Great Unraveling

Enhanced Cartographic Access & Future of Urban-Universe

by Ju-Hyun Kim and Bohyun Kim

This is an imaginary future scenario of architecture, infrastructure, landscape and urbanism shaped through the influence of ubiquitous cartographic access and Web democracy.

Year 2010:

De-mystified Surface of the Earth

In the 21st century, while we expect the improved access to the universe so that planets like Jupiter and Venus can be totally discovered and revealed, the World Wide Web provides us unprecedented and ubiquitous opportunities of airborne, virtual access to the earth's surface that we live on right now. Google Earth, Geographic Information System (GIS), live broadcasting from the sky (such as car chase in Los Angeles) and other cartographic scanning technologies disclose the whole configuration as it unfolds on our own planet's surface. Exposed to the airborne view with the diverse technologies, the skin of the earth starts to be perceived as a thin layer engraved with brutal tattoos and scars made by mankind. Some important findings of the virtual explorations of the earth surface are as follows:

Canyon of maximum FAR (Floor Area Ratio) skyscrapers

Vicious domination of hardscape over softscape

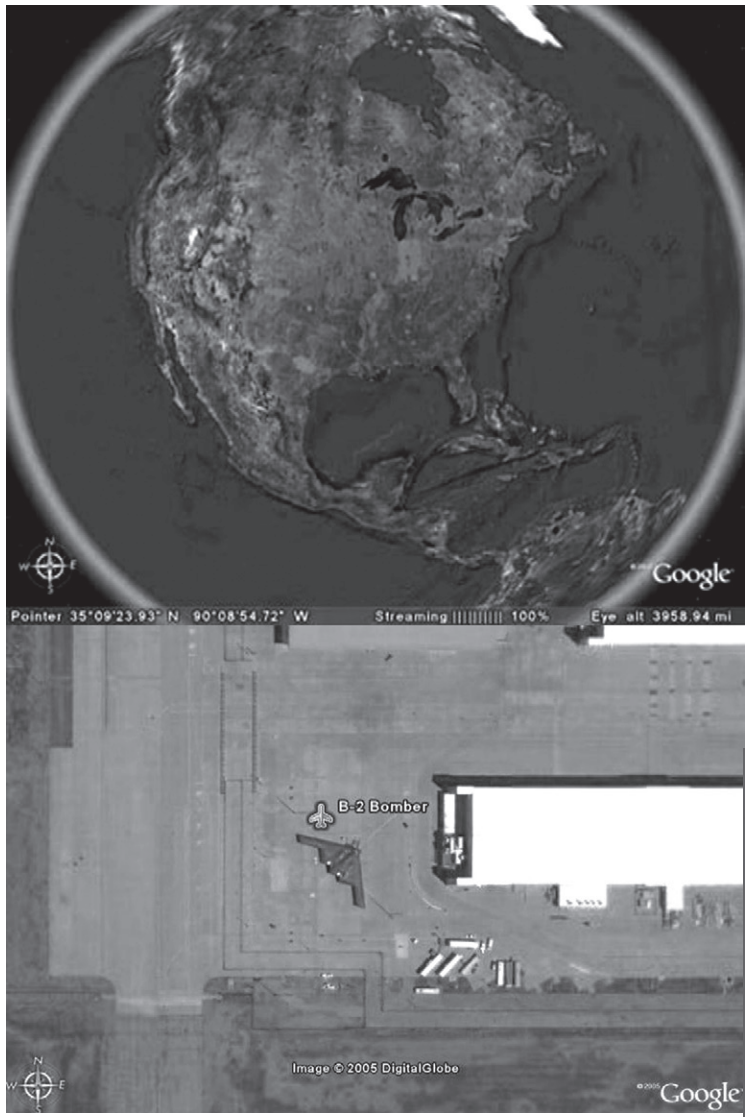
Hidden enclaves of gated communities with secret backyard pools

Invasively sprawled asphalt roads

Segregating and demarcating lines of infrastructures

The free-floating access to the earth begins to offer Web users a position of critique. With convenient tools to cross-reference geographical information around the world, Web users come to have a synchronic purview of the built and natural environments. By panning and zooming in and out of the geographical information, Internet users confront architects, landscape designers and urban designers on unrealized blueprints and impractical jargons. The Web users find the dominance of privatized developments over public interests, realize arbitrary outsets based on fictitious axis and uncover fragmented landscapes. Lack of imagination in infrastructure design also becomes a critical debate issue because of its utilitarian engineering layouts, which only pick up functional data from the terrain and draft minimum shortcuts from geographic survey when designing freeways and resources distribution lines. Most of all, fault-lines between architecture, infrastructure and landscape are excessively exposed by cartographic access technologies. In this situation, the Internet opinion groups strongly demand for increasing coordination between architects, urban planners and landscape artists.

In the meantime, the potential clues about the seamless incorporation of multi-disciplinary fields are unraveled: when viewed from top-down at a vertical distance, flattened images on the surface of the earth render equivalent significance to each entity of architecture, infrastructure and landscape. Every entity needs to be beautiful and attractive no matter what function it assumes. This repositioning towards non-hierarchy between multi-disciplinary fields stimulates innovative and interactive imaginings in the upcoming ages.



First Interface of Google Earth and Exposed Military Facilities

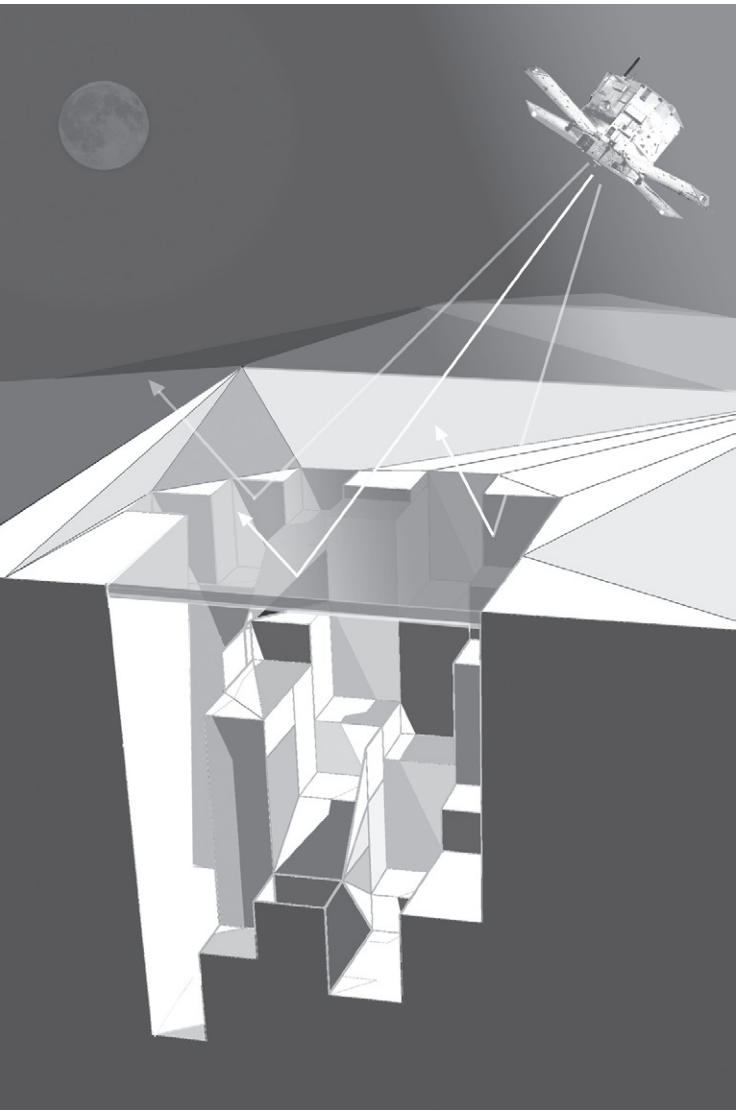
Year 2020:

Advent of Re-mystification Strategy – Camouflage Technique vs. Exposure Technique

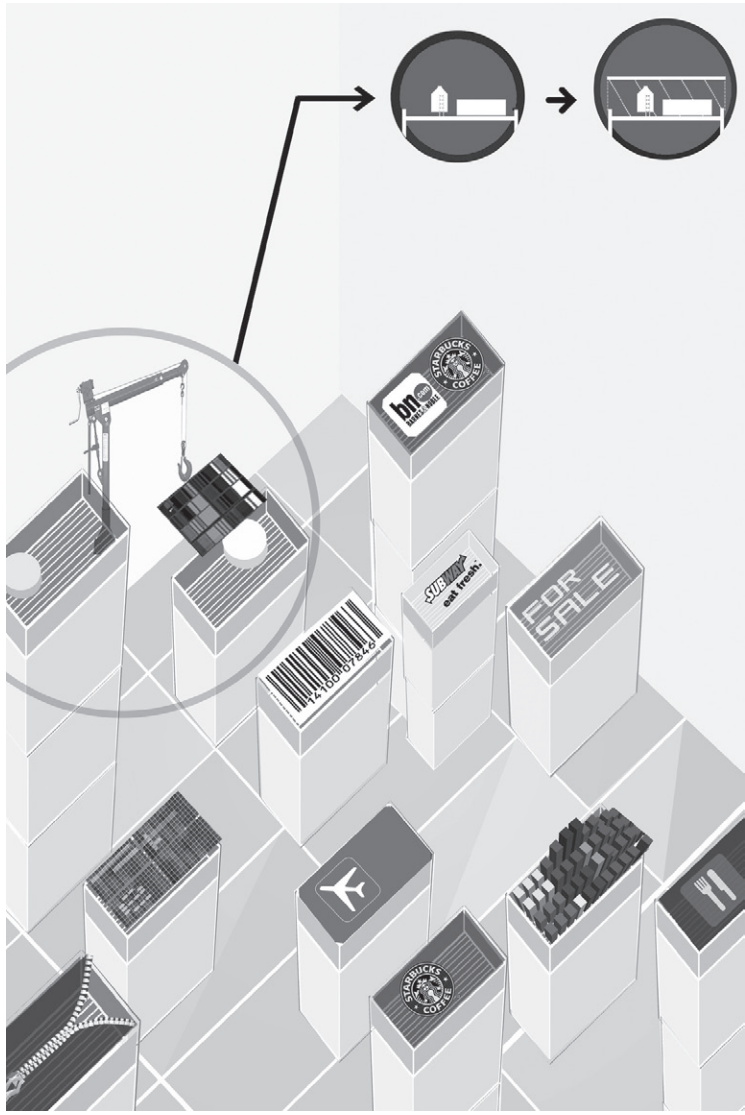
Earliest reactions to the dismal disclosure of the earth's surface emerges from the military-political sphere. In order to hide high-security facilities and military infrastructures involving nuclear plants, camouflaged structures have emerged rapidly. At the same time, relocation of anti-peace infrastructures to the satellies' blind spots makes some of the built structures vanish from maps and aerial photos. Buildings assume bigger and anonymous shapes to hide their functions. Landscape takes a masquerading role.

Meanwhile, as opposed to the resistance and an intentional blocking of the panoptic view from the sky, capital-driven “exhibitionism” starts to respond explicitly to the voyeuristic monitoring of the cartographic access technology. Architects hired by real-estate developers reintroduce eye-catching geometries to snare the floating search of the Internet users or prospective buyers of the buildings. To expose the best photo-op shot from the sky, hence maximizing the advertising effects, the gravity of the representation shoots to the top portion of buildings: commercial billboards cover mechanical equipments at the roof bulkhead, splendid rooftop pools appear on residential towers and the wigs of trees decorate the top of office buildings.

Under the situation where different altitudes of surface such as roofscape, streets, and adjacent greenery get stitched together to make a continuous plane, all the land, architecture and topography designs become subordinated to the realm of the surface articulation. Representative nature of capitalism shows its full nature in this stage with an extraordinary emphasis on the patterns, color, calligraphy, iconography and relief on the rooftop.



Covering technique gets applied to the built environment while underground facilities thrive.

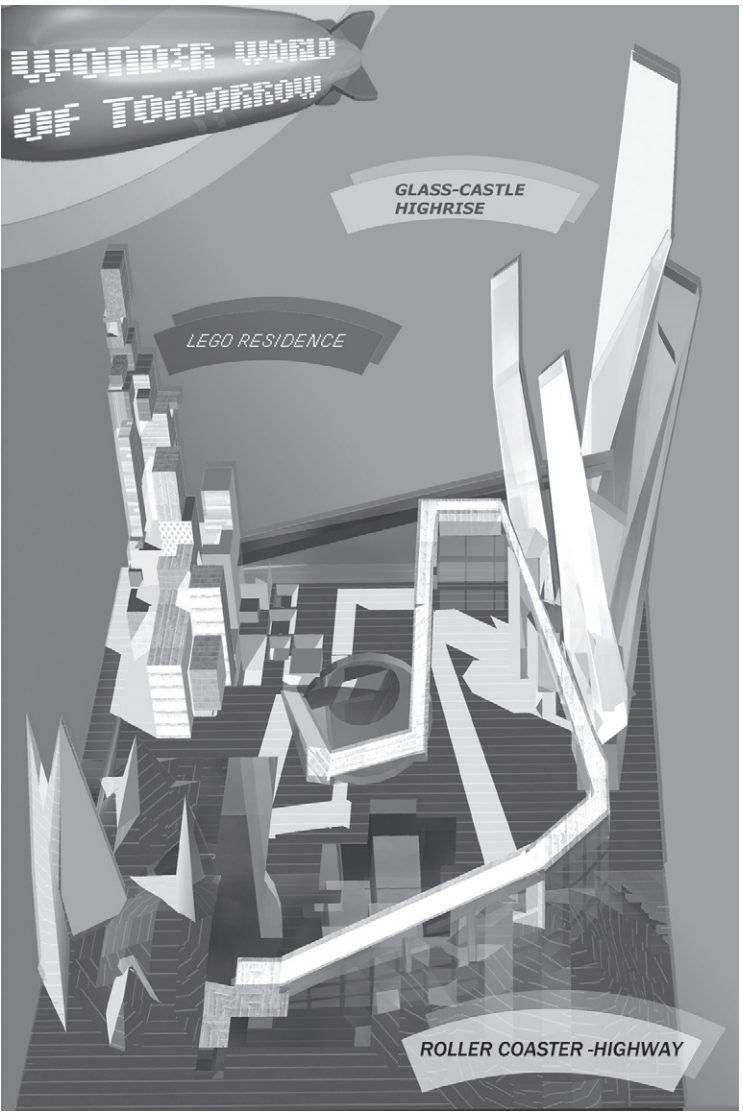


Rooftop equipment such as LED devices decorate roof bulkhead.

Year 2030:

Era of Creative Urban Geo-mythology

All the sporadic experiments performed by commercial as well as military-political spheres in the previous years have become stabilized and evolved by the year 2030. Meanwhile, under the situation where the fate of a city changes dynamically, individual cities compete with each other not only to attract tourists but also to draw capital from around the globe in the form of regional investments. As the marketability of a landmark image becomes more and more important, cities heavily resort to the impressions that aerial access photos offer. Hence, the public sector favors and promotes imaginative designs that appeal to aerial viewers.



City customized for the airborne view launches. Upscaled architecture, imaginative arrangement of landscape and non-utilitarian infrastructure design make the real city view looks like an amusement park map where distortion and exaggeration are granted. Web users capture and transfer diverse images of the city through Internet. The more interesting the look is, the more popular the image becomes. Architects, planners, land designers and real estate developers try to take advantage of this phenomenon. In this way, cartographic fantasy becomes commercialized and constructed in the real world.

Great numbers of oblique shaped buildings emerge: these buildings twist representative coordinates of longitude and latitude, and thereby show more façades to the sky. Some of the buildings provide a fisheye lens effect, which has been used in the TV commercials to enhance the impression of their aerial images. At the same time, creative, aesthetically amusing infrastructure designs dominate over utilitarian, functional layouts. Innovative approaches flourish such as greenery-wrapped gas supply lines and decorative detour of freeways. Up-scaled and programmable landscape not only engages in architecture and infrastructure but sets up its own sphere of the design. Internet users have a catalytic effect on the new, revolutionary image-making of the world. Voyage narratives of the Internet users reframe and distribute pictures and images of the cities to other users and media.
All these phenomena make the globe look like a tourist map of a theme park, where buildings, equipment and trees are depicted much larger than in real life, and the façades of the rides and structures are being drawn in rotated positions to provide viewers of the map with more understandable appearances. Also, just as relative coordinates of proximity dictate over absolute distances in this map, exaggeration of the scale attempts to reformulate our mental map so that the spatial frame in the subconscious cognition can be relocated and resituated. Finally, cities customized for this dynamic airborne-view are launched.

Geo-mythology is a genre that studies local legend and unidentified gossip about historical phenomenon, from which the outcome of the tectonic clashes of the earth are explaained. Likewise, the phenomena of surface intrusion, cross-cutting, and superposition between architecture, landscape and infrastructure, together with voyage narratives of Internet users, create a new era of urban geo-mythology, where fantastic spatial experience thrives and gets talked about.

Conclusion

The advent of ubiquitous technologies of cartographic access will provide a virtual interface from which an unprecedented shift of scale will enable the public to possess a macro vision for the miniature-looking world. Since zoomed-out views flatten and reduce all the details of the world, the macroscopic vision will make Internet users see the essence of the surface of the earth and to experience spatial dynamics situated on it. This new platform coupled with complex confrontation and negotiation between capitalistic, political and public interests will stimulate architects, landscape specialists and urban planners to innovate and expand design approaches of the built and natural environments in the emerging urban-universe.

Cartography has been the projection and interpretation of the world according to our subjective, visual experience. Even though the new technology of cartographic access will start by delivering us with brutal scenes of the earth, we will eventually create a unique urban geo-mythology based on our own imagination and fantasy. Put another way, in the future, mono-directional cartographic access will start to mutate its trajectory and evolve in an interactive way: ever-upgrading (Wikipedia-like) information on the earth's surface based on "cartographic imagination" will itself become "cartographic reality," and vice versa.

Ju-Hyun Kim holds Masters degree from Harvard Graduate School of Design. He currently leads UJ architects in New York as a licensed architect. His recent work was published in the book "306090, Decoration."

Bohyun Kim holds Masters degree in Public Health from Columbia University. He is a journalist working on several urban and social issues. His first book about a future society is to be published next fall.