“A city’s treasure hunt – horizontal and vertical open spaces”
“The 19th century was a century of empires, the 20th century was a century of nation states. The 21st century will be a century of cities.”

– Wellington E. Webb, former mayor of Denver, Colorado
Growth of the cities
Re-Densification

Build on top

Build in second row

Redevelopment

Build subterranean

Build upwards
Redevelopment – In der Fläche

- Use of existing space potential (space management)
- Integration into cityscape
- Space will be integrated in city developments
- Upgrading

- Pricier than greenfield new build
- May create barriers to progress by owners and authorities
- Circumstances due to building design law requirements
- Possible loss of green areas
- Micro climate change
Redevelopment – Mercedes Benz Arena

Services provided by Arcadis: city development concept und design of several buildings, Berlin
Build on top – Aufstockung

+ Creating urban density
  Avoiding additional soil sealing
  Protecting open spaces
  Using existing infrastructure

- Considering statics requirements
  Following high rise building limits
  Missing acceptance, neighbor’s tolerance
Build on top – Deutscher Bundestag

Services provided by Arcadis: Project controlling; Deutscher Bundestag, Berlin
Build in second row – Hidden Assets

+ Avoidance of misuse or under use
  + Creating additional space
  + Additional utilization

- Loss of urban play grounds
- Light and air supply
  (healthy living conditions)
Build in the second row – Deutscher Bundestag

Services provided by Arcadis: Project controlling, Deutscher Bundestag, Berlin
Build in second row – current news
Subterranean – “Bottom-up Urbanism”

- Cityscape unchanged
- Obtaining green and percolation spaces
- Keeping existing utilization
- Double use possible
- Statics of adjacent constructions
- (Natural) lightning
- Ground water management
- Costs
Subterranean – Capitol Visitor Center

Services provided by CallisonRTKL and Arcadis: Project planning and controlling; CVS Washington
Build upwards – above the clouds

Creating urban density and keeping free spaces
Using existing infrastructure
Possibility for mix use
Vertical gardens
Cost-intensive

Downdrafts (open air aisles)
Loss of connection to ground at a certain height
Build upwards – Warsaw Trade Tower

Services provided by Arcadis: Architecture, interior architecture and design
Re-Densification
Consequences

Regeneration
- Schools, kinder gardens, play grounds as well as culture and entertainment
- Local supply of daily consumption goods and medical care
- Gastronomy and retail
- Space management and monitoring

Resiliency
- Avoid over heating (e.g. with help of open air aisles)
- Water management – Handling of ground and rain water, flood protection

Mobility
- Reducing traffic and emissions in a city of short distances
- Electro mobility, Bike, by foot, smart mobility and smart grid
- Optimization of limited spaces
Die Zukunft der Menschheit liegt in den Städten.

– UNO-Generalsekretär Kofi Annan, 2000
(Opening of world conference about the future of cities "Urban 21")
Consequences

How much density is beneficial for a city?

How sustainable should we build new buildings?

Which infrastructural measures have to be considered?

What concepts are available? Which ones do you know?

City of short distances?
Arcadis.
Improving quality of life.
List of Sources
Abbildungsverzeichnis


Abbildung 3: Planung Aufstockung der buildings, http://www.proholz.at/architektur/detail/treehouses-bebelallee/?tx_ttnews%5BbackPid%5D=5582&cHash=6805fbbb6914557827538a9eeb3eba9, Anrufdatum 29.03.2016


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