## MAKING OF A METROPOLIS

A story about us "The Indoor Generation". Our generation spends 90% of its life indoors. This started the day when we started leaving nature behind. We brought lovely things both necessary and luxury items which filled our homes. Our home became places you would never want to leave. We are building our houses in way such that nothing could escape. Artificial lighting replaced the natural Sunlight. We cooked and showered, breathed and played, slept and sweated but we have closed ourselves IN to a point where nothing could get out. We tried spraying/using chemicals, when the inside air turned bad. Additionally, we started using artificial suns everywhere to make the life bearable. That's when things started to happen. At beginning, it is Hard to notice, some needed help to sleep, breathe and even not itch.

> VISUAL CONNECTION WITH NATURE A view to elements of nature, living systems and natural processes. 🛛 🌝 🧔 🚖

NON-VISUAL CONNECTION WITH NATURE Auditory, haptic, olfactory, or gustatory stimuli that engender a deliberate and positive reference to nature, living systems or natural processes. 🛛 🙆 🧒 👼

NON-RHYTHMIC SENSORY STIMULI Stochastic and ephemeral connections with nature that may be analyzed statistically but may not be predicted precisely.

THERMAL & AIRFLOW VARIABILITY Subtle changes in air temperature, relative humidity, airflow across the skin, and surface temperatures that mimic natural environments.

PRESENCE OF WATER.

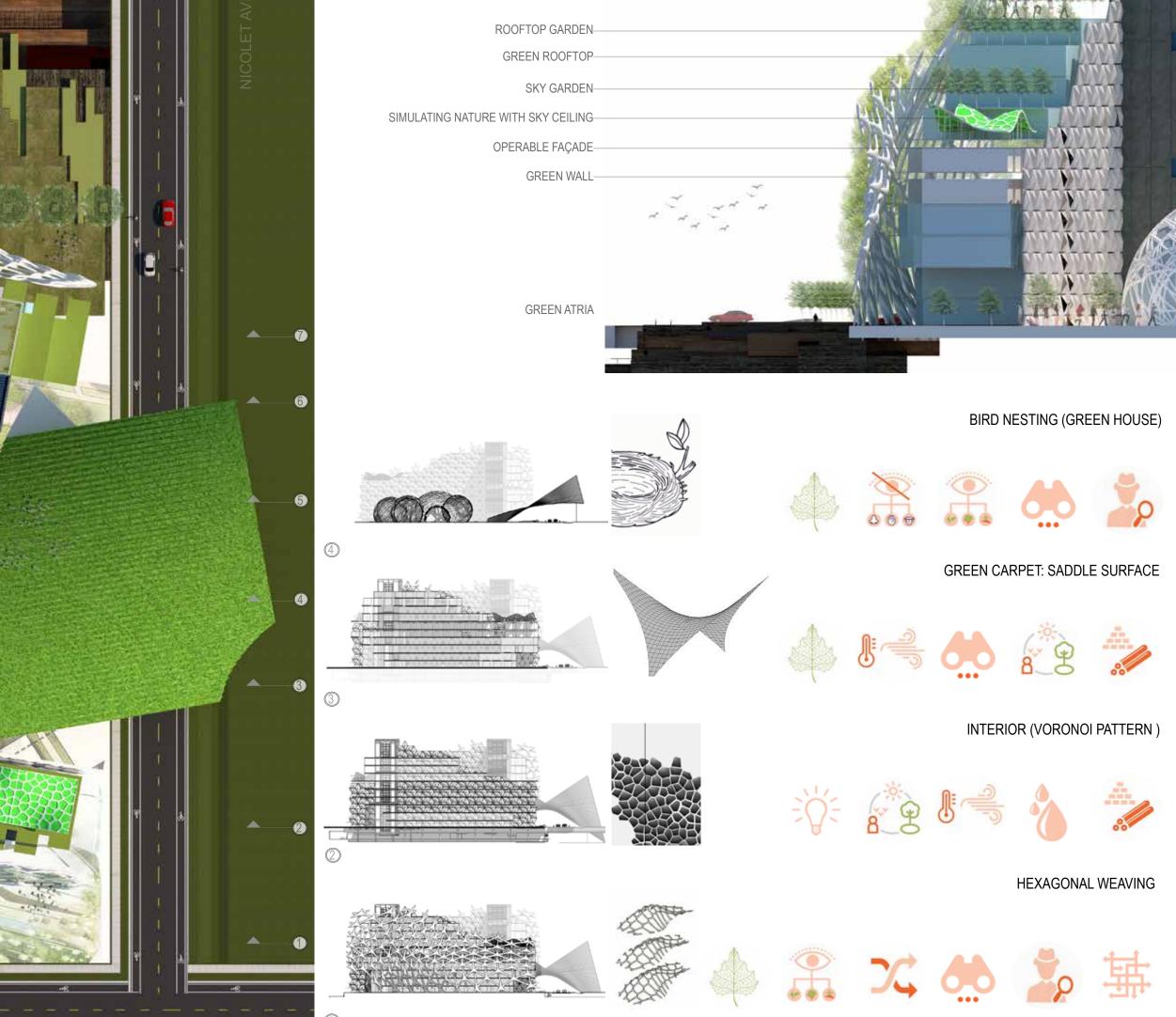
A condition that enhances the experience of a place through seeing, hearing or touching water.

DYNAMIC & DIFFUSE LIGHT

Leverages varying intensities of light and shadow that change over time to create conditions that occur in nature.

CONNECTION WITH NATURAL SYSTEMS Awareness of natural processes, especially seasonal and temporal changes characteristic of a healthy ecosystem. 8







Streets and Beyond, Organizing urban life arou Reforming Urban Planning System, Restorative



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Many of us even started to feel sad. So, we turned happy lamps to make the sadness go away. Then scientists discovered that the air inside our home is polluted 5 times more than air outside. And that the lack of daylight can affect children learning and blood pressure. It turns out that kids' room often has the highest concentration of toxicants in the house. In fact, millions of houses are unhealthy to live in. Scientists and doctors discovered that living in damp and moldy homes increases the risk of asthma by 40%. And I learned that millions of peoples suffer from asthma and allergies caused by the bad indoor environment. And so, here we are. How this story ends is up to you. DO something If you care about the indoor generation. Begin to think and live differently. Let light and fresh air into your life again. Even small differences can make a huge difference for coming generations

tinct sense of place.

**PROSPECT** 

REFUGE.

MYSTERY

**RISK/PERIL** 

<u>/!\</u>

COMPLEXITY & ORDER

to those encountered in nature

**BIOMORPHIC FORMS & PATTERNS** Symbolic references to contoured, patterned, textured or numerical arrangements that persist in nature. MATERIAL CONNECTION WITH NATURE.

An unimpeded view over a distance, for surveillance and planning.

A place for withdrawal from environmental conditions or the main

flow of activity, in which the individual is protected from behind and

obscured views or other sensory devices that entice the individual

The promise of more information, achieved through partially

An identifiable threat coupled with a reliable safeguard.

to travel deeper into the environment.

Materials and elements from nature that, through minimal

Wprocessing, reflect the local ecology or geology and create a dis-

Rich sensory information that adheres to a spatial hierarchy similar

THERMAL ENEGRY STORAGE SYSTEM: Storage of low-grade heat from solar gain in STORAGE:

living creatures and the whole nature and its beauty



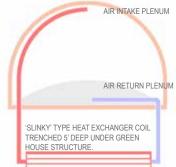
nap for transformation existing tress and landscape surfaces Fostering attachment to the place, help get the message out.

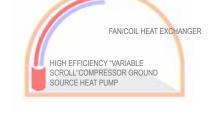
: 🛱 🙂 🤧 📼 METHODS FOR HEATING GREEN HOUSE AND CONVERTING SNOW TO WATER FOR FREE: AIR RETURN PLENU

under greenhouse benches

MIDTOWN GREEN REFUGE - TOWARD A BIOPHILIC CITY OF MINNEAPOLIS







**GREEN HOUSE EARTH THERMAL** EAHE- Earth to Air Heat Exchanger

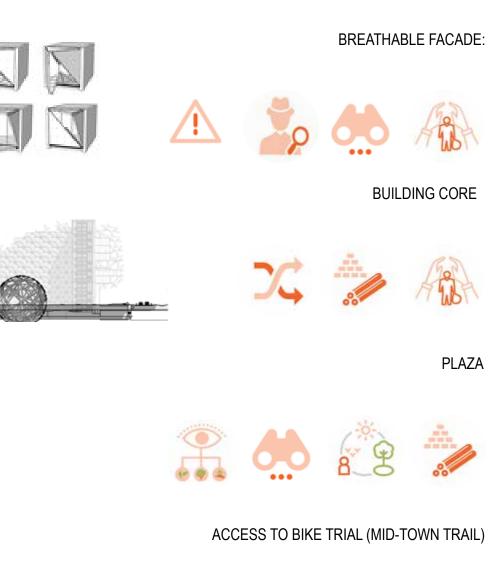
GREEN HOUSE SOLAR THERMAL STORAGE: SHCS- Soil Heating and Cooling System

Our task must be to free ourselves from this prison by widening our cirlces of compassion to embrace all



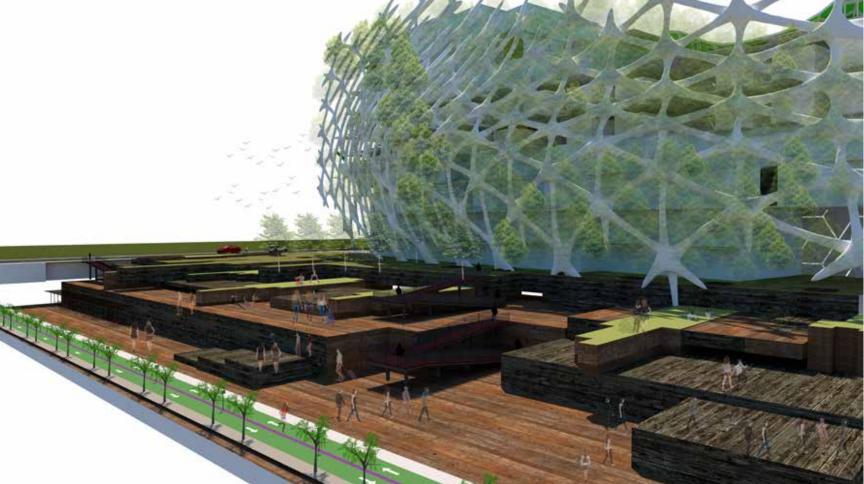
Albert Einstein

-LIVING WALL ON THE BUILDING EXTERIOR -DAY LIT INTERIOR SPACE -CLUSTERED HOUSING AROUND GREEN AREAS







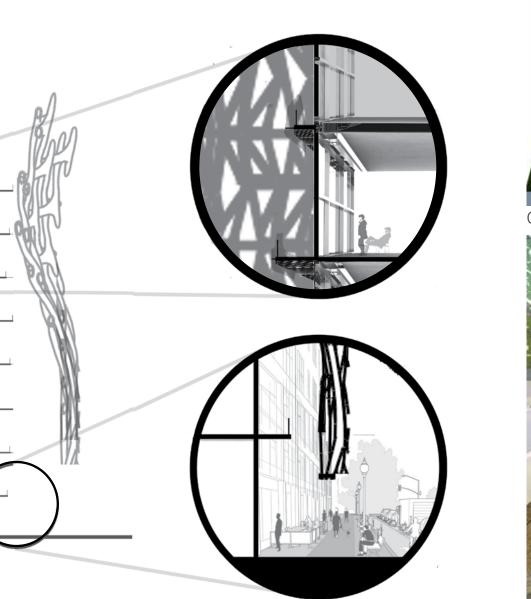


MID TOWN TRAIL PLAZA: Special geometries, ritual empowerment with life force energy and other techniques of work, Fostering attachment to space



ROM TWIN CITY - TO THE GARDEN CITY: Bringing building to life, transforming building practices through biophilic de the human and natural environment









TRAIL LEVEL – Easy access to natural trial, adaptability to balance urban setting and natural setting

