



BI-CITY
BIENNALE OF
URBANISM
ARCHITECTURE

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From collective form to ecological urbanism, this exhibition offers an alternate trajectory for climate resilient housing.

Since 2015, NOA has researched the history of vernacular and pre-industrial built environments in order to better understand indigenous solutions for climate-resilient housing. Spatial and ecological performance analysis of our findings initially led to a catalog of passive design strategies with twenty-five case studies that cut across climates and cultures: from the semi-private courtyards ventilating Beijing hutongs to the shared walls minimizing solar heat gain in North African medinas. From mud brick wind towers in Yemen to stepped terraces in Greece, the catalog focuses on "clustered housing," which we define as multi-family dwelling units gathered around shared public

spaces and communal passageways that are resistant to harsh climactic conditions.

From this data, we hope for the emergence of new techniques and patterns in design that foster passive and low energy architecture with conditions favoring natural ventilation, passive cooling and heating, and density without heat.

For over 80 years, the dominant forces of industry, development and even modernism itself, have been fundamentally at odds with how people live together, and in particular, how people live with their natural environments. By many measures, our built-up urban centers have exacerbated their local climates by overheating. This effect leads to a whole series of negative externalities. To elaborate this paradox at the scale of housing is to question the specific configurations, forms and fabrics of our cities today and how they can adapt and mitigate for tomorrow.

PROJECT

Exhibition

SIZE

18 m² (193 ft²)

CLIENT

UABB

LOCATION

Shenzhen, China

STATUS

Completed

SUPPORTERS

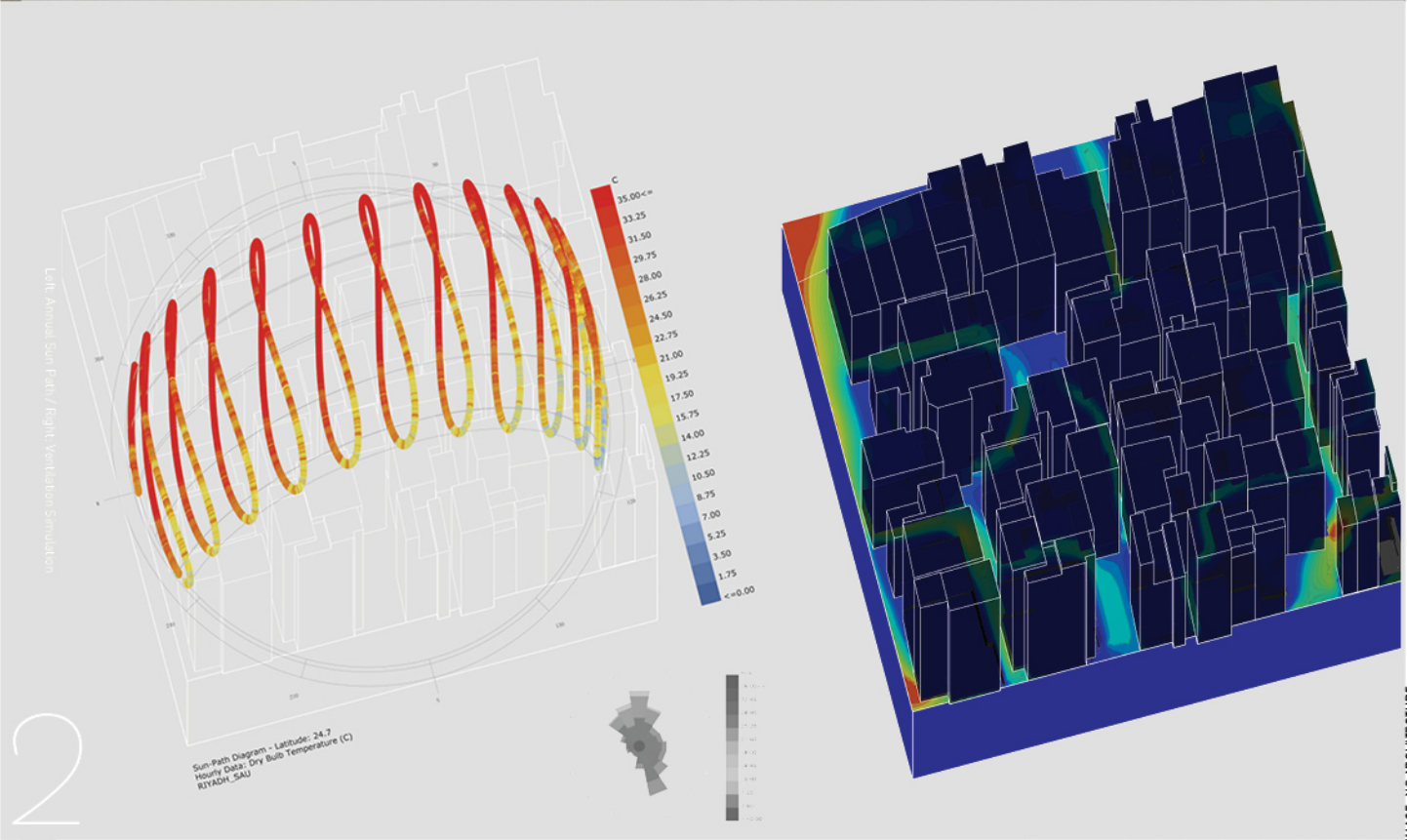
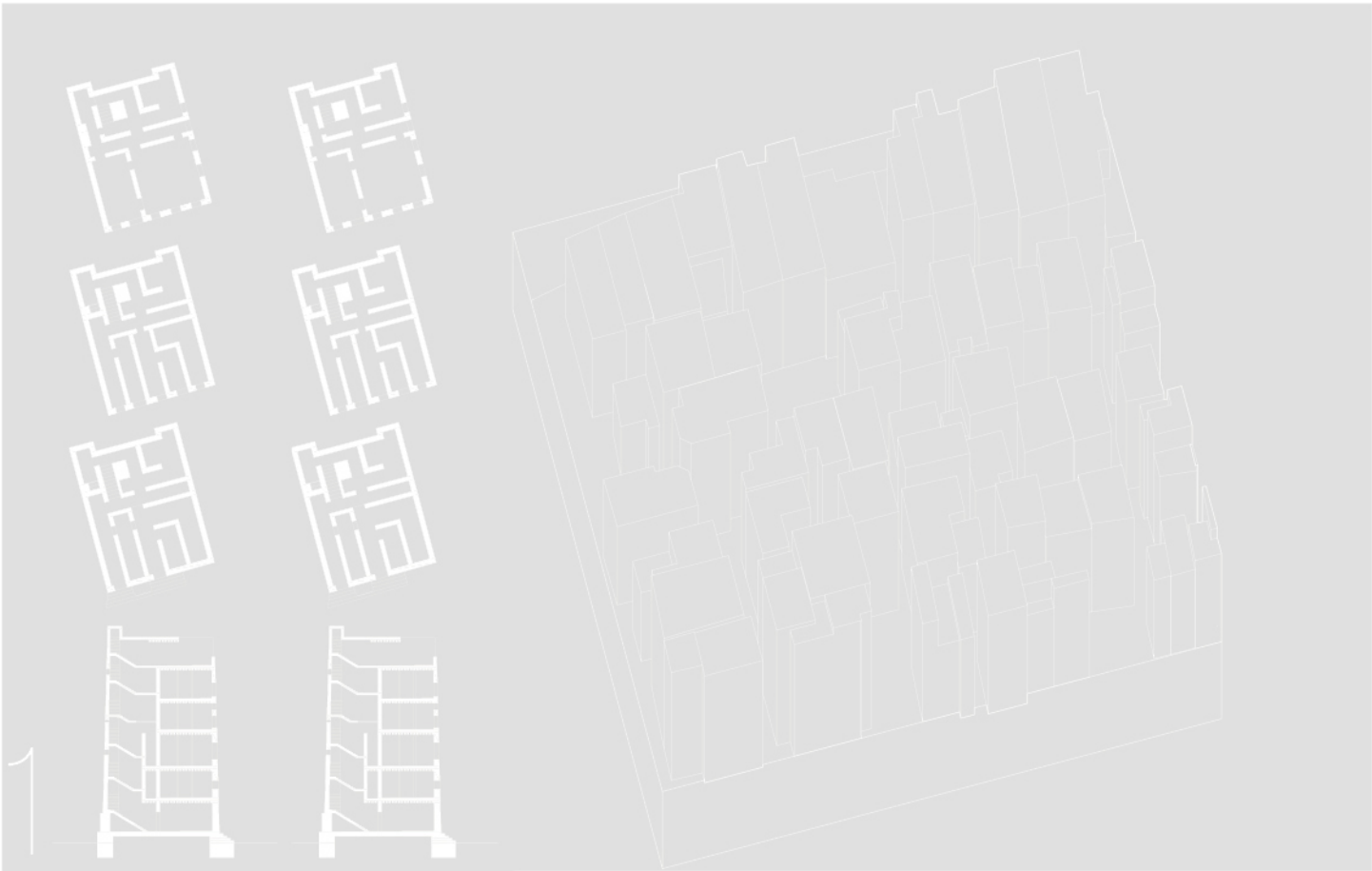
Plimpton-Shattuck Fund, CRH/
Old Castle, Dr. Nezh Cereb/
Histogenetics , NYIT

KEY PERSON

Andrew Heid, Jie Xie, Jialin Yuan

TEAM

Daniel Bayne, Yawen Jin, Chung
Ming Lam, Jean Lien, Sophie
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1-2. Climate resilient research. 3. Exhibition.