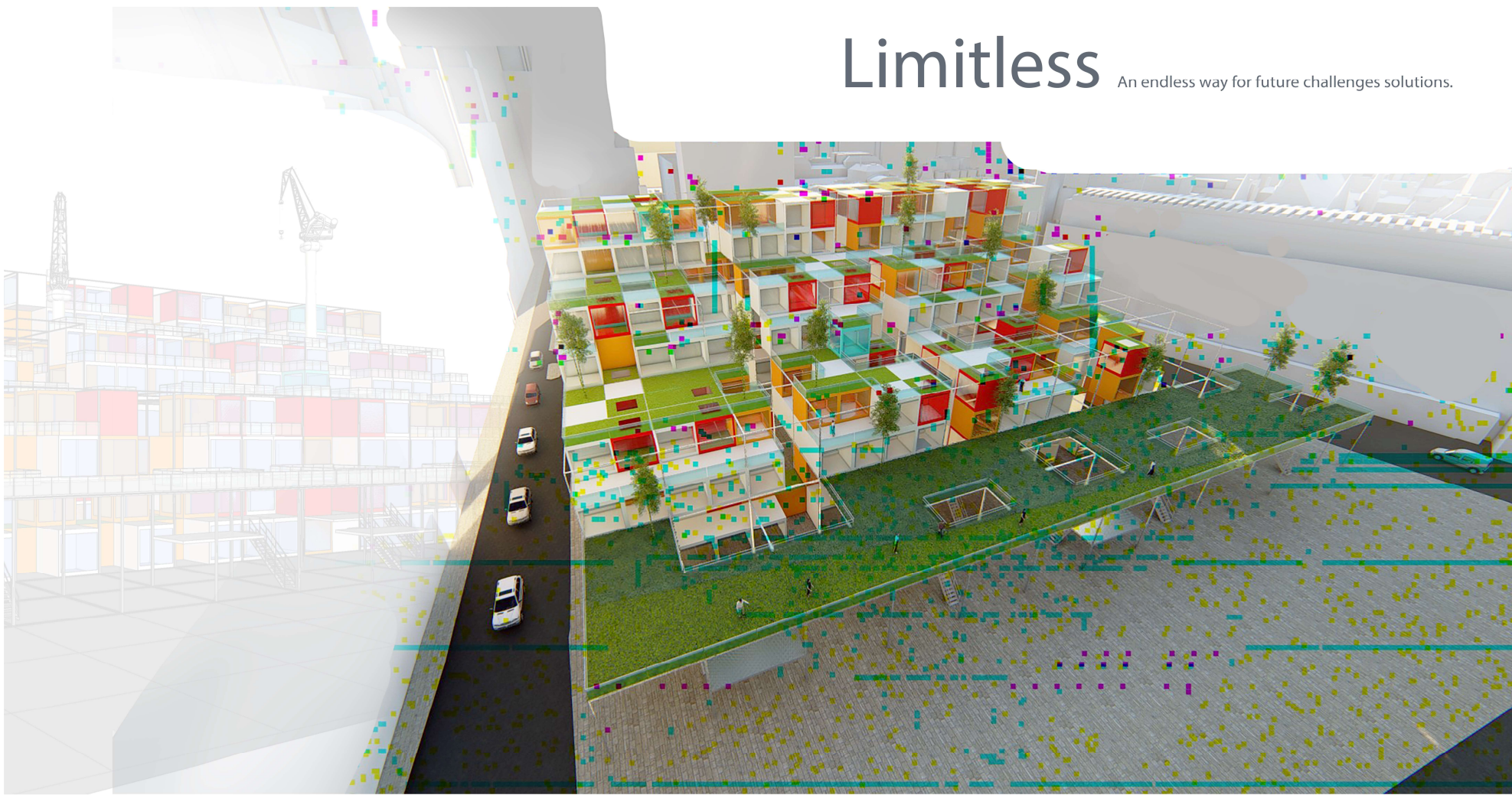


Limitless

An endless way for future challenges solutions.



The Pandemic Trauma

What the world has been through in the past few months showed how unpredictable the future is. Abundant offices, schools, shopping centers and even parts of cities seem to be lifeless. Ignoring what the pandemic did to the world socially, economically and environmentally is not an option. Architecture should be ready to both post-pandemic city needs and/or any other needs may face future generations, the randomness of the future needs necessitates elastic buildings flexible enough to cope this uncertainty. In the meanwhile, taking into consideration how fast the world had adapted to remotely interact with surprising results in productivity. Percentage of remote workers is expected to rise even after the pandemic where as reported by Forbes “By 2025, an estimated 70% of the workforce will be working remotely at least five days a month.”, these changes are not only improving the work productivity but also lead to savings. Rent, capital costs, facilities operations, maintenance, and management. Benefits also reach society and environment with less fuel consumption, traffic, gas emissions and wasted time. In addition, business insider predicted that even some retailer giants are thinking to depend more on the online shopping and close most of their stores for the sake of decreasing expenses and maximizing profits.

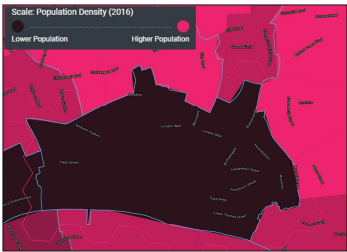
The Square Mile Zone :

- Lowest Population density in comparison to surroundings “1.1”.
- The current land uses “1.2” shows the majority presence of the industry and business buildings.
- The mayor of London shows the necessity of creating public spaces “1.3”.
- The Urban heat island effect caused by the city’s dense buildings “1.4”

Vision

The empty spaces from the abundant offices/schools/retails would create unequally distributed areas, where suburbs could be over-populated while the inner city is vacant. Solution would be for the time being, inviting more people to occupy these empty spaces to create equally populated cities while providing public and semi-public amenities to serve people on the scale of building, neighbourhood, and community. The key is to create a sample that can be relocated in different areas replacing the traditional single-use buildings, thus making sure the complex would bring life into the neighborhood through its vibrant and diverse uses all year long.

- Cubic solid/void movable/replaceable modules intensifying building’s ability to cope with city’s time and space needs.
- Maximizing the pedestrian accessibility through building
- Introducing Co-working/learning spaces.
- Creating different typologies of residential spaces to avoid the dense population areas.
- Creating variety of public spaces serving both neighborhood and city scales.
- Hospitality areas to serve the tourists/visitors expected especially with the nearby culture mile.
- Clinical areas for the public health.



Population Density
Figure 1.1



Land Use
Figure 1.2



Public Spaces Accessibility
Figure 1.3



Urban Heat Island
Figure 1.4

Sustainability/Well-being

Optimize day-lighting to reduce the use of electrical lighting by introducing daylight into the space

Varying intensities of light and shadow that change over time to create conditions that occur in nature positively impacted circadian system functioning

Vegetative roofs help to cool the surrounding air through evapotranspiration, reducing heat islands and to minimize its impacts on human and wildlife habitats.

Prioritize or enable exercise opportunities that are in proximity to green space. Connect building occupants to optimize health benefits with natural elements, by providing quality views which increase visual comfort, and positively impacted attitude and overall happiness.

Vegetative roofs to reduce pollution from storm water runoff and eliminating contaminants.

connections with nature that may be analyzed statistically but may not be predicted precisely raise the awareness of a functioning ecosystems.

Natural Ventilation to reduce environmental and economic impacts associated with excessive energy use and to increase levels of energy performance. Wind tunnels to allow airflow through the building.

Thermal & Airflow Variability positively impacted comfort, well-being and productivity

* The abandoned cubes (for any reason) could be re-used or recycled.

Resilience

Designing for flexibility and ease of future adaptation and for the service life of components and assemblies. Depending on the onsite cranes which are stored in the basement levels, and depending on the endless options that could be assembled to face challenges.

The format of the cubes could be in any configuration to adopt the different challenges, such as flood, hurricane ... Etc. For disaster such as diseases, in addition to the existing clinics, the flexibility for providing a single unit for quarantine for example.

As for social shocks like homelessness, the statistics indicate a continued rise in the estimated number of rough sleepers in England, based on a mixture of local authority counts and estimates for one night in Autumn (between October and November) each year since 2010. The stock format could be a full cube to act as a shelter whenever needed

