

Buildings of transportation systems

- historical overview

antique times: courier/postal service mansio /Rome/ and harbour facilities

medieval post stations and coach inns, caravansaries

19th century railway stations

20th century bus stations, airports and metro stations, tram stations

- motivations on traveling and transportations

- development on moving methods and vehicles/on foot; horse/camel/
donkey; ship; coach; railway; car; airplane; spaceship/

- location of transportation buildings

- kinds of transportation buildings

long distance transportation

- navigation buildings

- railway buildings

- bus transportation buildings

- aerial transportation

local transportation

- stops

- railway facilities

- underground facilities

- kind of spaces and space structures

- small

- mid-size

- large

- inn-like system

- railway station-
like system

-with vehicle hosting hall

- without vehicle hosting
hall

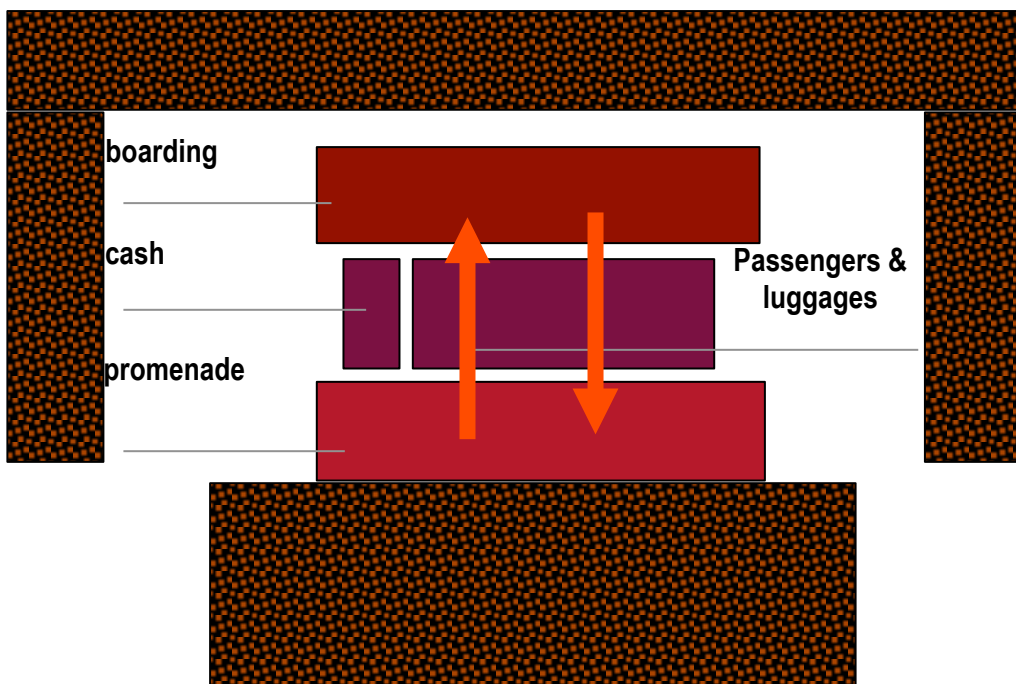
-one level

-multilevel

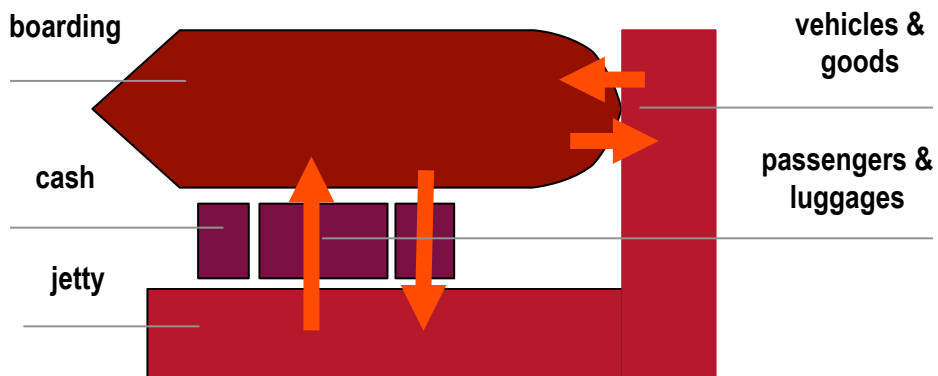
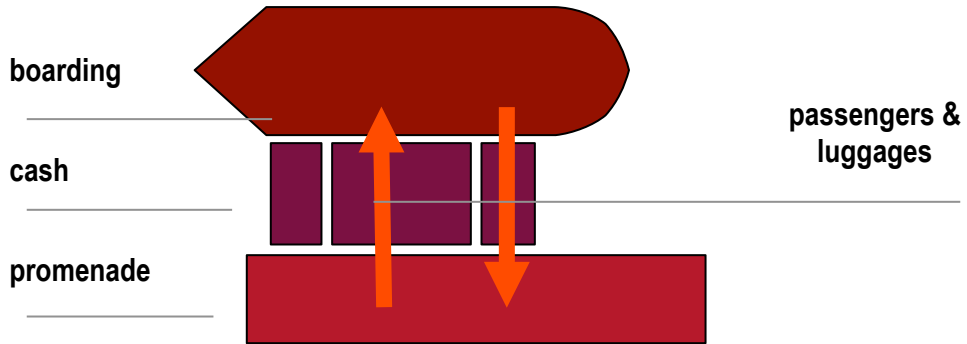
- underground system

- basic planning theories

Scheme of bus stations



Scheme of passenger-ship stations
Scheme of ship/ferry terminals

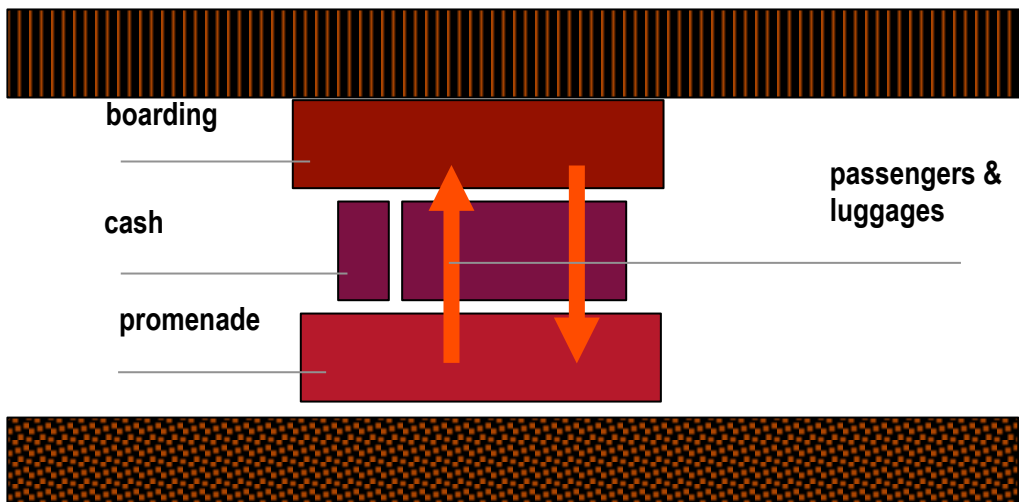


Schemes of „passing trough” railway stations

- Traditional layout: trucks on ground level - pedestrians underground
- Head-station-like layout: trucks underground
- Building above trucks with perpendicular traffic direction
- Building below the trucks with perpendicular traffic direction

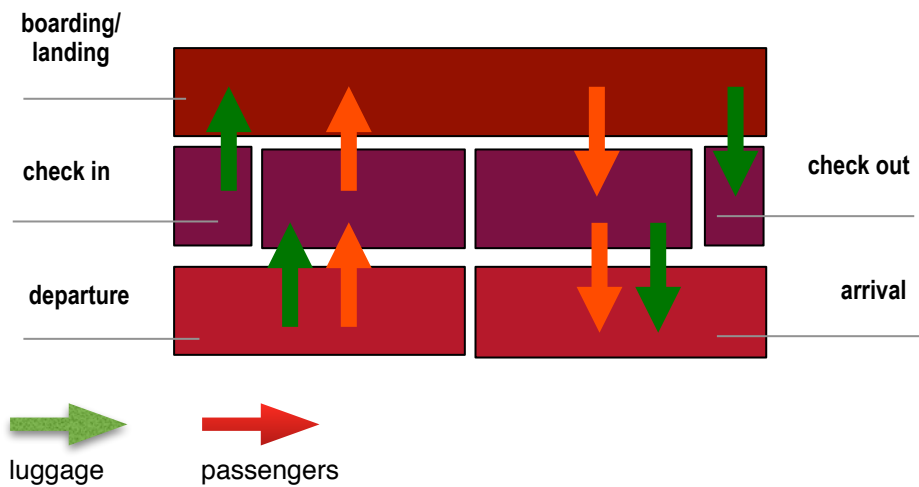
Schemes of „head” railway stations

- Parallel



- Perpendicular

Scheme of airport terminals



Scheme of urban transport head-stations

Free accessibility

- **design aspects to consider - according to VITRUVIO's principles:**
 - COMMODITY - multilink facilities - busy traffic from several directions
 - dimensions - estimations for the future
 - multifunction facilities (commercial, administration)
 - flexibility for the future
 - FIRMNESS - special structures (huge span!)
 - DELIGHT - gate symbol of locations, cities, countries

- samples

Bus stations

- Lázár Antal (A&D Stúdió Rt.): Bus station, Budapest, Hungary Népliget, 2002
- Eva Jiricna architects : Bus station, London, Britain Canada Water 1999
- Cruz & Ortiz : Bus station, Huelva, Spain 1995
- Allford Hall Monaghan Morris: Bus station, Walsall, Britain 1999

Bus stops

- NIO Architects: Bus stop, Hofdorp, Holland, Suidtangent, 2002

Ship stations, terminals

- Javier Garcia-Solera Vera: Ship station Alicante, Spain 2000
- Nielsen, Nielsen og Nielsen: DFDS Ferry terminal Copenhagen, Denmark 2004
- ShinTakamatsu: Ship terminal Mihonoseki, Japan 1996
- ShinTakamatsu: Ship terminal Nagasaki, Japan 1996
- FOA (Foreign Office Architects): International Ship terminal Yokohama, Japan, 2002

Airports

- Arkitekterne maa Schmidt, Hammer Lassen K/S: Airport Aalborg, Denmark 2001
- Aviaplan AS: Airport Oslo Norway 1998
- Santiago Calatrava: Airport Terminal Bilbao Spain 1990-

Railway stations

- Santiago Calatrava: Railway station Stadelhofen Switzerland 1990
- Herzog & de Meuron: Stellwerk Schweizerische Bundesbahnen Basel Switzerland 1999
- Hornberger Architekten AG: Reconstruction of Railway station Zug– Schweizerische Bundesbahnen Zug/Switzerland 2003
- AREP (Jean-MarieDuthilleul): Railwaystation St. Denis France 1998

Metro stations

- Sporaarchitects: Budapest Metro 4 stations: Gellért tér, Fővám tér 2013
- KHR: Metro station, Copenhagen Denmark 2002
- Ian Ritschie Architects: Metro station Bermondsay Beacon London, G.Britain 1998