

## **Cities, Communities and Homes: Is the Urban Future Livable?**

- **Paper / Proposal Title:**

From the Rational back to Radical: New Housing in the midst from the automobile to metro

- **Format:**

Design Proposal

- **Author(s) Name:**

Dr. SukHee Yun / Mr. Tae Yeual Yi / Eng. Yara Gahda / Eng. Haneen AlGhamdi

- **University or Company Affiliation:**

Prince Sultan University / Dar Saleh Engineering Consultancy

- **Abstract (300 words):**

[The meaning of Riyadh is Gardens in Arabic. There was some conflict between Constantinos Apostolou Doxiadis, who designed the master plan of Riyadh in 1968-1972, and Saudi Arabian officials on the lack of green space and cultural identity. In short, to Doxiadis, Riyadh ought to be a new city in the desert, but to the Saudi officials, it ought to be an urban oasis. This paper aims to find the urban oasis where celebrates lives.

An urban fabric fabricated by a spatial scale generated by a speed of the automobile implemented since 1972 in Riyadh. Since the master plan failed to provide open, public, and green space for the city as requested, Riyadh has struggled in a raw condition of speed and scale disorienting human association and interaction in various level of community.

Excluding the absence of green space from the master plan, there is a duality in Riyadh urban block formation, which is laid on the grid of 2km x 2km laid for its rapid expansion, but the units of the block were assumed and assigned as a part of natural growth pattern.

The road network inside of the block built up even, repetitive, and confusing spatial hierarchy between the inner and the outer, or the core and the border. The reason can

be detected if one investigates the ontological, operative, dynamic nature of any growth form; from center to the outer. Unfortunately, each central part of urban blocks in Riyadh lost its operative character, the ontological force for the community, and the dynamic force of the community. It results in determined actions for protecting privacy in residential blocks, for example, double height walls, parapets, and fewer openings as possible, disengaging from the neighborhood. It's highly passive which is different from the proactive privacy embodied in Diriyah.

All struggles to fit into the rational urban environment can be overturned when the origin of Riyadh could be recalled, Diriyah grown out from the watershed. The old town fabric presents a natural growth pattern from its origin to housings, community, and a city. Though it's been deserted and capsulated as a heritage, if its growth pattern is examined with a notion that the town does not know the speed and scale generated by vehicles, then it would guide a new housings, community, and a city for a new livable city accommodating a new pedestrian network generated by Metro and transit buses.

Riyadh will learn how to live with a new speed, Metro, and transit buses. As Riyadh experienced the scale generated by vehicles' speed, there will be a new scale formulated by Metro and transit buses.

This paper will investigate a possibility of a new livable housing in Riyadh as a reminiscent of Diriyah to grow to become an origin of community which is an active member of a city. The hypothesis is that Metro can be the main factor that will revive the feeble and inactive core of residential blocks in Riyadh according to transit bus network infiltrating into residential blocks. If the cores can be linked to the metro as the location of arrival and departure, the current urban flows which are dispersed from the outer to the center with individual vehicles, can be reversed from the center to the outer with a major pedestrian network spreading into individual housings.

If the new cores activated by metro can promote an active pedestrian network inside of residential blocks, new housings and community ought to be imagined that could be matched up with the forgotten experiential urban oasis; the radical city amending the rational city anchored to the new watershed, Metro.

• **Author(s) Biography (200 words each):**

Dr. Suk-Hee Yun is an Associate Professor at Prince Sultan University, Riyadh. She studied architecture in Korea and continued her study in NYC; Pratt Institute and Columbia Univ. She wrote her Ph.D thesis on John Hejduk's design methodology at Kyonggi University in Korea. Before she joined PSU as a full time associate professor, she worked in various architecture firms in Seoul, Korea.

Mr.TaeYeual Yi, a full-time lecturer in College of Engineering has been working as a professional engineer, project manager and architect for about 15 years in the field of AEC industry. His main research fields, these days are BIM(Building Information Modeling) in construction management by using BIM tools such as Revit, Navisworks, ArchiCAD, Tekla Structure etc. and LEED(Leadership in Energy and Environmental Design) as Green Building strategies. Especially, he has five accredited professional LEED credentials(all LEED

rating system) issued by U.S Green Building Council, which are Building Design and Construction(BD+C), Interior Design and Construction(ID+C), Homes Design and Construction(HOMES), Neighborhood Developments(ND) and Building Operations and Maintenance(O+M). He is also a PMP®(Project Management Professional®) and PE(Professional Engineer) on the basis of his hands-on field experience in the construction management.

Eng. Yara S. Gadah is a Junior Architect at Dar Saleh Engineering Consultancy. Abha, SA., after training at Arab Urban Development Institute. Riyadh, SA. She is an active member of design team; develop design concepts and digital models for multiple commercial and residential projects. Also she is responsible of managing construction administration, coordinate with team members, and communicate with clients and contractors. She is preparing her master degree in the field of architectural design and design management. She received Bachelor of Architectural Engineering degree at Prince Sultan University, Riyadh, KSA.