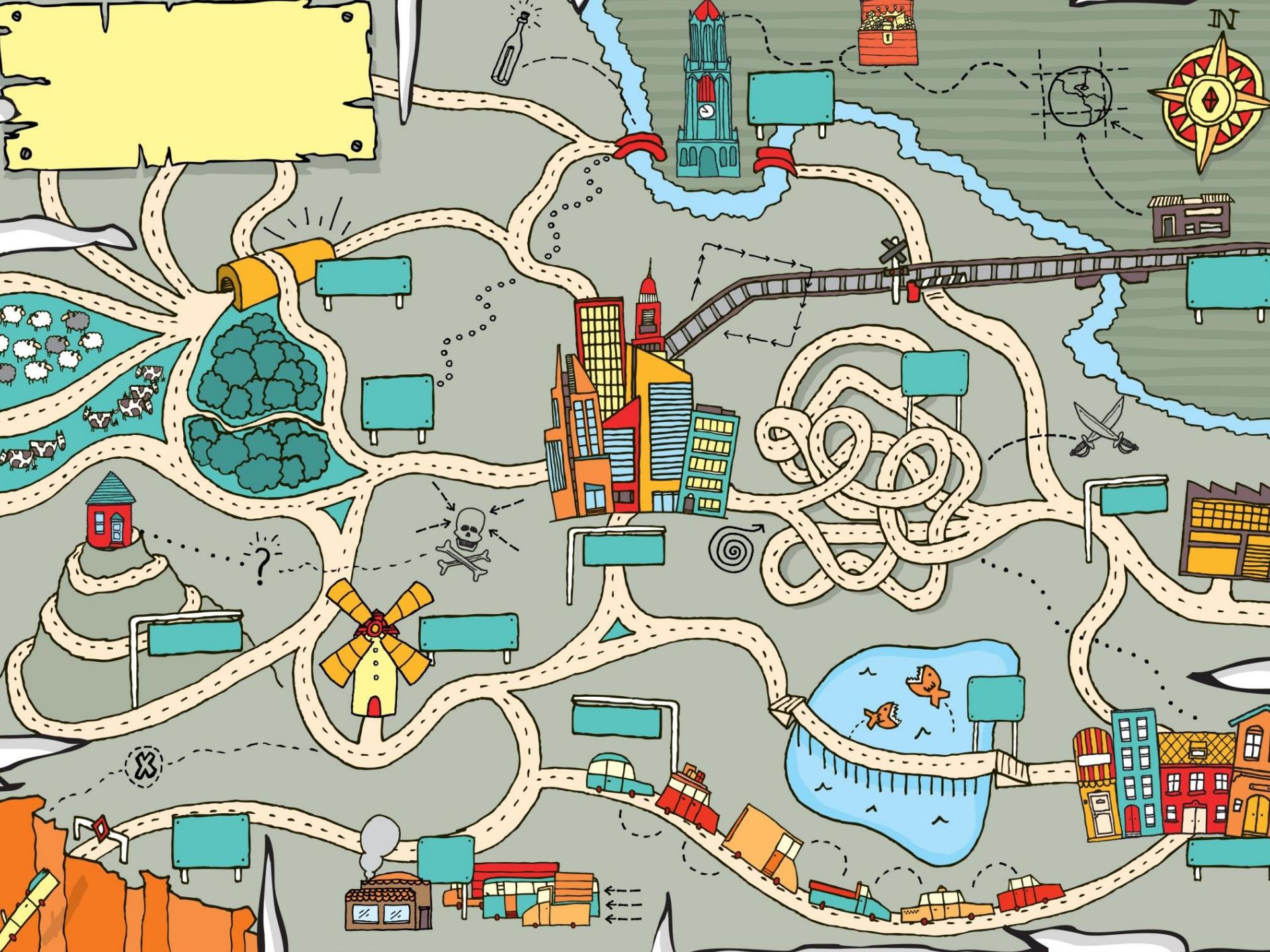
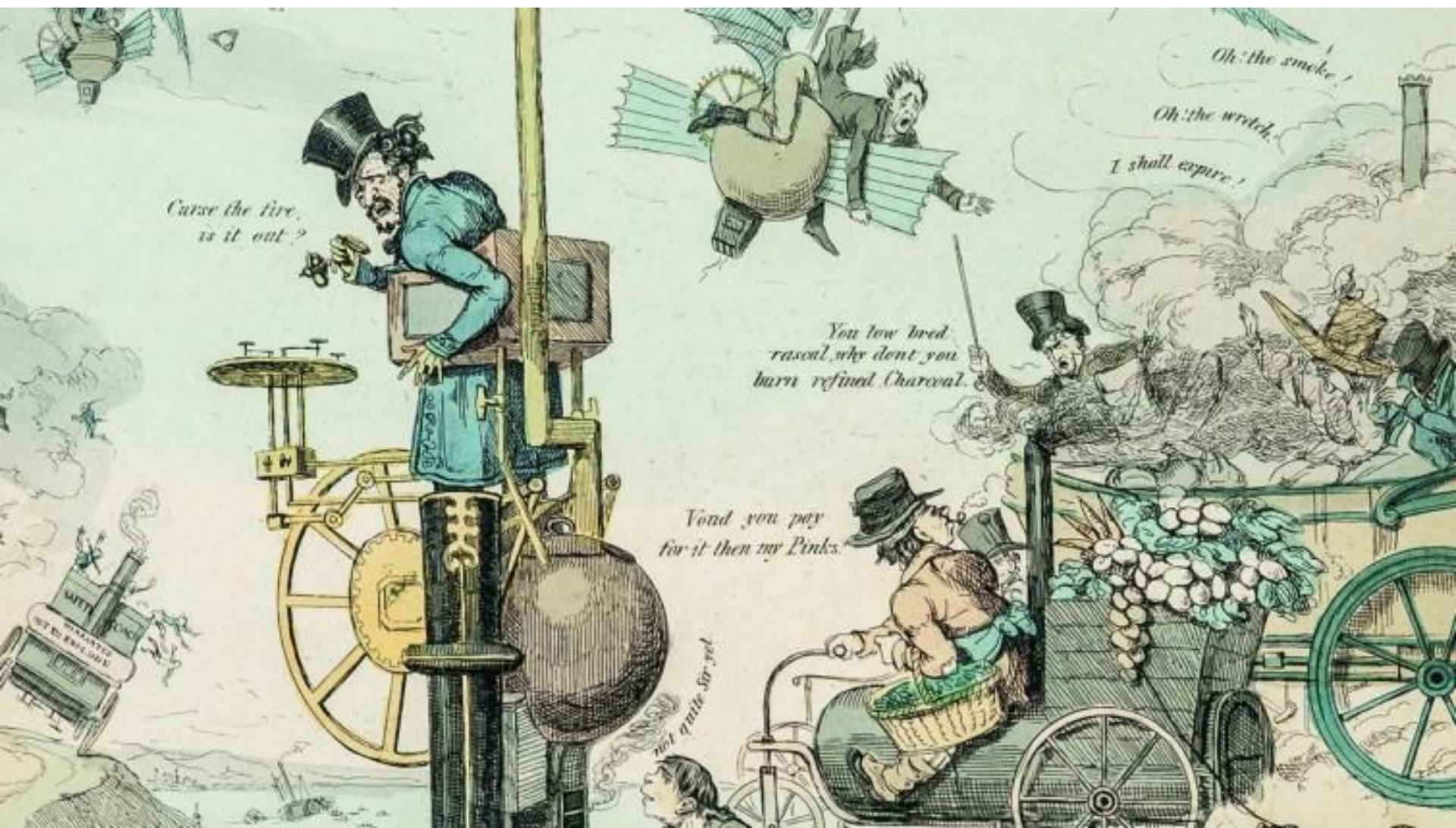


MOBILITY! WHAT MOBILITY?





RAUMZEIT



Robert Seymour (Sammlung Dieter Ante)



1851 © Hulton Archive/Getty Images

OPEN TO THE PUBLIC EVERY DAY (Sundays excepted) from Seven in the Morning, until Eight in the Evening,

THE THAMES TUNNEL.

Fig. 1.

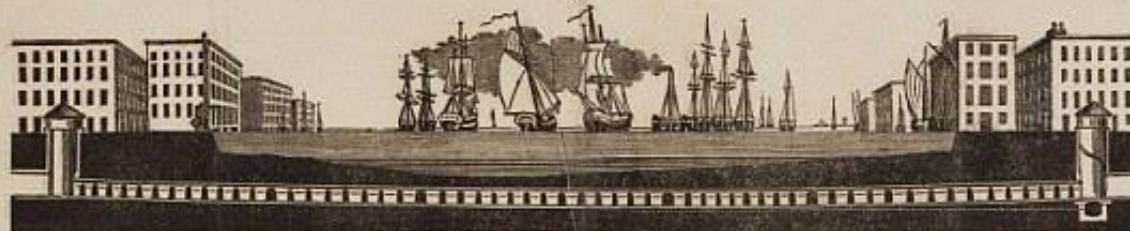
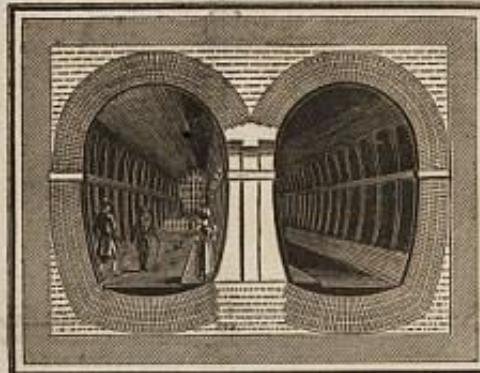


Fig. 2.



THE DRAWING.

No. 1 shows a transverse section of the Tunnel, and beneath it a longitudinal section of the Tunnel, on it will be when completed with the means in the indications in which they will be situated.

No. 2 shows the two arched entrances of the Tunnel from the street.

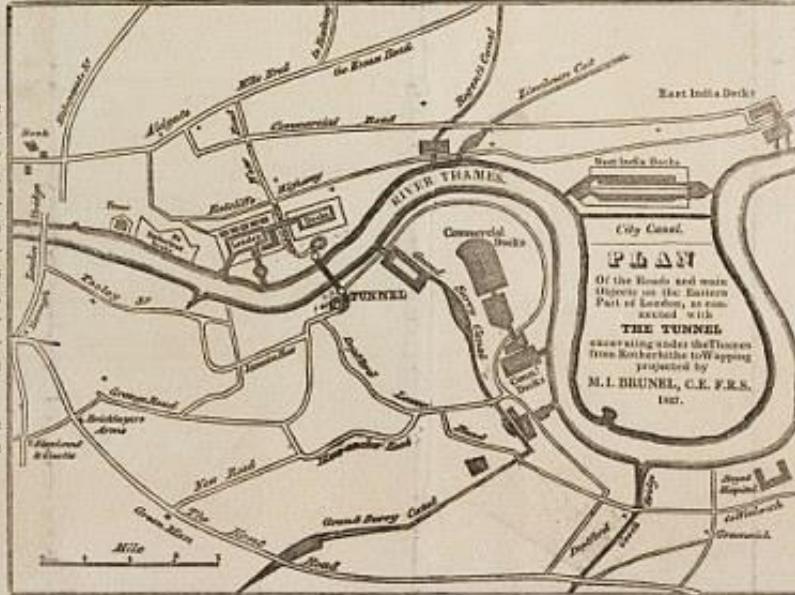
No. 3 is a representation of the Iron shield, and shows a workman in each of the compartments.

Fig. 3.



The Entrance to the Tunnel is near to Rotherhithe Church, and nearly opposite to the London Docks. The nearest landing place from the river is Church Stairs. The Greenwich and Deptford coaches which go the lower road, start hourly from Charing-cross, and Gracechurch-street, and pass close by the works at Rotherhithe.

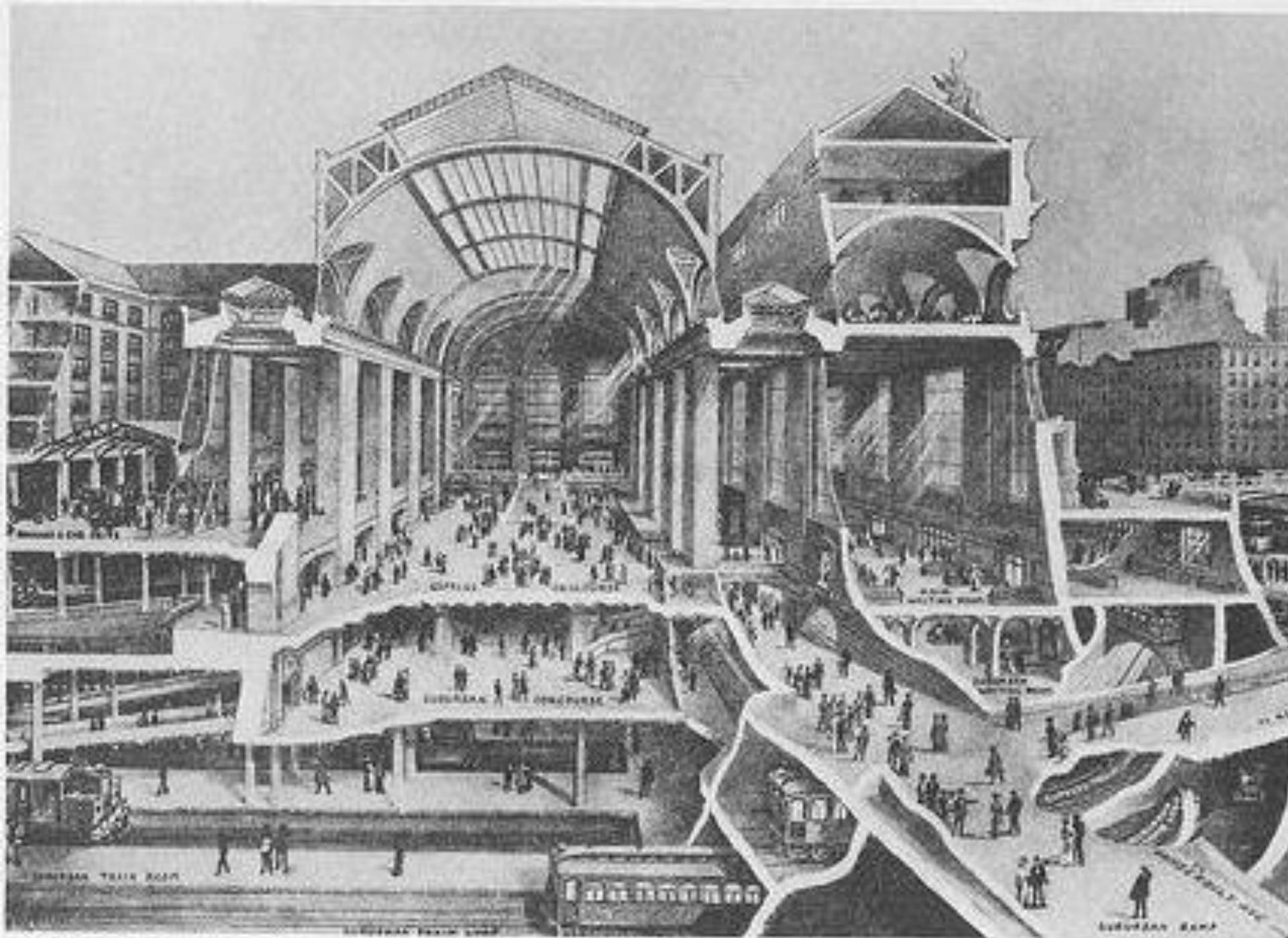
Books relative to the Tunnel may be had at the works.



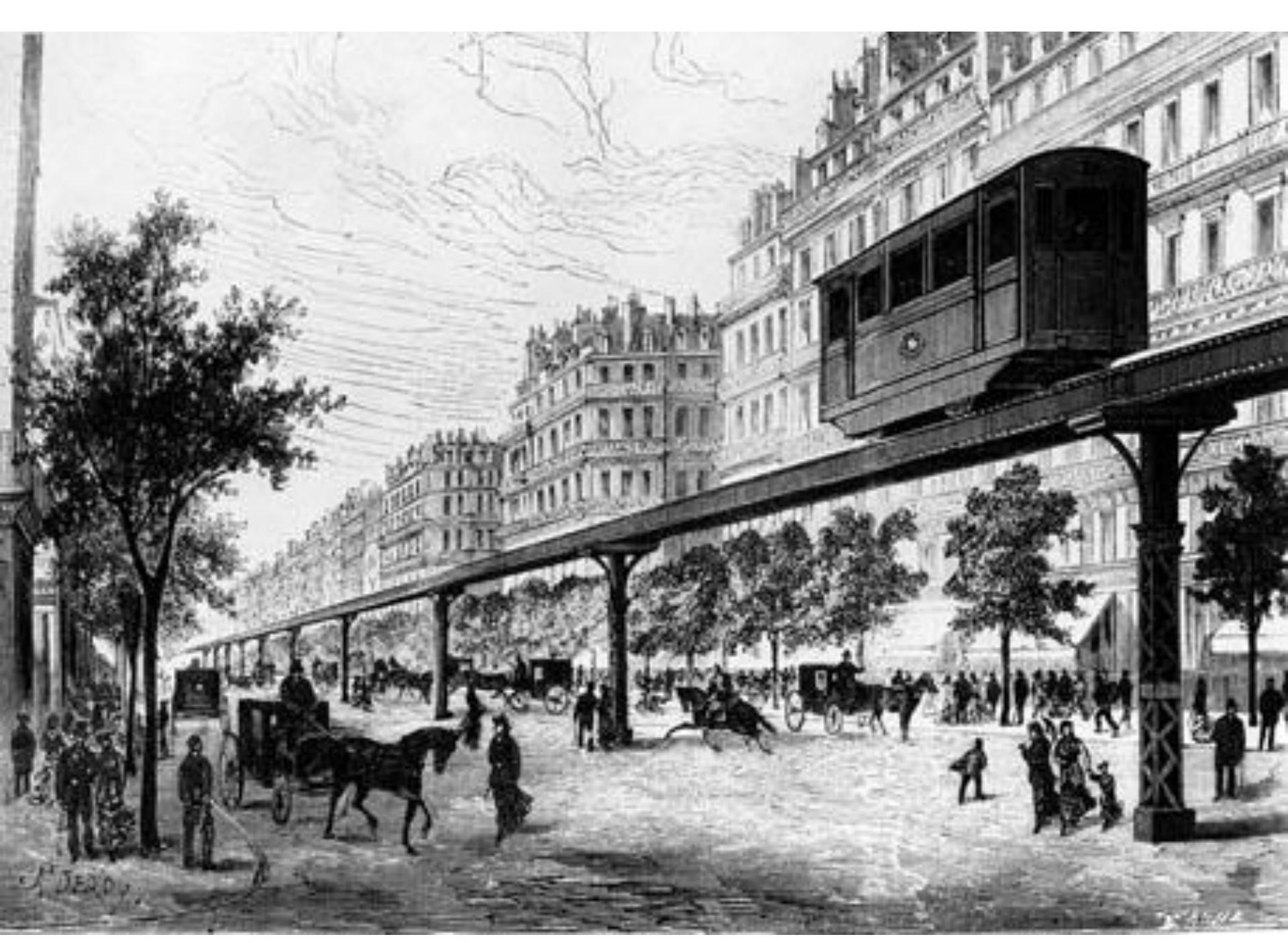
The Public may view the Tunnel every day (Sundays excepted) from Seven in the morning until Eight in the Evening, upon payment of One Shilling each Person.

The extreme northern end of the Tunnel is for the present secured by a strong wall; but visitors will find a dry, warm, and gravelled promenade, as far as to almost the centre of the river, and brilliantly lighted with oil gas.

The entrance is from Rotherhithe Street, and by a safe, commodious, and easy stair case.



Section of Grand Central Terminal, Scientific American, December 7, 1912.



Schöneberg. Victoria-Luise-Platz.







OTFRID von HANSTEIN-ELEKTROPOLIS



OTFRID
VON HANSTEIN

Elektropolis

DIE STADT DER
TECHNISCHEN
WUNDER



Urban Mobility Technologies

Automobile & Elevator

The Ford Model T changed the way of urban living, work and travel by introducing individual mobility to the mass market, 1908

<http://www.auto-motor-und-sport.de/bildergalerie/100-jahre-fliessband-am-fliessband>

The elevator safety gear, invented by Elisha Graves Otis, is generally considered as the invention that propelled vertical urbanism, 1853

https://en.wikipedia.org/wiki/File:Elisha_Otis_1854.jpg



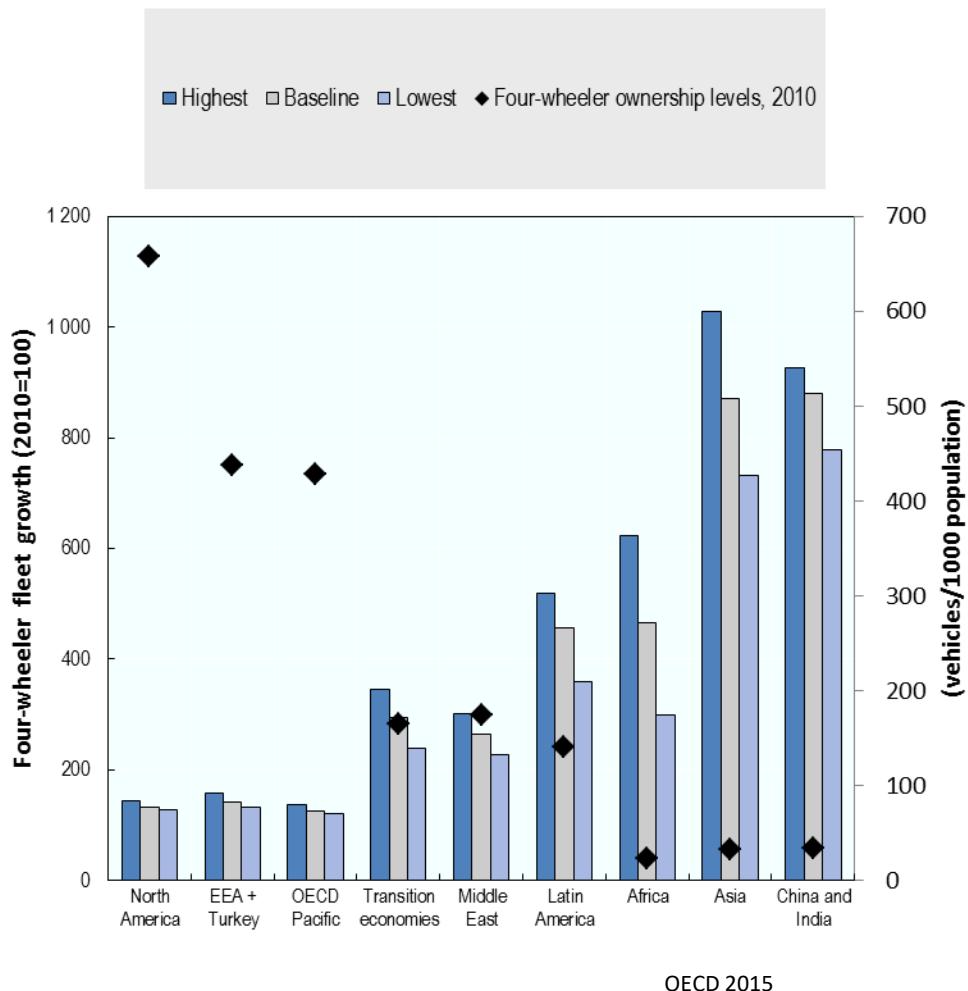
Kreuz
München-Nord
2500 m

Warching-Süd
1000 m

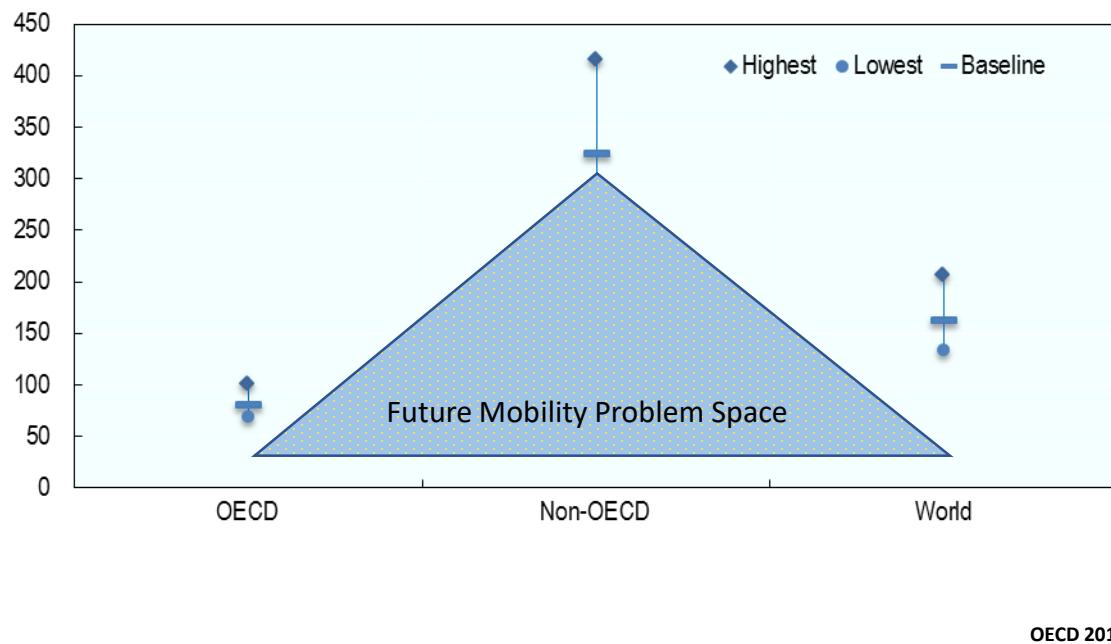
München
Edelburg



Four-wheeler ownership in 2010 and growth to 2050 by world region

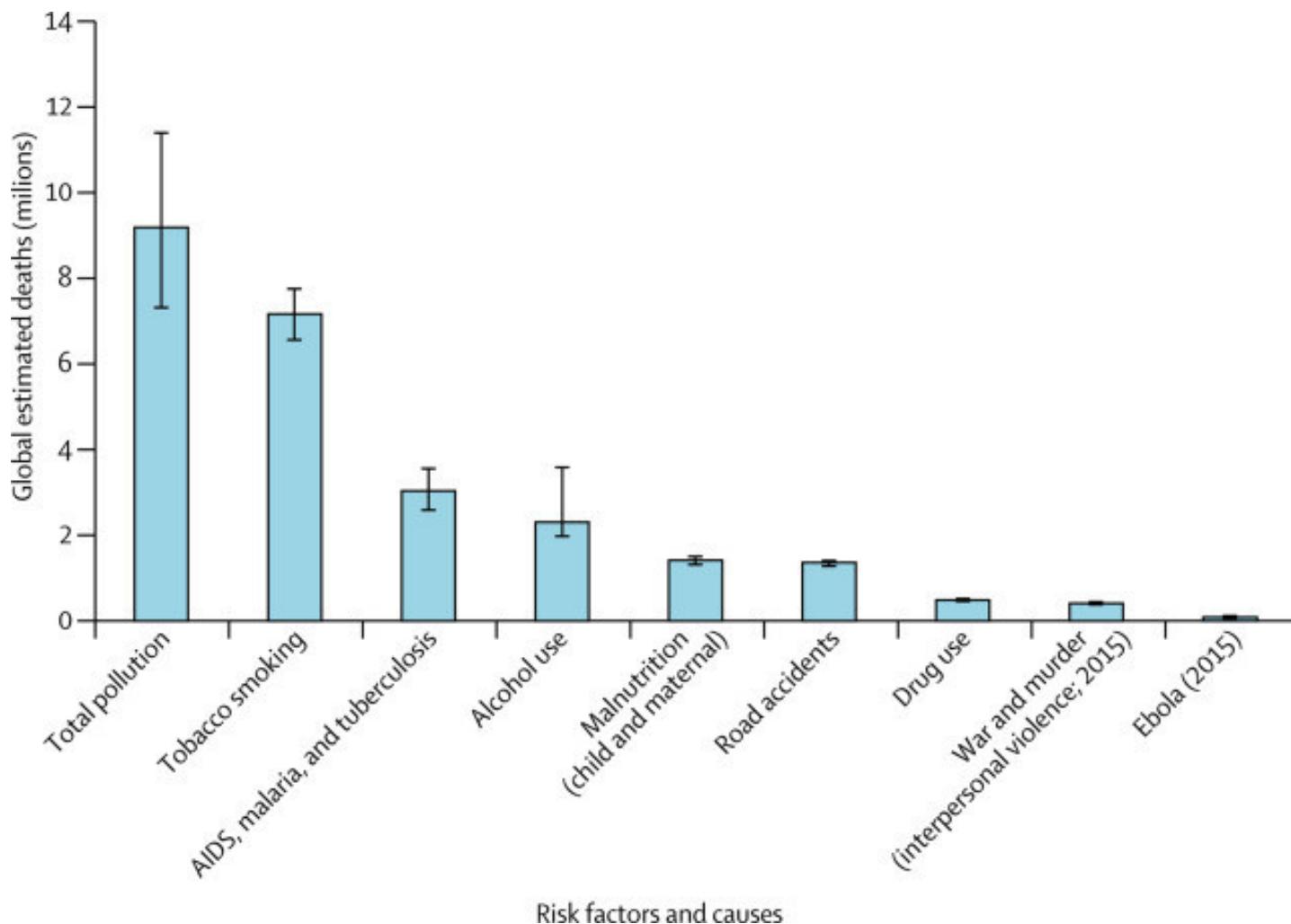


CO2 emissions from surface freight and passenger transport, 2050 (2010=100)



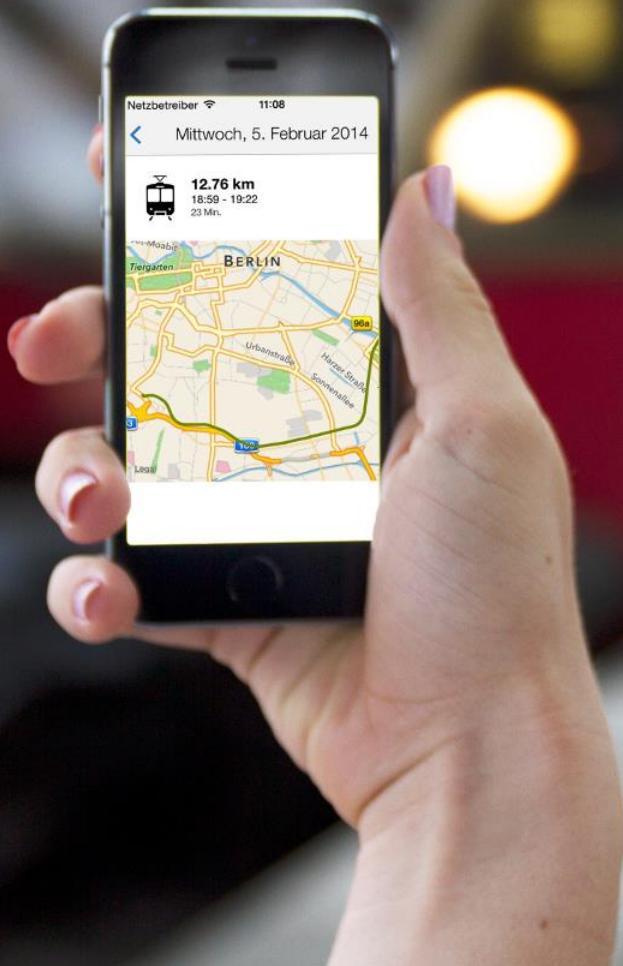
Global estimated deaths by major risk factor and cause, 2015

The Lancet Commission on Pollution and Health (Data and Image)











DAS
KUNSTWERK
WIRD
VIDEOUBERWACHT

AUSGANGSPUNKT
WURDE
VERBLÄHEND

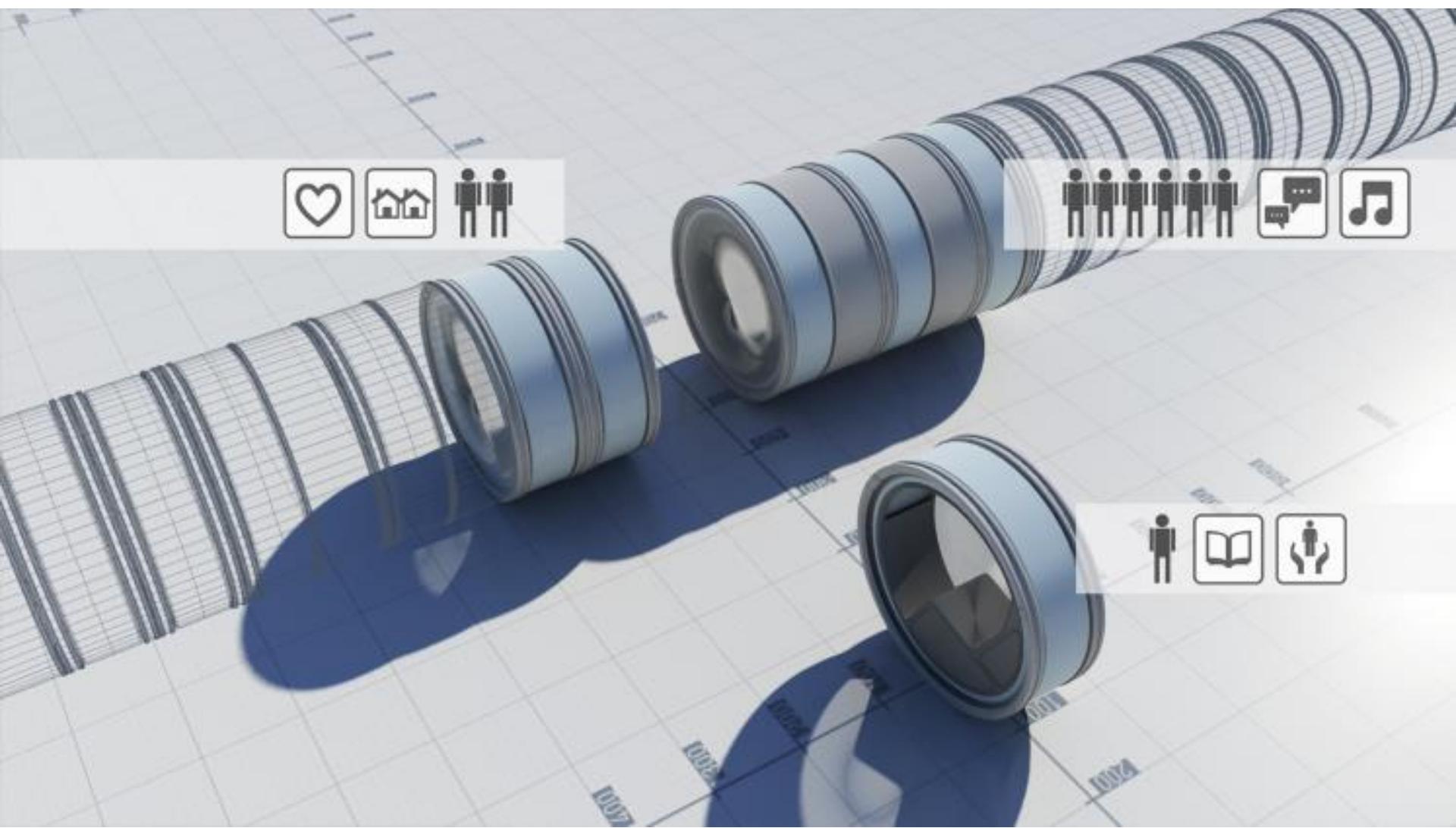
MOMMSENECK











Studio Schwitalla, 2014



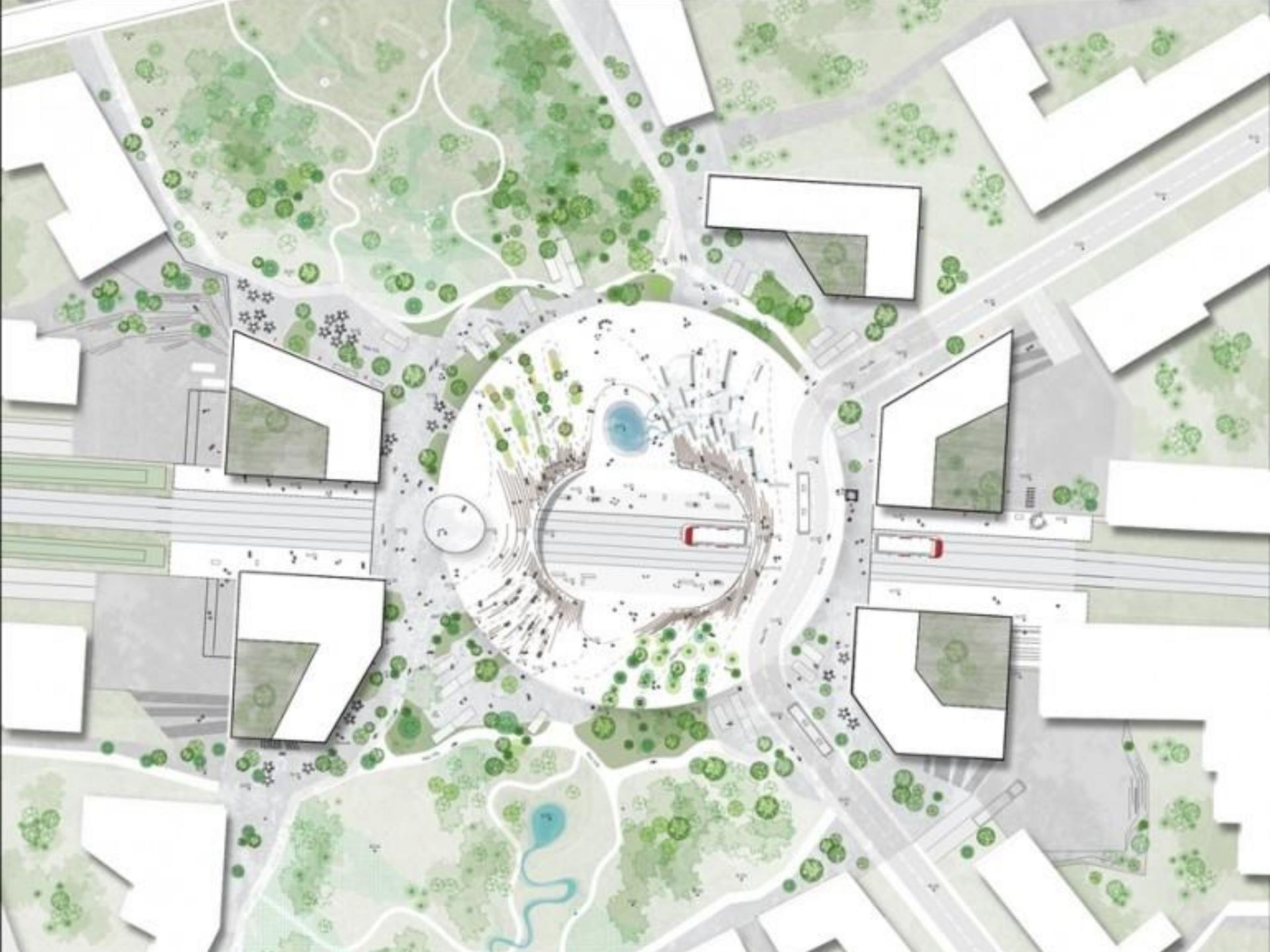


Studio Schwitalla, 2014



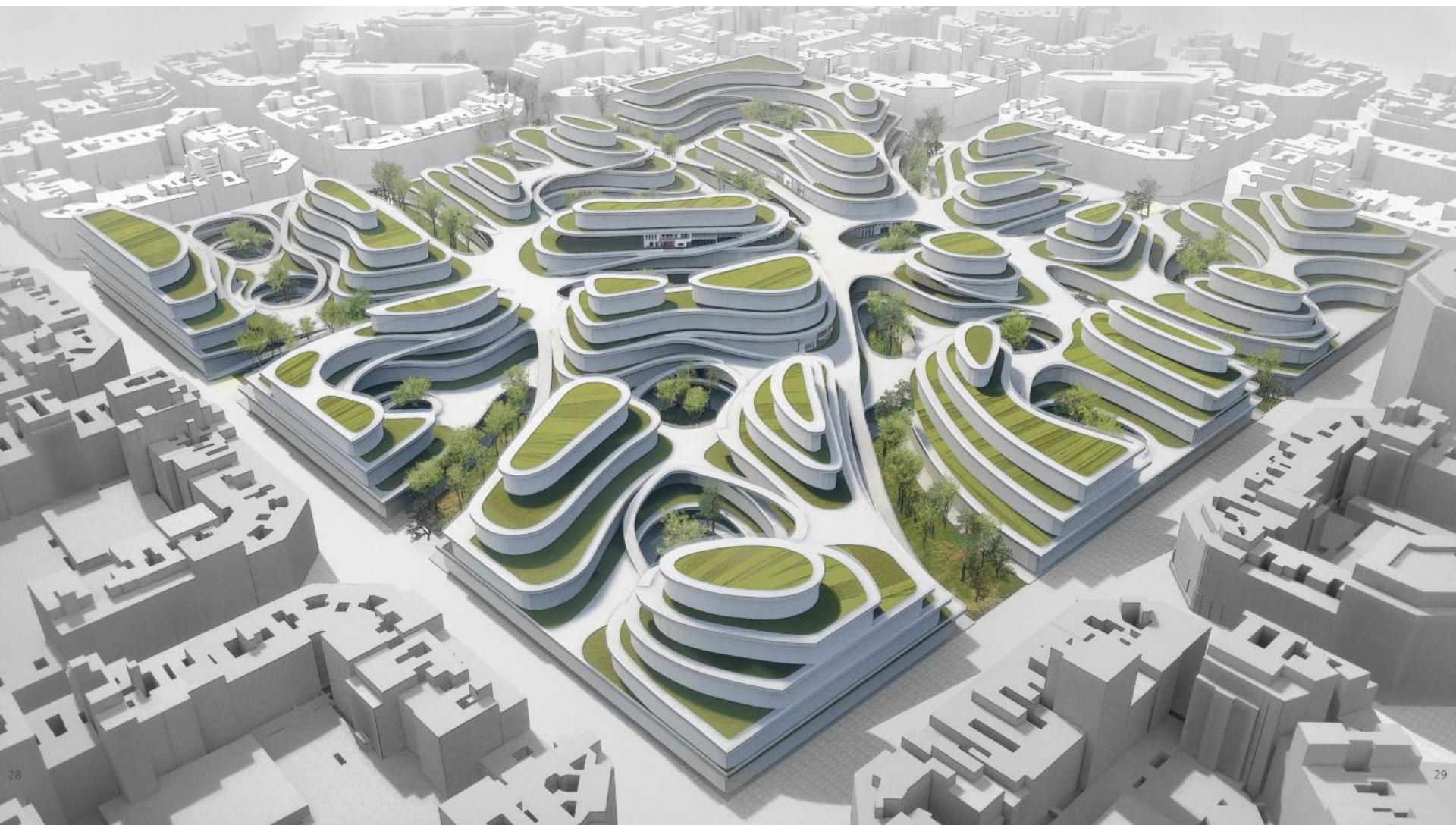
Studio Schwitalla, 2014







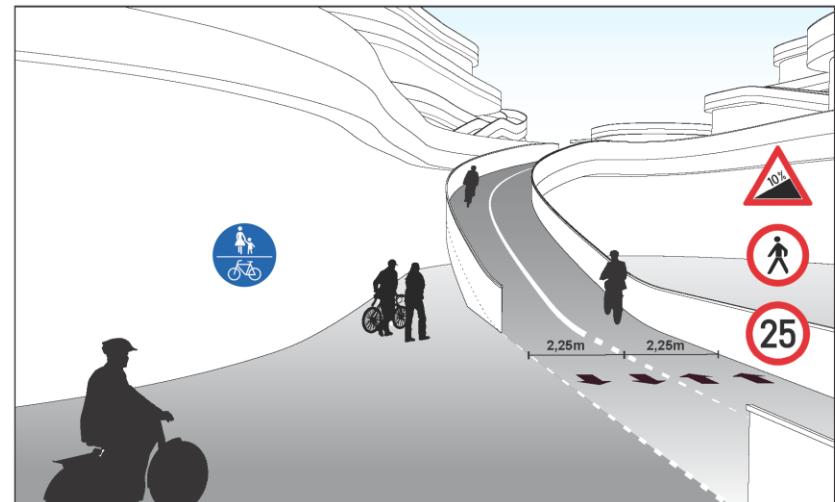
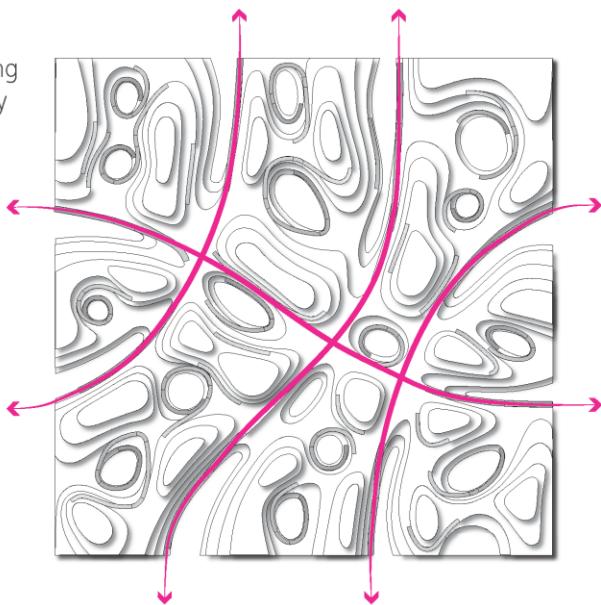
Studio Schwitalla 2019



Studio Schwitalla 2019

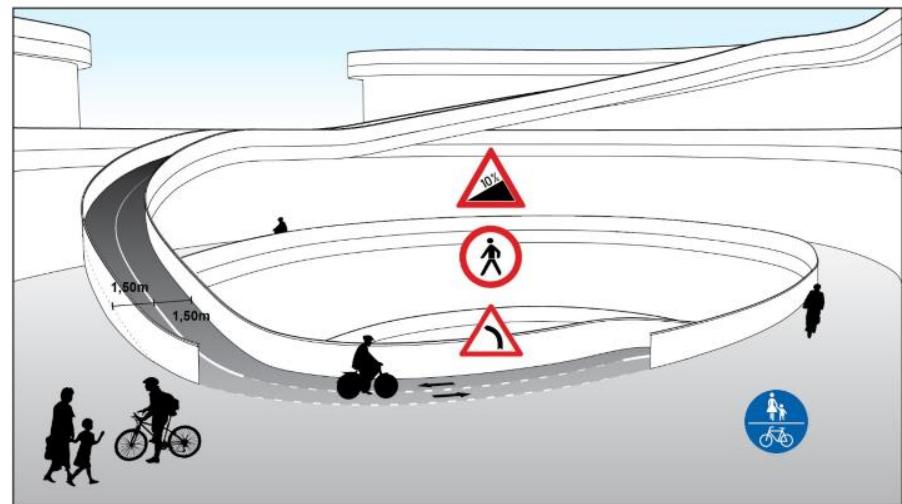
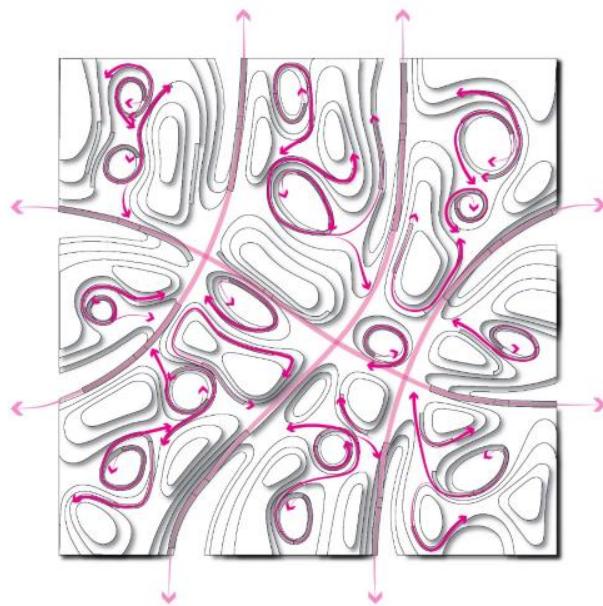
1. Main Paths

Connecting
to the City



2. Local Vertical Circulation

Vortex





Studio Schwitalla 2019



Studio Schwitalla 2019

30 MINUTES?

BUT I WANT IT NOW!





Transwheel Drone Concept
Kobi Shikar 2015









Norman Foster, 2015



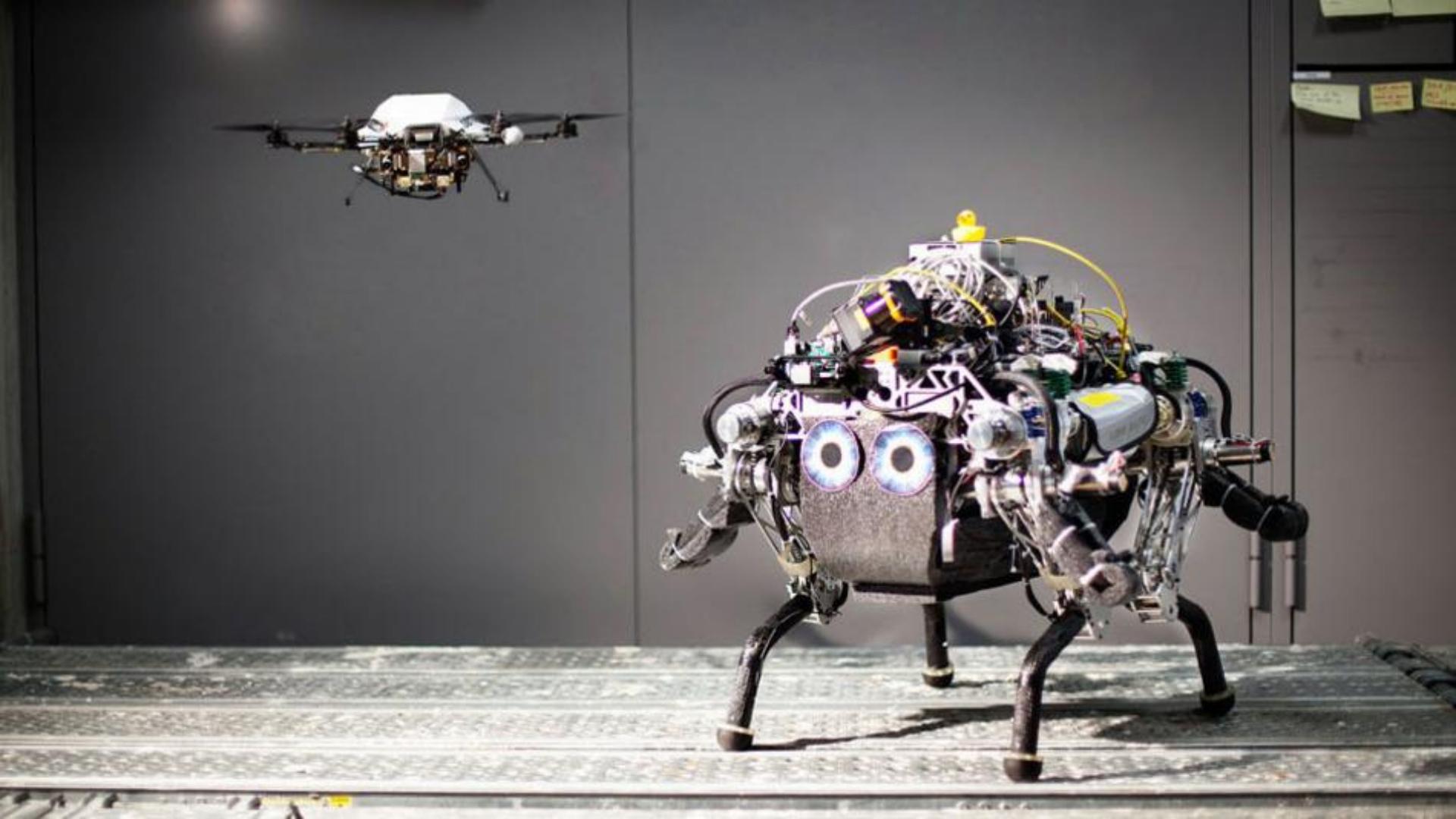
Norman Foster, 2015



DRONEMASTERS LOGISTICS

MONTAG, 26. SEPTEMBER 2016, 13.00 – 18.00 UHR

IAA Nutzfahrzeuge, Messegelände Hannover, Halle 19, Raum New York 2



Institute for Dynamic Systems and Control, ETH, 2015



Strategic Transport Research and Innovation Agenda

SMART MOBILITY SYSTEMS AND SERVICES

Roadmap 2019

Authors: Fred Dotter, Florian Lennert, Elena Patatouka

Thank you for your attention

f.lennert@futurelabberlin.de



COMCORDE