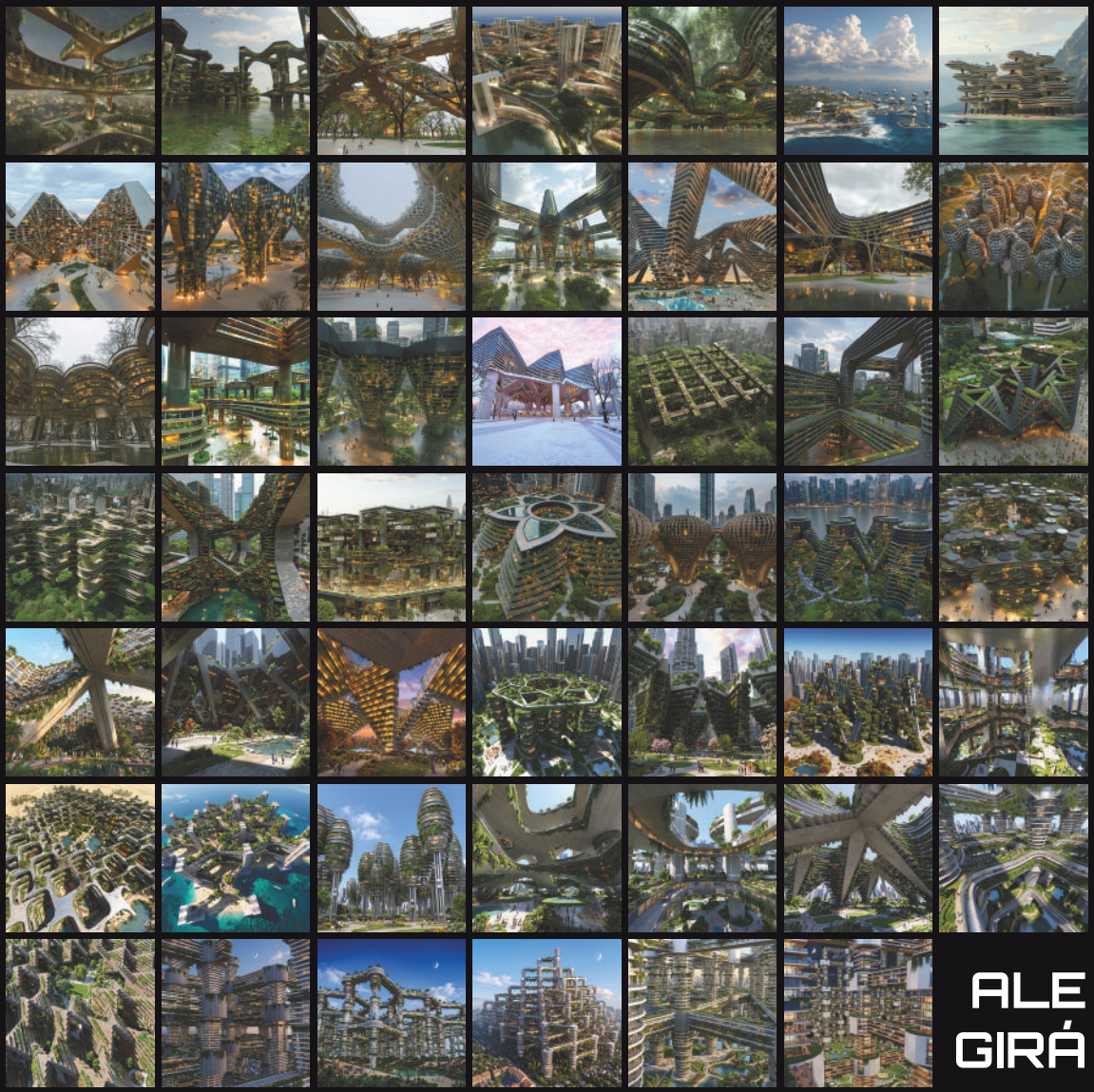
URBAN ENGITECTURE

MODELS FOR ELEVATED CITIES



ALE GIRÁ

URBAN ENGITECTURE

MODELS FOR ELEVATED CITIES

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FOREWORD

Why elevate?

I am not a sustainability expert, but I believe two main factors, one of function and one of livability, make today's cities unsustainable: mobility problems, and public spaces that are poor or insufficient. Other problems follow from them, such as buildings that waste energy and a general lack of quality caused by weak standards.

I think both main problems are caused directly by buildings, which I compare to obstacles: they hinder movement and they take space away from the public. For this reason I advocate elevation in future urban developments. Lifting buildings above the ground removes these two causes of unsustainability and can make neighborhoods more livable.

The models in this book explore that idea. They are experimental digital sketches, modelled first in CAD and then developed with AI, and I share them as questions rather than as finished answers. What do you think?

PROJECT INDEX

48 projects

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TEXT

01

BUILDINGS AS OBSTACLES

We usually think of buildings as the substance of a city, but they also behave as obstacles. They create barriers that hinder movement and interrupt natural flows, and they leave public space as whatever remains between them. Mobility in general and the quality of public space are both affected, in a negative and lasting way. Elevating buildings reverses this: the obstacle becomes an opportunity.

PROJECT

01

LAYERS

Continuous curved platforms lift homes and public walkways above the ground, leaving parkland and water below for everyone.

TEXTS 3 4 9





PROJECT

02

NETS



Branching, tree-like supports carry the city above water and woodland, so the ground stays open.

TEXTS 17 16 20





TEXT

04

GIVING LAND BACK TO NATURE

PROJECTS

01 03 09 10 14 16
21 25 31 32 34 38

As cities grow, buildings occupy land that would otherwise support wildlife and natural ecosystems, fragmenting habitats and reducing biodiversity. Spread-out development also lengthens journeys, increases congestion and emissions, makes walking, cycling and public transport harder, and deepens dependence on cars. Raising buildings above the ground frees the land beneath for green areas, wildlife corridors, parks and transport, and gives space back to both nature and the public.

PROJECT

03

TRIANGLES

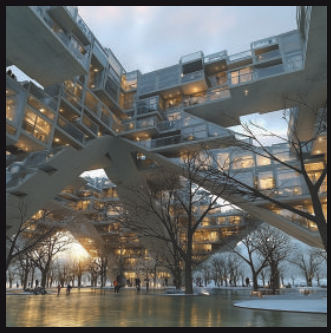
Large inclined braces hold stacked terraced homes above a park, freeing the ground level for public use.

TEXTS 27 19 4









TEXT

20

HANGING BUILDINGS

PROJECTS

02 37 42

We already know how to build amazing elevated structures for cars, including suspension bridges, so what if we applied the same logic to buildings? Suspended buildings could free the ground for parks, public space and mobility, or extend urban life above the sea where that is needed. It is another way to reconnect urban planning, architecture and engineering into one system.

PROJECT

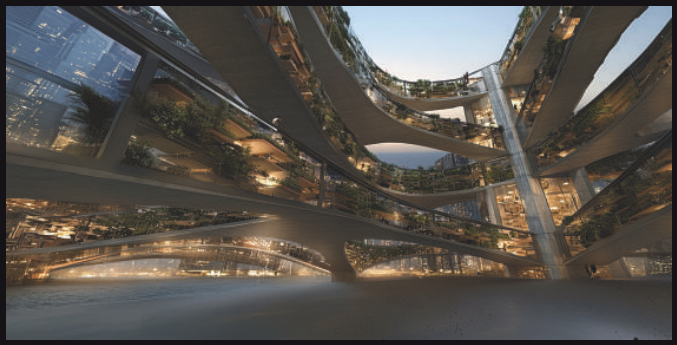
04

BRIDGES

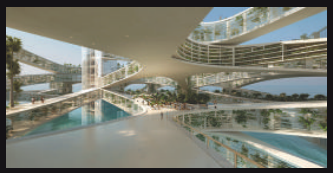
Towers joined by long curved bridges over the sea: the links carry movement at height and offer alternative ways out.

TEXTS 6 28 7









PROJECT

05

ROUNDED-TOWERS

Rounded, planted towers linked by bridges rise above an open public plaza.

TEXTS 6 16 30











TEXT

24

BEFORE IT IS REAL

PROJECTS

06

Before it becomes a reality, it is a project; before, a thought; before, an idea; before, a possibility; before, a hunch; before, a chance; before, it is a reality. I want to look more toward the future than toward the past, and I believe theory and practice, dream and reality, innovation and applied technology, art and science should come together until growth happens freely. These models are a way of exploring new possibilities for architecture, as a design and production line fed by many inputs, from reality or from fiction.

PROJECT

06

PLANTS



Small stilted pods stand lightly on shore and water, in summer and in snow, leaving the land beneath free.

TEXTS 24 16 2



TEXT

03

WHAT ELEVATION BRINGS

PROJECTS

01 07

Freeing the ground is the first benefit, and it brings others with it. When the buildings are also connected horizontally, at different heights or at least at their top, high-rise structures gain stability, because elevation alone does not provide it, and the same connections give several escape options in an emergency. Mobility can be green, easy and economical at different heights, and public spaces can be more numerous and better, also at different heights. Dwellings get better light, ventilation and views, a community feeling can grow, and elevated cities can adapt to difficult topography, in the way stilts do.

PROJECT

07

TREES

Terraced platforms on slender stilts rise like a canopy over beach and lake.

TEXTS 19 3 17





PROJECT

08

LEANING-TRIANGLES



Triangular housing blocks lean toward one another around an open public plaza.

TEXTS 27 26 30







PROJECT

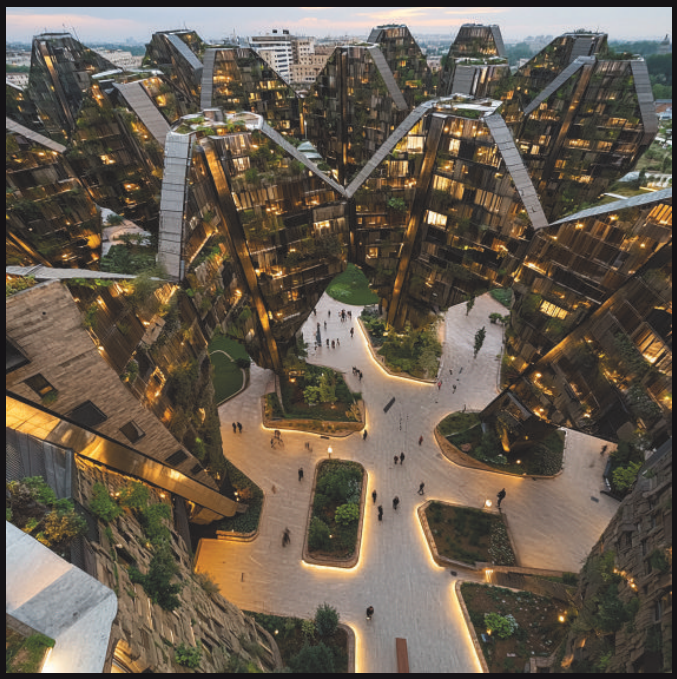
09

FACETED-BLOCKS

Faceted housing blocks rise from planted courtyards and are linked by zigzag walkways.

TEXTS 6 4 30









TEXT

11

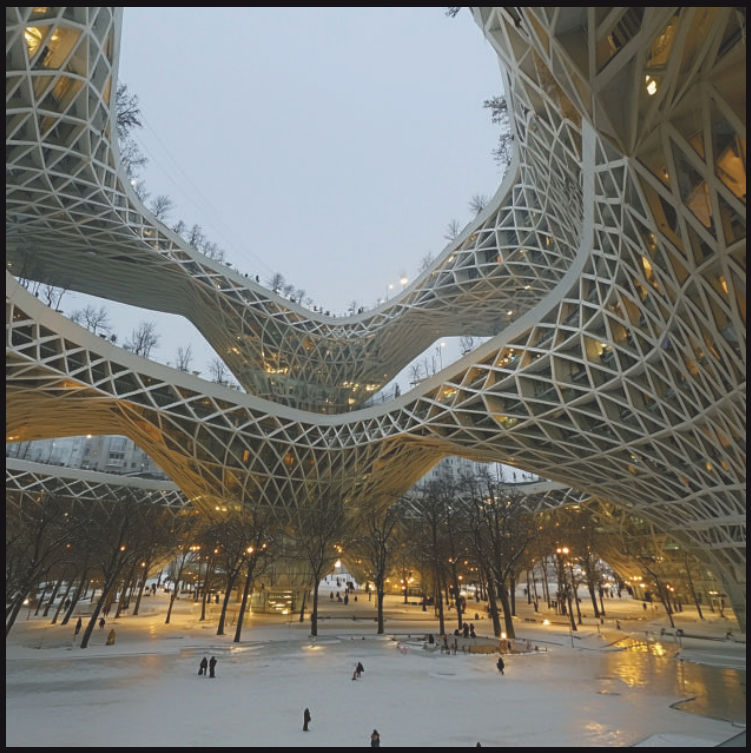
URBAN PLANNING AND ARCHITECTURE WERE ONCE ONE

In the distant past, architecture and urban planning formed a single action: cities took shape as buildings were built, and urban structure and architecture were one sensual unity. Much later, urban planning became its own discipline, and today we see the tension. Planning does not guarantee architectural quality, and good architecture often has to fight regulations that hinder its very construction. Separation does have advantages, because each discipline solves different problems, but bringing them closer would make planning more real and architecture closer to urban reality. I believe the solution to urban planning is in architecture, and the solution to architecture is in urban planning. Let us do architectural planning and urban architecture.

PROJECT

10

LATTICE-SHELLS



Lattice shells on tree-like supports open to the sky above a snowy plaza and a pool.

TEXTS 11 8 4











TEXT

12

THREE DISCIPLINES, ONE CITY

The future of cities depends on integrating architecture, urban planning and engineering. Architecture brings the aesthetics and function of buildings, urban planning organizes public spaces and the needs of communities, and engineering ensures structural integrity and efficient infrastructure. Working together they allow renewable energy, water management and green space, public spaces that inspire and connect people, fewer errors and lower costs, and room for creative solutions. Merging the three is not only about building better cities; it is about building urban environments where people thrive.

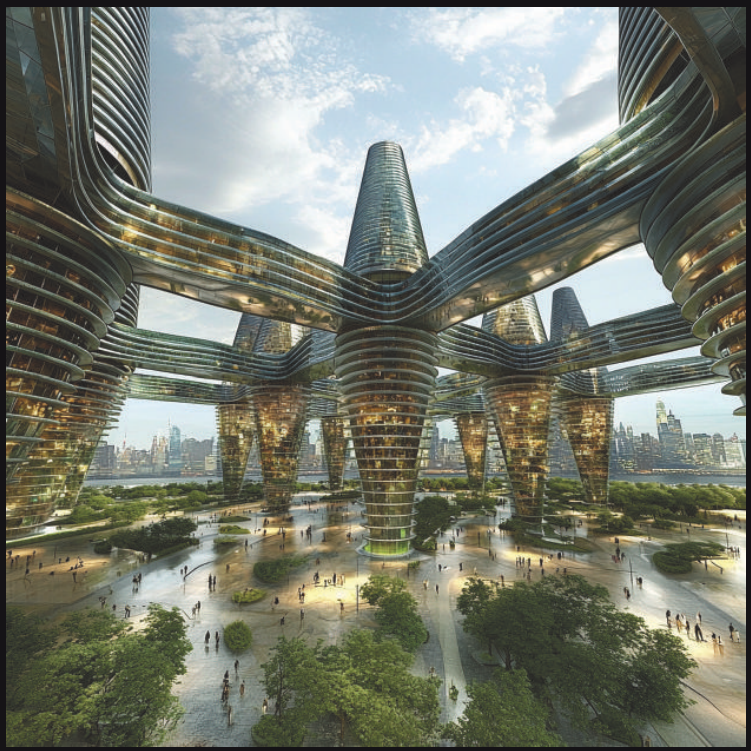
PROJECT

11

CONICAL-TOWERS

Tall conical towers linked by bridges and large branching supports, with parkland and water below.

TEXTS 6 8 28







PROJECT

12

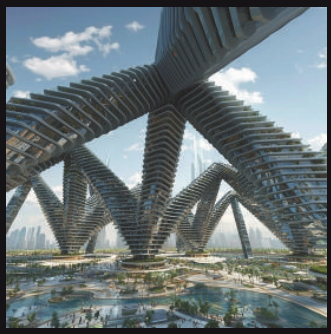
BRANCHING-TRUNKS



Huge tower trunks branch into inclined arches that carry the structure and leave plazas and pools open beneath.

TEXTS 27 8 13







TEXT

29

POROSITY: SEPARATION WITHOUT ISOLATION

PROJECTS

13 24 35 39 42

Permeability between private units can be designed. Separating homes with open space, in a stratified, porous structure, lets daylight reach deeper, natural ventilation move through, and views open across both private homes and communal areas. A building can then feel detached and still belong to a larger structure, and because its mass is lifted above the ground, the base stays free to improve circulation and encourage interaction in public space.

PROJECT

13

CURVED-SLABS

Long curved housing slabs rest on massive tree-like supports, with trees and public space beneath.

TEXTS 19 29 13









TEXT

02

ELEVATE THE CITY

PROJECTS

06 14 27

By lifting buildings above ground level, we free the ground for parks, pathways, transport networks and community life, and we let nature thrive inside the city. Private and public uses stop competing, because the valuable ground level can be used and enjoyed by everyone. Instead of building more streets, we can build parks.

PROJECT

14

CAPSULE-TREES



Tree-shaped capsule towers on tall trunks form an elevated forest above open ground.

TEXTS 11 4 2





PROJECT

15

ROUND-MODULES

Round, green-roofed modules gather around shared courtyards.

TEXTS 31 15 30









TEXT

30

A LIVELY GROUND LEVEL

PROJECTS

05 08 09 15 16 17 33

When buildings are elevated, their footprint at street level is minimized, and the ground can become a vibrant public space: pedestrian circulation, green areas, community activities or commercial uses. This strengthens the relationship between a building and its urban context, encourages social interaction, improves the microclimate through ventilation and shade, and contributes to a more inclusive and engaging public realm.

PROJECT

16

RING-COURTYARDS



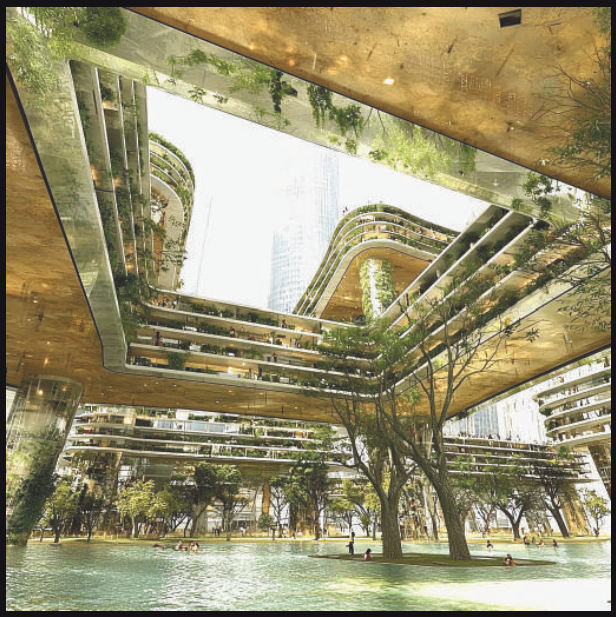
Square ring buildings on pillars hold courtyards and gardens high above a freed public ground.

TEXTS 19 30 4











TEXT

18

COOLING THE COMPACT CITY

PROJECTS

17 30 35 36 45

Density is often associated with heat, but compact urban fabrics can keep cities cooler: proximity produces shade that reduces solar heating, and light, reflective colors and insulating materials help further. The challenge is ventilation, since density without airflow traps heat, especially at night. Courtyards, wind corridors, vegetation and well-placed openings let fresh air circulate while hot air escapes upward, and partly or fully covered courtyards, with awnings, canopies or shade sails, could cool the shared spaces during the hottest hours. Extensive glass is a challenge in hot climates, but high-performance glazing, solar-control coatings, double façades and external shading can improve thermal performance, and a modular pattern lends itself to prefabrication, which reduces cost, waste and resource use.

PROJECT

17

CONES

Inverted glass cones stand as a group, narrow at the base so the ground stays free, with hexagonal glazed roofs over shared space.

TEXTS 26 18 30





PROJECT

18

GLASS-LATTICE



Inclined lattice supports carry glass-fronted blocks above a snowy public space.

TEXTS 27 13 8





TEXT

15

MODULARITY AND REPETITION

PROJECTS

19 20 30 40 43 44
45 46 48

In our designs we emphasize modularity and prefabrication through the repetition of elements. A geometric pattern makes a design scalable and adaptable to the requirements of each site and project, and small variations in module height and position produce a complex whole that adapts to different sizes and functions. Reciprocal polygons take this furthest: a single repeated polygonal module, tilted so that each element leans on and supports its neighbors, can compose entire clusters of buildings.

PROJECT

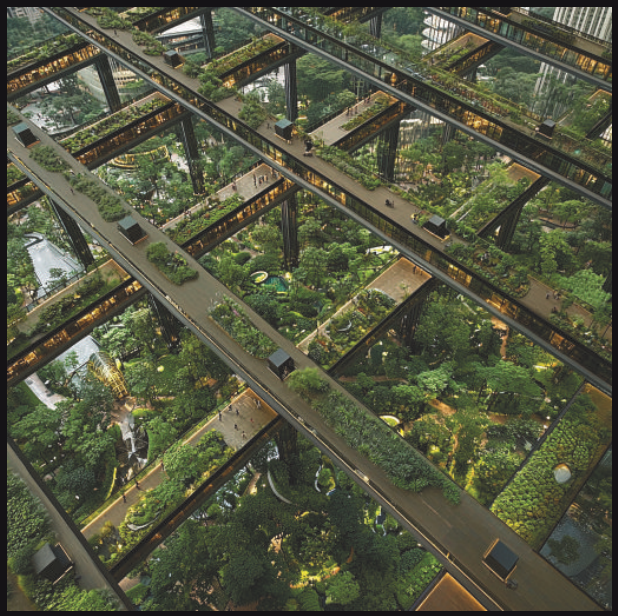
19

LINEAR

A grid of linear bars carries gardens and walkways over woodland: supports and beams at city scale.

TEXTS 27 15 13







TEXT

26

STABILITY THROUGH THE GROUP

PROJECTS

08 17 20 21 31 33 34 41

We tend to think a building should never be wider at the top than at its base, and for an isolated building that is true: its stability requires it. But a set of leaning or inverted forms can find its stability as a group, each building supporting and stabilizing the others. The shape that is unstable alone becomes stable together, and with this maneuver a large part of the ground plane is freed for public use.

PROJECT

20

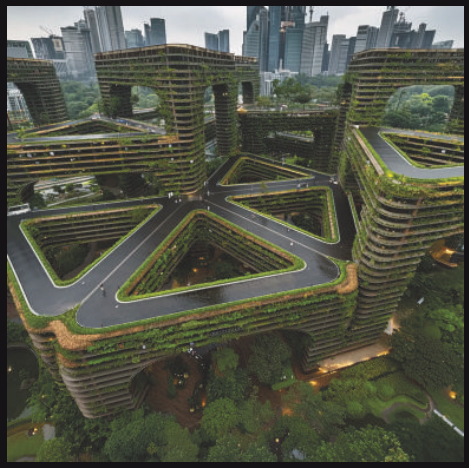
TRIANGLE-RINGS



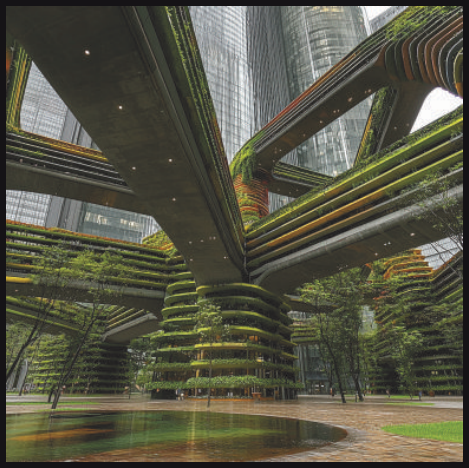
Triangular rings of planted buildings repeat in a zig-zag, each one holding the next.

TEXTS 15 26 13









PROJECT

21

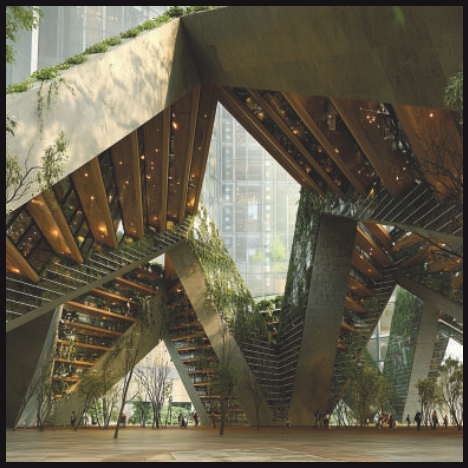
PIRAMID

Folded, leaning triangular blocks with terraced gardens stand together around an open plaza.

TEXTS 26 27 4











TEXT

10

DENSE AND OPEN

PROJECTS

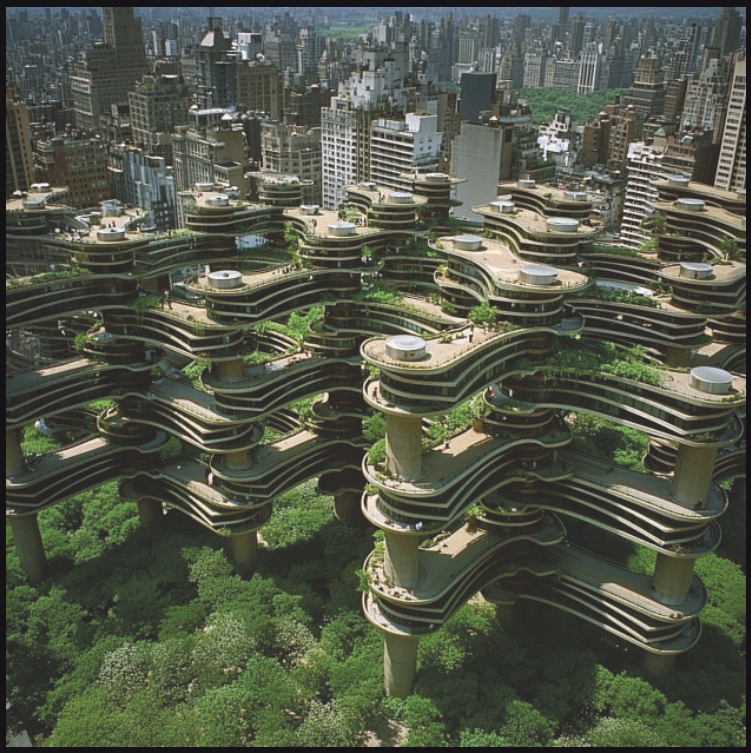
22 30 36 43 48

Cities are growing and will keep growing, so we need new ways to make them livable, and that means density and openness at the same time. They are usually seen as opposites, but they can be joined through geometry. A design can reach high population density while maximizing public space; connecting its buildings at the top improves their stability and adds escape routes, including upward ones, in an emergency. A denser city does not have to be a more closed one.

PROJECT

22

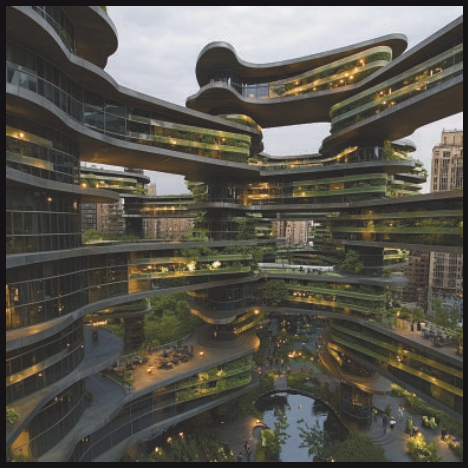
GARDEN-COURTYARDS



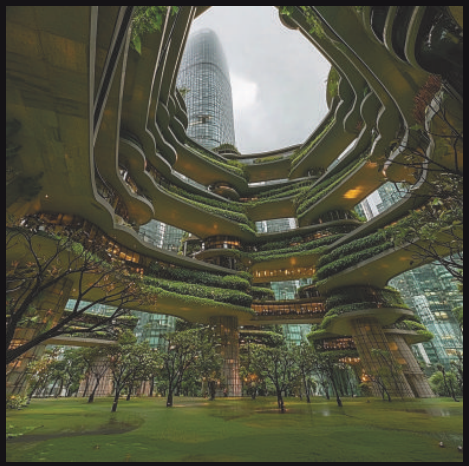
Organic terraced platforms wrap around central garden courtyards.

TEXTS 31 16 10









07

SEVERAL WAYS OUT

PROJECTS
04 23

The horizontal links between buildings can be put to use. They can be bridges between towers, public or community spaces in the sky, or simply escape routes. Where horizontal and vertical communications exist at different heights, an emergency does not have to be solved only by going down: evacuation can run downward, sideways and even upward. A connected structure is not only more stable but also safer to live in.

PROJECT

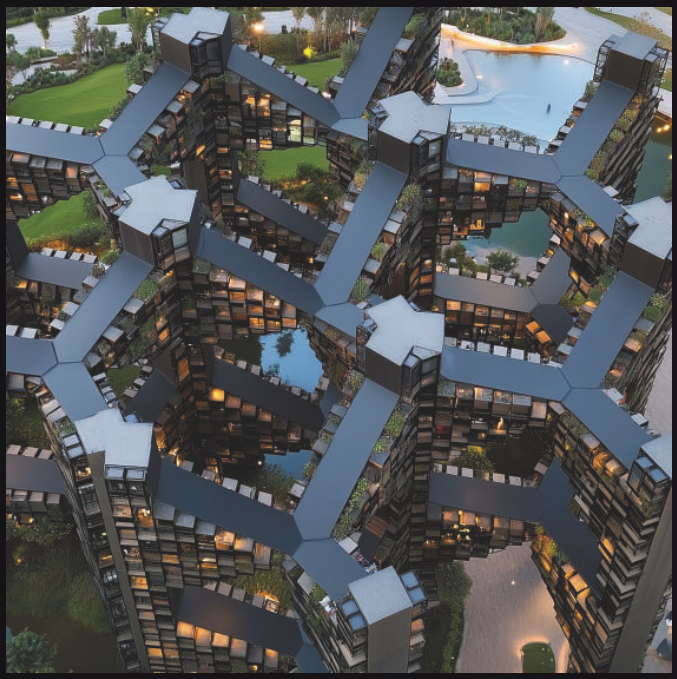
23

HEX-BRIDGES

Towers hold one another through a hexagonal network of bridges and gardens.

TEXTS 6 7 31









PROJECT

24

CUBIC-FRAMES



Cubic frames on pillars hold terraced, planted blocks, like housing suspended inside a structure.

TEXTS 8 21 29











TEXT

31

SPACING FOR LIGHT, AND LAYOUT FOR COMMUNITY

PROJECTS

15 22 23 25 33 35 36 42

The distance between buildings is not empty: it provides good natural light and ventilation for private and public spaces alike. A layout that arranges buildings around shared spaces, in hexagons for example, also builds a sense of community and belonging. Spacing and geometry can do social work as well as environmental work.

PROJECT

25

FLOWERS

Terraced buildings in the shape of a clover or flower open around a central public space.

TEXTS 16 31 4







TEXT

06

CONNECT THE TOWERS

PROJECTS

04 05 09 11 23 26
27 28 32 37 47

If tall buildings are connected horizontally at different heights, mid-level or at the top, they stop being isolated towers and work as a single superstructure. Horizontal displacements caused by wind or earthquakes are greatly limited, and the risk of overturning or collapse is largely avoided. Connecting at least three towers in a triangle already improves stability considerably, and groups of four give a pyramidal form that behaves better still. Because connected towers can be slimmer, they also need a smaller footprint, which frees more ground for people. Building upward should not mean instability, insecurity or isolation.

PROJECT

26

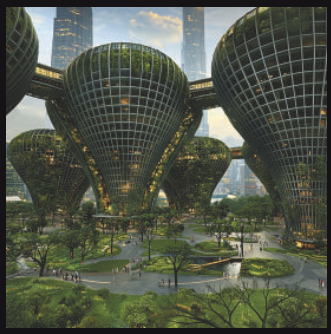
BALLOONS



Lattice towers swell like balloons and are linked at the top, leaving the parkland below free.

TEXTS 28 6 16







PROJECT

27

CIRCLES

Buildings connected at the top gain stability, which frees the ground level and lets it be optimized for public use.

TEXTS 6 28 2









TEXT

09

HIGHER FOR WIDER PUBLIC SPACE

PROJECTS

01 28

Too often, high-rise construction is driven by the pursuit of maximum return on land, and public space is left over: ignored, underused and treated as a remnant. Tall buildings can serve another purpose, a healthy balance between population density and accessible public space. For this, towers should occupy as little of the ground as possible, leaving room for community use, and should include private outdoor spaces that improve everyday life. Building higher should mean leaving more room at ground level, not less.

PROJECT

28

EDGES



High-rise towers connected at the top for stability, narrowing at the base to leave the ground level open.

TEXTS 6 28 9





TEXT

08

MACRO-STRUCTURES

PROJECTS

10 11 12 18 24 29
44 45 47 48

Connected towers form a global structural unit that behaves like a low-rise building even though it is very tall. Structural calculations in my PhD thesis showed that this type of macro-structure has short vibration periods, around one second, which is the behavior of a low-rise building and what makes it much more stable than a conventional tower. I also see macro-structures as a spatial framework in which all our needs can be fitted, something like an architectural operating system, and as a possible basis for modular, prefabricated cities that grow by patterns.

PROJECT

29

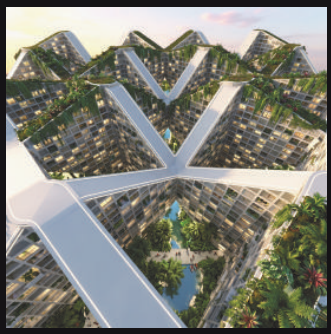
X-SUPPORTS

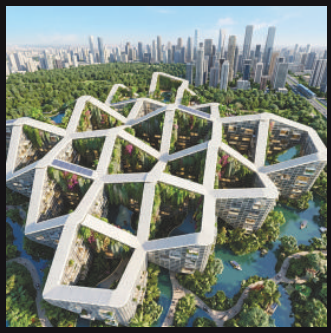
Huge inclined X-shaped supports carry gridded, planted housing over lakes and paths.

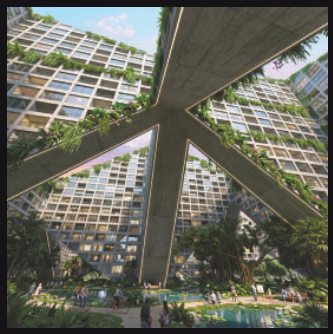
TEXTS 27 & 13

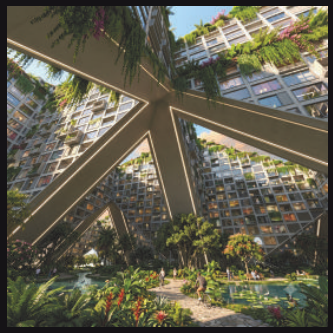














PROJECT

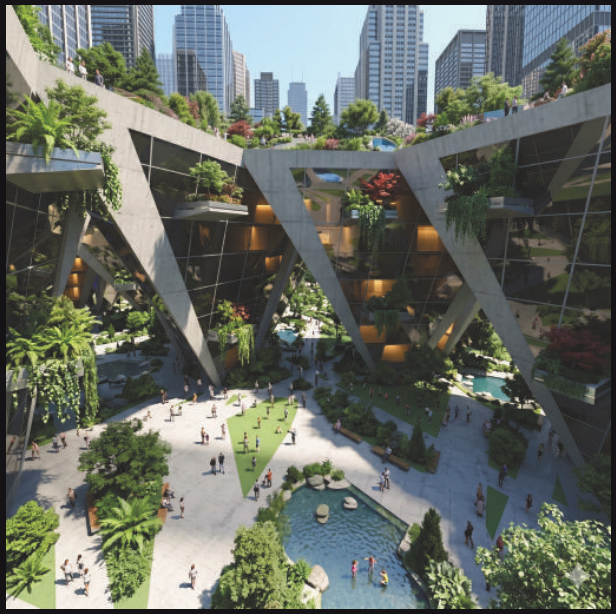
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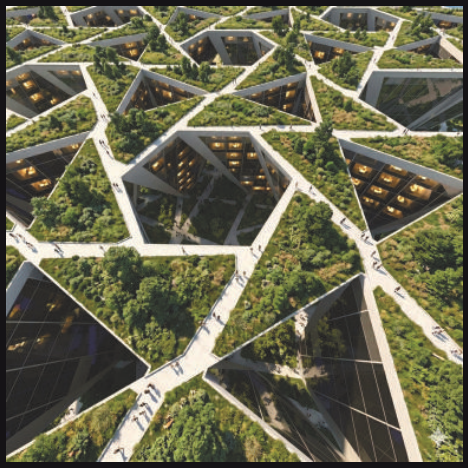
HEXAGONS & TRIANGLES



Triangular and hexagonal bracing frames planted courtyards open to the sky.

TEXTS 18 15 10





TEXT

27

THREE JOBS IN ONE FORM

PROJECTS

03 08 12 18 19 21 29 31

A single geometric move can do three things at once. When buildings are inclined and set side by side, they support and stabilize one another; the geometry itself produces private terraces and outdoor space; and lifting the built mass frees the ground plane as a flexible, inclusive public space. Such a composition works as a holistic system that passes fluidly from private to public uses, modular and scalable enough to adapt to different urban contexts while balancing individual needs and collective life.

PROJECT

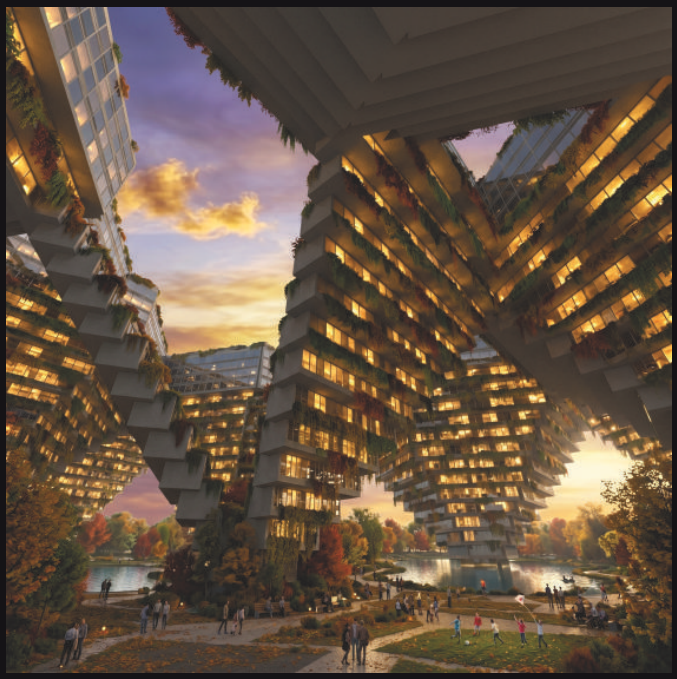
31

STEPPED-TRIANGLES

Inclined, stepped triangular buildings stand around an autumn park.

TEXTS 27 26 4













TEXT

28

UPWARD CONNECTION, DOWNWARD FREEDOM

PROJECTS

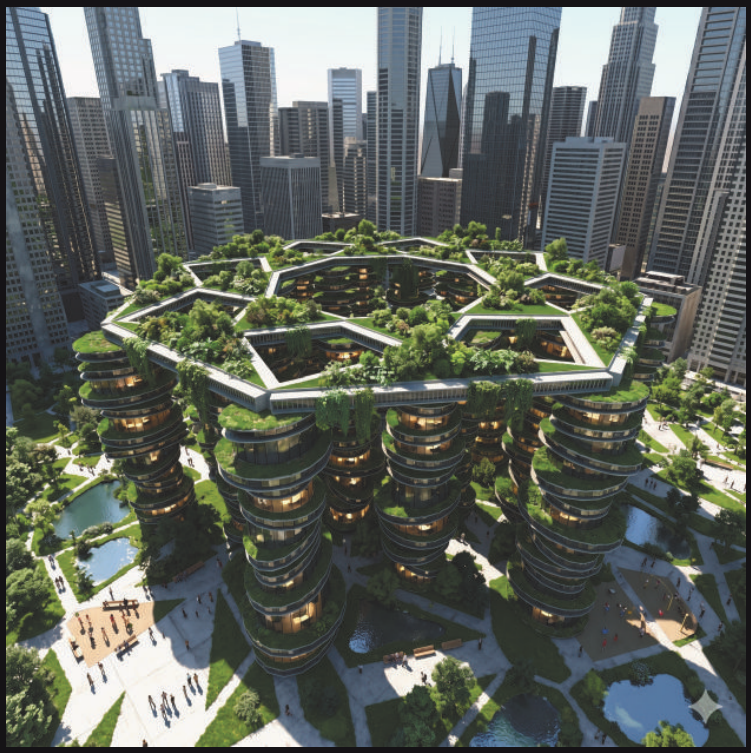
04 11 26 27 28 32 37

What if stability did not always have to start at the ground? By connecting buildings at their highest levels, like balloons tethered together, we dramatically reduce the space they need at street level. Buildings stop being vertical barriers and isolated islands and become bridges. The links can host sky gardens, cultural platforms and elevated walkways that stitch neighborhoods together, while the freed ground invites movement, interaction and inclusion. Designing upward connections creates downward freedom, and the city becomes lighter, more cohesive and more adaptable.

PROJECT

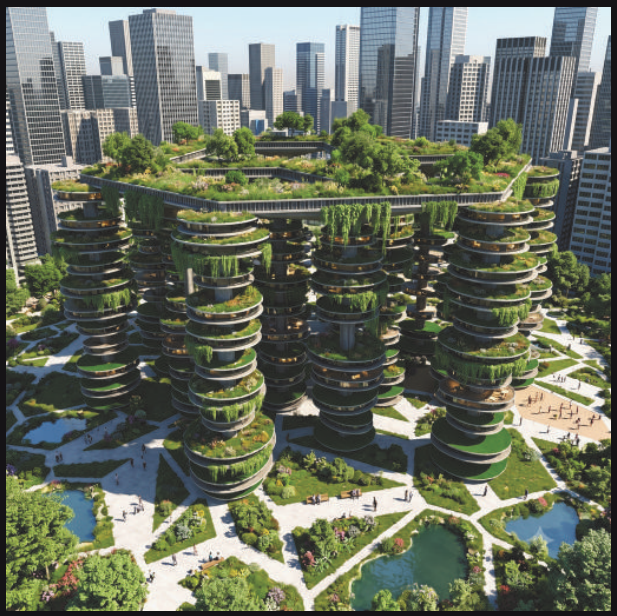
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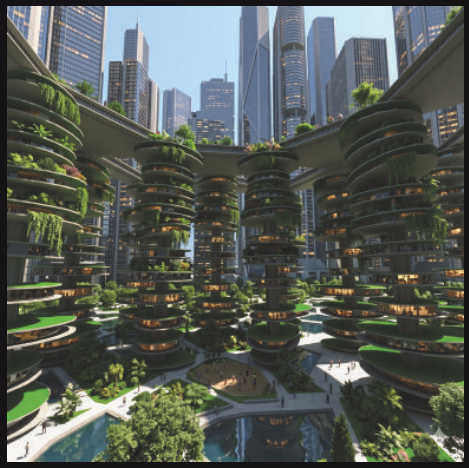
SPIRAL-TOWERS

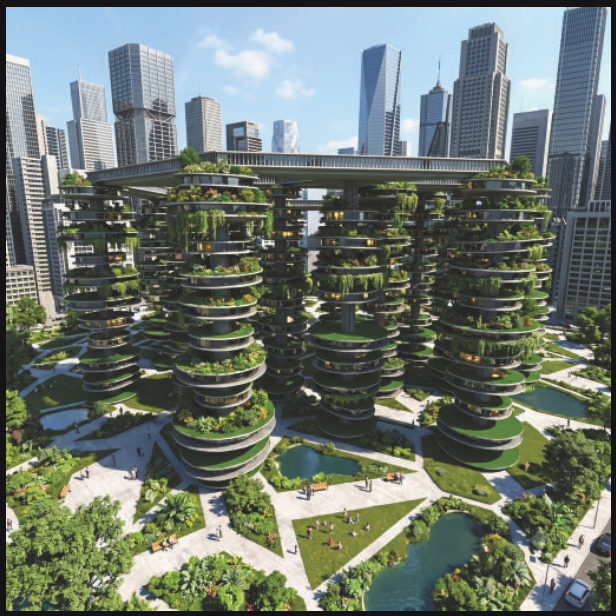


A second series: slender spiral towers joined by a top platform, seen in snow and in summer.

TEXTS 6 28 4









PROJECT

33

PENTAGON-WEDGES

Pentagonal inverted wedges are set around parks and ponds.

TEXTS 26 31 30











TEXT

16

NATURE AS THE FIRST DESIGN TEACHER

PROJECTS

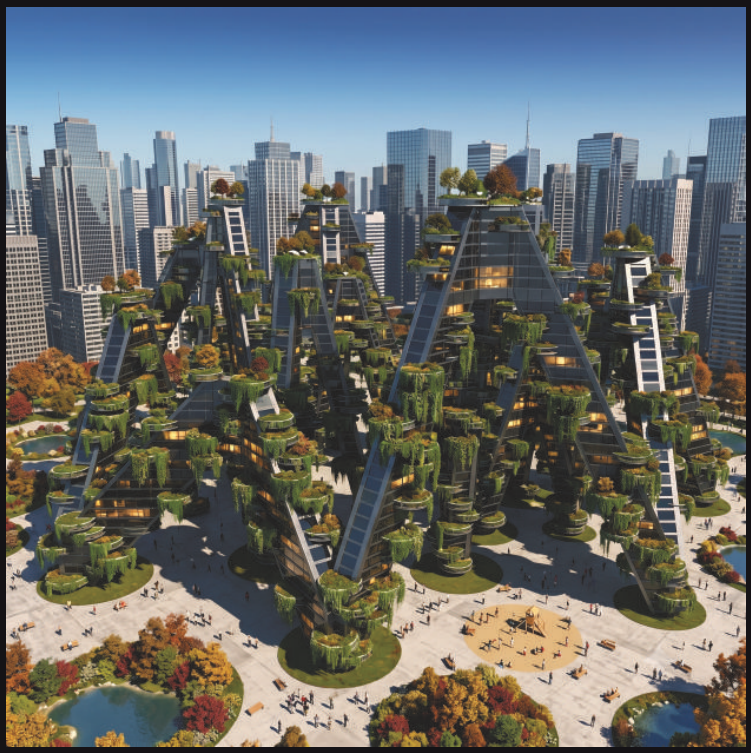
02 05 06 15 22 25
26 34 38

I believe nature and its geometries are humanity's first and most essential design teacher. Learning from natural forms, we can create environments that echo the balance and intelligence of the natural world, so that people feel integrated with their origins and surroundings. “Building nature” means incorporating terraces, gardens and green space, which offer fresh air, natural cooling, calm, and a chance to grow plants and trees. The benefit is physical, emotional and social, and perhaps spiritual too: a way to rediscover more balanced and life-supporting ways of inhabiting the world.

PROJECT

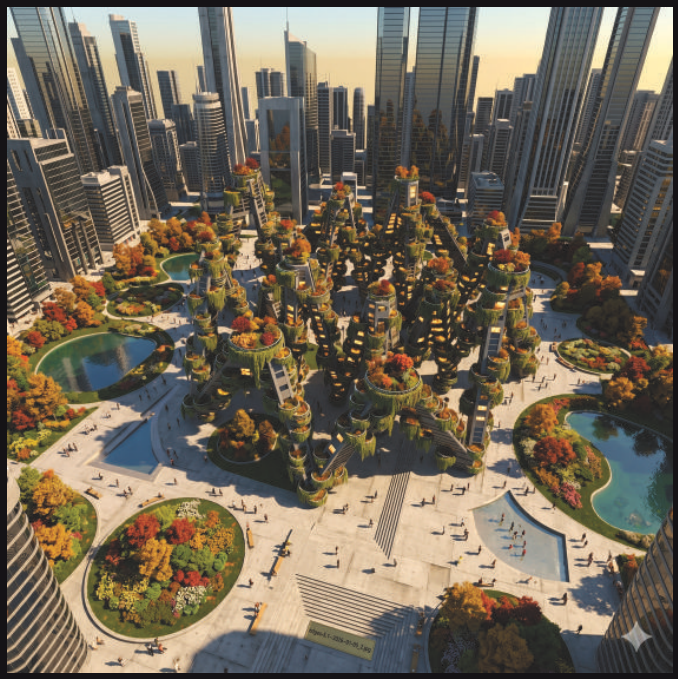
34

LEANING-PYRAMIDS



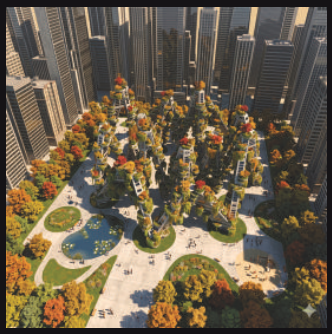
Leaning, pyramid-like towers with terraced gardens rise from a public square.

TEXTS 26 16 4



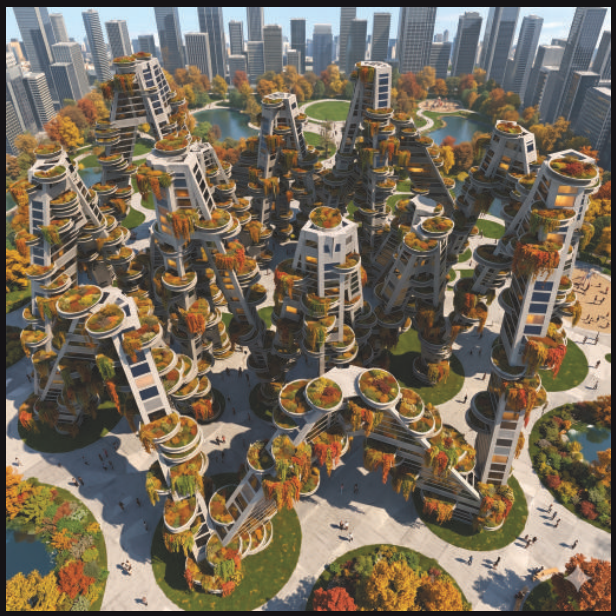














TEXT

22

SEVEN QUESTIONS FOR A MACRO-CITY

Would it be possible to build a different kind of city? By bringing together engineering, urban planning and architecture we can imagine a new scale of urban development: macro-cities. They could be cleaner and more efficient, through optimized geometries and smarter spatial organization; higher and safer, because macro-structures reduce slenderness; better connected, with mobility and communication flowing at several levels; more adaptable in emergencies, with horizontal escape routes built into the structure; more open and public, with fewer supports at ground level; healthier, with better light, ventilation and views; and more community-oriented, through new kinds of shared space.

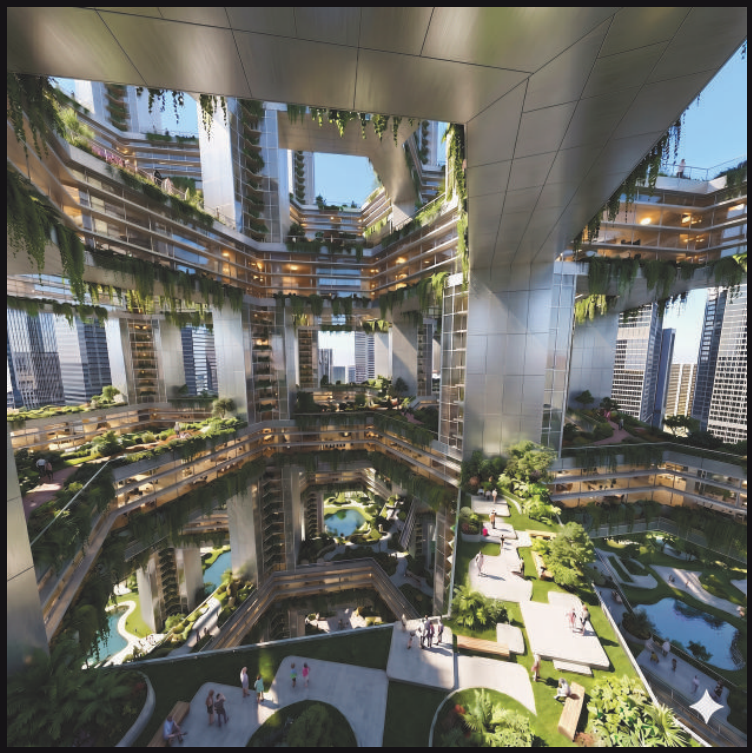
PROJECT

35

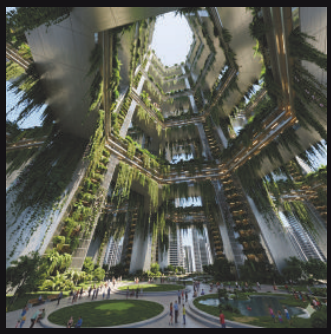
HEX-ATRIUM

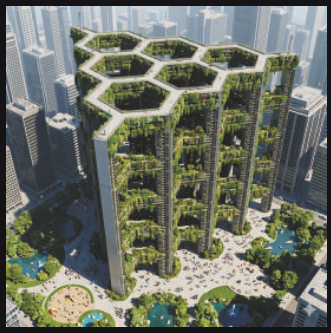
A tower opens around a hexagonal atrium hung with gardens.

TEXTS 29 31 18









PROJECT

36

HONEYCOMB-OASIS



A honeycomb of platforms and courtyards, with oases and tropical planting, explores cooler compact living in hot climates.

TEXTS 18 31 10







05

THE PROBLEM OF TALL BUILDINGS IS SLENDERNESS, NOT HEIGHT

What makes skyscrapers vulnerable is not their height but their slenderness: too little base for too much height. Stability is inversely proportional to slenderness, so the slimmer a tower is, the less structural safety it has against horizontal forces such as earthquakes and wind, and the greater the risk of overturning or collapse. Height itself is not the enemy.

PROJECT

37

STAR-ISLAND

A star-shaped island of towers and curved bridges rises from the sea.

TEXTS 6 20 28











TEXT

17

TREES AND FORESTS

PROJECTS

02 07 10 14 38

Buildings can take a tree-like, biophilic shape, rising from a few supports and opening into a canopy, so that together they form an elevated urban forest while the ground below stays free for public space and nature. Replicating natural forms may help us feel more integrated with nature and with our natural origins. It is a question rather than a claim: could technical and technological progress allow us to return to nature by bringing its forms back into our cities?

PROJECT

38

CAPSULE-PARK



A second series: tree-shaped capsule towers fill a city park like a forest.

TEXTS 17 4 15





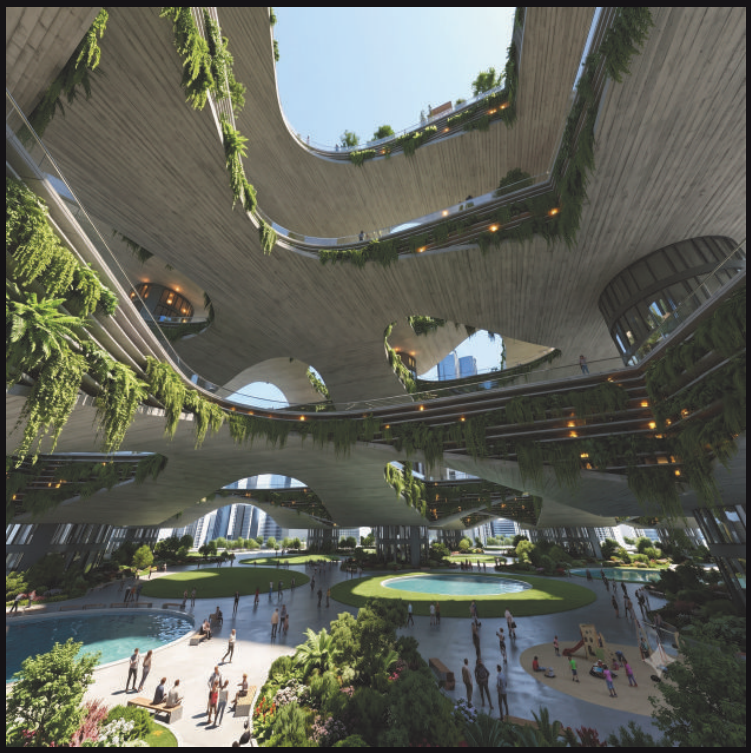
PROJECT

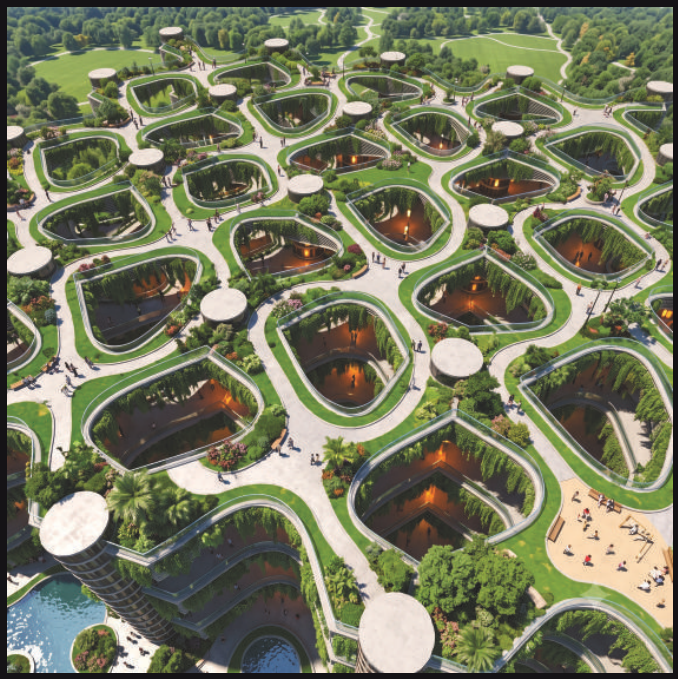
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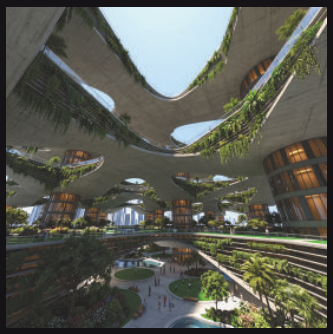
PERFORATED-SLABS

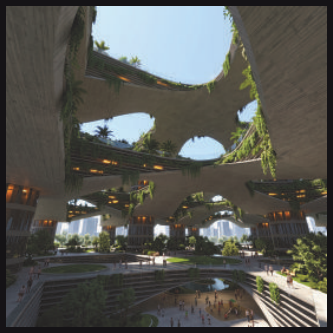
Soft perforated slabs and arches open to the sky above pools and gardens.

TEXTS 13 29 19









TEXT

21

DETACHED LIVING IN THE SKY

PROJECTS

24 40

Linking high-rise buildings at the top improves their structural stability and efficiency and allows slimmer towers with smaller footprints. The links can also become shared spaces at height for social life and community services. With this approach a tower could hold “detached” homes in layered configurations, each with its own terraces and gardens, combining privacy with vertical living: a kind of high-rise suburbia that frees ground space and reduces dependence on cars.

PROJECT

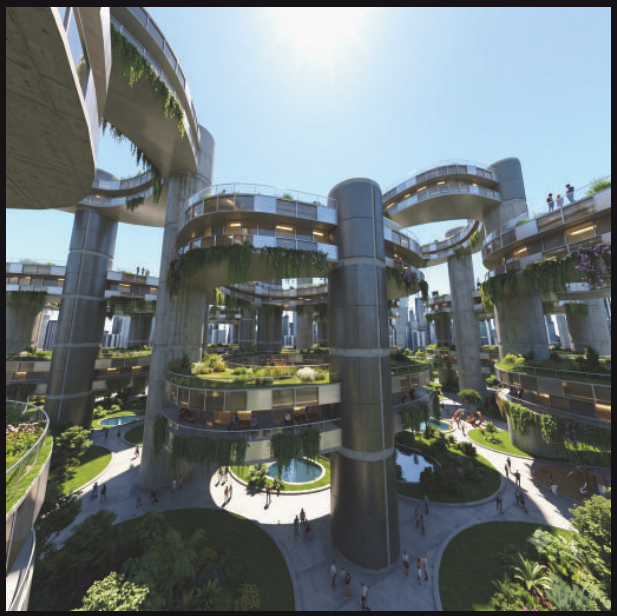
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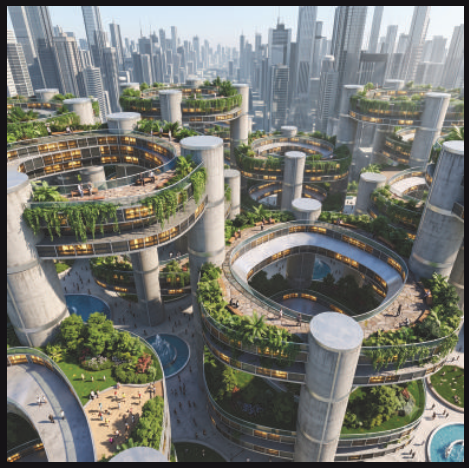
RING-DECKS

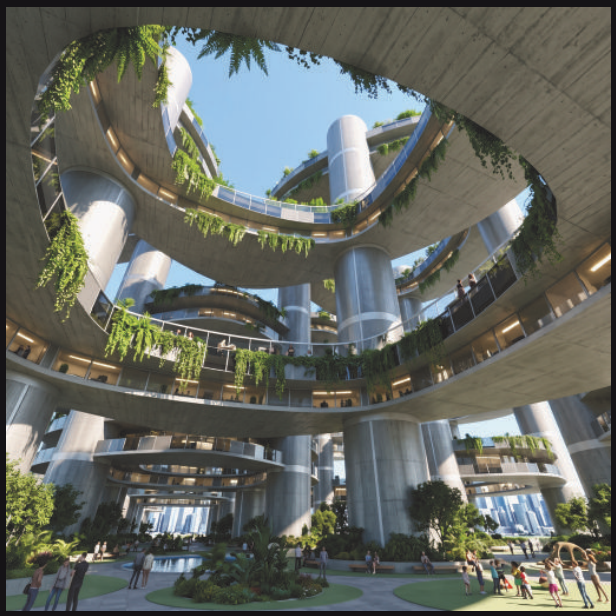


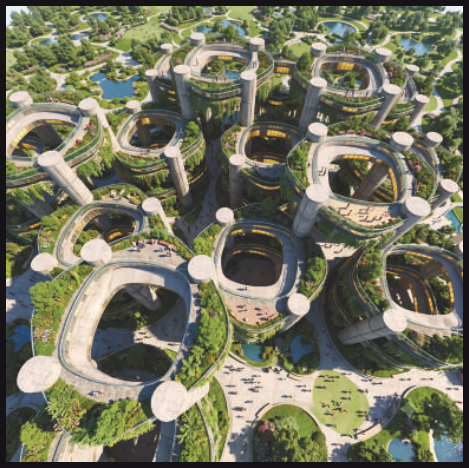
Ring decks with gardens rest on round columns.

TEXTS 13 15 21









TEXT

23

ENGINEERING MAKES IT POSSIBLE, IMAGINATION MAKES IT MEANINGFUL

Construction is usually seen as a world of calculations, materials and technical solutions, but buildings are not made only of concrete, steel and glass. They start with an idea. Creativity and imagination let us find new ways to use space, more efficient and sustainable solutions, better experiences for the people who inhabit buildings and innovative answers to complex challenges. Engineering makes buildings possible; imagination makes them meaningful. The future of construction will come not only from better technology but from combining knowledge with creativity, because every great structure begins as a vision.

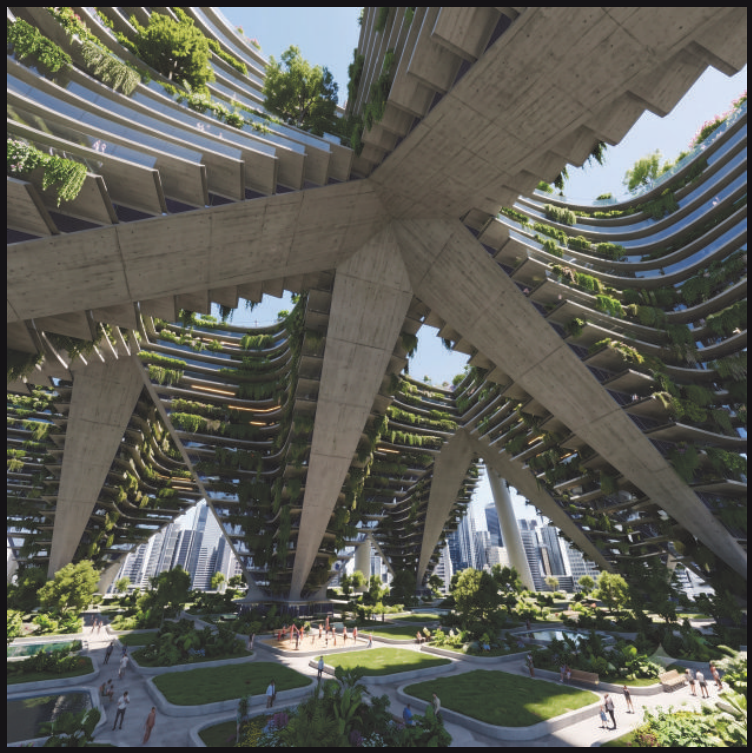
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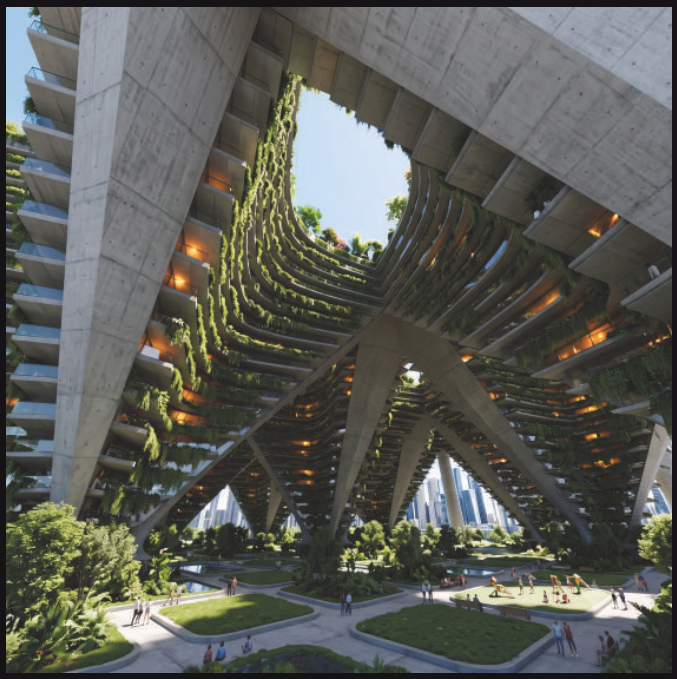
41

STAR-SUPPORTS

Star-shaped concrete supports carry curved terraced housing above open ground; seen from above, the plaza is perforated by leaf-shaped openings.

TEXTS 13 26 19





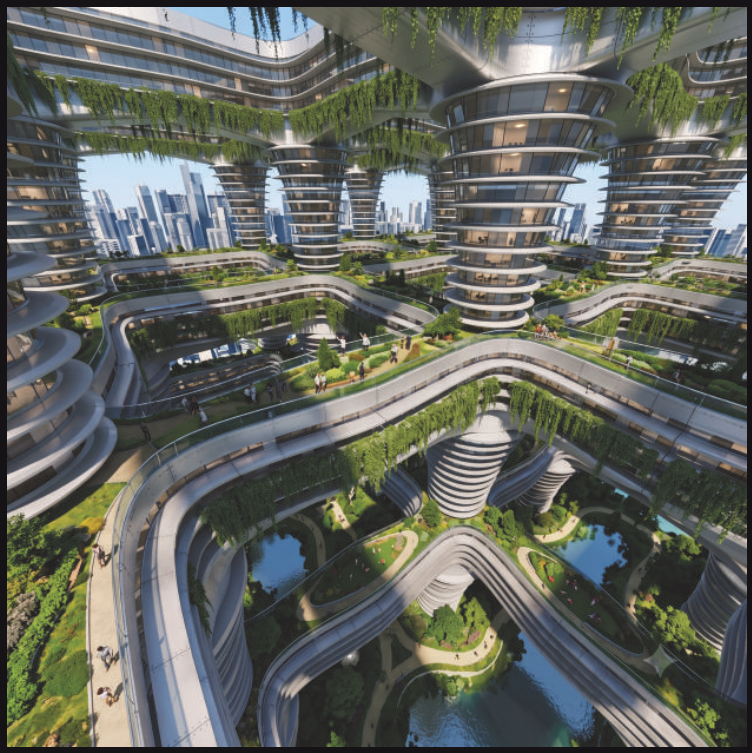




PROJECT

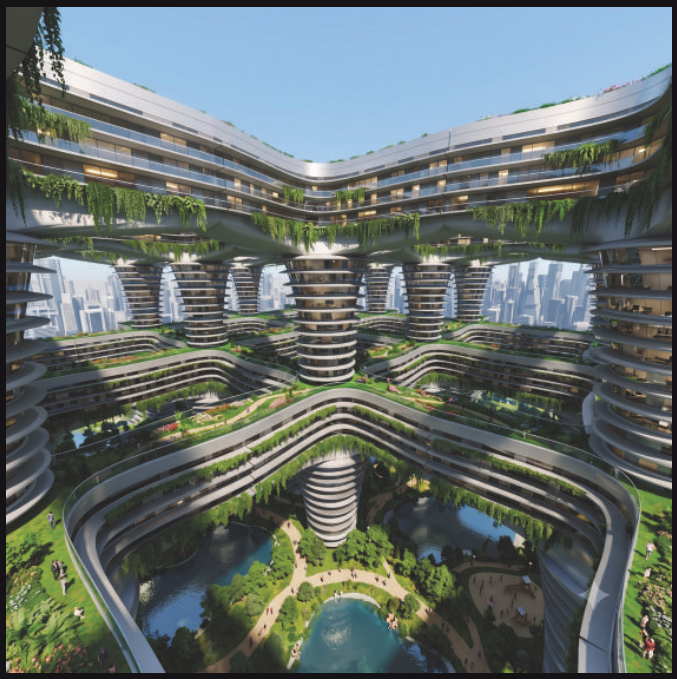
42

RING-TERRACES



Stacked cylindrical towers hold ring terraces with hanging gardens, above ponds and open ground.

TEXTS 31 29 20







TEXT

19

HOUSES ABOVE PUBLIC SPACE

PROJECTS

03 07 13 16 39 41 43

Elevated houses can reserve the ground level for parks, pathways and open space, so private and public functions coexist without conflict. A linear group of houses can combine covered terraces and private rooftop gardens, and its elevated position gives residents added security, privacy and comfort. The valuable ground level is not consumed by private use, and stays free of obstacles for the whole community.

PROJECT

43

WOODEN-TERRACES

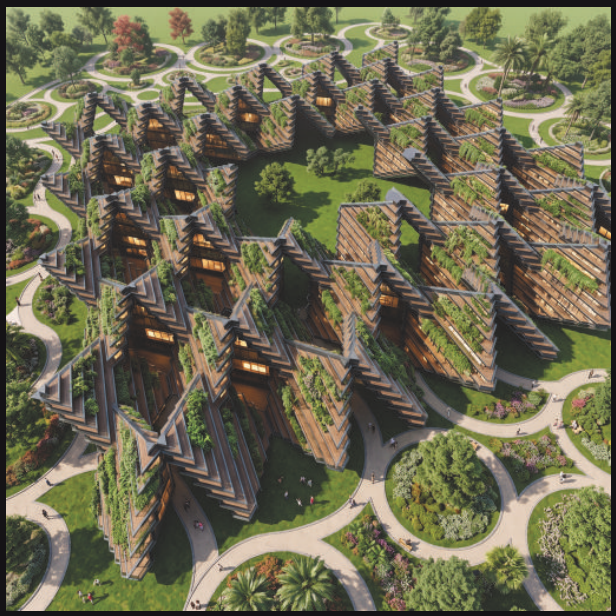
Wooden triangular terraces step around round garden paths, warm at night and dense but open by day.

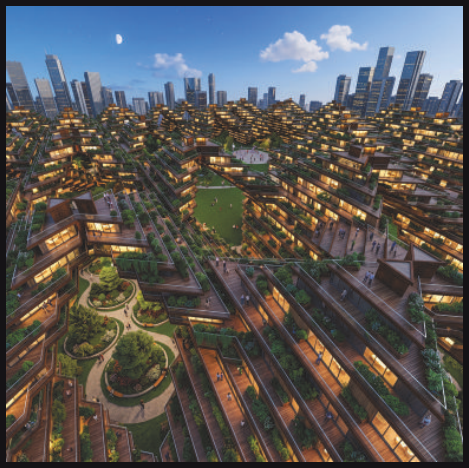
TEXTS 15 10 19











TEXT

13

URBAN ENGITECTURE

PROJECTS

12 13 18 19 20 29
39 40 41 44 46 47

We know a great deal about how building structures work: how they carry loads, how to calculate their resistance, how to predict their behavior, and architecture uses this knowledge widely. What if we applied it at the scale of the city, and stopped seeing the city as a collection of independent buildings? Vertical buildings can act as supports, horizontal linear buildings as beams, and curved or waved buildings as arches or cupolas. This could reconnect urban planning, architecture and engineering into one system. I call it Urban Engitecture.

PROJECT

44

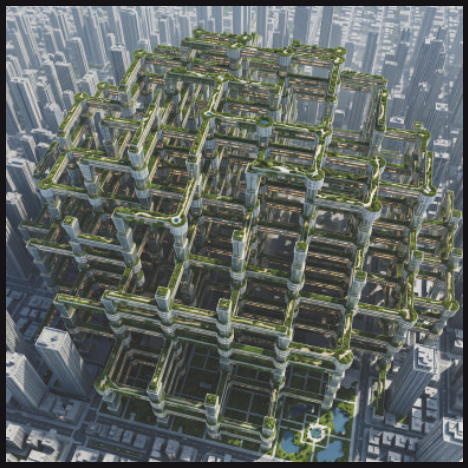
TOWER-GRID



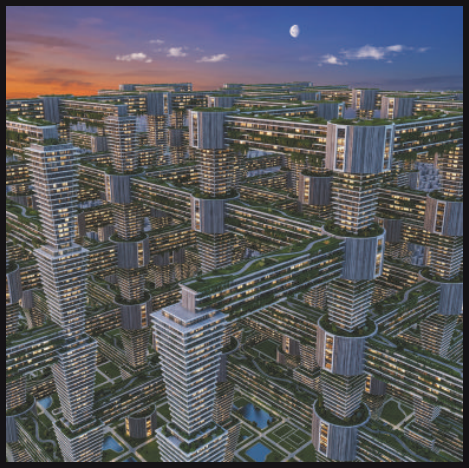
A square grid of tower columns and garden decks forms a lattice above a traditional city.

TEXTS 8 15 13









PROJECT

45

HEXAGON

A hexagonal network of towers and bridges rises over an oasis.

TEXTS 18 15 8









TEXT

14

A PYRAMIDAL MACRO-STRUCTURE

PROJECTS

46

A pyramidal macro-structure made of “support” and “beam” buildings is one possible urban framework in which architecture and engineering merge at a larger scale. In these models I first modelled the concept in CAD and then used AI deliberately to integrate it into traditional urban fabrics, as an experiment between existing cities and possible future ones, and a schematic animation shows how such a structure could evolve and expand over time.

PROJECT

46

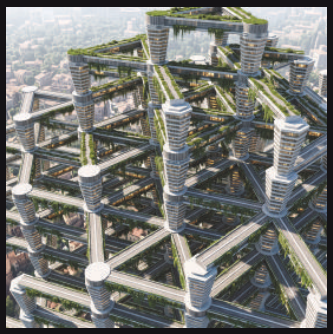
TRIANGLE



A pyramidal frame of “support” and “beam” buildings rises over a traditional urban fabric.

TEXTS 14 13 15











25

WHAT THESE DESIGNS DO NOT CLAIM

I am fully aware that designs like these face significant challenges: higher costs than conventional buildings, complex structural geometry, and the need for efficient inclined transportation systems. I share them nonetheless as explorations of how elevated buildings could free the ground level and return it to nature, creating open, accessible public space for everyone. The images and animations in this book are experimental digital sketches and should be read as nothing more.

PROJECT

47

BEAM-TOWERS

Cylindrical towers carry horizontal beams over plazas and pools.

TEXTS 8 6 13



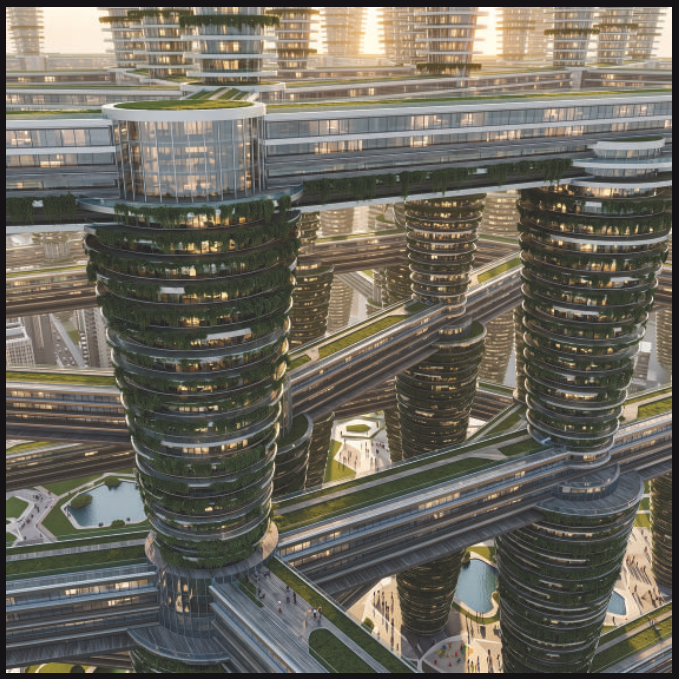
















PROJECT

48

CUBIC-LATTICE



A cubic lattice of towers and garden decks, seen by day and by night.

TEXTS 8 15 10





TEXT

32

CLOSING QUESTION

Maybe the future city is not only about building higher, but about building smarter, more connected and more human. High-rise architecture should not be only about building taller; it is about a better balance between density, livability and public space, with people and public life at the center. Is it worth designing cities this way?

ABOUT THE AUTHOR

Ale Girá

PhD Architect from the University of Seville, vocational architect since a very early age; he always believed in the importance of architecture as a generator of a big part of the reality we live in.



He attained his Degree in Architecture in Seville (Spain), and completed his studies in other countries and cities; before undertaking his studies in Architecture he attended in 1991-92 the Pre-University course in New Jersey (US). Later on, in 1996-97, he was awarded a scholarship within the 'Erasmus' exchange program which led him to the University of Venice (Italy), where he attended lessons given by Aldo Rossi.

Once he had completed his studies at the University of Seville, the Camuñas Foundation (Centre for Higher Education in Architecture) of Madrid (Spain) awarded him a scholarship in 2004-05 for a Master Degree in Virtual Architecture. The knowledge acquired there gave him the opportunity to achieve in 2008 a European Exchange 'Leonardo' scholarship, awarded by the Architectural Association of Architects of Seville, that took him to Hannover and Hamburg (Germany) where he worked with Professor Andreas Uffelmann.

In 2009-10 he attended the Master's Degree of 'Innovation in Architecture: Technology and Design' at University of Seville (Spain) finishing those studies with honors. His unceasing research in architecture reached its highest point with his PhD lecture in 2012 at the Department of Structural Design of the Higher School of Architecture of the University of Seville (Spain) - where he achieved the qualification of Cum Laude -, being this a compendium of his works up to that date; the PhD brought him to teach Architecture and Urban Planning at the Southwest University of Science and Technology of Mianyang (China) in 2013, where he widened his thesis with new projects and writings.

In 2020, Oscar Riera Ojeda published his first book entitled 'Hyperirrealism', a compendium of 15 years of his previous production. Later on, he published a condensed new edition of 'Hyperirrealism' with its most notable content entitled '(@- + i-) realism-s'.

Ale Girá has continued to impulse his research and development, until a new books series entitled 'realism-s', supported by Artificial Intelligence and based on his previous work.

In 2026, he published 'Urban Engitecture', a book of experimental models for elevated cities. Applying the logic of structures to the scale of the city, with vertical buildings as supports, horizontal buildings as beams and curved forms as arches, the projects are connected at the top and lifted above the ground, freeing the ground level for parks, mobility and public life. Modelled in CAD and developed with Artificial Intelligence, the book presents them as questions rather than answers.

URBAN ENGITECTURE

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URBAN ENGITECTURE

MODELS FOR ELEVATED CITIES

Buildings are obstacles. What if we lifted them?

Urban Engitecture applies the logic of structures to the scale of the city: vertical buildings as supports, horizontal buildings as beams, curved forms as arches. Connected at the top and lifted above the ground, buildings free the ground level for parks, mobility and public life.

These are experimental digital sketches, modelled first in CAD and then developed with AI: models for elevated cities, shared as questions rather than answers. What do you think?