Title: The Inevitability of Global Adaptation: Eastern and Western Developers Practicing Internationally

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The Inevitability of Global Adaptation: Eastern and Western Developers Practicing Internationally

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For architecture and engineering firms serving development clients who build large-scale urban projects in various corners of the world, the effort is often facilitated by regional satellite offices to ensure that the visions for each of the client’s projects are tailored to the local idiosyncrasies of design, culture, zoning, building codes and construction techniques. Some of these clients will develop globally, beyond their home territories, while many focus only on specific regions of comfort, be it foreign or domestic. In this case, similar to A/E teams, developers are seeking local partners to ensure the projects’ success and to establish a local presence in more unfamiliar geographies.

In this increasingly globalizing world, designing developments of various scales around the world requires transcending both geographic and cultural borders. While this seems to have become common practice for many in the AEC industry, it is evident that the depth of interaction required for successful global collaborations is still in its infancy. The global surge of development activity post-recession, combined with the surge of BIM protocol, has greatly increased the speed in which projects are design and delivered to the market. The calculated step for timing the market has become a nimble procedure that only well-balanced developers have mastered.

There has been no shortage of Western investment in Asian real estate. However, it is interesting to note how much this has increased in the last 10 years, especially through the recession, which crippled development investments in the US. Mainland China has become the most prominent recipient of those investments, driven by its prodigious economic growth. The demand for entire new cities and towns involves: homes, offices, shopping, entertainment, healthcare, education, social facilities, etc. While the US has generally recovered from its financial crisis, it is clearly not experiencing economic growth anywhere near the scale that Asia is, especially China. Hence the attraction for developers and design teams to pursue a share of that market.

Meanwhile, disposable income in Asian economies has increased broad consumer demand on all fronts. With so many restrictions historically in place on Chinese nationals’ investment opportunities, the local real estate market has become an attractive investment option. This disposable income, coming mainly from the emerging middle class, is restricted by the government on foreign investments at $50,000 per year (Leon 2014), and with the poor market returns and no insurance on bank deposits, purchasing additional homes as an investment emerged as the viable option. This trend in national investment single-handedly fueled the residential construction boom, in turn the emergence of entire new cities, and at a rate of 12-24 new cities per year (CBS News 2013). The result is a unified interest from developers globally on the future of Asia.

Nonetheless, as with the recession and residential bubble of development associated with it in the US, a similar bubble is growing in China. With families purchasing multiple apartments per household, investing on inflation, not as income properties, the result is entire cities that remain mostly empty (CBS News 2013). To ease the market, the government restricted families to only one investment property per household. In turn, as development slows, individual investments are lost as property values plummet and heaping amounts of debt have been incurred by the developers.

As the real estate investment opportunities for Chinese nationals decline domestically, the popularity of the “EB-5 Immigrant Investor Program” accelerated. The program’s mission is to “stimulate the US economy through job creation and capital investment by foreign investors.” (US Citizenship and Immigration Services 2015) According to a recent New York Times article, more than 80% of the investors participating in the program are from China, and that some of the most prestigious developers in New York City have taken advantage of this funding opportunity (Satow 2015). The minimum investment is $1,000,000 for urban areas and $500,000 for rural, resulting in green card citizenship. For developers seeking financing, typical 12% interest on traditional loans are double the 5% on EB-5 money. (Satow 2015)

The result is a shift in interests of, not only Eastern developers, but also individual investors to international development. Additionally, apprehension arises for Western developers seeking opportunities in Asia. Ironically, it is the volatility caused by these economic scenarios that begins to unify the interests of both sides, and is that which creates the tenuous process of new collaborations and shared learning we see in today’s multi-national development teams. The global interchange begins.

In the following case studies, four projects are highlighted which are developed by well-established, globally active, premier developers. They illustrate the trials and tribulations on a local and an international project for each.

The Asia-based Developer was founded in 1972 in Hong Kong. With a strong belief in their core values of integrity, originality, long-term focus and quality, they bring long-lasting value to their projects. They focus on the exploration of new ideas and unlocking and transforming spaces into vibrant neighborhoods and destinations. In 1978, they entered the US market in a joint venture with a local partner and have been building their portfolio and reputation in the US ever since. Of particular interest to their success in the US, their commitment to “long-term focus” has proven to be one of the most beneficial of their core values.
The US-based Developer was founded in 1978 in New York. With a strong belief that their history of success is a direct result of the people they employ and develop, they focus on transparency, honesty, and simplicity in business relationships. With great honor in the agreements they forge, they work towards the highest standards, not the standards expected by others. In 2006 they opened their first office in Shanghai after working in several other countries since 1988. Of particular interest to their success internationally, their commitment to pushing themselves to the “highest standards,” and also knowing when they cannot achieve them has proven to be one of the most beneficial of their core values.

**Logistics of Working Globally and Locally**

In Asia, local governing authorities assign development sites to developers depending on their proposals for the site. Basic development criteria and program requirements are established at the outset, but these are often considered guidelines. Depending on the importance of the site, the governing authorities are often open to changes in these basic requirements if the developer’s proposal demonstrates clearly defined advantages to the community. Local Design Institutes (LDIs) are assigned by the authorities to oversee the final production and implementation/construction of all major projects. The LDIs are instrumental in explaining the wide array of local requirements and a strong relationship with them from the beginning is vital to the process and its success.

In the US, generally the logistics are quite opposite and without such complexities. Private-sector development follows fundamental processes set in place by the zoning and planning departments where the projects are developed, and can be fully managed by the development team and the design/construction team.

**Local Government Participation and Approvals**

In Asia, it is common to find local government acting as a partner with the developer. Understanding the objectives of both parties is vital. It requires considerable
research and meetings with multiple officials to ensure the many aspects are understood. There is often misunderstanding or elusive interpretations. Foreign architects trying to interpret such requirements from afar find their designs need considerable revision after presentation to the authorities.

In the US, it would be very uncommon for the situation described above to occur in the private sector. Other than facilitating tax credit programs or affordable housing programs, the government is largely absent from the development process. Cities such as New York, Boston, Toronto, San Francisco, and Miami are just a few of several such places where a more intensive design review process is required. These oversight processes are generally only triggered once a project reaches a certain threshold of scale, requires rezoning, or is part of a “public private partnership.”

Design Process
In Asia, the previous topic of government participation bleeds into the design process. Seemingly irrevocable parameters can suddenly be thrown into turmoil halfway through the design. Issues that would potentially bankrupt a project in the West somehow need to be seamlessly incorporated without argument. Frustration and bewilderment must be put aside and replaced by understanding and a willingness to quickly resolve contention. Managing the design process under these circumstances can be extraordinarily challenging. Many situations are beyond the developer’s foresight. Communicating constructively with the design team, including local authorities, LDI’s, agencies and contractors takes on a new and dynamic dimension. It requires leadership, optimism, flexibility, and a tactful response.

In the US, other than the relationships between the developers, architect(s), sub-consultants and contractors, the intervention of semi-official like LDI’s does not exist.

Construction Process
In Asia, with the involvement of the LDI, the participation of the design team in the construction phase is less intensive than a similar project in the US. This is beneficial to design teams who are not versed in full service and is a major contributor to the proliferation of for international design teams. There is significantly less liability as well since the contract documents are prepared by the LDI – again, a facilitator of international collaboration.

In the US, this model exists, especially on high-profile jobs or in places like New York City, where there is frequently a design architect/engineer and an architect/engineer of record. It is in these models of collaboration that commonality exists in the processes of the East and West. However, the majority of projects in the US have a single executive architect who carries the entire responsibility for production, construction administration and, ultimately, liability for the project.

Financial Considerations
In Asia, for international developers, an Asia-based fund is typically created and they pair with a local developer. Professional fees for an international design team become a complex matter to repatriate back to the US. When working with a US developer internationally, fees can come directly through US banks, just as they would working locally, but this practice is uncommon. Pay agents that are local to the project can facilitate payment of taxes, their fee, and repatriating the remainder. Alternatively, the US-based design team can establish a legal presence in the country of work and internally deal with the repatriation of fees.

In the US, where lending and financing is the primary source of construction loans, and a project’s underwriting dictates its viability, there is the freedom to secure such financing in any way available to the developer. In developments including residential components in major urban cities, affordable housing has recently become a source of stalemate between developers and city agencies simply because of their impact on the development pro forma and resulting financing. US developers are looking for creative financing options and Asian investors are contributing to the success of
US projects by reducing debt financing and pushing projects forward. (Brown 2013)

Taikoo Hui – Guangzhou, Guangdong Province, PRC

Developed locally by an Asia-based developer, Taikoo Hui, which opened in 2010, is promoted by the local government, planning authorities, urban planning universities, academics and the public alike, as a landmark for the City of Guangzhou. The integrated design process implemented by the developer and design team has been used as a reference and standard in urban planning by the local authorities for future developments. The mixed-use project, as seen in Graph 1 consists of: retail, office, hotel, cultural center, and parking, totaling approximately 4,660,000 ft² (433,000 m²) within the three towers and a connected podium. With a site area of approximately 470,000 ft² (43,600 m²), and a significant, centrally located public open space requirement, the vertical integration and connectivity across programs was a significant challenge. Additional challenges existed below grade due to the requirements for an immense parking count and connections to two subway lines.

How did this project and its delivery perform?

Logistics of Working Locally

Relatively streamlined for a major development in China. A highly-experienced and diplomatic local developer, paired with an US-based architect with whom they have worked for nearly 20 years, and who has two offices local to the project. The site was owned by Guangzhou Daily News (GDN) whom set out to lead the development. However, with the vast experience of the developer, great trust was earned through their integrity, leadership and market knowledge, and in the end, GDN conceded the lead role.

Local Government Participation And Approvals

Although several hurdles arose, as expected, again the strong relationship between the developer and architect, paired with the experience, leadership and vision of the developer, caused the project to trend towards a product which could easily succeed in the market and establish new benchmarks/protocol for the local agencies on future work.
Opposite: Overall southern view of Brickell City Centre, Phase One. Shows: Hotel, two residential towers, two office buildings above the retail mall, and parking podium. Source: Swire Properties/Arquitectonica

Regarding project financing, the well-established credibility of the developer ensured relatively simple financing and those unrealistic expectations which sometimes arise during the process were quelled, resulting in a greatly successful project.

Brickell City Centre – Miami, Florida, USA
Developed internationally by the same Asia-based developer responsible for Taikoo Hui, through their US office, Brickell City Centre, expected to finish construction of Phase 1 in 2016, is the largest private-sector project currently under construction in the US. This mixed-use, multi-block urban master plan development, as seen in Graph 2, consists of: retail, office, hotel, residential and parking, and totals approximately 5,400,000 ft² (502,000 m²) within five towers and a connected podium. With a Phase 1 site area of approximately 394,000 ft² (36,600 m²) dispersed across several city blocks and a high water table, to accommodate parking and to achieve seamless connectivity for the retail were significant challenges.

Connectivity is deeply important to the developer, and this project embodies this principle. Brickell City Centre is designed to be integrated from the ground up with Brickell and the wider area, bringing a much-needed mix of complimentary uses into this thriving shopping center. The project features new innovations in sustainability and will employ one of the industry’s most innovative environmental features. Acting as a sophisticated environmental management system, the Climate Ribbon™, a 150,000 square foot elevated trellis composed of steel, fabric, and a continuous glass surface, protects visitors from inclement weather, captures sea breezes to regulate air flow and temperature, collects rainwater for reuse, and allows visitors to enjoy natural light in an open air experience.

How did this project and its delivery perform?

Design Process
Team collaboration was streamlined due to the well-established relationship between the developer and architect and familiarity with the team within the LDI. However, several zoning and planning initiatives were challenged by the team in order to ensure the success of the project. Numerous studies were conducted to establish credibility with local officials and visits to other successful properties took place to ease and assist in the revision of unrealistic requirements on the project.

Construction Process
Given the role of the LDI, there were very few unexpected challenges placed on the design team. However, having local offices ensured that the LDI had 24/7 support for challenges arising during construction and this ensured a high-level of quality for the project.

Design and Construction Challenges
A significant delay in construction was encountered as a result of a schedule-driven initiative to file for foundation permits before the design of the superstructure was substantially complete. In many parts of the world, this is common practice, however in Guangzhou an unexpected process within the municipality required the entire superstructure to be structurally designed in order to release permits for the full foundation.

Financial Considerations
With the team consisting of a local, Asia-based developer and a multinational design team with offices in the region, there were no challenges in this relationship.
Logistics of Working Globally
In this particular case, although the developer is Asia-based, they had established a US presence nearly 30 years ago. Their experience in the market is unparalleled to any other non-US-based developer practicing in Miami. Additionally, the long-term collaboration between the developer and the design team further facilitated success.

Local Government Participation And Approvals
The incredible scale of this initiative required extensive participation of local authorities to properly plan and approve the project. However, given the role of government in a typical private-sector development, there were several obstacles to overcome through their participation. Additionally, with a design team completely fluent with and established in this location, the process was nearly seamless.

Design Process
Very successful collaboration. While there were many consultants required to execute such a large project, there was only one architect overseeing the entire coordination process and, as mentioned previously, a long-standing relationship with the developer had already been established.

Construction Process
While the project is not yet complete, this again has been a successful process. The great aptitude of the developer yielded a very high caliber of contractors, some from outside of the US, who each brought exceptional talent to the development team.

Design and Construction Challenges
The aforementioned Climate Ribbon was a design solution in response to the initiative to have an outdoor shopping experience in a climate that can be very uncomfortable in the heat of summer. This design challenge required the creation of a new sustainability strategy and in turn a significantly larger collaboration of expert consultants to bring to fruition. A major construction challenge was construction of the basement levels for parking with the extraordinarily high water table of Miami. Three innovative systems were extensively considered: ground freezing, deep soil mix (DSM), and a tremie slab strategy. The full basement linked the various separate blocks below grade allowing visitors to access all parts of the complex and allowing the facility to assist in

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Top: Overall view of Brickell City Centre in Miami. Source: Swire Properties/Arquitectonica

Bottom: Brickell City Centre’s retail mall and streetscape, Phase One. The Climate Ribbon and multiple two-level bridges housing retail outlets traverse city streets within the development. Source: Swire Properties/Arquitectonica
sell more than 200 units in the depths of the 2009 economic crisis. (Weinberg 2015)

How did this project and its delivery perform?

**Logistics of Working Locally**

Efficient and successful as to be expected for a locally-based design and development team.

**Local Government Participation and Approvals**

Although approvals and regulations in San Francisco can be quite challenging, in the end, the aptitude of the developer and the willingness of the design team to collaborate set the course for a successful project. The biggest hurdle was the aggressive affordable housing initiatives of the municipality and the developer placed integrity first, illustrating how to be industry leaders in helping municipalities achieve their goals for their communities.

**Design Process**

While there were two architects involved in the production of the project, a local associate architect in addition to the design and executive architect, this too was a very successful collaboration. The developer is New York-based, and with the design architect having offices in both New York and California, the ability to collaborate and coordinate the client’s expectations and local regulations was greatly facilitated.

**Construction Process**

Complications arose with below grade anomalies, namely a buried 19th century whaling ship, and the remediation of the site slowed progress significantly. However, the design and development team’s collaboration and experience afforded successful solutions in responding this and other less unexpected challenges.

**Design and Construction Challenges**

For Lumina, each tower steps and rotates as it rises towards the top. As the shaping of the towers took place, it became apparent that facade maintenance was becoming

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Graph 2: Graph showing Area Program Comparison: Brickell City Centre. Source: Arquitectonica
challenging and the intended davit system capabilities were quickly becoming impractical. A decision was made early on to accept a single building maintenance unit as a solution to accommodate the required stepbacks. The aforementioned buried whaling ship was by far the most significant construction challenge for both projects.

Financial Considerations

With the team consisting of all US-based partners, there were none of these types of challenges in this relationship. However, the delays seen by the subgrade conditions pushed the schedule into the period of economic down-turn in the US. This, in addition to the heavy commitment for affordable housing, placed the developer in a very challenging position. The developer took bold financial measures to ensure the project’s success and, as it proceeded, garnered the attention of a well-established Asian developer, who invested significantly in the project.

Yujia Pu Mixed-Use – Binhai New Area, Tianjin Municipality, PRC

Developed internationally by the same US-based developer responsible for the Infinity/Lumina projects, the Yujia Pu Mixed-Use project in Tianjin’s new financial district is part of an area-wide master plan instituted by the local government to create an urban core and potential center of world finance. The master plan for this specific development within that financial center, as seen in Graph 4 consists of: retail, office, hotel, residential, parking and cultural facilities with an urban green space, and totals 4,960,000 ft² (460,800 m²) in nine
towers, eight of which are connected in pairs by a low-rise podium. The US developer has withdrawn from the project, but is included in this paper specifically to open the dialogue about how and when multinational developers choose which battles to engage. There are several reasons that the deal stalled. Market conditions not trending in a favorable direction and the readiness of the surrounding areas were not as advertised or planned, including significant delays on the extension of the high speed rail which was supposed to link the region to Shanghai – a major obstacle.

How did this project and its delivery perform?

Logistics of Working Globally
The US developer teamed up with a local development entity who is overseeing development of the overall district. The US developer had two roles: project manager on behalf of the local developer, and as a partner in investing/developing.

Local Government Participation And Approvals
Because of the importance of this project to the Municipality, the Mayor and Vice Mayor were heavily involved. Several meetings occurred both in the US and Tianjin to update this high-ranking team on the progress of the project.

Design Process
At various stages of the design process, expectations on the master plan and building designs were given input by the Municipality. Several of the strategies and expectations for this development were repeatedly revisited and revised, causing great delays in the early phases of design. This required heavy back and forth between the local developer, the teams of the US developer and the design architect, to filter and understand the end goals of each contributing party and return designs that accounted for the comments for conclusion.

Design and Construction Challenges
The developer was very interested in providing a high level of glazing at the façades for natural light into the units. The local construction techniques for concrete resulted in a great deal of perimeter structure that blocked much of these views and access to natural light. The design team worked out a system of shear walls that accommodated gravity loads back away from the slab edges in order to accommodate the goals of the developer.

Financial Considerations
In the eyes of the developer, this project has not progressed to a place where neither the development pro forma nor the design process have concluded in a successful project. Given their high standards for distinctive quality and design excellence, as well as the creation of only those projects that create extraordinary value for the inhabitants and its investors, they have withdrawn.

Final Thoughts
It is unmistakable that as market demands fluctuate, economies transition back and
forth from bull or bear, governments evolve, and developing countries emerge on the global stage, the world of development will refocus to take part in the change, wherever it is. Further, as that change occurs and new territories with new challenges are ventured into, having the ability to adapt and learn new ways of working and collaborating are paramount. These are both obvious points. However, through these case studies, it is apparent that the success of adaptation is not without retaining the core values and principles that have driven historic success.

In the case of the Asia-based developer, they showed great respect, patience, and calculation when working internationally. They spent nearly 30 years working in Miami, granted on very significant projects, before embarking on their largest US development. Sites were acquired, as market fluctuation allowed for a responsible acquisition, and they learned the politics, the process, and the local pool of talent. They took advantage of long-term relationships for their most significant project. The result for them is an anticipated successful development on the international stage, where others find such great risk, speculation and uncertainty. For Taikoo Hui, the same respect and patience allowed for a very successful collaboration in a very complicated collection of stakeholders.

In the case of the US-based developer, there is a lesson in abiding by the quality standards that produced prior success, especially when working in unfamiliar territory. It takes a lifetime to build a reputation and one single act to destroy it. In the case of the project in Tianjin, the success was confiding in their core values and the quality that their brand repeatedly delivers. They knew when to take a step back and reevaluate their position rather than force a development that would tarnish their company and a community. In San Francisco, against economic downturn, they again illustrate great tenacity for imbuing a successful project without losing the integrity of their commitment to affordable housing.
References:


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For all of the case studies mentioned, there were, as there always are, technical challenges that arose during both design and construction. What is apparent from considering them collectively is that it takes developers and contractors with unique ingenuity, creativity and vision to assist the design team, which may be working in unfamiliar territories with unfamiliar construction techniques, to adapt to unforeseen challenges. Further, it is apparent that one major facilitator of a quality design process, is local knowledge and experience – plain and simple. For all projects visited in this paper, the design architect had offices local to the projects and also either had the support of a local architect (or LDI), or was acting as local architect of record themselves. While there is no universal solution for developers seeking to enter unfamiliar markets, finding a design team that is experienced in both the new territory as well as their local territory, allows them to translate their quality standards into adaptable variations and successfully meet realistic expectations.

It is the unknown that is most challenging. Where the chaotic process and government participation paired with flexible codes and standards is daunting to US-based development teams, conversely, the strict regulations and lack of access to government agencies is daunting to Asia-based development teams (Fung 2015). Adapting and investing in unfamiliar cultures will prove to be the successful mend for the reticence of the unknown. In the end, no matter which side of the globe, it comes down to great relationships and great integrity.

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