Press Conference

May 23, 2016

Introduction

FAR is the ratio of a building's total floor area to the size of the plot.

It is a technical jargon for professionals - developers, urbanists, and architects.

But almost every Korean either knows what it is, or has heard about it.

If you type FAR on Korean search engines, an endless stream of news, articles, and commentary pops up.

The word speaks to the hunger for space in a hyper-dense environment, as well as the desire to satisfy that hunger by any means possible.

It touches everybody’s life.

In fact, it has been a driving force behind the growth of South Korea for the last 50 years.

So, the FAR Game is a powerful lens into the frontiers of Korean society as expressed by buildings and cities.

The Korean Pavilion is designed to track changes in the game after the global economic crisis of 2008, and highlight the best examples of creative responses to the demands of FAR.

So please come inside and see what are the rules of the FAR Game, how is the game played, what are the forces in the game, different perspectives on the game, and why does the game matter.

Exhibit Guide

The exhibit consists of 5 sections.

1. What are the Rules of the Game?
2. How is the FAR Game played?
3. What are the Forces at Play in the FAR Game?
4. Artist Perspectives on the FAR Game
5. Why does the FAR Game Matter?

1. What are the Rules of the Game?

First, the definition, the players, calculation, building rules, 5 steps of design in the FAR Game - are explained.

The game is played using three variables - land, law, and building - through the interactions of three players - the consumer desiring maximum volume, the supplier attempting to achieve it, and the controller restricting it.

The first step for Korean architects is to know how much floor area they work with for their design – more precisely the limits of FAR and BCR (Building Coverage Ratio) on the zoning.

The next step is establishing a hypothetical 'building envelope', applying five most critical regulations, 1) **minimum distances** from the site boundary, 2) **street width** diagonal plane control, 3) **north-south** orientation setback and diagonal plane control, 4) **maximum height** and number of floors, and 5) **required number** of parking spots.

You also consider some buildings elements are exempt from the calculation in Korea. 1) **underground** floor area, 2) **ground floor parking area** with *pilotis,* 3) **balcony with** a depth of less than 1.5 meters, 4) **attic with** a height of less than 1.5 meters. 5) **exterior areas** enclosed by walls whose opening ratios are larger than 50% and etc.

2. How is the FAR Game played?

The 36 buildings are each represented by two models. One is a building mass accommodating the specific functions required by clients within the hypothetical building envelope by regulations. The other is the realized building. All 72 models are built to the same scale, 1/75.

In front of two models, four diagrams outline how the game is played. 1) **Diagram 1** is a hypothetical building envelope by regulations. 2) **Diagram 2** is a building mass – equal to the first model. 3) **Diagram 3** is the extended volumes or surfaces developed through design tactics and innovations. 4) **Diagram 4** is the realized building equal to the second model. Above the models, the numbers show the basic profiles of each building including FAR and

BCR.

All 36 buildings were built after 2010. 29 are in the city of Seoul. With the exception of the five largest buildings, they reflect the averages for urban architecture and plots in Seoul. The program of the majority is residential, or a mix of residential and retail.

The 36 buildings showcased here illustrate the game imposes not only on the scale of a building but also on the fundamental elements of a building—plan, volume, and section. The architect must develop tactics to address each of these elements in order to meet the demand for maximum floor area and volume.

The **aerial photos** on the wall show the urban context of each of the 36 buildings. The scale is 1/1000.

The **photographs by Kyungsub SHIN** provide a macro view for each of the 36 buildings from a distance. The backdrops look standardized and flat at first, then so heterogeneous and chaotic it is difficult to actually discern the buildings designed by architects.

I will show a few examples among 36 buildings.

Let's start from #22.

While maximizing FAR, you can make this mass with 6 floors within the hypothetical envelope by rules. The result is that FAR is **199.95%** just below the limit, 200%. But the BCR of each floor are a lot below than the limit, 60%.

The exterior areas, enclosed by walls whose opening ratios are larger than 50%, are included in BCR, but not in FAR. So the architect increased BCR by making this curved surface without going over the legal envelope. The space in between is used as resting areas. So the game is played by balancing FAR and BCR.

Let's go to #32.

The limit of FAR is 250% now, but it is expected to be increased to 400%. The FAR is **248.96%** just below 250%. The architect attached the outer surface with floating decks, which are not calculated as floor areas. The result is that the double facade makes rich intermediate space for office environment, and they can be interior space when the rules are changed in the future.

Let's go to #34.

The initial scheme is a simple 8-story tall box with FAR of **399.85%** just below the limit of

400%. But the site is not bound to maximum height regulations and diagonal plane controls. The architect added 3 more floors. To reduce the gained floor areas, the middle part of a mass was cut like tightening waist of a body. The openings of the façade connect each two floors with zigzag form. So in this case the game is played between FAR and height.

Finally, let's go to #24.

In this narrow and deep site, the architects squeeze as many one-bed room units as possible with FAR of **199.88%,** again just below the limit, 200%. Then they extended interior space to balconies and manipulated ceiling heights to gain more floor areas.

We enlarged these models to the scale of 1/20. The sections in red indicate how building volumes and spaces are extended. The drawing on the wall compares the regulated areas and the extended volumes and other exempt areas.

We summarize all the analysis at the **matrix of design tactics** used in the 36 buildings at the end of room.

2.1 & 2.2 Stereotypical Medium Multifamily House

Before we go to Section 3, I want to talk about the stereotypical medium multifamily houses and mixed use buildings, which are the main targets of our exhibition.

These buildings were built by local builders and developers without any professional design training. If the construction boom lasted, these would have been replaced by high-rise apartment complexes or commercial buildings.

More households still live in these houses than in high-rise apartment buildings. In 2015, construction of multi-family houses exceeded the construction of apartment buildings for the first time since the 1970s.

Young architects began to enter this tough market.

3. What are the Forces at Play in the FAR Game?

We describe why the FAR Game is so intense in Korean cities. Hyper-density, land price, compressed growth, building typologies, and urban fabric are demonstrated in statistics and infographics.

3.1 Hyper-density and compressed growth

Seoul is one of the most populated, densest, and most concentrated cities in the world.

It took only 46 years for Seoul's population to go from 1 million to 10 million.

Rapid economic growth accelerated the Far Game in Seoul.

3.2 & 3.3 Land Price Growth & Land Price and Construction Costs

The growth of land price exceeded the growth of nominal GDP in Korea over the last 50 years.

Seoul's land prices continued to grow between 1990 and 2015, most dramatically between 2002 and 2008. The data is from an analysis of the total 1.3 million plots in Seoul.

The diagram shows the ratio of land price to total construction cost in Class-2 General Residential Areas of Seoul.

On the average, the land price consists of more than half of the total construction cost in Seoul. The building is often not valued in the sale of a property. In Seoul a building is considered as the stacking of land.

3.4 Amplification and Verticalization

The horizontal layers indicate how building storey were planned and constructed in response to the changes in building rules. Building typologies were polarized drastically after Korea's 1997 foreign exchange crisis.

About 500,000 building out of the total 634,000 buildings in Seoul were analyzed for this graph.

3.5 Scales, Programs, and Typologies

The building profiles in each mini-graph represent the total amount of floor for each storey of each building type.

Small retail spaces were combined with the medium-rise multi-family houses, and became the prototypical mixed-use buildings in Seoul.

The retailization of medium multi-family houses is due to the higher ratio of self-employed in Korea.

3.6 The FAR Game and Urban Building Rules

These two infographics demonstrate how the FAR Game is played in direct response to changes in the urban building rules. The infographic on the left shows the stepwise distribution of FAR with some intervals.

Dots represent 558,956 out of the 634,201 buildings in Seoul.

On the right infographic the two highest peaks are shown at 100% and 200%, which coincides with the FAR limits for different zoning areas.

The discrepancy between the current FAR and buildable FAR puts pressure on developers and architects.

3.7 Characteristics of the Urban Fabric

Gangnam is representative of a planned grid pattern consisting of superblocks.

This horizontal shift of zoning within a block can be compared to the layers of an onion. Entering a block is like peeling a layer off; you see more onion, but the onion is getting smaller.

Due to the small plots, narrow adjacent roads, and the restrictive plot-based buildings rules, it is virtually unavoidable that seeking to reach BCR and FAR limits will create a dense and compact urban fabric with buildings side by side.

4. Artist Perspectives on the FAR Game

Here we hear the voices of local builders, developers, workers, home owners, and architects to see what are their perspectives on the FAR Game.

Yeondoo JUNG documents fragments of streetscapes. A series of photographs seem frozen at first, but they crawl slowly across the screen. Monologues from everyday people reinforce the way residents identify with their homes. Here the FAR Game is a context for the accumulated memories of their lives.

In this room, two artists render the reality of the lived urban space.

Seongeun KANG details the façades of multi-family houses using fine calligraphic brushes, with a simple elegance that belies their banal designs. She captures the anonymity created by builders who don't fully take ownership of their craft, and reflects a form of unconscious thinking that still pervades everyday life in the city.

Seung Woo BACK has photographed thousands of multi-family houses over the years. He captures a tinge of the poverty that Koreans have tried to erase from their memories. While Seoul tries to measure up to other global cities, the awkward and disjointed elements in these buildings, which are the result of FAR Game, mock such an endeavor.

5. Why does the FAR Game Matter?

So why does the FAR Game matter to the Koreans and architecture in general?

The Impact of Architecture on Society

It is thus encouraging that a new generation of architects in Korea has discovered a niche in the market that will allow them to play the game with greater emphasis on quality of life and emerging cultural values for the urban middle class.

Innovative Design Tactics Inside and Out

Architects creatively absorb hyper-density by crossing over from quantity to quality, and to turn short-term individual profit into long term public benefits, stimulating more activity between private and public space, and between architecture and city.

An Alternative Model for Urban Regeneration

It fosters a slow but resilient form of urban regeneration on a smaller scale within sub-blocks. At this more personal level of development, a new economic and social dynamic is cultivated. From the supplier side, small and medium-sized business is stimulated, leading to a better trained laborers, workers, builders, and contractors.

Opening

ARKO Chair, Myung Jin PARK, Sue LIM, Beoyeong BYEON

Vice Mayor, 하승창

City Architect of Seoul, 승효상
Team for Seoul Biennale of Architecture and Urbanism in 2017

5 Co-Curators/Exhibitors
Eungee CINN, Keehyun AHN, Seungbum KIM, Isak CHUNG, Da Eun JEONG

3 Invited Artists: Seongeun KANG, Seung Woo BACK, Kyungsub SHIN
Graphic Designer: STUDIO TEXT
Substantive Editor: Richard Enos

Staff: Hyung Bum KIM, Woo Joe LEE, Hyung Rok DO, Hee Ra KANG, Jung In SEO
International Public Relations: So Young HAN, Haewon SHIN
Coordinator in Venice: Eun Jeong KIM

Contributing Architects:
SsD (Jinhee PARK)
Mass Studies (Minsuk CHO), the curator in 2014
AnLstudio (Keehyun AHN, Minjae SHIN, Minsoo LEE)
OCA (Jae Y. LIM)

Counselor: John Peponis
Advisory Group: Moongyu CHOI, Jae Y. LIM, Chungkee LEE, Cheolsoo PARK, Richard Enos

Essay Contributors:
John Peponis (Georgia Tech), Marc Simmons (FRONT),
Rowan Moore (The Observer), Julian Worrall (The University of Adelaide),
Neville Mars (MARS Architects)

Catalog Publisher: SPACE Books, Sungjin PARK, Gyehyun PARK, Seungtae CHOI