

Structural Art and Aesthetics of Architecture at Impressive Mega-Stations

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Summary

The paper describes structural art and aesthetics of distinguished large railways stations that has been built or are still under development as a part of the re-urbanization of large cities and as a highlights of "Station Renaissance" trend. Three mega-stations – Berlin Hauptbahnhof, St Pancras and Tokyo station are examples of aesthetic stations that have qualities of structural art.

Keywords: railway station; aesthetics; structural art; mega-stations, station renaissance.

1. Introduction

A railway station can be defined as a place where trains load or unload passengers and / or goods. Historically railway stations dealt with goods just as much as passenger traffic but nowadays they are almost solely used for passengers with the possible exception to mail. Goods on the railways are now transported in containers which are handled at special container depots.

A railway station usually consists of a combination of a platform and a station building or shelter, or only one of either. Usually every station has a platform to allow the passengers to get on and off the train but smaller station may not have a station building or shelter. In the past, large railway halls for the train terminals built in all major European cities were top achievements among engineering structures that flourished in 19th century. Today, along with "Station Renaissance", some of these splendid stations have been modernized and adapted for high-speed trains (HST). Also, the last decade saw a development of impressive new stations that have been built to respond to the reurbanization of large cities and the development of the network of high-speed trains.

Being large engineering structures in urbanscape, railway terminals need to have aesthetic qualities and satisfy the requirements of structural art. This paper describes these aesthetic qualities on the example of three mega-stations: Berlin Hauptbahnhof, St. Pancras International and Tokyo Station. Berlin Hauptbahnhof (2006) has been built as a new central station that was completed four years ago. St. Pancras (2007) is a historical London terminal that has been recently completely renovated, upgraded and trasformated into the Eurostar terminal. Tokyo Station (uc, to be completed in 2013) is also a historical station that currently is undergoing historical renovation and redevelopment that includes new towers, station entrance hall and station plaza.

2. Station Renaissance

2.1 "Station Renaissance" in Europe

"Station Renaissance" was initiated for the first time by railway companies in Europe in 1980s, as their response to various challenges of railway sector and respectively as a result of technological potential of high-speed trains and as a factor of urban renewal, reflecting growing environmental concern. As Thorne [1] noted: "It has been commonly observed that railway architecture has been experiencing a "renaissance" since the 1980s" and as a result station architecture has very much improved. The development of railways was the outcome of technological advancement of high-