The Taiwan (Architectural) Miracle

By Artifacts • Jul 19th, 2012 • Category: Culture, Energy Efficiency, Issue 7, Space and Place, Technology

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Globalization is the increase in societal and economic relationships throughout the world. Over the past century the ability to talk to anyone—anywhere—as well as the ability to travel to any country or island on the planet in a matter of hours has caused an increase in the mixing of cultural ideas and has enabled countries to be influenced by one another faster and easier than ever before. Taiwan is an example of a country that has practically been built by this process, many historians calling the growth of the country through globalization the Taiwan Miracle. The small island country is located directly east of the Chinese mainland, and was established in the early 1900s after the Xinhai Revolution which officially created the Republic of China, which is known as Taiwan today (Xinhai). The economy and wealth of the country has grown exponentially in the past fifty years, and shows no signs of slowing down due to the massive amount of exports that are shipped around the globe to major countries. Ever since ancient times, when a country was able to gain a great increase in prosperity, it used this money to build things that showed off the wealth that has been accrued. From the Egyptians with their pyramids, to Romans and their sophisticated cities, the wealthy leaders of these civilizations have been obsessed with building superior structures to display their power and cement their legacies (literally) onto the face of history. In modern times, the ever-growing world population has caused the boom of giant cities with limited space, along with the rise of amazing places that are built to round in tourists. The allure to build and have the tallest building known to the world in one's country satisfies many needs of a blossoming city. The recent few record buildings have primarily been in Asia, and all have in some way influenced the other. In Taiwan, the drive to have this recognition was created when Malaysia built the Petronas Towers in Kuala Lumpur. Once the Taipei 101 building was erected in Taiwan, they were able to enjoy all the benefits of this claim. Soon after, the UAE was inspired and wanted to have this mark, so they constructed the Burj Khalifa, and currently have the tallest building in the world. The latter two buildings have also been on the forefront of green building, in attempt to shift worldwide focus on limiting energy consumption. In the journey to create these giant attractions, the countries involved will benefit as the skyscraper is built, while the country has the record building, and then even after their achievement has been surpassed.

When a country plans the grand endeavor of constructing a record setting building, many factors go into how it is built. When Malaysia proposed and made the Petronas Towers, they wanted not only to show their economical wealth, but they wanted to show the world that they were a country worth recognizing. They wanted to make the "roar of Malaysia's Asian Tiger" known to everyone, and even the style of the building reflects the culture of the country (Wilson Quarterly 84). In Taiwan, they were influenced by this and in turn incorporated Asian architectural ideas into the building of the Taipei 101. "It starts at the square base with a gentile slope inwards and upwards. The division between base and shaft is denoted by a belt running around the perimeter of the structure. This is adorned with something resembling a belt buckle in the center of each side. It is actually a representation of an ancient coin" (Taipei). This enables other countries to be more interested in Taiwan, because these cultural ideas are incorporated into this global monument. The building also shows that the country can be invested in and trusted in economically.

Once Taiwan was able to solely and definitively establish itself as having the world's tallest building when the Taipei 101 was opened to the public, tourism not only in Taipei increased, but

the entire country's tourism amounts skyrocketed. From the height of construction (2002) to the end of Taipei 101's reign as record holder(2010), the GDP(Per capita) doubled from \$18k to about \$36k, from a previous time of social economical stagnancy (Central Intelligence Agency). By examining this data, can be inferred that the massive increase of industry growth and wealth the country experienced would not have been nearly as great without the stability shown by creating the Taipei 101. This enables other countries to see that Taiwan is a viable option to trade with and invest in because of its strong, wealthy infrastructure. Companies such as the Taiwan Stock Exchange Corporation (TSEC), China Telecom, and the Chiaotung Bank put large amounts of money into the creation of the Taipei 101, and have gained worldwide recognition by investing in the building (Wang 302). Doing this strengthened not only Taiwan's economy, but various economies around the world; because of the vast impact the Taiwanese economy has on Chinese markets.

Historically, a myriad of factors go into planning an expensive, time consuming building, but most affluent countries build only for specific reasons, especially in contemporary culture. "Skyscrapers are built for two reasons: to make money, responding to existing demand, or to advertise and flaunt the money one already has. The current boom is driven by both, but the latter impetus—the realm of ego, personal or national—seems to be winning the day" (Nobel). Taiwan has used the building for both reasons, and has benefitted from both greatly. Yet showing their economic wealth by creating a grand building influenced other countries by causing people to want their own country to be associated with having the most wealth and having the largest skyscraper in the world. In this instance, the UAE was heavily influenced in this way, and with the vast amount of wealth in the country, they easily took on the challenge of constructing such a building, and succeeded by making the Burj Khalifa in Dubai. "A living wonder. Stunning work of art. Incomparable feat of engineering. Burj Khalifa is all that. In concept and execution, Burj Khalifa has no peer. ...Buri Khalifa is an unprecedented example of international cooperation, symbolic beacon of progress, and an emblem of the new, dynamic and prosperous Middle East" (Buri). Being one of the richest and fastest growing countries of the world, they wanted to show and shift the views of grandeur, power, and wealth to the Middle East, and were able to achieve all of their goals.

As more countries become increasingly urbanized, the demand for energy and infrastructure skyrockets in their growing cities. Cars are produced at an astounding rate and get all of the attention for pollution, yet in terms of energy use commercial buildings account for about 70% of total energy use in the United States, this figure being comparable to the rest of the world (Tobias1). In Taiwan, with their construction of the Taipei 101, they have taken the challenge of making more "green" buildings to another level. In the summer of 2011 the building was able to earn the highest Leadership in Energy and Environmental Design and Existing Building Operations & Maintenance (LEED EBOM) rating ever for a skyscraper—platinum (Tobias2). Paving the way for the future of architecture, this achievement makes the drive create low energy use buildings imperative and virtually inexcusable for any size building. As for the Burj Khalifa in Dubai, the utilization of 378 solar collector panels almost completely diminishes their water heating costs throughout the entire building (Ali Al Mashni). Not only does this decrease heating costs for the building, but it also greatly decreases the energy used as well. These benefits show how "Burj Khalifa is setting an example as well as creating a referral mark on how urban developments can effectively integrate energy-friendly initiatives" (Ali Al Mashni). Merging "green" building and economic gain should be incentive enough to cause developers and architects to create much more eco-friendly skyscrapers in the future and upgrade those previously built, showing how past innovations will influence buildings that have yet to come.

Provided that people have the money and ability to build bigger and more amazing buildings and

monuments, they will continue to outshine each and everything that has been built before. Just as one is erected and captures the eyes of the world, ground is being broken on a taller, evermore spectacular skyscraper every year. "...Without a hint of irony or doubt that by 2030, somewhere, a mile-high skyscraper would be built. Five thousand two hundred and eighty feet. One-tenth of the way to the ozone layer. More than three times as tall as anything now stand—ing and exactly as high as the most fantastic towers ever dared conceived" (Nobel). This endeavor would easily be one of the greatest achievements accomplished by man, rivaling that of electricity and entering outer space. Each building influences the last, each building showcases the culture and the mindset of the native people that live in these cities and countries. Each country that strives for greatness in architecture will benefit, even if they are surpassed, and the entire world will be forever intrigued with the magnificent and difficult challenge of reaching for the skies, "bridging" the gap between man and God.

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