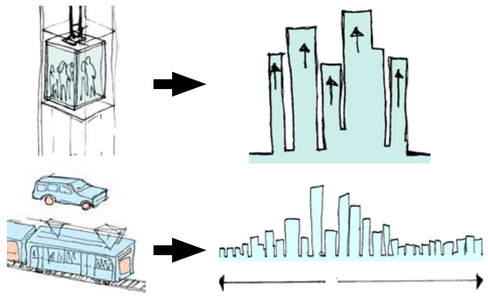
THEME | DENSITY AND MOVEMENT IN URBAN SPACE



HORIZONTAL + VERTICAL EXPANSION

The expansion of cities in the 20th century is characterized by the invention of the automobile and the elevator, which made a horizontal and vertical extension possible beyond an imaginable scale. Both schemes represent a planar system of planning, which either considers a horizontal limit (x-axis) or a vertical limit (z-axis) and does not neccesarily take into account the relationship three dimentinal space above ground floor.

WHAT HAPPENS IF WE INTRODUCE A THREE-DIMENTIONAL UTILIZATION OF SPACE PLANNING?

EXTREME BUILDING DENSITY

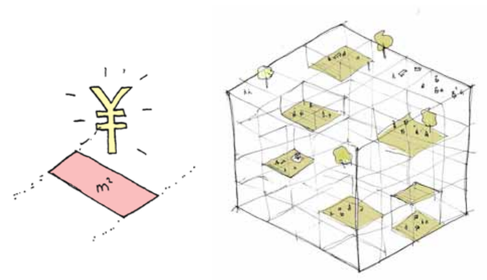
Rampant urban development often causes extreme density, lack of space on ground floor and high land values that make it difficult to only consider a two-dimentional utilization of space in order to achieve natural qualities such as greenery, air and space on top of the neccessary infrastructure, water/ sewage systems, energy and ressources that a city needs.

WHEN THE GROUND IS ALREADY OCCUPIED, HOW DO WE CREATE MORE SPACE?

HIGH POPULATION DENSITY

Humans are social beings, and have always lived together in communities. As the world population continues to grow, we have to get used to live closer each other, even on top of each other. Huge concentrations of people in densly built areas needs special attention terms of planning in order maintain harmony and balance, both for the community and the individual needs.

HOW CAN AN INCREASED ACCESSIBILITY INCREASE THE QUALITY OF URBAN SPACE AND THE RELATIONSHIP BETWEEN PEOPLE?



HIGH LAND COST AND TDR

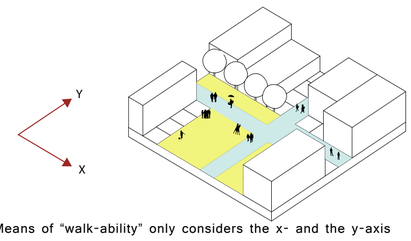
Central parts of cities are often very expensive and hard to get. Developers seek to get the highest possible profit which often result in densly packed conditions. The price of a lot is indisputably connected to the physical conditions of the ground floor such as its location, size and surroundings. Generally speaking, the building has realtively low value compared to the lot. But when density is high, air rights becomes valuable, allowing lot-owners to sell transferable development rights (TDR) in order to develop space not connected to the physical ground floor.

CAN ONE PROPOSE STRATEGIES THAT ADDS QUALITY OF SPACE TO THE VOLUM, NOT ONLY THE FLAT LOT?

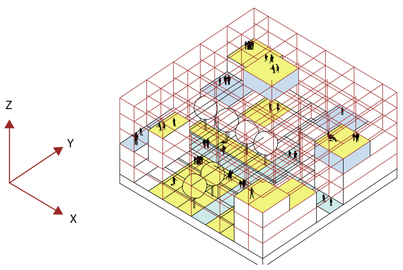
METHOD | HIKE-ABILITY

In this project I wish to rethink and investigate the possibilities of the cityscape by using the term "hike-ability" as a method.

Hike-ability derives from from the more popular term "walk-ability", the measure of how friendly an area is to walking. "Hike-ability" seeks to further investigate the potential of vertical and diagonal movement to gain health, economic and environmental benefits in a dense urban context.



Means of "walk-ability" only considers the x- and the y-axis



Hike-ability takes it to the next level and considers x-, y- and z-axis

In less dense cities public spaces and natural qualities can be found on ground floor.

But in cities like Tokyo, heavy densification of buildings and people causes a loss of ground floor qualities such as air, space and greenery.

What if we add a new value above ground floor to increase the quality of the urban space?

Then, how do we make these spaces accessible for the public? Can we increase the city's "hike-ability"?

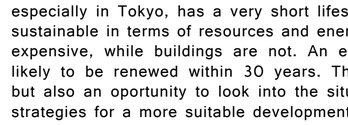
TWO SCENARIOS FOR A HIKE-ABLE STRATEGY

SCENARIO I

The urban landscape is transformed into a continuous diagonal movement in order to make space accessible in every level. Requires more planning of a larger project area.

SCENARIO II

Point-based vertical connections. "Getting there" is the goal. These points will occur over time as a result of the continuous metabolism of buildings, and create links between when there is enough tension between them.



The approach to a street is a key factor when designing a building.

A hike-ability scheme will create possibilites for new relations between typologies, infrastructure, topography and public/ private spaces.

CONTEXT | TOKYO

LEARNING FROM TOKYO

Tokyo is the worlds largest meteropolitan area, both in terms of size and population. It has a highly developed and efficient infrastructure, low crime-rate and is a realtively comfortable city to live in despite its density and size. But it is also a city that has reached the limit of growth in many ways; it will not significantly expand or become more densly built. This brings us the opportunity to work in a context where expansion and densification are already dealt with, and we can take it to the next level. What happens at this stage? What are the challenges of this kind of city? What can we learn by studying complexity of Tokyo?

ENERGY CRISIS

Japan is known for its high energy and resource consumption. On March 11, 2011 Japan suffered perhaps the largest ever natural disaster yet to afflict an advanced industrial economy, causing the meltdown of the Fukushima nuclear power plant and eventually the temporary shutdown of 52 of 52 reactors nationwide. This triggered an ongoing debate on the policies regarding renewable energy and sustainable development.

BEFORE 3/11 JAPAN RELIED ON NUCLEAR POWER TO SUPPLY NEARLY 30% OF ITS ELECTRICITY, AIMING TOWARDS 50% IN 2020.

77 % ARE WILLING TO ACCEPT STRAIGHT ELECTRICITY SAVING INITIATIVES AND ROLLING BLACKOUTS FROM THE MUNICIPALITIES

Japanese people show a strong willingness to pay the price of no nuclear power at the local level.
-Asahi Shimbun polls

SOCIAL AND DEMOGRAPHIC CHANGE

Japan is facing both a diminishing and a rapidly aging population which triggers huge changes in the society. The local community becomes more important, as a economical recession causes declining and more expensive welfare offers. Lack of faith in politicans and a growing community participation are also shifting the way of planning for the future. Japan is shifting from a strong governmental rule towards local autonomy and a more horizontal hierarchy in terms of decisicion-making.

SHORT BUILDING LIFESPAN

Japan has a tradition for renewal (Ise Shrine). Buildings, especially in Tokyo, has a very short lifespan, which is not sustainable in terms of resources and energy use. Lots are expensive, while buildings are not. An entire cityscape is likely to be renewed within 30 years. This is outrageous, but also an oportunity to look into the situation and design strategies for a more suitable development.