

HISTORIC BRIDGE IN PLISZCZYŃSKA STREET IN LUBLIN

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SUMMARY

The introduction contains a general discussion of the concept of synergy as a social category, often related to architecture and bridges as elements of architecture. The revitalisation of Bilbao and the Lutosławski bridge in Lublin are mentioned as examples of synergistic processes. The link between synergy and strong aesthetic feelings is discussed on the example of the Rzędziński bridge in Wrocław. The fundamental focus of the paper is a potentially feasible process resulting in the development of wide valley of the Bystrzyca river near Pliszczyńska Street, which runs through the outskirts of Lublin. A heritage bridge, the renovation of which may initiate a whole process of creating a new urban recreational area, is also located there. It is a reinforced concrete bridge with an arch girder – a cylindrical shell, to be precise. In terms of form, the structure resembles the Monier arch bridge. There is no information of the 100 year old bridge in the archives which could testify to its role and history. The paper contains basic technical information concerning the bridge.

Keywords: *heritage bridges, bridge synergy, technical culture heritage, sustainable construction, ecology.*

1. INTRODUCTION

Synergy is not anything obvious. The very process of defining it is multifaceted and can be inconsistent in terms of details [1-2]. A concise definition of synergy is expressed as the following relationship:

$$2 + 2 = 5 \quad (1)$$

which can be precisely or colloquially conveyed by saying that the sum of the components is not strictly arithmetic, but contains an added value constituting the measure of a creation, whether artistic, architectural or other one. The relationship (1) comes from the space of fuzzy sets and may include, e.g., the psychological state of optimism, or it can be a measure of optimism facilitating progress – whatever it may mean.

In the case of bridge structures, synergy may be associated with the aesthetics of a bridge structure throughout the spectrum of aesthetics, from ugly structures to spatial bridges exciting to their users/observers.

Naturally, bridges are indispensable. Their facilitation of transition over an obstacle meets the criterion of sufficiency. As a result, most bridges are inconspicuous enough to be almost invisible both in rural and urban areas. The average bridge length in Poland amounts to approx. 21 m, therefore, small and medium-size bridges tend to be the most popular. On the other hand, precisely such bridges are the most important, as they play a fundamental role in road and railway transport. Through their simplicity, they form a background for large bridges, the monumentality of which may and should be associated with their potentially dominating character in an urban space – more seldom in a rural landscape. Moreover, all their valuable conservatism notwithstanding, bridges are carriers of progress in material, structural and aesthetic engineering.

A great example of synergy – of the synergy process, to be precise – in the social field is revitalisation of the biggest city of the Basque Country, Bilbao (Fig.1).