Planning mega-event built legacies – A case of Expo 2010

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ABSTRACT

Mega-events are popular catalysts for launching area-based urban renewal. However, their built legacies are problematic due to a lack of planning. Besides a much-needed shift in mindset, legacy planning methodology holds the key. This chronic issue is gaining renewed attention with the recent rise of new-generation hosts such as China where massive event-led construction was fast-tracked in a top-down fashion. What remains less understood is the impact and implications of such a forceful paradigm on legacy planning and urban renewal. This paper aims to address this gap with an in-depth case study of Expo 2010 Shanghai China. The central theme is to investigate how this paradigm has been adopted to a previous dockland selected as the Expo 2010 site and a catalyst for city-branding oriented urban renewal. Data was sourced from 2004 to 2015 from personal observations, strategic policies, planning documents, photo documentation, and meetings and interviews. This study identifies both the merits and drawbacks of this controversial paradigm to caution about its mixed impact on mega-event built legacies. It is concluded that future event cities should shift their mindset from super-developers to guardians of built legacies, and strike a balance between the top-down and bottom-up thinking. A new categorization centering on the legacy planning process is proposed, with guidelines to improve legacy planning methodology for future event cities.

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1. Background introduction

1.1. Defining built legacies

‘Event legacy’ is an umbrella term most used in the context of global mega-events like Olympic Games and World Expos. It describes structures which are produced for these short-lived events and will have long-term implications for host cities and nations. These structures can be planned (environmental improvement), unplanned (sporting ethos), positive (tourism boom), negative (financial deficit), tangible (upgraded infrastructure) or intangible (elevated global status) (Clark, 2008; IOC, 2013b; Hall in Murphy, 1997; Preuss, 2007). Among others built legacies are a focus of interdisciplinary debate but seldom clearly defined.

A mega-event built legacy is a physical structure possessing an inborn duality of temporality and permanency. It is purpose-built to facilitate the holding of an ephemeral mega-event, and will function as an enduring urban asset thereafter (Deng & Poon, 2011). Its greatest challenges emerge after the transition of this duality: how to fulfill the longstanding mandate after the cessation of the ephemeral role? Since the 1960s, there has been a global proliferation of mega-event built legacies by scale and complexity. Taking World Expos for example, Table 1 categorizes related built legacies into two main types – standalone and area-based. They can be further divided into several sub-types with examples ranging from spectacular buildings to advanced infrastructures to revitalized districts. This proliferation has intensified the paradoxical duality of built legacies. It is hence necessary to review its causes and problems before going into the case study.

1.2. Mega-event led urban renewal

In the 1950s, urban renewal was characterized by slum-clearance and engineering megaprojects to revive the economy of industrialized cities (Altshuler & Luberoff, 2003; Healey, 1992). This infrastructure-based strategy was largely abandoned in the late 1960s due to lacking social and environmental considerations (Roberts & Sykes, 2000). In the 1970s, positioning selective demolition and image-enhancing projects on urban fringes became a more acceptable compromise to ease the tension between...
economic growth and social frictions (Couch, 1990). In this connection, Expo 1962 in Seattle, USA set a precedent. The Expo was staged on a peripheral site long reserved for civic uses. About 75% on-site structures were kept as a basis for gradually developing the area into Seattle’s most vibrant civic center (Rydell, Findling, & Lehrer, 2008). The staging of influential mega-events became an irresistible catalyst for launching them (Cuthbert & ebary, 2011). However, this mega-event strategy (Chalkley & Essex, 1999) is a double-edge sword. The prioritizing of internationally oriented projects were often justified not by scientific evidence but by mere speculations of tourism boom, employment increase and rising land and property values (Cashman, 2003; Olds & Ley, 1988). The momentary glory entailed chronic problems of underused ‘white elephants’ or even isolated ‘urban islands’. Furthermore, there could be collateral damages such as displaced local residents (Olds, 1998), ignored livelihood developments (Lenskyj, 2000) or gentrified districts (Andranovich, Burbank, & Heying, 2001).

Due to exorbitant expenditures for staging a mega-event, Essex and Chalkey’s (2004) predicted that mega-events would not be affordable outside developed countries. Nevertheless, the 21st century has so far witnessed mega-events moving from traditional bases in the West to emerging economic powerhouses. By estimate, China spent USD44 billion on Beijing Olympics (Flyvbjerg & Stewart, 2012) and USD55 billion on Shanghai Expo (Waldmeir, 2010). Sochi, a small Russian resort, paid USD51 billion for the 2014 Winter Olympics (MuGiler, 2011); while the total costs for Russia’s 2018 World Cup was expected to exceed USD30 billion (Bray, 2011). Free from the affordability concern, these new hosts seemed determined in using spectacular construction to strengthen national prestige. But are they fully immune to the post-event pitfalls after Expo 1992 in Seville or Olympic 2004 in Athens [see for example (Lentz, 2007; Panagiotopoulou, 2013)]? This emerging phenomenon is now gaining renewed attention.

### 1.3. Downplayed legacy planning

As an indispensable link between the pre- and post-event timeframes, legacy planning focuses on critical issues of ‘What’s next’ beyond ‘What now’, such as reusing event facilities, redeveloping vacated land parcels, and reconnecting the site to the city. International experience suggested a common lack of interest among host cities in developing a legacy plan than a big plan. Reasons for this lopsidedness vary. They may include: no urgency for handling long-term issues, considering legacies as extra costs than a good chance to recoup event investment, no hard-and-fast

<table>
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rule to follow, and lacking systematic knowledge transfer (Cashman, 1998; Deng & Poon, 2011).

However, counting on a legacy plan might not be enough. As part of a previous study (Deng & Poon, 2014), the performance of built legacies in four Expo cities—Seville (1992), Lisbon (1998), Hannover (2000) and Zaragoza (2008) were reviewed. All four made detailed legacy plans for launching city-branding urban renewal, but three fell short of their specific objectives 5–10 years after the closure of respective events. Major problems included disconnected uses between different zones of the site, an oversupply of exhibition facilities, and a longer lag time for merging built legacies into existing fabric due to unexpected economic slowdown. The findings showed great differences between developing an event site and developing an urban area; and indicated that changes would be the norm for legacy planning.

Rectification measures have been introduced by international sanctioning bodies of mega-events. The International Olympic Committee considered sustainable legacies as one of the 11 key criteria in determining the next host city (IOC, 2013a). The Bureau International des Expositions passed a resolution on “the conditions of introduction and reuse of the site” in 1994, underlining the obligation of host cities to reuse the Expo sites and built legacies (BIE, 2008). Nevertheless, if the decision-making of host-right bidding continues to be heavily weighted towards advanced venues and infrastructures, new-generation hosts would be more susceptible to serious hangovers of “staged globalization” (Short, 2008). For instance, Brazil already faced a quandary of inheriting underused and high-maintenance sporting stadiums in a number of co-host cities after FIFA World Cups 2014 (Watts, 2013).

Another major reason for downplaying legacy planning is the fixed timeframe for preparing a mega-event—about seven years after the announcing of the bid result until the event’s opening day. When overwhelmed by a plethora of construction schedules, a city could hardly spare time for anything beyond meeting the unequivocal event deadline. Paradoxically, this short timeframe is longer than one office term for most local governments. Changes in administration may lead to changes in policy. The adoption of centralized decision-making seems necessary to avoid unwieldy bureaucracy which easily poses financial or legal risks. To fast-track event construction, not a few city authorities chose to sidestep fundamental planning prerequisites, disregard comprehensive impact assessments, or dodge genuine public consultation (Andranovich & Burbank, 2011; Owen, 2002). If this structural dilemma remains, the making of built legacies would become a zero-sum game, with the event duration as a winner and the post-event duration a loser.

2. Aims and approaches

Due to its one-off nature, the legacy planning process is an understatement in the mega-event related research. This not only prevents constructive lessons to be transferred from one host city to another, but retards the improvement of legacy planning methodology particularly in host cities from emerging economies. This provides an initial thrust for conducting an in-depth case study, because the value of case research is not for statistical generalization— to increase predictability; but for analytic generation— to generate or expand theories (Yin, 2013). This paper is intended to contribute to future practice and research in twofold:

- To help mega-event hosts appreciate the values of legacy planning when adopting the mega-event strategy.
- To provide methodological insights for launching mega-event led urban renewal in the form of legacy planning guidelines.

In China, eliminating labor-intensive industries has become a top priority over the past two decades. Such economic restructuring is often associated with grand spatial restructuring metaphorically nicknamed as “empty and fill” by city authorities. This infrastructure-based strategy is to replace rusty bird cages (dilapidated industrial belts) with new ones (new commercial districts and office towers) awaiting the arrival of better species (service-oriented industries). However, its implementation met with a dilemma in many cities: the ‘old cages’ were emptied but the ‘new birds’ have yet to come. Worth noting is that, this government-led strategy has been adopted in an unprecedented pace and scale via the staging of Beijing Olympics and Shanghai Expo among other major urban events. What remain less understood are some interesting questions about the event version of this top-down paradigm. How is it realized from conceptualization to implementation? What is its strength and weakness that might have significant impact on the process and production of legacy planning? And what might be its implications for the broader urban renewal?

This paper aims to bridge the gap in understanding the spatial-temporal complexity of legacy planning by studying the case of Expo 2010 Shanghai China. The focus is on the Expo site as a catalyst for launching a citywide riverfront renewal program between 2000 and 2015. A previous industrialized dockland of 5.28 sq.km, the site accommodated over 300 new-build and adaptation projects. About 50% of the 2.3 million-sq.m construction is kept as legacies in the form of building flags, conserved heritage, adapted industrial facilities, landscaped parks, and restored riverfront eco-system. These legacies have formed a spatial platform for more massive developments to unfold.

Following a commonly adopted categorization, the 15-year legacy planning process of Expo 2010 is divided into four steps as shown in Fig. 1. The focus is on identifying major challenges and strategies to fulfill the key tasks at each step. Worth noting is that, in theory, a city-branding vision should reflect the perceptions and expectations of the majority of citizens (Kavaratzis, 2004; Lynch, 1960). The public sector shall play a leadership role in the pre-Expo timeframe (BIE, 2008), while various market forces will gradually take over the site redevelopment after the Expo. Hence, city-branding visions hereby mainly refer to the city image and identity promoted by city authorities, upon which support policies, organizational arrangements and site-specific strategies were developed.

Data has been sourced by various means since 2004:
- Participant and field observations in major legacy planning activities listed in Fig. 1 (2004–07);
- Site visits and regular communications with key management and professional personnel (2008–15);
- Official records, public media, and promotional pamphlets (2004–15); and
- Face-to-face or telephone interviews with people who have been involved in the post-Expo development (December 2014–January 2015).

The selection of interviewees relied on both personal connection and the snowballing technique. To collect attitudinal evidence, preference was given to those who were involved in the Expo preparation and are still working for the post-Expo development. Some of them further recommended their colleagues to provide more information through briefing sessions, site visits and informal interviews. Table 2 lists the background information of informants and interview details. Data collection of the post-Expo stage centered on the following questions which were sent to those informants before interviews:
What are the major similarities and differences between the up-to-date legacy plan (after 2010) and the preliminary legacy plan (before 2010)? And why?

What is the relationship between the post-Expo site development and the new city-branding visions?

What is the latest progress of reusing on-site built legacies and redevelopment of the vacated land parcels?

What are the implications of the post-Expo development for the renewal process of its vicinity?

3. The case of Expo 2010

3.1. Historical profile

One of China’s most populous mega-cities, Shanghai is now home to over 23 million residents. This international port city is divided by the Huangpu River into two parts — Puxi (River West) and Pudong (River East) (Fig. 2). At the turn of the 20th century, Shanghai was colonized with a concentration of foreign settlements alongside the Puxi riverfront. In the 1930s, the Bund in Puxi...
accommodated many of the world's major banks and trading houses. Between 1950s and 1970s, Shanghai was repositioned as a national base for petrochemicals and steel industries following the planning philosophies of the former Soviet Union. With increasingly industrialized riverfronts, the city's aura as a financial center of the Far East was buried in oblivion. While the densely-populated Puxi consolidated its central-city status, Pudong remained dormant with vast tracks of farmland.

The decision of Chinese Central Government to develop Pudong in 1990 became a watershed for Shanghai to be back on track. Three decades of cultivation at Lujiazui — the tip of Pudong right opposite the Bund, has resulted in a crop of futuristic skyscrapers housing hundreds of multinational financial corporations. However, environmental quality was placed secondary to economic growth in the investment-driven plan of Lujiazui. The transfer of the financial district from the Bund to the Lujiazui Finance and Trade Zone (FTZ) also marked the advent of massive urban sprawl. As shown in Fig. 2, the city has been sprawling from its previous boundaries (within the Inner Ring Road) to the two concentric peripherals (within the Middle and Outer Ring Roads). Shanghai currently occupies a land area of 6340 sq.km, almost a tenfold increase since 1949 (Shanghai.gov, 2015). A rush to modernization has come at the price of diminished historic traces and deteriorating old neighborhoods. The opportunity for bidding Expo 2010 provided a good justification for reclaiming the city's lost identity.

3.2. Host-right bidding (1999–2002)

At this point of departure, a top priority for a candidate city is to identify a place suitable for both staging the Expo and catalyzing urban renewal (Linden, Creighton, Rogers, & Deseure, 2011). Because of perceived development potentials, heritage areas or industrial waterfronts are first-choice locations for prestigious property developments or influential urban events (Craig-Smith & Fagence, 1995; Healey, 1992). In 1999, Shanghai Municipal Government (SHG) selected a cross-river dockland in the southern edge of the city center (Fig. 2) for staging Expo 2010 themed under “Better city, better life”.

This proposed site initially covering a land area of 5.4 sq.km. The Puxi site was mainly occupied by a shipyard established in 1865, a coal-fired power plant, and other industrial premises. The Pudong site was packed with steel mills, warehouses, factories and residential quarters. As the birthplace of China's national industry in the 19th century, the site was imbued with industrial heritage including an 1872 dockyard and a 1931 hanger. Yet, the area had long been haunted by issues of aging housing, lagging infrastructures, insufficient amenities and heavy pollution. This typified a daunting task for the whole city to regenerate its 113-km long riverfronts, most of which had been industrialized. In 2001, a year before the host-right bid result came out, SHG launched The 11th Five-Year Plan for Comprehensive Development of Both Banks of the Huangpu River (2006–2010). Among the planning area of 74 sq.km, the proposed Expo site was in its south section — a 22.9-sq.km industrialized belt.

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**Fig. 2.** Location map of the Expo 2010 site in Shanghai, China.
3.3. Post-announcement (2002–03)

3.3.1. An urban catalyst

After securing the host right for Expo 2010, SHG started concretizing the rebranding vision of this riverfront renewal touted as “the century project to enhance the competitive edges of Shanghai” (SHG, 2002). Expo 2010 became a desirable impetus at all levels.


- Program level. The site was among four priority areas to be renewed along the southern section of the riverfronts renewal program aforementioned (OBHR, 2002). The site would also expedite the transforming of this underdeveloped region into a service-oriented sub-center.

- Site level. To facilitate a better understanding of the site and its vicinity, post-announcement surveys were extended to Houtan – a 1.03-sq.km riverfront west of the Lupu Bridge (Fig. 2). Literally meaning the Rear Bund, Houtan was scattered with unauthorized structures and had remained a no-man’s-land for almost a century. It would be visually out of place once the Expo site was renewed. New survey findings also revealed a sporadic distribution of built heritage and remaining industrial uses on the site, indicating that its renewal process would be far more complicated than erecting a concrete jungle on the flat Lujiazui.

3.3.2. A super-developer

Establishing an event organization is pivotal to kick-start the event preparation. This ad hoc agency will play a super-developer role in steering the whole renewal process which lasts at least 20 years (Lynch & Hack, 1984). This “super-developer” should be large and stable; occupy a permanent site for its intended development; and be capable of exercising long-term control to minimize spatial-temporal uncertainties (Lynch, 1962). This theory rationalizes, to a certain extent, the adoption of a top-down paradigm in Expo-led urban renewal.

In late 2003, the Bureau of Shanghai World Expo Coordination (SEB) was established as the Expo organizer and executive arm of the Expo 2010 Organizing and Executive Committees at the national and local levels. To encourage consensus building among cross-sector agencies, SEB was led by a Vice Mayor and staffed by an eclectic mix of people. All positions of the steering committee were concurrently held by municipal officers from various agencies. Most in-house staff members were either transferred from municipal government agencies or recruited from professional and academic institutions. The red tape of China’s construction supervision system presented a unique challenge to this megaproject. Without a wide industry network and strong leadership, it would be impossible to push forward hundreds of projects of different natures. Hence, the Deputy Chief supervising on-site planning, design and construction was concurrently held by a Deputy Director of Shanghai Construction and Communications Committee – the city’s supervising agency for primary capital construction. A panel of experts from the academic, industry and government sectors was appointed to lead the site planning work. Two state-owned enterprises (SOEs) – Expo Land and Expo Group, were assembled and entrusted by SHG for project financing and site development.

3.4. Expo preparation (2004–10)

3.4.1. Citywide overhaul

The accumulative attendance of Expo 2010 in its six-month duration was targeted at 70 million. The intention was to surpass the historic high of 64 million set by Expo 1970 Osaka Japan. This daunting figure entailed such unprecedented logistic pressures as to justify a significant enhancement of transportation capacities from air to rail, as reflected in the extended version of Shanghai’s near-term urban construction plan (2003–2007). After an initial investment of estimated USD 73 billion by 2008, a follow-up worth of USD 22 billion were allocated by SHG as part of Chinese Central Government’s 2008/9 fiscal stimulus plan. The city-wide infrastructural upgrade was realized with an estimated price tag of over USD95 billion (JLL, 2010).

3.4.2. Site-specific strategies

The premier status of the Expo site development was reflected in SHG’s official motto: mobilizing the resources of the entire nation and assembly the wisdom from around the globe. Since early 2004, SEB in collaboration with dozens of competent government agencies began to adjust the site boundaries, pay visits to previous mega-event cities, initiate international consultations on built legacies, and launch design competitions. As the Pudong site occupied about 75% of the site, the vision to forge a service-oriented sub-center was also embedded in the near-term development plan of the Pudong New District (2004–2009). While Houtan was officially included in the site boundaries, a 1.40-sq.km peripheral of the site was designated as “the planning coordination area” for legitimizing coordinated beautification programs.

Study visits and international consultations resulted in adhering to a pre-post planning principle – prioritizing the post-Expo needs upon satisfying the Expo needs. The target was to release about 40% of the site area after the Expo. By the end of 2004, a preliminary master site plan (SEB, 2006) was approved by the State Council. By integrating the area’s long-term prospects into the event demand, this legacy plan 2004 (Fig. 3) laid the foundation for the seven-year process of legacy planning as follows:

- **Functional specialization.** The site was divided into five functional zones from A to E, each designed with a unique development theme shown in Fig. 3.

- **Spatial clustering.** The four building flags were grouped together and linked by multimodal transportation means to maintain good connectivity with the rest of the city. Special attention was paid to their functional compatibility and adaptability, economic viability, and environmental sustainability in anticipation of a synergy effect.

- **Adaptive reuse.** About 20,000-sq.m heritage buildings and over 400,000-sq.m industrial structures were preserved or repurposed for event uses. This accounted for 1/5 of the overall on-site construction volume. On the historical shipyard, cultural values were introduced to a memorial sculpture park, open spaces and promenades.

- **Environmental sustainability.** Compared with the Lujiazui development, the Expo site renewal adopted a more environmentally conscious approach to turning the polluted dockland into a ‘green lung’ of the downtown Shanghai. Different strategies were formulated to restore the 8.2-km riverfront ecosystem through the creation of three riverfront parks, six passengers’ quays, and various riverfront amenities.

Experience from previous host cities such as Seville and Hannover showed that their site plans were revised every half a year over four years. Shanghai was on a par with them: four major versions of
site plans and numerous partial revisions from 2004 to 2007.

3.5. After the Expo (2011–15)

An important step towards the post-event era is the designation of “guardians” (Cashman, 1998) for built legacies.

3.5.1. A new Expo Region

During the period of the 12th Five-Year Plan (2011–2015), the deadline to transform Shanghai into an international financial center by 2020 was reconﬁrmed by the Chinese State Council (2009). One of the local responses by the Pudong New District was the birth of a new Expo Region in 2011—a 25-sq.km land area comprising the former Pudong Expo site and three adjacent neighborhoods (Fig. 4). This was followed by the announcement of ﬁscal policies to support transforming the Region into a “world-class civic center” (ERMO., 2012). Prioritized agenda included the development of headquarters economy, commerce and trade, advanced services, and creative industries. Government slogans of “world-class” and “high-end” frequently appeared in investment guides for this Region. If Lujiazui is a modern version of the Bund, this post-Expo Region is designed to become the ‘Lujiazui Version 2′. While the intention is clearly to change the single ﬁnancial center model to a twin model, what remains unclear is how this ‘Version 2′ would differentiate itself from ‘Version 1′.

3.5.2. A new organization

To ensure a smooth transition, SHG set up the Leadership Panel for the Post-Expo Development of the Expo Site (the Panel) and the Expo Shanghai Development Corporations Limited (ESG) after SEB was disbanded in 2011. This two-tier organizational model has long been adopted as a project-based advisory mechanism for developing major projects in China. The Panel is headed by a Vice Mayor and composed of competent municipal agencies. ESG is by nature a state-owned enterprise (SOE), and proﬁled as a “modern service-sector flagship enterprise” on its website (ESG, 2014a). Missioned to develop the post-Expo site on behalf of SHG, ESG is mainly staffed by the remaining people transferred from SEB. Regarding the impact of such organizational arrangements on built legacies, interviews with the 13 ESG informants provided some interesting insights as numerated below.

“We are a function-oriented state-owned enterprise, that is, to implement the post-Expo site redevelopment based on the direction and instructions set by SHG.” (Senior management)

“There is a mismatch of human resources. We have enough people to ‘issue orders’, but are short of good people for execution. This was not a problem before, because of the full support from all external municipal agencies and state-owned companies.” (Senior management)

“… It’s different now … We are gradually losing footholds. Previously, we did not have to worry about the issue of self-sustaining, and we had our own ‘feet’ to do the actual stuff — the two companies. But not any more ….” (Senior management)

“We are just a company now, not a government agency which can order people around. When you talk business with another company, no one buys your account. It’s equal.” (Business Development sector)

“Those state-owned enterprises who intend to build an ofﬁce tower on the Expo site are all with strong backgrounds ….” (Business Development sector)

“The Expo is no longer the top priority in the mind of decision-makers.” (Various staff members)
“Now the hot topics are the Shanghai Disneyland and the Great Hongqiao Area.¹ The Expo is just a passing interest.” (Various staff members)

Clearly, there was a consensus on weakened internal capacity and external support. Fig. 5 tries to explain this from the differences between SEB and ESG:

- SEB (2003–2011), the designated Expo organizer, was a for-purpose public agency. Expo 2010 was seen by the national and municipal governments as the topmost priority. SEB hence enjoyed government supports at all levels and by all means. It had its own subordinate companies — Expo Land and Expo Group, for project financing and development.

- ESG (2011–present), a state-owned enterprise, has to be financially self-sustained. Apart from bearing all the running costs of the site development, ESG possess limited resources in generating revenues. The site redevelopment is just one of many ongoing major projects at the municipal level.

3.5.3. A new legacy plan

After 2010, the redevelopable land area reached about 2.25 sq.km, or 42.6% of the 5.28-sq.km site area, largely meeting the target of vacating 40% of the site area set out in the legacy plan 2004. In 2011, a new legacy plan was announced, envisaging the post-Expo site as “the 21st century landmark municipal-level civic center of Shanghai”. Three key themes were underlined — a headquarters of international corporations, a world-class green business community, and a low-carbon demonstration zone (ESG., 2014b). As shown in Fig. 6, the site development is based on the spatial structure of “Five Zones and One Belt” in the legacy plan 2004 (Fig. 4).

A millions-sq.m construction schedule has been underway by stage, with the first phase on Zone B and A to be completed in three to eight years. During the 12th Five-Year Plan period (2011–15), ESG is to develop an estimated construction volume of 3.15 million sq.m, including open space, pedestrian circulations, riverfront landscape, and underground utility ducts and facilities. Fig. 7 traces the evolution of legacy planning by comparing the initial (2004) and final (2011) legacy plans. Major functions of each zone have been either retained, combined, changed or shelved. Greater details are explained below.

Zone B. Redevelopment started with Zone B with five flagships shown in Fig. 6. Nicknamed “One Axis” and the “Big Four”, they totaled over 850,000 sq.m. Expo Spine, formerly a major pedestrian walkway linking to the “Big Four”, has been revamped and renamed in 2014 as River Mall - Shanghai’s largest shopping and leisure complex with a retailing area of 130,000 sq.m. The “Big Four”, with an average floor area of 150,000 sq.m, are designated places for holding large public events. Expo Center serves as a convention

¹ After 2010, a new wave of constructing large convention and exhibition venues among other transportation infrastructures has been underway in the Great Hongqiao Area (i.e. the Hongqiao Comprehensive Transportation Hub).
center for high-level political events, brand-named conventions and large public events. Theme Pavilion becomes a commercial exhibition center for large-scale trade shows and exhibitions. China Pavilion is transformed into China Art Museum. Expo Performing Arts Center is renamed as Mercedes-Benz Arena hosting large-scale live performances, sports events, and recreational activities.

The vacated land parcels to the west of River Mall were subdivided and transferred to 13 state-owned enterprises (SOEs). Twenty-eight office buildings of about 600,000 sq.m are under construction to form a SOE headquarters. The land parcel between the convention center and the exhibition center is reserved for a 325,000-sq.m hotel cluster comprising two upscale hotels and two boutique hotels. Scheduled to be in operation in 2018, this cluster is targeted at high-spending conventioneers and business travelers to the “Big Four” market position initially proposed during China’s stimulus program worth over CNY4000 billion since 2008. At the end of 2014, two auctions for selling this parcel bundled with hotel design schemes were suspended due to a cold market response. This result was unexpected for ESG:

“Money was not a problem at that time. So the more deluxe, the better ... Just like the whole nation ...” (Business Development sector)

“Nobody expected that the market changed so quickly”. (Business Development sector)

“The high-end position was supported by the municipal level. Later, we felt it might be a bit risky because of the economic slowdown, but no one raised the issue openly ... ...” (Business Development sector)

Zone A, Zone C and the Outparcel. Zone A is to be merged with Zone B by functioning as an international business district. The outparcel of Expo village was planned as an international residential community. Except for some chain hotel facilities still in operation, the rest buildings have been gradually taken up by government agencies. Zone C (Houtan) was reserved for retail, trade and office uses in legacy plan 2004. Due to a functional overlap with Zone A and B, it is now idled and named as the Houtan expansion zone.

Zone D and E. The Puxi Expo site is redeveloped in line with a new branding vision articulated in the 13th Five-Year Plan (2016–20) to shape Shanghai into a culture metropolis. Zone D went through its temporary adaptive reuse before the Expo, and is now entering into its longer-term adaptive reuse. Functional combination and consolidation are also taking place. Previous Expo pavilions converted from industrial buildings are now being transformed into permanent cultural venues: a modern arts museum, a children’s theater and an Expo museum. The vision is to make the area a high-end arts and culture district comparable to the Smithsonian Institution in Washington D.C. and Berlin’s Museumsinsel. Zone E is to be revamped into a mixed-use community titled the “Dynamic block”, which is promoted for small businesses of creative industries and for low-end catering and leisure uses. However, the Puxi side is facing a similar dilemma as the
Pudong side, as cautioned by an urban-planner interviewee:

“I couldn’t see any reason to support the mass market. The need to recoup heavy investments in revitalizing this rundown area means only one thing to me: why not introducing international designer brands? How can a small arts workshop survive with the land-price hike?”

3.5.4. Site visits

Besides meetings and interviews at ESG, three site visits to the post-Expo site were made in December 2014, January 2015 and March 2015. All trips were made by interchanging between old and new subway lines. Within the city-center boundaries, the trains were always full even in off-peak hours. But there was a sudden drop in the number of passengers upon reaching this urban-edge area. The renewed site was too huge to walk by foot, so car trips were arranged by ESG. The car could stop any time for photo taking because of light traffic on the newly built roads. No major cultural or exhibition events took place during the site visits. The spacious front yards of the “Big Four” were inaccessible and appeared as idle as the surrounding access roads.

Besides Mercedes-Benz Arena as a joint-venture between an SOE and foreign corporations, the other three of the “Big Four” are run by different SOEs. A big portion of their businesses came from government-designated large events, according to one informant who has a wide network in Shanghai’s cultural sector. The River Mall, which is co-managed by ESG and other joint-stock companies, was mentioned as the most-visited place among all built legacies. Besides the profit center of the catering sector, most retailing space has remained empty in short of either customers or tenants since the Mall’s opening in early 2014.

Within the fenced area, also kept were most of the national and corporate pavilions. Some were among the most visited venues during the Expo. After reopening in 2011 and 2012, visitor flows dwindled significantly due to lacking new exhibitions. The surroundings of empty pavilions and support facilities appeared lacking proper maintenance. Much of the open space was used for temporary storage. During the last site visit, unauthorized street vending appeared along the side lane of some main access roads to the site in early morning.

4. Discussions

Since the top-down paradigm is the focus, its positive and negative impact on mega-event built legacies is drawn from the study’s findings.
4.1. The bright side

The evolution of city-branding visions, support policies and development themes over the past 15 years is summarized in Fig. 8. The whole process typifies a tailored version of China’s top-down paradigm for planning major projects. Its strong feature is represented by the government-promoted visions, policies and themes from the national and municipal levels to the district and site levels. Its major strength lies in the stability in policy, finance, management and organization as specified below:

- Maintaining policy consistency at various administration layers.
- Secure timely financial support to any contingency or cost overage.
- Guarantee high efficiency of enforcing comprehensive developments.
- Ensuring a smooth transfer of authority between critical periods.

Through recycling the 5.28-sq.km dockland, this Expo-driven urban renewal has set the foundation for an emerging sub-center to complement the functions of the city center. The area’s historical traces, vernacular eco-system and heritage values have been selectively preserved and integrated in its modernized landscape. The two-stage adaptive reuse of industrial heritage is an innovative interpretation to the duality of temporality and permanency in built legacies. Establishing the Expo Region is both part of the comprehensive riverfronts renewal program since 2001 and a logic start to continue the place rebranding momentum of the site’s vicinity after 2010. The experience will have a transforming effect on future practice of recycling a vast stock of brownfield in Shanghai and other cities in transition.

4.2. The shadow side

The proposal to develop the luxury hotel cluster epitomized that a host city experienced an economic boom time would be prone to scope creep. The grand scheme left little leeway for any market-oriented developer to rectify, due to a combination of an ill-timed market position, an inflexible development scheme, and a tight delivery timeframe. In the advent of economic slowdown, it is risky to aim exclusively at the high-end market by providing such a large volume of office, hospitality and cultural spaces. The slower-than-expected intake of oversupplied legacies was also reflected in the “reserved” Houtan which has been idled for five years.

On the building level, conventional wisdom always rationalizes the size of a purpose-built event venue should meet the peak demand from a mega-event. However, large public buildings are normally gated communities which strictly follow the principle of “no admission except on invitation”. This will certainly discourage potential users. The most dynamic streets in the world are always those have numerous small shops with interesting openings and free entry. The slogan of a world-class civic center seems a continuation of the Expo theme “Better city, better life”, but what kind of “world-class” is aimed at? As the site redevelopment is projecting an image of a gigantic Wall-Street, it is hard to find any trace of street life and local culture. Affordability would become a major issue for existing and new residents, potential property buyers, and tenants of smaller businesses. Livelihood developments still remain a policy vacuum.

5. Conclusions

This paper reports the 15-year legacy planning of the Expo site in Shanghai. Expo 2010 was used for boosting the sub-center development and citywide infrastructural overhaul. A snapshot
overview of the site’s major planning milestones is illustrated in Fig. 9. The physical transforming effect was significant from an outdated dockland in 2003 to a modern sub-center which is rapidly taking shape. Such an unprecedented pace and scale of event-driven construction, as reflected in this and other recent cases, would be a strong sign that the infrastructure strategy has made a comeback under the mega-event guise.

5.1. Top-down versus bottom-up

This site renewal possesses a spatial-temporal duality — its production of the 2.3 million-sq.m built environment and its process as an urban catalyst for the riverfronts renewal. Although this duality distinguished it from other conventional ones, this event-based urban renewal epitomized China’s well-trodden approach to fast-tracking megaprojects. This top-down paradigm is attached with high predictability over time due to its strong administrative enforcement and stable financial provision. Even so, the renewed region has to face the greatest problems from Athens to Brazil to reinvigorate empty venues with new uses and to attract investors for developing vacated land. As shown in Fig. 5, state-owned enterprises (SOEs) were entrusted with the mission to develop all on-site built legacies from new and adapted facilities to landscaped parks. These SEOs are now entrusted to manage these built legacies and develop new buildings which are to be owned by other SOEs. Despite plenty of reusable facilities and developable land on-site, the majority of development themes bear little irrelevance to local residents or smaller businesses. A glaring insufficiency remains the true market force and community engagement as the fountain of innovative ways to reuse major venues and open space during the absence of organized events.

5.2. From developers to guardians

City authorities obsessed with showing its competitiveness might be spatially shaped by meeting construction deadlines one after another for materializing its branding visions. However, the case indicated the risk of an oversupply of upscale developments in the face of economic slowdown. Rather than a continuation of projecting an image of global corporations luring external investors and visitors, inspiring local demand is a more realistic way to secure continued interests in maintaining area vibrancy. From a management perspective, ESG is designed to continue the role of the Expo organizer (SEB) as a super-developer. The pace and scope of redevelopment is no less significant, albeit with less public attention. A major reason is because the post-Expo redevelopment has been “downplayed” from a national top priority to one of the local major projects. Without smart ideas to inspire future uses, buildings do not automatically deliver higher economic values or lead to better quality of life. How to find ways to survive the Expo and thrive in the post-Expo market is a big challenge for such a government-led super-developer. The prosperity of event sites relies more on a paradigmatic shift in mindset from super-developers to smart guardians of built legacies.

6. Recommendation

With the mega-investments at stake, it is more important to
create a methodological framework than just a spatial shell. Drawing from this and other international cases, recommendations are made to facilitate improvement in legacy planning methodology at the end of this paper.

6.1. A new categorization

Fig. 1 is tailored made for analyzing the legacy planning process of Expo 2010, but this widely-used categorization centers on the key word “event”. Based on the study's findings, a new way of categorization is proposed from a legacy perspective. As shown in Fig. 10, legacy planning centers on two key tasks — making and management — with a clear aim to fulfill the long-term mandates of built legacies and ensure the prosperity of the event site.

6.2. Legacy making

Legacy making in theory comprises of conceptualization and construction. The guidelines below only cover conceptualization for three reasons. Firstly, legacy conceptualization is the most dynamic part as in any other project process. Secondly, it is often done in an itinerant or phased manner due to the duality of built legacies. Finally, the construction of major built legacies can be omitted because it is largely identical with that of major event venues and infrastructures. Conceptualization should ideally start from host-right bidding and continue in most time of the pre-event stage.

The fundamental principle is to identify the site's development potentials and define the future uses of built legacies:

6.2.1. Site level

- Consider the site's relations to the rest of the city, including its accessibility to and from established urban areas and long-range functions.
- Survey the site thoroughly to identify development potentials and constrains.
- Recognize and respect the site's existing fabric with significant cultural, historical and vernacular values.
- Create site-specific renewal objectives in line with the city-branding visions as well as reflecting the unique history, culture and resources of the site and its vicinity.
- Encourage the co-existence between existing, adapted and new built environments.
- Integrate fiscal planning into physical planning to avoid scope creep especially during an economic boom time.
- Plan the site and its vicinity holistically to maximize the catalytic effect of a mega-event led urban renewal both before and after a mega-event.
- Produce a framework plan that can withstand future modification yet still generate good outcomes by increasing functional compatibility and connectivity but avoiding too specific zoning.
Pay attention to two key ratios: one between temporary and permanent construction; and the other between new-build and adaptive reuse.

6.2.2. Building level

- Avoid rigidity in functional definition and increasing high flexibility (change to the internal layout but not to the building shell).
- Maintain a reasonable level of adaptability (change to the building shell (shape, style, size, etc.), and hence will be relatively costly).
- Adopt phased development in the face of a high degree of economic/industrial uncertainty.
- Focus on the provision of multipurpose facilities by minimizing those one-off components in a single facility.
- Lower the risk of underuse in a large purpose-built facility, such as developing smaller mixed-use facilities nearby to help it merge with its surrounding.

6.3. Legacy management

Legacy management, in practice, should start parallel with the construction of those permanently kept structures, and continue thereafter. Its scope may include:

- Establish a longstanding agency in supervising the management of built legacies and the development of the site.
- Seek and secure facility managers, investors and developers for legacy reuse and site redevelopment.
- Reuse purpose-built venues and support facilities temporarily (e.g. memorial events immediately after the closure of a mega-event).
- Dismantle temporary structures and vacate related land parcels.
- Sub-divide the vacated land and provide infrastructures for redevelopment.
- Transfer the land-use rights to future developers and the rights of use to future tenants.

The key to accomplish this long-range task lies in the following major dimensions:

- Design an organizational model for equality, synergy and efficiency.
- Consider multifaceted factors that will affect the area’s future including local needs, physical conditions, economic constraints, and available resources.
• Develop socially inclusive policies to allow a combined force of the policy, market and community to inspire future uses while retaining local features.
• Cultivate a sense of shared responsibility among local communities through regular public consultation and focus group forums to understand locally pressing needs to be incorporated into the blueprint of site redevelopment.
• Encourage multiple ownerships of major built legacies.
• Provide planning and financial incentives for livelihood developments.
• Adjust the redevelopment scale and scope based on independent research by multidisciplinary experts and professionals.

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