The Discourse of Postmodern Architecture: From American Dream to Chinese Reality

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July 13 2001, International Olympic Committee awarded Beijing the 2008 Summer Olympic hosting right. December 3 2002, International Exhibition Bureau granted Shanghai the 2010 World Expo hosting right. China then, was already rapidly rising. However by winning both the Games and the Exposition in such short time range – excluding only FIFA World Cup in societal setting where basketball is much more popular than soccer- China was ready to rise in a whole new level. The superpower level.

The first 15 years of the new millennium marked the exodus of world's finest architects—the Pritzker Laureates—into China. Fostered by main spectacles of the two events, followed by expansive supporting infrastructure works, and the setting up of multinational private operations; China then started to break world construction records over and over again. Bringing in numerous latest inventions of postmodern architecture marvels built in speed never seen before. October 2014 President Xi Jinping delivered the famous 'no more weird architecture' speech. By 2015 Chinese government had already began to formulate regulation strategies to protect its inherited local identities.

How does President Jinping administration's defense mechanism effected the development of postmodern architecture in general? Can it be defined as contra productive measures towards progress? Or on the contrary—since postmodernism itself often critically considered as being trapped in never ending loops—is it actually savior to avoid furthermore uncertainty? Acting as—Copernicus' paradigm—this paper aim to understand as to why had not the American Dreams survived smoothly in China.

KEYWORDS: 2008 Beijing Olympic Games, 2010 Shanghai World Expo, postmodern architecture.

Introduction

In the height of Cold War, Indonesia's first President Sukarno and his *Bandung Spirit* allies attempted to establish South-south governance body –*Conefo*, supposed to be based in Jakarta- to challenge *Oldefo*'s UN. Strangely on the path of shaping this *Nefo* collective body; what came in between the continuous meetings (New Delhi 1947, Bandung 1955, Cairo 1957, and Belgrade 1961) were not the formation of military pact (i.e. western bloc's NATO or eastern bloc's Warsaw Pact) or financial co-operation (i.e. Regional/Islamic/BRICS Development Banks); but of fair sporting games, and peaceful cultural exchanges. As opposition to IOC's Olympic Games, both 1963 Jakarta *Ganefo* and 1966 Phnom Penh Asian *Ganefo* proved how sporting (and cultural) events can play such important roles in reshaping world geopolitical map¹.

Summer Olympic, World Expo, and FIFA World Cup

Other than Olympic Games, the World Fair/Exposition/Expo which mostly exhibits culture (history) and technology (progress); and FIFA World Cups as the international championships for the most popular sport in the planet are also playing important roles in laying-out soft (geo) political diplomacy and or propaganda. At worldwide scale, all three representing 166 years historical roots of preceding 112 events conducted since 1851 London Great Exhibition to this year's 2017 Astana Expo on Future Energy. At regional level, at least two of the six FIFA regional cup(s) (UEFA European Championship, and CONMEBOL Copa America) enjoys popularity level that is presumably as high as the World Cup itself. However, focusing on the –participant exposure and therefore scale of impact- the Summer Olympic Games, (registered) World

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¹ New Emerging Forces (Nefo) as opposition to the Old Established Forces (Oldefo) or both western and eastern blocs in the Cold War setting; formed the Games of Nefo (Ganefo 1963-66) and Conference of Nefo (Conefo 1965-66).

Expo, and FIFA (Men) World Cup were all by far outran any other global events. Preceding 83 events so far, the three were hosted in the following geographical distribution:

Table 1. World Events Hosting Frequency by Continents

Continent	Summer Olympic		World	l Expo	FIFA W	orld Cup	Mean		
Continent	$\Sigma(n)$	Σ(%)	$\Sigma(n)$	Σ(%)	$\Sigma(n)$	Σ(%)	M(n)	M(%)	
Europe	15	54	21	64	10	47	15	55	
N.America	06	21	09	27	03	14	06	21	
C.America	00	00	00	00	00	00	00	00	
S.America	01	04	00	00	05	24	02	09	
Asia	04	14	02	06	01	05	02	08	
Middle East	00	00	00	00	00	00	00	00	
Africa	00	00	00	00	01	05	00	02	
Australia	02	07	01	03	01	05	01	05	
Total	28	100	33	100	21	100	27	100	

Source: OSA Analysis.

Out of all the three events, Europe had achieved total dominance with 54%, 64%, and 47% worldwide hosting distribution; followed by North America with 21%, 27%, and 14% respectively for Summer Olympic, World Expo, and FIFA World Cup. In average –the rest of the world- only contributed 24%; not even a quarter distribution share. However with the rise of Asia, nations on the continent are recently actively bidding for hosting rights.

Japan is the only Asian country to have hosted all three events (1964 Tokyo Olympic, Osaka Expo 1970, and with South Korea 2002 World Cup). Out of the last ten Summer Olympics, three (30%) were hosted in Asia (Moscow 1980, Seoul 1988, and Beijing 2008) with Tokyo had already been crowned for the next (2020). Shanghai remained only as the second Asian city to ever host (registered) World Expo but has held all-time records in the number of participants (246 pavilions), total attendee (73 million),

single-day attendance (1.03 million on October 16th 2010)², site size (5.28 km²), operation expenditure (USD 1.88 billion), total revenue (USD 2.04 billion), and initial investment cost (USD 3.09 billion)³ – records which are most likely would remained in many years to come. Japan and South Korea remained as the only Asian country(s) to co-host FIFA World Cup, however the next two in-line were both to be hosted in Asia (Russia 2018, and Qatar 2022). The research question to respond this recent great event hosting-demand increase is: 'How much does Asia need to rely on the help of the more experience European/North American experts?'

Case Study: Beijing 2008 Summer Olympic

According to the New York Times columnist Arthur Lubow, during the preparation years of the Olympic Games, China consumed equivalency of 54.7% concrete and 36.1% steel produced worldwide, with the USD 290 million Bird's Nest Stadium acted as center piece of the Games designed by 2001 Pritzker Laurette⁴ Herzog de Meuron. Report on his May 2006 visit was mesmerizing:

Cranes more than 300 feet tall hovered above, hoisting metal pieces as heavy as 350 tons to form a lattice of interwoven steel ... The 24 main columns are gargantuan - 1,000 tons each, far more than the weight of those in conventional stadium and spaced in what appears to be a random pattern⁵.

Apart from the functional Olympic-sized field and 91,000 seats technical mandatories, design briefs also emphasized on post-Games commercial plans (which then

⁴ The Pritzker Prize often considered as the Noble Prize of architecture.

⁵ Lubow, A. *The China Syndrome*, The New York Times, 21 May 2006. http://www.nytimes.com/2006/05/21/magazine/21bejing.html

² Fauna. Shanghai World Expo Sees 1+ Million Visitors in a Single Day, Chinasmack, 19 October 2010. https://www.chinasmack.com/shanghai-world-expo-sees-1-million-visitors-in-a-single-day

³ Shanghai Daily. *City's record-breaking Expo turns in a profit*, Eastday, 1 October 2011. https://web.archive.org/web/20111015104613/http://english.eastday.com/e/111001/u1a6133087.html

eventually became 2012 London Games key success) to avoid Athens/Sydney post-Games maintenance-cost disasters; as well as unusual demand for retractable roof – of which had mainly caused the Athens/Sydney disasters in the first place. As Lubow furtherly reported: "To optimize view lines and place spectators closer to the action on the rectangular playing field, the architects designed a bowl that was higher on the short east-west sides than the [longer] north and south." However Li Xinggang of the CAG, the firm's local partner furtherly objected: "Two sides high, two sides low is not a good thing in China." So instead of utilizing the common two giant beams to support super heavy retractable roofs (also utilized in Athens/Sydney), the team synthesized 24 interwoven gigantic columns to support the roofing system while at the same time hiding the spectator's bowl-shaped platform. Eventually the roof design was dropped as construction cost was cut from USD 500 to 290 million. Through the aid of renowned Chinese artist Ai Wei Wei, the repetitive 121,000 tons of interwoven steel structures were laid in such brilliant arrangement resembling the form of a Bird's Nest. Li Hu (Steven Holl's partner in China) appraised the decision by stating that in China, a bird nest is very expensive, something you eat on special occasion. Culinary associations' aside, a bird's nest is a harmonious natural object⁶.

Next to the Bird's Nest is the USD 140 million Water Cube Aquatic Center designed by PTW Architects/Arup/CSCEC/CCDI. Serving as yet another engineering marvel, Water Cube built over complex *Weaire-Phelan* geometric steel space frame, cladded with over 4,000 ETFE compressed soap foam-panels covering 100,000 square meter surface, making it the largest ETFE structure ever built. The sophisticated foam-based cladding allows more light-in while at the same time providing heat control

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⁶ Ibid.

mechanism, resulting to some 30% energy saving in comparison to the common glass skin⁷.

Anyway 2008 Olympic Games was much more than about cutting edge stadium constructions, it was the total (re)building or rather rebranding of Beijing. Robin Pogrebin November 2006 New York Times's article described the USD 700 million China Central Television Headquarter (CCTV)—one of today's Beijing most important 'brand'- in bold words:

[With] site as large as 37 football fields, [the] 54-story [tower] leans and looms like some kind of science-fiction creature poised to stomp all over the surrounding central business district ... essentially an upside down U with right angles ... bent out of shape⁸.

MoMA's assistant curator Tina di Carlo described it as "radical rethinking of the tall building typography". Regarding to its capacity to house 10,000 workers plus several thousand more visitors, capable of serving more than one billion viewers in 250 broadcasting channels; 2000 Pritzker Laurette Rem Koolhaas, OMA's co-founder the company responsible for the CCTV's design, describe it as "fiendishly complex building in terms of program and structure". Regarding to the design strategy where vast programs were not laid out on multiple buildings but instead stacked into single loop of continuous structure, Ole Scheeren, ex-OMA CCTV's partner in charge explained: "frightening if it was pure gesture, but since it's actually a circuit of life inside, it's a huge social catalyst ... [with] the critical mass of a small city." Nevertheless the CCTV (and TVCC) building

⁸ Pogrebin, R. *Embracing Koolhaas's Friendly Skyscraper*, The New York Times, 16 November 2016. http://www.nytimes.com/2006/11/16/arts/design/16rem.html

⁷ Carroll, C., et al. *CCTV Headquarters, Beijing, China: Building the Structure*, The Arup Journal, 43(2), Pp. 40-51, February 2008.

was built in preparation for the Beijing Olympic-worldwide broadcasting purpose but was failed to function in time for the Games⁹.

Another important infrastructure improvement is Terminal 3 Beijing Capital International Airport, the gateway to the Games, designed by 1999 Pritzker Laurette Sir Norman Foster/Foster & Partners. With 986,000 m2 area, terminal 3 alone is the world's second largest airport terminal (surpassed only by Dubai's Terminal 3) dwarfing all five of Heathrow's terminal combined (busiest European hub). However in such functional building, the architect's genius laid on the efficiency delivery, to spent USD 3.8 billion 'only' and fully constructed the building in less than four years (in comparison to Heathrow's 300,000 m2 'only' Terminal 5 completed with USD 8.7 billion budget in more than 6 years)¹⁰.

China Syndrome and Jenck's Trilogy

2008 Beijing Olympic, 2010 Shanghai Expo, and the vast developments that followed had fostered great debates forwarded by Lubow as 'the China Syndrome' of which selected contra opinions are as follows¹¹:

Do they know what they are getting? They want to showcase their economic success. In that sense they know. But did they know what Rem Koolhaas and Herzog & de Meuron are trying to achieve in architecture? Probably no. (Yung Ho Chang, MIT architecture department chairman).

They couldn't do this in their own country, so they are taking advantage of the Chinese psychology that European thinking is better ... They are using the

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⁹ Ibid

¹⁰ Barboza, D. *Beijing Air Terminal Goes All Out for the Games*, The New York Times, 2 May 2008. http://www.nytimes.com/2008/05/02/business/worldbusiness/02terminal.html

¹¹ See Lubow. A.

Chinese as their new-weapon test field. (Peng Pei Gen, Tsinghua University senior professor of architecture).

Meanwhile pro opinions are as follows¹²:

They never tell the truth but always to build this so-called nationalism against foreigner who open up society. They lost prestige when society opened up. For 50 years they never made a single object that is countable as valuable. (Ai Wei Wei, international artist).

In the past there was a debate whether you could combine avant-garde and commercial. But I think the value of the avant-garde will be recognized in the market. Like Picasso's paintings, which were once avant-garde, and now they are very valuable. (Pan Shiyi, SOHO China developer).

Chang-Wei's debate is the typical daily discourses on the subject of 'open-up China' against its unknown impacts happened in all fields of profession. However as Asia (and perhaps also some part of Africa and South Africa) is collectively rising, what was once secluded common subject in China, had now emerged into global questions; not only of tradition versus progress, but also of North-north universal (monogenic) influences versus South-south's unique (heterogenic) identities. Returning to the earlier research question, regarding to Gen's notion, were the western experts had really helped China? Or is it the other way around?

The first Herzog de Meuron's large-scale project was London Tate Modern completed in 2000, the Beijing National Stadium competition commenced just a year later, in the same year when they received Pritzker Prize. The same goes with PTW Architects of whom at the time had never built building as sophisticated as Water Cube.

¹² Ibid.

When handling CCTV/TVCC and Terminal 3, both Koolhaas and Foster have already won Pritzker Price with the experience in designing similar functional typologies (Koolhaas/OMA's with the Universal Studio Los Angeles Headquarter and Foster & Partners with Chek Lap Kok Hong Kong International Airport). However CCTV's complex structure is one of its kind. Held by structural tube of columns, beams, and braces around its entire skin, at such gigantic scale, it was never been/since attempted before/after. Similarly, Beijing Capital Terminal 3's construction efficiency was also an engineering marvel never been practiced anywhere else in the world. Professor Gen was right – the western experts were using China as their new-weapon test field.

Developer Shiyi on the other hand, was also right. By the turning of the century, Charles Jencks, one of the most influential architecture writer in our time, published three books on the topic of today's 'weird architecture'. The first; *Architecture of the Jumping Universe*¹³ was describing the changing methods/tools of design to create new breed of architecture. The second; *The Iconic Building*¹⁴ argued about the economic value of these new breeds. The third; *The Story of Post-Modernism*¹⁵ exhibited selected few of the pact. Hence like Picasso's paintings; beautiful or ugly, meaningful or meaningless, these latest Postmodern Avant-Gardes had collectively established themselves —as the new collectible items- highly valuable in the economic balance of scarce supply and massive demand. In the context of China Syndrome, the phenomenon ignited major *starchitect*¹⁶ exodus into the country.

¹³ Jencks, C. *The Architecture of the Jumping Universe*, London: Academy, 1995.

¹⁴ Jencks, C. *Iconic Building: The Power of Enigma*, London: Frances Lincoln, 2005.

¹⁵ Jencks, C. *The Story of Post-Modernism: Five Decades of the Ironic, Iconic, and Critical in Architecture*, London: Wiley, 2011.

¹⁶ Abbreviated from *Star Architect* commonly uses to describe highly recognized international architects.

Alongside to the 2008 Games preparation, there were at least two other non-Olympic related notable under-constructed megaprojects: One of today's world largest National Performing Arts Center with opera house, concert hall, and theater center bigger than DC's Kennedy Center designed by Paul Andreu; and mixed-use complex of sky bridges-linked 622-unit apartments, a boutique hotel, and a cinema all powered by 600 geothermal wells designed by Steven Holl. Dispatching from the events, at the Pritzker level, Zaha Hadid/ZHA (2004 Laurette) was among the most successful with the delivery of Guangzhou Opera House, several SOHO mixed-use development in various locations, and currently under-construction Daxing International Airport Terminal. Asianborn/based laurates also had their shares, most notably with Tadao Ando (1995 Laurette)'s Poly Grand Theater in the outskirt of Shanghai. Although no post-Games commissions had yet came to Herzog de Meuron, both Koolhaas/OMA and Foster were hired to design several more prestigious projects which includes Shenzhen Stock Exchange building, CITIC Bank Headquarter, and Bund Finance Center. And the list went on even to the corporate-style architectural consultants like Kohn Pederson Fox (KPF) with their numerous tower projects which includes China's second tallest building; Shanghai World Finance Center.

CTBUH and the China-Dubai Decade

In an interview with Barboza, Ma Yansong one of today's most influential Chinese young architect said:

This is just the start ... The last 10 years we've had landmark buildings in Beijing and Shanghai. But now, the private developers are coming in, and second-tier cities want to develop ¹⁷.

Providing quantitative analysis to the construction boom in China while inserting comparative studies to other regions of the world can be a daunting task, especially when data mining is preferably gathered from a single source to maintain comparison objectivity. However if research subject is shifted from mere building construction to the –more sophisticated tower/tall building construction- Council of Tall Buildings and Urban Habitat (CTBUH)'s reports can be utilize to serve the purpose¹⁸.

According to the reports, the first one hundred tall buildings¹⁹ was constructed during 1940s in the United States. As of 1950s however, North America's share of world Top100 was gradually declined from 98% to just 16% last year. Middle East and Asia on the contrary, went the opposite; starting from just 4% and 11% in 1980s and 2000s, to 26% and 54% in 2017. Europe's share never grew more than 6%.

Table 2. World All Time Top100 Tallest Building Distribution

Continent	By decades							Annually since the last decade						
Continent	50s	60s	70s	80s	90s	00s	10s	'11	'12	'13	'14	'15	'16	'17
Europe	0	6	5	4	3	3	2	1	1	3	3	5	5	4
N.America	98	92	91	80	80	51	31	26	23	20	20	17	16	16
C.America	0	1	1	0	0	0	0	1	2	0	0	0	0	0
S.America	2	1	2	3	2	0	0	0	0	0	1	1	0	0
Asia	0	0	0	11	12	36	42	46	45	46	44	48	54	54
Middle East	0	0	0	0	0	4	22	24	27	29	30	28	24	26
Africa	0	0	0	1	1	0	0	0	0	0	0	0	0	0
Australia	0	0	1	1	2	6	3	2	2	2	2	1	1	0

Source: CTBUH 2008-2017 TT/TBIN/YIR Research Reports.

¹⁸ Analyzed from all CTBUH Tallest Ten (TT), Tall Buildings in Numbers (TBIN), and Year in Review (YIR) reports published from 2008 to 2017.

¹⁷ See Barboza, D.

¹⁹ By definition building with 300m height or more.

Narrowing the list to more sophisticated World Top10 annual data in the last decade –out of all 100 towers- 53 were located in China, 23 in UEA; together representing 76% shares, dwarfing any other countries worldwide. By city, location-wise Dubai came first with 19% share. However China was represented by 6 cities, of which surprisingly Beijing was not in the top ten chart list. Instead Shanghai and Hong Kong were accompanied by second-tier Shenzhen, Guangzhou, Wuxi, and Nanjing.

Table 3. World Last Decade Top10 Tallest Building Distribution

By city									By country				
R	City	n	$\Sigma(h),m$	R	City	n	$\Sigma(h),m$	R	Country	n	$\Sigma(h),m$		
1	Dubai	19	7,154	7	Wuxi	5	1,467	1	China	53	17,661		
2	Shenzhen	8	2,844	8	Abu Dhabi	4	1,339	2	UEA	23	8,493		
3	Guangzhou	7	2,568	9	Nanjing	4	1,329	3	USA	8	2,961		
4	Moscow	5	1,678	10	HongKong	4	1,322	4	Russia	5	1,678		
5	New York	4	1,644		Others*	36	12,097	5	S.Korea	3	1,161		
6	Shanghai	4	1,643	*) R11-39, n<3; **) R6-12, n<3					Others**	9	3,131		

Source: OSA Analysis.

So both Gen and Yansong were right, the rise of Chinese second-tier had brought even more test-weapon fields.

Weird Architecture and Beyond

The Postmodern Architecture constant exploitation triggered numerous reactions, especially in Beijing and Shanghai. October 2012 Aric Chen organized the Dezeen Beijing Design Week centered in the theme of going back to craft-thinking²⁰. November 2012 Neri&Hu/Design Republic organized two day international symposium concluded in the publication of (Chinese) Design Manifesto in format resembling to Mao's little red book²¹. October 2014 President Xi Jinping delivered the famous 'no more weird

²⁰ Howarth, D. China Needs to Slowdown, Dezeen, 5 October 2012. https://www.dezeen.com/2012/10/05/china-needs-to-slow-down-says-beijing-design-week-creative-director-aric-chen/

²¹ Fairs, M. *Architects in China Are Lost*, Dezeen, 16 November 2012. https://www.dezeen.com/2012/11/16/architects-feel-lost/

architecture' speech of which numerously quoting the CCTV/TVCC building²². December 2015 high-level confab was held responding to the president's speech, an event that was last convened in 1978. February 2016 authorities released The Guidelines for the Development of China's Cities targeting weird buildings and gated communities²³.

For the better or worse, Lubow concluded his article to nicely summarize the fate of the syndrome²⁴:

I felt perched on a hinge of history. By taking on the Olympics, China committed itself to demonstrating that it is a world-class power. Acknowledging that their architects were not yet up to the challenge, the Chinese had imported the best the West could offer, and now young local architects were collaborating with and learning from Western masters. By marrying Chinese tradition with a modern outlook, Herzog and de Meuron were helping to raise the bar for architecture in China. Even the unrealized projects, which have been widely published, can influence younger architects ... In a few years, as the junior Chinese architects become more sophisticated, foreign practitioners will be less needed and perhaps less welcome. This period of intense mutual enlightenment may be brief.

Conclusion

Returning to the Olympic Games and World Expo discussions (putting aside FIFA World Cup since China had never hosted the event), over the years post-events were known for their monuments legacy, of which either will serve as new icon(s) for the

²² Abkowitz, A., & Si, M. Xi Jinping Isn't a Fan of Weird Architecture in China, The Wall Street Journal, 17 October 2014. https://blogs.wsj.com/chinarealtime/2014/10/17/xi-jinping-isnt-a-fan-of-weird-architecture-in-china/

²³ Chin, J. *Urban Brawl: China Targets 'Weird' Buildings, Gated Communities*, The Wall Street Journal, 22 February 2016. https://blogs.wsj.com/chinarealtime/2016/02/22/urban-brawl-china-targets-weird-buildings-gated-communities/

²⁴ See Lubow, A.

hosting city(s) (i.e. Eifel Tower to Paris) or decayed as white elephant(s)²⁵ (i.e. former 2004 Athens Olympic stadiums). In regards to the 'weird architecture' notion, the question then shifted to how could these newer monuments fits-into its surrounding urban fabrics, moreover to the host national identity. 1964 Tokyo Olympic inherited Yoyogi National Gymnasium (designed by Kenzo Tange, 1987 Pritzker Laurette), and Nippon Budokan; both demonstrated strong connection to the Japanese culture. 1970 Osaka Expo's main spectacles were the Tower of the Sun, a gigantic sculptural monolith surrounded by giant space frame roof (also designed by Tange). At the time, the tower was highly progressive. Nevertheless it was embodied with strong Japanese symbolism, while the roof was completely dismantled after Expo'70 ended. On the other hand, 2008 Beijing Olympic and 2010 Shanghai Expo inherited Bird's Nest, Water Cube, and Five Urban Theme Pavilions –all culturally disconnected to their existing loci- leaving the Oriental Crown as the only culturally Chinese-friendly legacy.

On her golden era, Japan's economic growth was as miraculous as of China's today. However Japan had somehow managed to filter the waves of technological advancement and avant-garde(ism) that followed without sacrificing progress; because six out of forty (15%) Pritzker Laurates are Japanese, surpassed only by USA's eight (20%) preceded by UK's four (10%) laurates. Does Japan's strong cultural identities rooted from strong monarchy tradition? It is debatable to say. Nevertheless even the most avant-garde architect group throughout Japanese history, the Metabolism led by Tange, was referencing their advance technological concepts to the Ise Grand Shrine; one of Shinto's holiest structure guarded by the emperor's direct descendant. The Asian (economic) miracle on the other hand, is also an unprecedented phenomenon in the

²⁵ The term uses to describe abandoned infrastructures too expensive to maintain.

West/North-north. Slowly reinterpreting their older classic/neo classical heritages, the Europeans and North Americans were developing modernist/postmodernist styles in a century-long odyssey. The Asians (and perhaps also Africans and South Americans) on the other hand, was forced to reshape their equally long-standing indigenous vernacular identities –mixed with traces of colonial infiltrations- only in few decades time; resulting in what seems to be fierce denial towards global progress.