1.

IS THERE A BETTER WAY?

Introduction

Winy Maas

For centuries, the fabric of East Asian cities has been formed by urban villages that are built up of small scale, informal, often 'light' architecture: the hutongs in Beijing, the small – mostly wooden – houses in Tokyo, the villages in Singapore, the kampungs in Jakarta, as well the individual houses and rooftop-extensions in Taipei.

These urban villages form intense, socially connected communities where strong individual identities and differences are maintained. Because they are, and have been, inhabited mostly by the poor, land is cheap – and therefore, change comes easily. . . .

Driven by demographic and economic forces since the start of the second millennium, these cities are rapidly changing. In a relentless 'Block Attack', massive towers, slabs and blocks with repetitive housing units, floor plans and façades are invading – scraping away the urban villages that have evolved over hundreds of years. These alien buildings provide a Western standard of living, destroying indigenous communities in the process. They obstruct urban innovation and discourage differentiation, flexibility and individual ideas.

Is there a better way to develop these areas? Could we densify them without sacrificing the informality of the urban village? Could we even apply the principles of informality to generate new neighbourhoods? What if we could grow urban villages vertically, as an alternative to the monotonous sea of blocks?

This approach could enable housing types with terraces and roof gardens that accommodate leisure activities. This comfortable lifestyle might even attract the middle and upper classes, leading to a more mixed and less segregated society. Homes could even be combined with small-scale offices and workspaces. In contrast to the blocks, this new village type might enable an architecture based on individual expression and identity. Just imagine . . . a 'villa' for everybody!

Can this new kind of village be developed in an evolutionary manner? Can a workable model for a self-organized process of city building be provided? Can it grow and shrink and change in time – as historic urban villages did? In short: is informal vertical urbanism possible?

Such a development would require a framework and a set of principles to regulate and support the individuality of its elements, while guaranteeing safety, sunlight, sanitation and the wishes of its inhabitants. What technologies would be needed? How can health regulations and air rights be addressed? What about fire safety? Can development be phased?

We need to provide a workable model for a truly self-organized manner of city building – a model that combines individuality, differentiation and collectivity with the need for densification, as an alternative to the Block Attack. A model that can generate a vertical village – a three-dimensional community that brings personal freedom, diversity, flexibility and neighbourhood life back into Asian – and maybe even Western – cities.

Throughout Asia, urban villages have formed the fabric of cities for centuries. But now, an invasion of towers and blocks is obliterating them: the Block Attack.

As a result of demographic and economic forces, these anonymous buildings packed with repetitive housing units, floor plans and façades, are taking over Asian cities with relentless speed. But the public space surrounding them lacks the traditional Asian city's qualities of diversity, intimacy and richness.

What's the difference between a housing block alongside Beijing's ring road, one on the periphery of Taipei and one in Singapore? Is there a difference?

2.

URBAN VILLAGES ARE DISAPPEARING.

Block Attack

MVRDV

3.

WHY WE LOVE THE URBAN VILLAGE.

The Properties of Communities

What characterizes healthy communities? They are lively, intimate and diverse. They combine human scale with critical mass and density, offering both individual freedom and social coherence. They grow in an evolutionary way. They are resilient.

How can these qualities be described, distilled and transformed into concrete parameters?
By studying the work of Christopher Alexander, Jane Jacobs and other urban theorists, we reformulated these qualities into specific criteria that can be used to evaluate communities in various global situations.

Urban villages are threatened by rapid urban development. How many are left? Where are future demolitions planned? And when will the last urban village become history? Tracing the evolution of nine very different Asian cities provides insight into the development, the current status and the future of urban villages. These processes show how the Block Attack has influenced the range of housing typologies offered, the urban fabric and traditional communities.

4.

EXTINCTION?

The Death and Life of the Urban Village

MVRDV / The Why Factory

5.

HOW DO YOU REALLY WANT TO LIVE?

Like many other Asian cities, Taipei has transformed itself into a modern, high-density city in recent decades. An influx of young families and newcomers has spurred urban renewal. As much as these new residents may desire homes with individual identities, they also require affordability and convenience. For most, a standard apartment in a newly built housing tower is the only option. 'Finding a nice house is difficult!' is a complaint often heard in Taipei.

Unfulfilled Domestic Desires

MVRDV with Sun Studios

How can we, as architects and urbanists, handle the endless individual desires of prospective homebuyers? Can we answer all of their demands? Could we, instead, provide these unsatisfied shoppers with a tool to help them design their own dream houses?

The HouseMaker© is the first attempt to develop a software program that can address the many requirements of prospective homebuyers.
The HouseMaker© is a software program that categorizes all elements of a house. It offers a user-friendly interface with which to choose rooms, layout, shape, materials, windows and outdoor spaces. It also allows the user to modulate functionality, spaciousness, expressiveness and luxuriousness. You create your customized house and see the result and price in real time. You can easily adjust any part of the house, and once satisfied, have it built. Every dream house is just a few clicks away.

6.

ARCHITECTURE ON DEMAND.

The HouseMaker©

MVRDV with Axis.fm

Can we dream a new model for the development of Asian cities that combines individuality, differentiation and collectivity with the need for densification? Can we create a Vertical Village – a three-dimensional community that brings personal freedom, diversity, flexibility and neighbourhood life back into Asian cities – as an alternative to the Block Attack? What would this Vertical Village look like?

7.

INDIVIDUAL, INFORMAL, INTENSE.

Dream

MVRDV

8.

WHAT TO LEARN FROM OTHERS?

The dream of a vertical village is nothing new in the history of architecture and urbanism. Many before us have tried to address the need to combine density with human scale, individual freedom and collectivity. A web-based search for terms related to 'vertical' and 'village' displays an overview of our predecessors' inventions, revealing a variety of designs and techniques that could influence the development of future vertical communities. What did they strive to accomplish in their designs? What types of units comprised their vertical communities? And what can we learn from them?

Google Search

The evolutionary growth of the Vertical Village is different from that of a top-down development or masterplan. Rules are needed to guide this growth. How can we guarantee that a house will have enough light, even if another house is built next to, or on top of it? How do we make a village of ten floors safe, and ensure that once the village has grown to 50 floors, everyone will be able to escape in the event of an emergency?

To enhance knowledge of the Vertical Village's growth, to understand the relationships among its different elements, and to test the necessary rules, an exercise was constructed. Cubes represented individual houses, with each colour representing one parameter. Growth over X years was simulated for six days, for six identical plots, following six parameters, resulting in a battle of conflicting desires. How does the village's economy compete with community? And what is the ideal synergy between accessibility and energy? These systematic tests of evolutionary growth generated a set of rules that form a basis for further development of the Vertical Village.

9.

STEP BY STEP BY STEP

Investigating Evolution

The Why Factory / Berlage Institute

10.

IS IT FEASIBLE?

Ask the Experts

Samia Henni

How to realize the Vertical Village? Is it possible to create a 'village' that is dense, that allows for individuality, and that grows – vertically – in an evolutionary way? What are the possible solutions, and what are the challenges? How do we solve all technical requirements, guarantee structural integrity and safety, and provide access? What is needed for local legislation? And what is needed for the growth of a cohesive community? We asked a team of experts for their advice, suggestions and comments on the feasibility of constructing the Vertical Village.

11.

INTENSIFY.

SuperKampung

The Why Factory / Berlage Institute / Tarumanagara University

In order to test the vertical village concept when economic and social conditions are involved, the study moves from abstract parameters, to a specific location. Will bottom-up development be functional in a real situation? Can it gradually change and improve an existing urban pattern?

The SuperKampung project explores the socio-economic side of communities in Jakarta, a city largely composed of urban villages: some are slums, while others include middle-class areas. The informal structures that characterize these kampungs are crucial to the city's future prosperity, and should be used as a basis for development.

The project tests a hypothesis: if each kampung focusses on one type of business, can it become a resilient model for economic development? Nine different kampungs were tested for their economic potential following the gradual evolutionary development of their urban fabric. The result challenges existing kampungs to exceed their current limitations by joining together to become a SuperKampung.

The Five Villages study anticipates examples of possible appearances of a Vertical Village. Each resulting village emerges from the same sized plot, with the same number of inhabitants and the same time span of development. However, each village has a different focus, structural concept and strategy for growth. In each case, village inhabitants need to agree on a specific structure and a set of principles in order to make their village unique. These five villages illustrate the different characteristics that might emerge from the evolutionary growth of a Vertical Village.

12.

EACH ONE WILL BE DIFFERENT.

Five Villages

The Why Factory

13.

WHO NEEDS A MASTERPLAN?

The VillageMaker©

MVRDV / The Why Factory

All knowledge of parameters, relations and rules are brought together in the VillageMaker©, an open-source software program that allows future inhabitants to collectively develop a vertical village in an evolutionary way. The program is a tool for supervision and a platform for negotiation, without the need for a masterplan or the involvement of urban planners. The VillageMaker© is connected to the HouseMaker©, which, after defining one's dream house, enables one to select a dream location.

The VillageMaker© is a fully interactive, scripted Rhinoceros Grasshopper model, with a user-friendly interface that directly transforms desires into a 3D model of a village. After setting user-criteria for sunlight, view, privacy and preferred area, the program shows where the house could be built, and specifies the associated costs. With the help of the VillageMaker©, Vertical Villages can be initiated, tested and gradually developed to become a dynamic part of future Asian urban development.

14.

WELCOME

A Day in the Life of . . .

MVRDV with Wieland&Gouwens

What would it be like to live in the Vertical Village? Welcome to a place where citizens determine and construct their own lives according to their individual dreams. Though living conditions are dense, they are also sanitary, social and efficient.

Walk through the Vertical Village; climb its stairs to communal gardens with trees and small ponds, with sunbeams and views to the surrounding city. See how new neighbours construct their houses, and how they extend and implement their shared gardens. Watch the community expand. Peek in on the lives of the inhabitants of the Vertical Village.

How did the Vertical Village project come into being? What studies have been executed and who has contributed? An overview of the process from its start as a concept for the next 'museum of tomorrow'; via collaborative research and designs for different buildings on several locations; towards the publication of *The Vertical Village* and the Museum of Tomorrow exhibition in Taipei.

ON AND ON AND ON

Project Chronology

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