

The Symbolism of Architectural Form in a Time of Bigness. Learning from the Venetian Macao

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Abstract

The period of instability opened by the 1973 oil crisis contributed to the affirmation of a new spatial paradigm, which culminated in postmodern architecture. The establishment of a new systemic cycle of accumulation under the hegemonic role of China seems to be associated with a novel paradigmatic shift, and the emerging of a new form of the "classical". This new spatial language, associated with bigness, is questioning both the role of architecture and urban design. This paper investigates this novel paradigm by analysing the spatial structure of Venetian Macao and the symbolism of its architectural form.

1. Introduction

1.1. Long economic cycles and architectural movements

Long economic cycles in world-systems theory consists of periods of stable growth and phases of systemic reorganization [1]. These waves of the social-economic base affect the superstructure of society, becoming evident in both theoretical and physical architectural production [2]. The end of the Bretton-Woods Agreement (1971) and the 1973 oil crisis ended the long period of economic stability under American hegemony. Parallel to these events, the publication of *Learning From Las Vegas* in 1972 [3], laid the theoretical foundations for the establishment of Postmodernism in architecture. The period of instability that followed is now coming to an end, and, according to the model of cyclic recurrence of the "classical" proposed by Salvatore Settis [4], it is expected to make way for a new architectural movement. While Postmodernism is eclectic, heterogeneous, plural – "We think the more directions that architecture takes at this point, the better" [3] –, and it created a hiatus in architectural form by breaking it into two distinctive parts, we are conversely now expecting function and symbolic ornament to find a new uniform and universal synthesis [5].

Las Vegas was used by Venturi, Scott-Brown and Izenour as the emblem of the radical transformation happening in the American urban landscape, this paper looks at Macao as the place in which the architectural features of a new 'movement' are becoming evident, using the Venetian Macao as a case study.

1.2. *Belle époques*, eclecticism and Postmodernity

Periods of crisis, restructuring and reorganization of the capitalist word-economy have been recurrent turning

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points since the early stages of the world-system. Arrighi pinpointed four periods of chaos, coinciding with the passage from a hegemonic power to a new one. During these periods, "capital tends to revert to more flexible forms of investment" [1], augmenting its liquidity. These phases of crisis are constituted by sudden economic collapses, alternated with short periods of unprecedented prosperity. These "wonderful moments", known as *belle époques*, "rested on a shift of the crisis from one set of relations to another set of relations" [1]. The instability of such gilded periods, the last one opened by the 1970's crisis, finds spatial representation in architecture [5]. Phases of crisis are characterized by the separation of the 'perceivable-forms' from their 'structural-forms': the stylistic elements are not depending on a construction technique, they are no longer linked with a specific function, but they are used as independent features [5]. It follows their mutation into symbols, which are used by architects in the façade composition to convey new significances. This multiplicity of *motif* was recombined – as a collage of fragments– in various styles, namely historicism, revivalism, eclecticism, postmodern. Such collages of fragments can be found in architecture, as well as in music, and more widely in other arts. The subsequent juxtaposition of historical references produces the effect of the collapse of time into only one dimension – the present: "We are in the epoch of simultaneity: we are in the epoch of juxtaposition, the epoch of the near and far, of the side-by-side, of the dispersed" [6]. In the past, the phases of crisis were followed by periods of stability, coinciding with the investment of the capital "in a particular input-output combination in view of a profit" [1]. This passage can be also found in architecture, where eclecticism makes way for the establishment of a new 'classical' in which perceivable-forms and structural-forms are consistent and in a tight relation of dependency [5].

1.3. Replicas and entertainment

The process of copying – defined as imitation or reproduction of an original– allowed the separation of the perceivable forms from their structural forms. Copying an original work of art became a widespread practice during the Hellenistic period – conceivably the first crisis/*belle époque* of the western culture [4]. The cultural decadence experienced at that time and the perceived unbridgeable distance from the cultural heights previously reached, were the reason behind the high demand for classical art. A technical innovation in sculpture, brought by the brothers Lysippus and Lysistratus of Sicyon, allowed the supply of a massive reproduction of art works [4]. The two sculptors developed and extensively adopted an innovative method, which consisted in the use of plaster for

capturing a physical form [7]. The method, which boosted the proliferation of copies, allowed the separation of the perceivable form and structural form. In fact, the mechanical extraction of the external shape of a human body, or of an original work of art, was no more dependent on the understanding of its proportions and compositional rules [2]. Replicas have been exhibited in museums, world fairs, and thematic parks, where they provide material representation of artefacts from temporally or geographically distant civilizations. This representation can have different aims, it can be used to educate or to entertain. During *belle époques* replicas are often employed for amusement purposes.

The entertainment industry flourishes in times of financial availability or economic prosperity. For instance, during the Gilded Age, in North America as well as in Europe, the higher economic availability of the masses boosted the booming of amusement parks. Conversely, the stock market crash of 1929 caused the collapse of the entertainment industry, and many amusement parks went into bankruptcy or closed. Within the period of stability which followed World War II, Disney played a key role in their reaffirmation. However, there is a substantial difference between the amusement parks of the Gilded Age/Victorian era/*Belle Époque* and the thematic parks of post-World War II. The first ones were a mere collection of attractions, while the second ones arrange the attractions around unifying pivotal themes.

2. From Las Vegas to Macao

2.1. Las Vegas

Las Vegas is a resort city in the state of Nevada. It is currently home to 648,224 within a region populated by over two million people. The first Western pioneers arrived in the area during the XIX century, but the city was formally founded only in the beginning of the XX century. Nevada legalized gambling in 1931, being the first and only state in the USA to do so, thus laying the foundations for the casino booming of the post-war period. In 1972 – the year of publication of *Learning From Las Vegas* – the total recorded volume of visitors was 7,954,748 and the gaming revenue \$476,126,720 [8]. Thanks to the gambling monopoly, Las Vegas shortly came to be an emblem of entertainment and sin. In 2017 the city recorded 42.21 million visitors and \$9.98 billion gaming revenue [8]. The gap between Las Vegas and the other American cities has been closing in the last decades, Las Vegas becoming home to a growing stable population and the city expanding real estate development in its outskirts. In comparison, many other states and cities have legalized gambling and the entertainment industry has begun to grow in these

places into an all-pervasive presence within many aspects of everyday life.

In their study conducted in the late 1960s and published in the early 1970s, Venturi, Scott-Brown and Izenour used Las Vegas as a case study to illustrate how the popularization of gambling and the widespread access to private mobility would lead to the production of a particular landscape, buttressed by a radical transformation in architectural forms [3]. The separation between what they named 'ornament' (perceivable form) and the function (structural form) was the theoretical ground for the use of the ornament as a syntactical element of an autonomous language and for the establishment of postmodernity in architecture. The research of Venturi, Scott-Brown and Izenour focused on the Las Vegas Strip, a 6.8 km road skirted by a long sequence of casinos on both sides. In order to attract drivers and clients casinos adopted a series of visual tactics physically detaching signs and symbols from buildings. The radical transformation induced by the widespread access to automobile transportation resulted in the competition for visibility in a capitalistic logic of consumption and produced the iconic landscape of Las Vegas that came to be one of the emblems of American popular culture.

2.2. Macao

Macao (Figure 1) is a former Portuguese colony established in 1887, after it was leased to Portugal as a trading port in 1557. In Macao, gambling has been legal since the 1850s. In December 1999, after four centuries of Portuguese colonial rule, the territory was returned to China, becoming, along with Hong Kong, a special administrative region of the People's Republic of China. Its gambling industry has been flourishing since the early 2000s, rapidly surpassing Las Vegas in 2006. In 2017, the city recorded 32.61 million visitors and gross revenue from gambling totalling MOP265.74 billion (\$32.87 billion) [9]. The turning point in the recent history of the city was determined by the governmental opening to foreign investment that boosted the gambling industry, 'remapping' [10] the city and shaping its image on the Las Vegas token. In fact, after a long-lasting monopoly enduring from the 1930s to 2002 [11], in 2002 the casino market was opened to a select small number of the world's largest casino multinational corporations from North America, Australia and Hong Kong [11]. This change in the legislative framework, allowed \$25million of foreign investment [12], and produced several transformations in the city's economic structure [11], its cultural identity [13] and its urban image [14]. The opening to foreign capital generated an exponential growth of the tax revenues paid by the gambling industry, increasing from \$1.908 billion to \$3.877 billion from just 2004 to 2007, as well as the radical

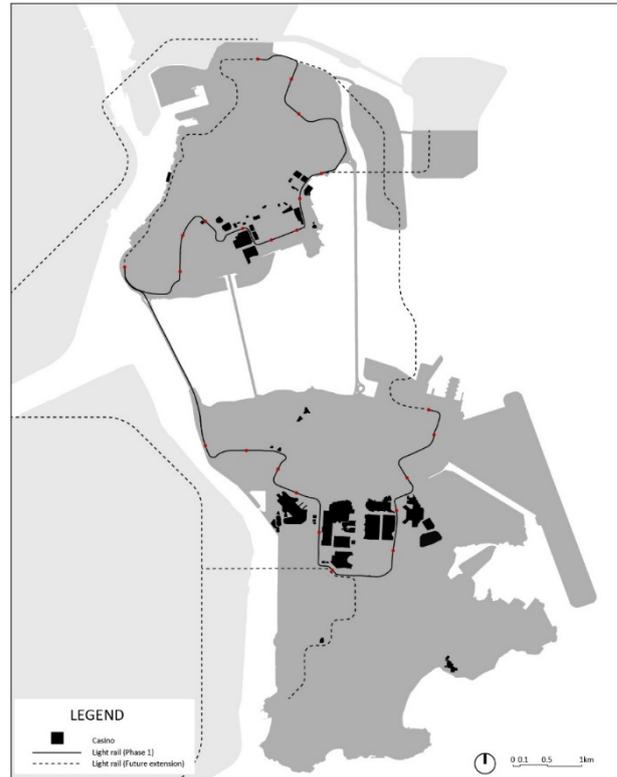


Figure 1. Casinos and LTR in Macao

transformation of the image of Macao from "City of Culture" to an "Asian Las Vegas" [14]. The revenues, gained in the first decade of the 2000s, allowed the city administration to follow in the Roosevelt footsteps during the economic crisis of 2008, investing in the infrastructural development to sustain the local economy. Part of this 'New Deal' was the construction of the LRT (light transportation system) which is currently under implementation [14] (Fig. 1). The astonishing growth was boosted by the prohibition of gambling in the neighbouring countries and exploiting the locational advantages by securing outbound tourist markets [11]. However, this strategic shift of the local economy transformed the city into an almost monothematic international tourist attraction heavily relying on the gambling industry [11, 15]. The planned new town of Cotai – the reclaimed land between Taipa and Coloane – disappeared from the government agenda, substituted by a conglomeration of new casinos [14]. In here, the typological development of the model produced within Las Vegas reached a new synthesis.

2.3. The Venetian Las Vegas

"No matter what your mood, The Venetian has something for you, from the celebrity chef-studded dine-and-drink scene to smart bites and organic juices to the legendary TAO Beach day club and relaxing times at Canyon Ranch spa" [16].

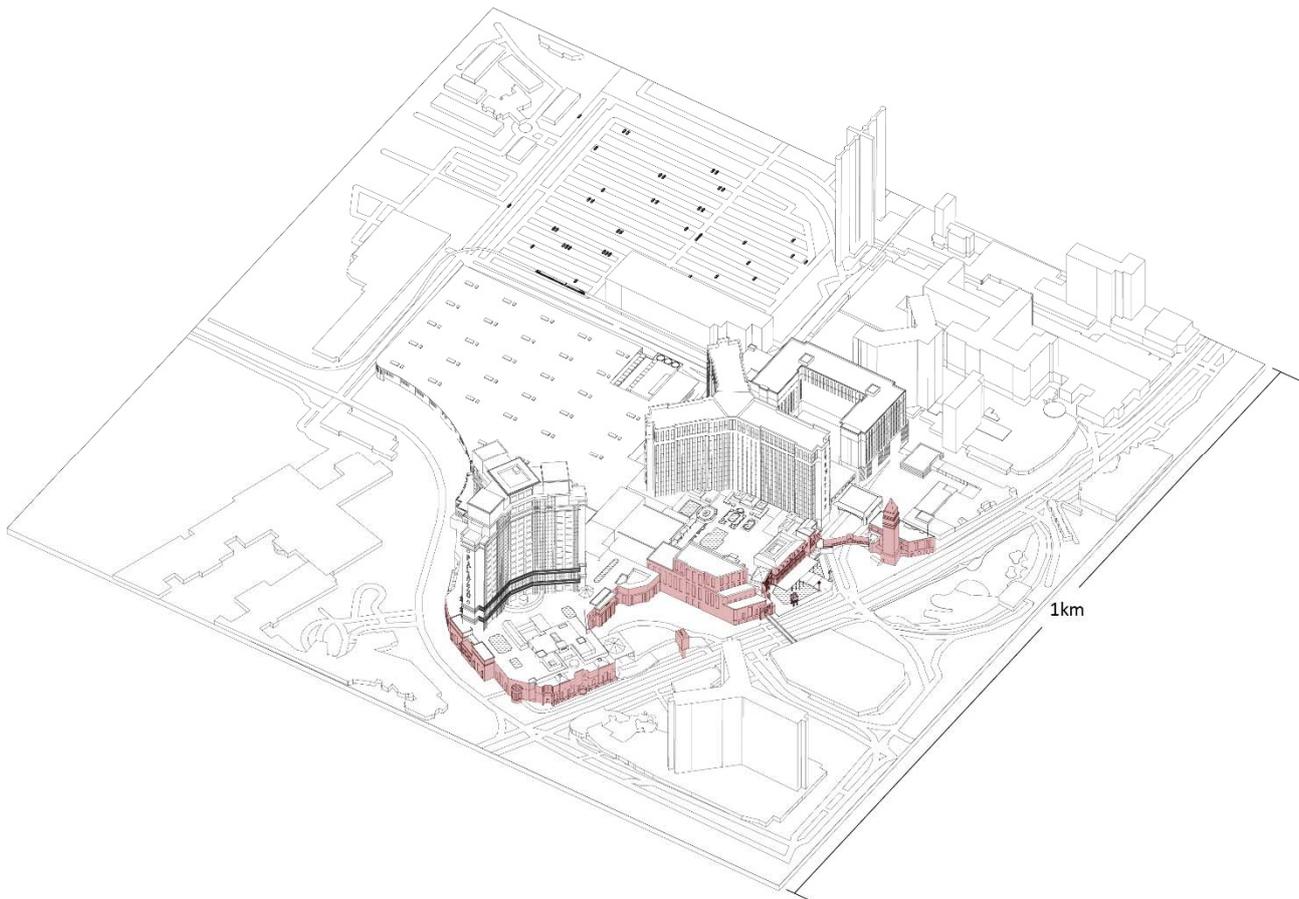


Figure 2. The Venetian – Las Vegas, street wall (in red)

The Venetian (Figure 2), a mega-resort on the Las Vegas Strip owned by the Las Vegas Sands Corporation (LVS), was built in the late 1990s, its groundbreaking taking place in 1997 in conjunction with the Asian financial crisis. At the time of its opening to the public in 1999, it was the world's most expensive mega-resort, with a construction cost of \$1.5 billion. Forming a large resort complex with The Palazzo, it held the record of the largest hotel (7,117 rooms) from 2008 to 2015. The complex constituted a turning point in the typological development of gambling resorts:

1. It used a worldwide known tourist destination as a consistent thematic *motif*, by reproducing its perceivable forms on a one-to-one scale;
2. Although maintaining the former separation between perceivable-forms and structural-forms, it produced a new alchemical combination by way of *façadism*;
3. It shifted the scale of urban intervention to an unprecedented size;
4. By doing so, it encompassed a miscellaneous series of functions, no longer just relying on gambling.

2.4. The Venetian Macao

LVS opened its first gambling resort in Macao in 2004. The Sands Macao, the first American casino to be opened in the Special Administrative Region of China, recouped its \$265 million construction cost within nine months of operation [10]. LVS immediately reinvested the big profit gained into the construction of the Venetian Macao (Figure 3), which opened in 2007, with a construction cost of \$2.4 billion. The Venetian Macao stands as the largest hotel resort of Asia, and the second largest in the world. It extends over 980,000 square metres, comprising 300 shops, 30 restaurants, an arena of 15,000 seats, and an artificial water body of about 14,000 squared meters [17]. Designed on the model of the Venetian Las Vegas, the resort was the first to be opened in the land reclamation of Cotai. The complex represents a turning point in the development of Macao, determining the further direction of the entire city and possibly influencing the whole society at a regional, even international level [12]. The tactics of the American tycoon Sheldon Adelson, chairman and chief executive officer of LVC, and its competition with the local former gambling monopolist Stanley Ho, were among the most significant motives behind current planning and

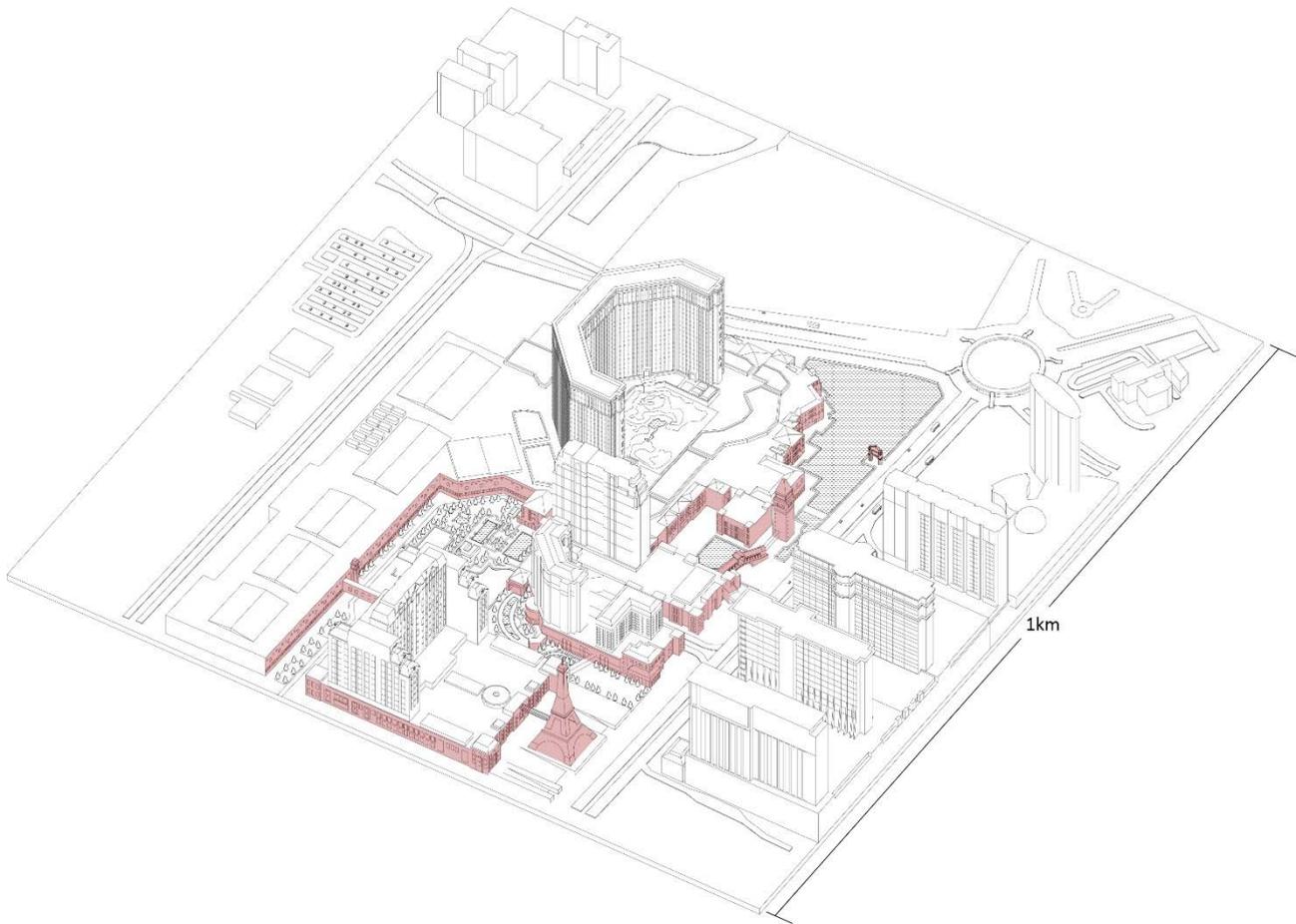


Figure 3. The Venetian Macao, street wall (in red)

infrastructural development trajectories [10]. His uncontested economic power, thanks to some brave tactical moves, muted into a spatial hegemony. The first of Adelson's stepping stones into the Macao gambling market was the construction of the Sands casino. Its locational advantage, the casino being erected at the entrance of Macao Peninsula, was one of the major reasons for the enormous profits gained after its opening [10]. Given that the tiny reclamation strip in front of the Macao Peninsula turned into a crowded battlefield in the competition among the three concessioners and their subcontractors, Adelson took the courageous decision of a pioneering intervention in Cotai investing in the construction of the Venetian. In order to reduce the locational disadvantage, Adelson invested in the infrastructural development of 5.2 km² of reclaimed land, for its connection to HK/Shenzhen with a new ferry terminal [10]. Moreover, he declared its intentions of a very large investment – up to \$15 billion – in the Special Economic Zone of Hengqin, a 106.46 km² undeveloped land right on the other side of the border with the Mainland [10, 18]. The Venetian Macao recouped its initial investment in only four years, convincing all the other concessioners of the sustainability of large investments in Cotai [10].

Adelson's move was determinant both for the success of Cotai, as well as for the expansion of foreign investment into the Mainland, where gambling is still prohibited and where a new model of resort city – a hybrid of Orlando and Las Vegas, as described by GW Investment Consulting CEO Matthew Ossolinski [19] – is taking shape.

The Venetian Macao not only changed the urban ecology of Macao, it also contributed to the process of 'architectural mutation' [20] of the casino resort into:

1. A large, autonomous and thematic urban complex, which is no longer context dependent (strip dependent in the case of Las Vegas);
2. A mega-block in which the street wall is a continual element composed of one-to-one replicas of the city chosen as a thematic reference;
3. A new form of alchemy of perceivable forms and structural forms of the category of the 'decorated sheds', in which perceivable forms are a manifesto of the building function and programming;

4. A mega-structure in which the public open spaces of the traditional city are internalized and commodified;
5. A space in which consumers become extras, being part of the fictional representation of the reality they are turned into meta-tourists.

2.5. Disney in Macao

Gary Goddard is an American producer and director, best known for the design of several entertainment attractions around the world. During the 1970s he has been working for the Walt Disney Company and Walt Disney Imagineering, where he was involved in the design of various projects, and in the concept development of the Experimental Prototype Community of Tomorrow (EPCOT) – a visionary project of a city for 20 thousand people to be constructed within the Florida Project, and abandoned after the death of Walt Disney. Founded in 2002, the Goddard Group has designed several large-scale entertainment projects, comprising amusement parks, retail malls and resorts. The Galaxy Entertainment Group, controlled by the Hong Kong magnate Lui Chee Woo, commissioned Goddard Group to design the \$1.9 billion resort Galaxy Macau, including concept development, master planning, schematic design and show design. In 2011 the Macao-based Melco Crown Entertainment Limited, controlled by the Ho family – Macao's gambling former monopolist –, impressed by the newly completed Galaxy, ask Gary Goddard to take charge of the design of their "Studio City" resort. "Ho wanted a new kind of casino hotel that was entertainment orientated and that would be a tribute to and a celebration of cinema, the movies. When you say the cinema –he loves Batman– so you can definitely see traces of Gotham City in our design, but also of Metropolis, of Blade Runner – so we took those movies and some other ones as inspiration" [21].

Both Galaxy Macau and Studio City constitute steps forward in the process of definition of a new typological unit in urban design. In the Galaxy Macau perceivable forms are not any longer simply juxtaposed to the functional volumes by way of façadism, they are amalgamated in the process of massing, forming a consistent streetwall as in the European City of the XIX century. With the Golden Reel of the Studio City, function, symbolism and decoration reached a further synthesis: the building massing embodied a giant figure 8 (8 being an auspicious number in the Chinese tradition) fairground Ferris wheel, the first and highest of this kind. The Studio City also constitutes an important development in the process of mutation of the casino into a leisure resort; integrating for the first time gambling, retail, and hotels with facilities for television and film production, as well as a 3,700m² children's playground.

3. The synthetic city of the XXI century

As argued by Tim Simpson (2008), Macao is rising as a new urban model for a "reinvented and rejuvenated China" [10]. As the *belle époque* is coming to an end, the 'casino capitalism' [22] is supposed to slow down and give space to a different kind of entertainment, which accommodate the demand of the fast growing Chinese middle-class and the interest of the millennials no longer attracted by gambling. This trajectory is clear in the temporal passage from the old casino-resort, to a new type of colossal urban complex, as well as in the physical – the part of Hengqin leased to Macao – and ideological expansion of Macao into the Mainland.

Reclamation. The physical expansion of both Macao and Hengqin is progressively taking place through land reclamation. Two out of three parts of the 30.4 km² of Macao's territory are reclaimed lands. These new *tabulae rasae* are commodified [10] and become the physical support for the expansion of both foreign capital and consumeristic ideology within the territory of the People's Republic of China.

Mega grid. The first act of colonization of these virgin lands is the superimposition of a grid, which in the case of Cotai defines a block twenty times bigger than the standard block of Manhattan, or seven time bigger than the *superquadra* of Brasilia. The resulting urban structure, differing from the Las Vegas Strip, is developing along two orthogonal axes allowing an isotropic urban development. The changes that ensued from the addition of one dimension – in the passage from the strip to the grid – amply affect the urban design approach. The block no longer has one main façade overlooking the urban axis and large parking lots on the backyard as in Las Vegas; it is now encapsulated by four streetwalls, no longer has a hidden backyard and organizes the different functions vertically (Figure 4).

Mass transit. The monorail promoted by Walt Disney in his parks since the 1950s was employed in Las Vegas in the 1990s with the construction of MGM Grand-Bally's Monorail, which is nowadays a portion of the Las Vegas Monorail. The elevated light rail system found in Macao's project is its ultimate interpretation (Figure 1). The LTR, currently under construction, is a hybrid between the two systems proposed by Disney for EPCOT: light rail and people mover. The system will partially replace the feeder flews, which are currently offered free of charge by the casinos. A giant car park at the landing point of the Hong Kong–Zhuhai–Macao Bridge (HKZMB) will be the main intermodal passenger transport hub together with the other main land connection with the Mainland and the ferry terminals. The LTR is planned to extend to Hengqin and to intersect the Hengqin Light Rail and the Guangzhou–Zhuhai Intercity Railway. Consequently, it will finally achieve full

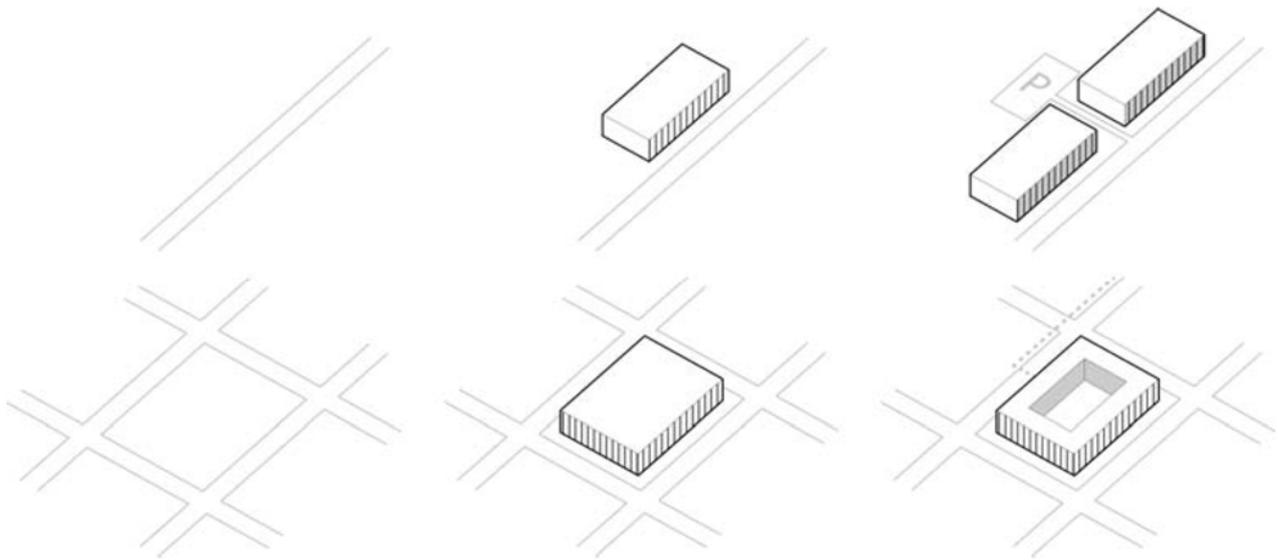


Figure 4. Strip-car development model (above – Las Vegas type) and Grid-LTR development model (below – Macao type)

integration with the railway network of China, allowing visitors to reach Macao from Guangzhou in about one hour.

Thematic zoning. The mega-grid defines a blocks size of 0.5 km². The Venetian Macao together with its neighbouring Parisian covers a surface as big as the Vatican City State in Rome and twice the size of Burano island in (the authentic) Venice. Each of the mega-block can host an autonomous settlement that includes several functions ranging from production to consumption, from entertainment to hospitality, from residential to educational. An illustrative case is the University of Macao, which is going to relocate to Hengqin. The new planned campus for 15 thousand students will cover 1.09km². An other example in Hengqin is the Ocean Resort –partly opened and partly still under construction– which includes several attractions around the same *motif*, such as a theme park, an aquarium, a circus, a hotel, sport facilities, commercial and conference/exhibition centres and a so called Water City. It covers a total area of about 5km² (as a comparison, the Macao Peninsula extend over an area of 8.5km²) and at its full operation is expected to attract 10 to 20 million tourists a year.

Colossal. “Here in Florida we have something special we never enjoyed at Disneyland: the blessing of size. There's enough land here to hold all the ideas and plans we could possibly imagine.” [23]

Lysippus did not only have a key role in the passage from the Classical era to the Hellenistic period, as previously described; he was also the mentor of Chares of Lindos, who produced another significant innovation in sculpture simply by reproducing a human body at a

different scale. Chares was the sculptor of the Colossus of Rhodes, one of Seven Wonders of the Ancient World, a 32 metres high bronze statue, constructed between 292 BC and 280 BC, representing the god Helios and located at the maritime entrance of the city of Rhodes. The Colossus of Rhodes inspired the colossal statue of Nero (Rome, 1st century AD) whose adjacency to the Flavian Amphitheatre was probably the reason behind the name Colosseum. Similarly, the evolution of the classical from Ancient Greece to Ancient Rome happened by way of the colossal order. It comes with no surprise that the colossal order found widespread application during other classical periods such as the Renaissance and the Baroque. Since *Delirious New York*, the interest of Rem Koolhaas focused on a specific type of “architectural mutation” that is produced by way of “Bigness.” As the Colossus of Rhode was a fundamental step in the Hellenistic arts that open the way to the new classical, Bigness has been the stepping-stone in the production of the new giant urban unit, which as the Colossus of Rhode works as landmark in the cityscape, the skyscraper. The mutation described by Koolhaas, produced a new container unit in which, as a matter of scale, the “divorce between appearance and performance” [24] became effective. Thus, “the façade no longer reveals what happens inside [...] – agent of disinformation – offering the city the apparent stability of an object” [25], while the “interiors accommodate compositions of program and activity that change constantly and independently of each other without affecting the envelope” [24]. The ‘architectural mutation’ produced by way of Bigness is no longer context dependent, containing “a promiscuous proliferation of events in a single container” it “generates a new king of city” [24] and empties the

urban open spaces of their collective functions, turning them into residual spaces. The ultimate mutation, the one of Macao, engulfs both Bigness and the city, privatizing the urban open space, reprogramming and subjecting it to the logic of consumerism. Conversely, its peripheral limits become spaces of propaganda, conveying phantasmagorical images, which function as advertisement boards to attract potential consumers – overturning the Bigness' motto "What you see is no longer what you get" [24]. The exterior limits completely enclose new colossal units (Fig. 3), disconnecting the city from the landscape as Bigness disconnected the building from the city. Thus, as the Ancient Greek semi-circular theatre, mutated into the circular Roman amphitheatre, the same process of disconnection from the natural environment and insertion in a full-surrounding urban context is at the base of the mutation of the Venetian Las Vegas to the Venetian Macao (Figure 4).

Normalization. Las Vegas went through a progressive transformation from the 'city of sin', to a normal American urban conglomerate, while its most extreme image deeply influenced the rest of the country, both culturally and spatially. The same osmotic process is now happening between Macao and Mainland, with outcomes of cultural and political reach to go far beyond the aims of this paper. Nevertheless, what appear evident is a radical transformation of the territory by way of a new – no longer architectural – urban design mutation.

4. Conclusion

This paper has aimed to trace the connection between long economic cycles and architectural production by analysing how the establishment of a new systemic cycle of accumulation under the hegemonic role of China could be associated with the emergence of a new urban formation. It has discussed the role of replicas in the process of separation of perceivable form and structural form, which is the theoretical ground of *Learning from Las Vegas*. It illustrates the establishment of a new architectural mutation as the outcome of a long-term typological transformation of the casino from the 1990s to the second decade of the 2000s, and from Las Vegas to Macao. Finally, this research has analysed this new urban formation by drawing inspiration from Rem Koolhaas' dialectical analysis of Bigness, and defining the six principles of this paradigmatic shift in urban design: reclamation, mega-grid, mass transit, thematic zoning, colossal and normalization.

Acknowledgements

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