Pandemic resilient cities
31st of August 1854 | Soho, London
1858 | The “Great Stink”
'all smell is disease'
Brick-walled sewer tunnels
The new sewerage system was opened in 1865
Can Philadelphia reinvent itself?
In 1795 was established a board of public health
An extraordinary innovative vision of progressive technology and civitas
Quarantena | "forty days"
Santa Maria di Nazareth
Lazzaretto Vecchio
90% of all COVID-19 cases reported are in urban areas
Cities are obsolete systems
Rethink densities and the extension of cities
What will ‘post – COVID’ cities be like?
What will ‘post – COVID’ cities be like?
Hygienist theory influenced modernist aesthetics
Hygienist theory influenced modernist aesthetics
Hygienist theory influenced modernist aesthetics
The crisis as a structural problem of urban inequality
The pandemic has demonstrated the fragility of our world.
What will ‘post – COVID’ cities be like?
The city is an inherently political and ideological social product
technical science for health network
I was birthed by a virus, conceived by virtuous aspirations, nurtured by crowd-sourced resources and materialized as a core programme of work within the World Health Organization in 2020. This here is my story…
When the COVID-19 emergency began, back in 2020, WHO started to respond to urgent requests for assistance from Member States. We were flying where needed to support Ministries of Health to help set up treatment centers and provide hands on training and capacity building to make healthcare facilities safer, both for patients and staffs. As the outbreak was spreading, we quickly started moving from country to country with more rapid and intensive deployments.

In the meantime, while new countries were affected daily, we rapidly produced and published guidance on how to set up COVID-19 facility.

Then lockdowns and travel restrictions began and we needed to change the way we worked.
When the pandemic hit us and we had to go into lockdown and teach from our computers that was all well and good, but there didn’t seem like there was anything we could really do ‘hands on’ that could help. So when the request came from Téchne, I had a feeling that yes, this is something that I and some of our international students, with their specific country-based knowledge, could really help with. Through Téchne we were able to really make a difference.

Caroline Newton, Associate Professor at the Faculty of Architecture and Built Environment at the Technical University of Delft (TU Delft, Netherlands)
Hospitals are like fingerprint

Téchne network members addressed requests from our Member States for help in developing design specifications for COVID-19 treatment centres. In Burkina Faso, for example, we helped to develop 3 treatment centres and 13-15 triage centres based on the designs proposed by Téchne, and up to now it's still some kind of reference.

Mamadou Zongo, Health Logician, WHO Regional Office for Africa
“I think the main lesson we learned was that our global community can come together and quickly produce designs that can make a real difference for people who desperately need them. We very much appreciated the opportunity Téchne gave us.”

Troy Savage, Project coordinator IFHE, engineering and design consultancy (Virginia, USA)
The Help Desk model of work

1. REQUESTS FOR ASSISTANCE
   Applicants submit through WHO Regional or Country Offices

2. EVALUATION
   tēchnē will evaluate all support requests

3. ASSIGNMENT
   tēchnē coordinator will select Network member to support the request.

4. ELABORATION
   The tēchnē member will develop the requested deliverables.

5. FINALISED PLANS
   tēchnē coordinator sends deliverables, through the Regional or Country office, to the applicant.

6. REPORTING
   Applicants report back.

7. DATA BASE
   All materials are gathered to allow internal review, capitalization, data analysis, lessons learned exercises and future studies.
Field deployments
Countries supported (Sao tome e Principe, Italy, Ghana, Kosovo, Greece, DRC, Turkey, Sierra Leone, Guinea, Ivory Coast)

40 Countries involved in webinar
Topic: SARI facilities design, waste management, ventilation

30 Countries supported
6000 Beds
COVID-19, EBOLA

Facility design, treatment centers, repurposing existing building

World Health Organization
External Institutions
External Universities
Operational support
Remote training
Research
guidance
country technical support

Techne
technical science for health
NETWORK
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Guidance development & researches:
- Mode of transmission and ventilation
- PPE and comfort
- Innovative Facility Design

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Building capacities and sharing knowledge