Peter Holt stresses that "based on past experience, there is no doubt that it is difficult and costly to build a linear urban form" [2]. Therefore, after the Second World War, numerous modifications of the original concepts of Soria y Mata emerged, which often included the development of subcentres around railway stations (Copenhagen, Stockholm, Tokyo), construction of "new towns" along the traffic axes (Paris), or development of cities by connecting them with one circular road into a single functional unit (6 Dutch cities) [4].

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## ECOTOURISM AND ITS DEVELOPMENT PROSPECTS IN GEORGIA

In the modern world tourism industry is one of the most rapidly growing economic sector. Tourism is very important part of the gross domestic product in many countries. Nowadays, the trends of global tourism showcase the developments of the types of tourism, those are based on the princeples of sustainable development and concentrated on relaxing in ecologically clean environment. Therefore, ecotourism is distinguished by the raising trends.

Ecotourism implies such type of journey that benefits both, the environment and the people. It excludes any kind of harsh interference in the nature. First of all, the aim of this type of tourism is to preserve the nature.

The United Nations World Tourism Organization has acknowledged ecotourism as a key factor for poverty reduction, environmental protection and conservation, and, in addition, for the promotion of sustainable development.

Georgia, which is one of the most outstanding countries with it nature, landscapes and historical-cultural heritage, has great opportunity to turn the ecotourism as the leading tourism industry. In Georgia the development of ecotourism is mainly related to the protected areas. This is showed by the annual flows of tourists in these areas.

The underlying work discribes the concept of ecotourism, its types, the brief history, and the current situation in Georgia and in the world. The aim of this work is to assess the potencial of ecotourism and its main challeges in Georgia. The Research of these issues have great importance, especially for Georgia, because the country has

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