

CHAOFAN ZHANG

MOVE ON WITH WIND

- EXPLORING A NEW LIVING MODE IN THE PUBLIC SPACE FROM THE PERSPECTIVE OF URBAN SCALE VENTILATION DESIGN UNDER THE PANDEMIC SITUATION



As of May 2nd, there have been over 152 million covid-19 infections worldwide. It is true that many activities have been switched to remote mode, but many still need physical contact. The thesis aims to explore a new living mode in the urban public space under the pandemic situation from the perspective of urban scale ventilation design.

In the thesis, urban furniture (extended to be explained as every object that accommodates various activities of users and adds comfort and character to urban public space) is used as intervention to improve pedestrian wind comfort and create circulation that separates people. First, experiment is conducted on a simplified virtual context to study the specific impact that intervention has on wind environment. The result of the experiment is the urban furniture which is re-shaped according to wind flow and the re-organized pedestrian circulation which helps people to keep social distance.

As the consideration of Goteborg context, Gullbersvass is perceived as an anonymous part of the city today, but it is planned for a completely new district that connects five districts with 2000 people living and working here. The selected site is in Bergslagsgatan, within Gullbersvass. From Vision 2035

Goteborg, the selected site will be transformed into central area of Goteborg with high building and population density. Urban public space will be more expected here because people's need to have outdoor activities, which makes this area a suitable site to test the research process and outcome.

The procedure from virtual context experiment is applied on the site and after that all the interventions are combined as a prototype. An urban living room proposal is transformed from the component and circulation of the prototype.

The result of the thesis is an urban living room proposal consisting of urban park, entertainment and retail space. Instead of an anonymous place today, the site will be the social, culture and shopping hub which not only satisfies the requirement of people working or living surrounding it, but attracts visitors from other districts. All these experiences are based on the contribution to improved wind comfort and well-organized pedestrian circulation regulated by wind environment which put emphasis on social distancing.

Keywords: post pandemic, urban public space, ventilation design, pedestrian wind comfort, social distancing

URBAN CHALLENGES

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