Urban Manufacturing: Planning Issues and Case Studies

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"Industrial Internet, Industry 4.0 and digital manufacturing as transformers of spaces of production and consumption"
Recent trends

- increasing service sector (e.g., care work, communication) → from a post-industrial society to a post-industrial city
- social inequality
- right-wing populism (e.g., President Trump’s protectionist trade position)
- climate change → increased awareness through “Fridays for Future” demo’s
- Individualism & demographic change (e.g. individualized products)
- Digitalisation, technological innovation (e.g. additive fabrication / 3D-printing), industry 4.0
- Financial investment on real estate
- Reshoring (Fine 2013)
- Work-Life-Balance, New Work
- Smart & Sustainable Cities
https://www.offene-werkstaetten.org/werkstatt-suche
New Discussion about Urban Manufacturing

Sassen (2006) describes Urban Manufacturing in large cities like LA, NY depending on cultural industries and the creative class.

Mistry, Byron (2011) show that industry in the US changed from large enterprises to smaller ones between 1972-1992 (91.4% of the companies employ less than 100 employees).


Läpple (2013) supports a new urban economy that stabilizes social structures in cities and strengthens local circular and resilient economies against the turbulences on the global market.

Spath (2014) and Lentes (2015) focus on new ways of production through Industry 4.0 and logistics to improve sustainability, urban production.

Friedman (2016) outlooks urban manufacturing as high-quality sector with a high value-added share.

Gärtner, Stegman (2015), Brandt et al. (2017) see a potential of urban manufacturing in urban quarters.

Scheelhaase, Zinke (2016) speak about ‘nearshoring’ through 3D-printing.

Herrmann, Juraschek (2017) look at customized or even personalized products, close to customers, Positive Impact Factory.

Stiehm (2017) looks at traditional urban manufacturing with high batch size and new urban manufacturing with small production batch.

Berends, Haeffs (2018) efficiency and innovation through urban manufacturing.
Urban Manufacturing (dt.: Urbane Produktion)...

... means making and converting **tangible goods** in densely populated areas, often making use of local resources and local value chains. The enterprises often operate in a self-sustaining way.

The proximity to living spaces demands resource efficiency as well as low-emission modes of production to avoid conflicts with residents. Synergy effects often arise with the creative class and services. (Brandt et al. 2017)
Already in 2002, the San Francisco Planning Department has described the importance of this sector in a city in its report “Industrial Land in San Francisco: Understanding Production, Distribution, and Repair” (PDR).
URBAN MANUFACTURING

Urban Industries

Small Urban Manufacturing (SUMS) and Repair

Urban Agriculture

Tech

Craft

Food

Brandt et al. 2017
Beispiel Mannern in Wien
Manner – Urban Industry back to the city
Cluster: Urban Manufacturing

WUPPERTAL

- Ölberg
- Hoegens Urbanität
- Lichtbogen Wohn- und Objektbeleuchtung
- oelberger taschenmanufaktur
- Liebesgruss
- Schmuckschmiede
- la petite confiserie
- Schreinersuse
- Dachdeckerei Ingo Neumann
- Schneiderei Burscheid
- mithandundherz

Association / Management
Urban Manufacturing
Distribution
URBAN MANUFACTURING

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Urban Agriculture
Tech
Craft
Food
Hut&Stiel – showcasing Circular Economy

- Production and direct sales
- Further processing
- Supplied restaurants
- Supplied groceries

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Findings of the Case studies

Characteristics:

• There is a great variety of Urban Manufacturing

• Location in mixed areas

• Often tight linkages within the quarter (differentiated by supply and sales market)

• Relocation of production close to skilled workers → short distances
  → but little job effects so far

• Production and retail within the same building

eg. Hut & Stiel, Confectionary, Marmeladenmanufaktur, Bridge & Tunnel, Adidas Factory Store, Mädelskramladen
Urban Manufacturing

Urban Industries

Small Urban Manufacturing & Repair

Urban Agriculture

- tech enterprises
- crafts enterprises
- food enterprises
- Socio-ecologically oriented enterprises
- ethnic enterprises/migrant economy
- homepreneurs

- Urban Manufacturing

- private space (home/work shop/garage)
- business/crafts yard
- Co-working/maker space
- vacancy/brownfield
- multilevel/vertical factory
Measures to prevent further displacement of manufacturing:

1. Strategy for Urban Manufacturing in the City
2. Check for preservation and protection statutes
3. Check necessity of rededication of commercial to residential areas
4. Purchase of commercial properties/ areas by the municipality → allocation with building lease
5. Mobilize owners of vacant real estate
6. Development of craft/ production yards
7. Creation of flagship projects in quarters, e.g. district festivals, “Made In” - Campaigns etc.
8. Determination of areas for manufacturing in urban development contracts
9. Adapt a local business development on the level of city quarters
10. Support SMEs, Urban Manufacturing, Urban Agriculture, cooperatives in the production sector
Thanks for your attention.

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