



“The principle of modular structures and flexibility seem to be suitable for dynamic scenarios, such as a pandemic, i.e., we have to develop structural concepts that endure the change.”

– Edzard SCHULTZ, architect and partner at Heinle, Wischer und Partner, Berlin

Image Source: Corona Treatment Centre Berlin at the Berlin Fairgrounds. Heinle, Wischer und Partner, 2020. Image by Nordsonne Identity, all rights reserved ©.



Aleksandra SHULEVSKA
New Dialogues
Heinle, Wischer und Partner
architects
Berlin, Germany

THE PANDEMIC AND ITS IMPACTS ON HEALTHCARE DESIGN

Due to its expertise in healthcare architecture, in March 2020 our office Heinle, Wischer und Partner was asked to create a new typology for a treatment center for COVID-19 and to simultaneously build one with great urgency. Later on we were also commissioned to build 6 vaccination centers throughout the city.

As an architect on the Corona Treatment Center Berlin (CTCB) team, I was directly a part of Berlin's utilization of spatial means to tackle the COVID-19 pandemic and take control over its spreading. Reflecting on this experience, as a researcher on the topic of Spaces and Disease at New Dialogues and as a citizen of Berlin, I can differentiate three main stages of dealing with the new coronavirus: Confining, Preventing and Treating COVID-19.

CONFINING COVID-19

First mechanism of defense against the unknown disease was implementing a concept of confinement with the aim of slowing down the spreading of the new virus. This defense mechanism gives the medical profession the necessary time to find a suitable treatment – cure, as well as a preventive vaccine. Confinement is a spatial principle of protection through restriction of movement, where organized medicine utilizes space to protect the unaffected by containing the disease and by restricting the movement of the infected.¹

In Germany confining interaction measures were enforced on various scales reaching from national and regional to the urban level. The movement through the lines of defense, set by the concept of confinement was regulated with a 14-day quarantine, which is the period of communicability of COVID-19. The flow of potential COVID-19 patients in Berlin on the urban scale was regulated with a procedure, based on minimizing physical contact. The primary administrative regulation - the AHA-rule (Abstand, Hygiene, Alltagsmaske; German for distance, hygiene, everyday mask) is another defending mechanism by spatial means. The minimum distance of 1.5 m between humans was implemented into every aspect of society and all the scenarios which didn't allow that, were forbidden. As a consequence of the spatial restrictions in human interaction, some spaces within the city were left unused and available for a temporary adaptation into spaces of defense against COVID-19.

The CTCB was set up with the objective to reduce potentially the shortage of clinical care by taking over the COVID-19 patients who do not primarily require intensive care. Due to the temporary nature of the project and the time frame for execution it was decided on a host-building - the Berlin Fairgrounds. The location of the fairgrounds was chosen because it offers very specific logistical conditions and big column-free exhibition halls, which are not in use for the time being.

With the CTCB, Berlin created a centralized isolation area with a strict cordon, completely restricted to visitors, meant to spatially separate the contagious from the uninfected. A new building typology was developed with a very flexible structure based on a standard module. Considering the unpredictable situation, i.e., the building and design process running alongside the clinical reasoning process, the flexibility of this new typology was crucial. Even though the CTCB has not been put to use yet, its modular configuration has been a testing ground for time-limiting scenarios by medical staff. With that the city is evaluating its fast spatial response and learning how to improve it for future scenarios.

PREVENTING COVID-19

During the confining stage, medicine has been developing a vaccine against the new coronavirus. The second defending mechanism of the city is the one of preventing COVID-19, where spatial measurements play a role in the efficiency of

its implementation. As part of this mechanism, Berlin set up 6 vaccination centres, a central vaccination logistic unit and a centralized storage area for the vaccine. Because the Corona Vaccination Centres Berlin (CVCB) were urgent and with a temporary character, the same spatial principal as for the CTCB was applied i.e., utilizing host spaces, which at the moment are out of use e.g., airports, concert halls etc. As of January 2021, three of the six vaccination centres have been put in use, with more to be opened as the production of the vaccine increases.

TREATING COVID-19

Handling COVID-19 would ultimately mean adapting our future to the treatment against this disease, without referring anymore to temporary solutions of defense, but to permanent solutions of treatment. When a cure for COVID-19 will be available, an appropriate spatial concept within hospitals will enable the COVID-19 treatment to become a regular practice. The entire experience of the COVID-19 pandemic calls for an adaptation of the typical hospital structure to one that is flexible enough to quickly answer unexpected scenarios.

<https://newdialogues.com/berlin-and-covid-19/>

1. Hartmann, Gunnar. Disease and the City The Architecture of Medical Practice. Kultur-, Sozial- u. Bildungswissenschaftliche Fakultät, 2015, p. 106