# Songdo, Korea: Aerotropolis, Metropolis, and Cyberopolis

Proceeding eighty miles into the northwest wind, you reach the city of Euphemia, where the merchants of seven nations gather at every solstice and equinox...But what drives men to travel up rivers and cross deserts is not only the exchange of wares... you do not come to Euphemia only to buy and sell, but also because at night, by the fires all around the market, at each word that one man says...the others tell, each one, his tale...from "Trading Cities1"

# INTRODUCTION

Songdo IBD was conceived as an international business district and free trade zone, emerging from the Asian tradition of trading cities along the Silk Road. Marco Polo's descriptions of the cities he encountered along this route form the basis for Italo Calvino's tales in Invisible Cities. Calvino's tales tease apart various aspects of the different cities that Marco Polo describes to Kublai Khan, different cities that, in the end, are really all the same city. We will use selected passages from Invisible Cities to inform an analysis that views the city of Songdo as three distinct cities.

The paper looks at public space at three scales of urbanism, in cities that we will call the Aerotropolis, the Metropolis, and the Cyberopolis. The Aerotropolis² is a pan-Asian business district defined by travel distance from Songdo's travel hub. The Metropolis is a clearly delineated physical city in the process of becoming upon newly created land adjacent to the port city of Incheon. The Cyberopolis is the city in the cloud that touches down in the lives of the earthly denizens of Songdo.

Will Songdo become a sustainable model for a humane global city? Or will it be an example of what Michael Sorkin dubbed variations on a theme park in his book of the same name? We will examine the three scales of Songdo using as lenses Michael Sorkin's three salient characteristics of the postmodern city: ageographia, controls, and simulations. Sorkin describes ageographia as a destabilization of the relationship of the city to physical and cultural geography, where generic public space is articulated by applique. Controls encompass both physical and technological segregation, surveillance, and manipulation of the populace. Simulations refer to the substitution of applied imagery for authentic place-based culture.<sup>3</sup>

Since Songdo is a city in the process of becoming, not yet fully built and inhabited, this case study of Songdo's public space is largely based upon

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interpretation of visual and verbal information about the city by the Korean government, the developer, and the master plan architect. Rather than a definitive critique, this analysis will propose significant questions to be considered as the urban form takes shape and fills with life. In this paper, we examine the vision and question whether realization will match vision. What factors are likely to promote the vision? What factors might challenge the vision?

### **AEROTROPOLIS: AGEOGRAPHIA OR PLACE-BASED URBANISM?**

If on arriving at Trude I had not read the city's name written in big letters, I would have thought I was landing at the same airport from which I had taken off. ..Why come to Trude? I asked myself. And I already wanted to leave. "You can resume your flight whenever you like,' they said to me, 'but you will arrive at another Trude, absolutely the same, detail by detail. The world is covered by a sole Trude which does not begin and does not end. Only the name of the airport changes." From "Continuous Cities<sup>4</sup>

As an international business district designed to serve as the hub for commerce in Asia, Songdo is aimed at an international community with a shared focus on the Asian region. The diagram below shows Songdo at the center of concentric circles encompassing the commercial zones of Asia. This graphic description locates Songdo in a space defined by air travel distance. In fact, Songdo is billed as an Aerotropolis. A member of the Sondgo development team describes a day in the life of a Sondgo resident as follows, "In the morning, one takes the children to the international school, flies to Beijing or Shanghai (less than an hour and a half flight) for a working lunch, then returns to pick up the children and stroll in Central Park at sunset before dining with a panoramic view."<sup>5</sup>



The focus on pan-Asian commerce and the ease of multi-modal transit tends to dissolve the physical boundaries of Songdo, making the city porous and annexing the other cities of the region into its space. The international school preparing Songdo's children for higher education around the world and the adoption of English as the official language of business further tend to situate Songdo in a global, rather than local, community.

Is Songdo the ageographical<sup>6</sup> city of Michael Sorkin's Variations on a Theme Park, the city without a place attached to it? Is Songdo merely a radius point in a continuous field of Asian business opportunities? Sorkin asserts that the structure of the ageographical city is like television, where the seamless transition between disparite elements of programming renders all bits of information of equal value. In the Aerotropolis, the airplane ride is that seamless transition between Asian cities. In one sense, it is keenly important that the traveller is in Seoul or Tokyo or Beijing

Figure 1: Songdo as a hub for Asian business travel, Songdo website, http://www.songdo.com/songdo-international-business-district/why-songdo/global-business-hub.aspx (accessed 9/17/13).

for the business opportunities afforded. On the other hand, the typical business travel experience is like Calvino's description of Continuous Cities, above, where meetings take place in office towers that could be anywhere and "only the name of the airport changes." In *Aerotropolis: The Way We'll Live Life Next*, John Kasarda projects that "as aviation increasingly connects the world's people and places, we will simultaneously observe *global homogenization* and *local diversification*...creating strikingly observable commonalities among widely dispersed places while enriching the variety of products and services in those places."<sup>7</sup>



Let us consider the physical and cultural geography or ageography of Songdo. The new city is built upon 1500 acres of constructed land adjacent to the port of Incheon, separated from the mainland by a narrow channel and projecting into the West Sea. Bridges connect Songdo to the mainland and to Incheon Airport.

One might say that the city is literally no place because the land upon which it stands did not exist before. On the other hand, the development team appears to view the new city of Songdo as the next step in the evolution of the historic international trade city of Chemulpo, settled in the 19th century by traders who formed enclaves of Chinese, Japanese, Western, and Korean populations, and known as Incheon in modern times.<sup>8</sup> Along with the construction of Incheon Airport came a vision for a new city that would be an international business district. Donald Southerton articulates the vision as follows: "Songdo IBD is a world-class 21st century community that will cater to multi-national companies and their knowledge-based and talented workforce. In contrast to the 19th century Foreign Settlement, Songdo IBD reflects a new global culture — one not dominated by a single nation or region, but a diverse group of people with similar tastes and needs. This new generation of residents demands state of the art technology, eco-friendly Green buildings, a universal business language (English), world-class recreation, and high-caliber medical and educational facilities."

This vision of the new city as a reflection of global culture may be read as a prescription for a generic, ageographic architecture. Where Sorkin decries the loss of place,

Figure 2: Songdo Aerial View, Google Earth (accessed 9/14/13).

however, Songdo's developers celebrate a set of transcultural values. Is Songdo an ageographic city? Or, in the age of globalization, is Songdo a city designed specifically for the planet earth? The master plan architects, KPF, assert that, "The city aims to become an international destination known for the high quality of life provided to its inhabitants and sustained by a vital public realm rich in cultural and recreational attractions. One of the development's stated goals is to help the Korean nation adapt to a changing global economic environment, spur job creation and provide modern, energy-efficient dwelling units to residents across the economic spectrum. The future viability and health of the city is also at the forefront of design considerations. By focusing on local and regional resources and energy efficiency, New Songdo City minimizes its contribution to global climate change"<sup>10</sup>



The master plan is certified under the LEED Neighborhood Design pilot program. A white paper published by the developer, Gale International, and POSCO E & C, sets forth core development goals organized into the following six categories:<sup>11</sup>

- 1. Open and green space (access to nature, sunlight, healthful recreation, public gathering spaces)
- Transportation (multi-modal transportation including walking and biking, clean energy)
- 3. Water consumption, storage, and reuse (reduced water use, storm-water and grey-water recycling, green roofs to reduce runoff, mitigate heat island effect, and provide native species habitat)
- 4. Carbon emissions and energy use (ASHRAE standards, co-generation, solar energy generation, reduced energy use, pneumatic waste collection)
- 5. Material flows and recycling (construction waste recycling, local materials)
- 6. Sustainable city operations

In the more than twenty years since the publication of Variations on a Theme Park, has the focus on sustainability shifted our concept of place-based

Figure 3: *Songdo Master Plan,* KPF website, http://www.kpf.com/project.asp?T=6&ID=9 (accessed 9/15/13). Reproduced with permission from KPF.

architecture from one based on local culture to one based on local resources? Has the ethos of sustainability made us more keenly aware of ourselves as citizens of a planet?



# **METROPOLIS: REALITY OR SIMULATION?**

And yet I have constructed in my mind a model city from which all possible cities can be deduced," Kublai said. "It contains everything corresponding to the norm. Since the cities that exist diverge in varying degree from the norm, I need only forsee the exceptions to the norm and calculate the most probable combinations." "I have also thought of a model city from which I deduce all the others," Marco answered. "It is a city made only of exceptions, exclusions, incongruities, contradictions. If such a city is the most improbable, by reducing the number of abnormal elements, we increase the probability that the city really exists. So I have only to subtract exceptions from my model, and in whatever direction I proceed, I will arrive at one of the cities which, always as an exception, exist. But I cannot force my operation beyond a certain limit: I would achieve cities too probable to be real.<sup>12</sup>

Figure 4: *Songdo Master Plan*, KPF website, http://www.kpf.com/project.asp?T=6&ID=9 (accessed 9/12/13). Reproduced with permission from KPF.

Let us consider whether Songdo offers real or simulated urbanism. The master plan architects, KPF, took the notion of world-class recreation to heart in their designs for the public space of the city. Songdo offers "a system of pocket parks (based on the design of Savannah, Georgia), canals (like Venice), and a large Central Park (like New York)."<sup>13</sup> The skyline is based on Hong Kong's and the cultural center is like the Sydney Opera House. At first glance, this reads like a program for a theme park. Is this the ultimate in consumerism, treating world culture as a sort of global mall in which to shop for the luxury goods of urban design? Are the celebrated public spaces of Songdo merely simulations? Or is the park system of Savannah, the canals of Venice, and Central Park just a form of shorthand for humane urbanism?



KPF's Principal responsible for Songdo, Richard Nemeth AIA, explains that the references to the great urban places of the world came about as a result of the compressed design process. KPF had one year to design a city, so they adopted the principles behind the places that have withstood evolution, taking the concepts out of context, and linking them by means of the master plan. They drew upon a broad set of precedents in order to associate the new city with a variety of places acceptable to the many different cultures of the anticipated international population. Rather than creating literal copies like we see in Disney World and Las Vegas, KPF abstracted the design principles behind the places to create public places that support urban life.<sup>14</sup>

In the image above, we see all the urban virtues of a large park located at the center of a dense city, offering healthy recreation for humans and habitat for native plant and animal species. We also see a picturesque pagoda as a reference to historic Korean architecture in a theme park pastiche where a snippet of Korean culture is placed in a park from New York in the center of a generic global city. One might view the pagoda as a sign carrying the message, "you are in Korea." The question of how Songdo's architecture and urbanism responds to Korean culture is complex. On the one hand, the generic architecture of Songdo looks like it could be anywhere. On the other hand, it is overly simplistic to expect Sondgo to honor Korean traditions. A major trend in contemporary Korean culture is neophilia. The shiny towers of Songdo are, therefore, more culturally appropriate than the pagoda. Current Korean slang for "tacky" is a term that translates as

Figure 5: Central Park December 11, 2009, Songdo website, http://www.songdo.com/songdo-international-business-district/gallery/image-gallery.aspx/d=770/title=Central\_Park (accessed 9/17/13).

"countryside." Anything old and rustic, like the pagoda in the park, would likely be scorned as tacky.

The strategy most likely to produce place-based urbanism in the city of Songdo is the sustainability program. For example, KPF designed the Central Park as a microcosm of the Korean peninsula, with native plants from the country's various ecosystems. <sup>16</sup> Shaping the architecture and public spaces to work with local climate, ecology, and resources is a twenty-first century means to an authentic expression of place as both a local and global phenomenon.

What about the population of Songdo? Is this truly a public place? Or is Songdo the sort of gated community decried by Michael Sorkin? Songdo was planned to bring together an international mix of residents into a unified community. <sup>17</sup> The public served by the city is not just Korean citizenry. it is conceived as world citizens united in their interest in doing business in Asia. The language of the public space is English. An international school prepares students for post-secondary education around the world. In terms of nationality, Songdo is a highly inclusive city.

The city is planned for 65,000 residents<sup>18</sup> and a workforce of 300,000.<sup>19</sup> The Songdo IBD website describes the 22,500 planned new housing units as "prime residential condominiums."20 This seems to contradict the master plan architects' statement of the goal to, "provide modern, energy-efficient dwelling units to residents across the economic spectrum."21 What about the workforce required for serving the residences and commercial enterprises? Can these workers afford to live in the new buildings of Songdo, or must they commute to work from elsewhere? The working class that is needed to clean the office towers, serve in the restaurants, wash the dishes, staff the residential buildings, and generally serve in all of the low-skill, low-pay positions that keep the city running may be excluded from living in the city. While the city is not an overtly gated community, the cost of living may effectively create a gate that opens to admit workers each day and closes to exclude those workers from becoming residents. So, are the public spaces of the city truly public? Or do the celebrated spaces of the city serve as public amenities to a selected group that can afford to live in Songdo's residential developments. Is the populace served by Songdo diverse in terms of nationality, but economically homogeneous? Are the children preparing for college educations around the world well prepared for participation in a global community but ill prepared for participating in an economically diverse society?

# CYBEROPOLIS: PERSONAL FREEDOM VS. PUBLIC GOOD

If you choose to believe me, good. Now I will tell how Octavia, the spider-web city, is made. There is a precipice between two steep mountains: the city is over the void, bound to the two crests with ropes and chains and catwalks. You walk on the little wooden ties, careful not to set your foot in the open spaces, or you cling to the hempend strands. Below there is nothing for hundreds and hundreds of feet; a few clouds glide past; farther down you can glimpse the chasm's bed. This is the foundation of the city a net which serves as passage and as support. From "Thin Cities"<sup>22</sup>

The u-Life system provides the digital infrastructure of Songdo. The goal of u-Life, a joint venture of CISCO, the development team, and the LG corporation, is to develop and operate Songdo as "the most beautiful and environmental-friendly smart city in the world."<sup>23</sup> This is the city in the cloud, the network that serves as the digital foundation for Songdo. Where does this net touch down in the Metropolis of Songdo? The physical public realm of Songdo appears unaffected

by this city in the cloud. The forms of the public spaces – the New York-type Central Park, the Savannah-type neighborhood parks, the Venetian-type canal – bear no traces of their connection to Songdo's city in the cloud. The form of the public space is neo-traditional, ignoring or denying the presence of its digital foundation in cyberspace. KPF considered it pointless to make the cyberinfrastructure a factor in the urban design because the digital technology is rapidly evolving and constantly changing.<sup>24</sup>

The connections between Metropolis and Cyberopolis become evident where public cyberspace intrudes into private physical space. The u in u-Life stands for ubiquitous. In Songdo, digital technologies are everywhere and omnipresent. The u-Life company articulates its vision as follows: "u-Life envisions establishment of a resident-friendly community that thrives in a sustainable green living environment with exploitation of the state-of-the-art technologies to the fullest. Building a truly ubiquitous community designed to bring ubiquitous culture, society, and lifestyle to each resident is our vision."<sup>25</sup>

Cisco reports that "u-Life Solutions will deliver a wide range of managed smart-city services to organizations and residents living and working in Songdo IBD, including integrated building and facility management, on-premise safety and security, home networking, and virtual concierge services... residents will be able to conveniently control lighting, air conditioning/heating systems, gas, curtains and all other home devices using touch-screen wall pads, mobile remote controllers and even smartphones, computers and tablet devices. The Cisco TelePresence unit will enable real-time video communication and provide a window not just to family members, but also to a host of service providers such as schools, banks and the government."<sup>26</sup>

As what is likely the most complete installation of its kind, Songdo will serve as a testing ground for success and acceptance of the various aspects of the u-Life technologies. <sup>27</sup> The systems will likely be more acceptable in Asia than in the West, as the Korean culture tends to value early adoption of new technologies. <sup>28</sup> Resistance would likely be greater in the West, where ubiquitous digital controls evoke 1984, Orwell's dystopian vision of big brother watching us. <sup>29</sup>

The electronic controls of the u-Life system are likely a key element of the realization of the development team's goal for sustainable operations of the city. This is a situation where digital intrusion and control in public and private spheres fosters the greater public good of sustainability. The ethos of sustainability seems to extend the social contract. No longer do citizens just surrender certain freedoms for the good of their fellow citizens. Sustainability requires, in addition, that citizens give up some personal liberties for the good of the planet and its current and unborn denizens of all species.

Is the intrusion of the public realm via cyberspace merely a necessary evil, or does it serve as a positive force in the life of Songdo's inhabitants? In "Is Your City Smart Enough," Steve Hodgkinson posits a set of digital checks and balances, two opposing tendencies in digital technology, digital city strategies and digital society initiatives. The digital city strategies are infrastructure to improve city functioning. These projects include "digitization of processes and systems in urban planning, transport, healthcare, education, utilities, and buildings." Digital society initiatives are emergent projects that "stimulate self-help and co-production behaviors in the community, strengthen social capital, and engender digital inclusion. These complement public services, but also hold them to account."<sup>30</sup>

## **ENDNOTES**

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Will the citizens of Songdo utilize digital society initiatives to form a robust civil society in Cyberopolis? Will digital technology subject the citizens of Songdo to surveillance, manipulation and control? Or will it set them free?

# **CONCLUSIONS**

Considering the city of Songdo as three separate cities, we discussed the extent to which Songdo serves as a manifestation of the three characteristics of the post-modern city that Michael Sorkin identified twenty one years ago, ageographia, control, and simulation. As Songdo is a city in the process of becoming, we do not offer a definitive interpretation, but rather recognize the ambiguous potentials for later evaluation.

When we consider Songdo as Aerotropolis, we see on the one hand an example of ageographic, generic urbanism. On the other hand, we see a city that clearly defines itself by its location and reach, as the hub of an Asian business district. It is a city connected to it's place and planet by sustainable design strategies. On the one hand, the manifestations of the public realm appear disconnected from Korean tradition. On the other hand, the new buildings, the adoption of English, and the cutting-edge technologies resonate with current Korean culture and aspirations.

When we consider Songdo as a Metropolis, we see on the one hand an example of a theme park - a collage of allusions to well-known imageable cities around the globe. On the other hand, we see the references to historic urban precedents as a form of shorthand for the values and characteristics of good public spaces. We see a city committed to sustaining an economically diverse community, yet lacking in demonstrated success in this area.

When we consider Songdo as a Cyberopolis, we see how the ethos of sustainability can require citizens to cede freedoms in favor of certain forms of surveillance, control, and manipulation in order to secure the rights of the global community and future generations of all the planet's species. On the other hand, we see the potential for the extension of civil society into cyberspace through the enlightened use of digital social initiatives.

Songdo has multiple possible futures. It may mature to fulfill Michael Sorkin's negative vision of the city as theme park. Or, Songdo may become a positive model for sustainable urbanism in the age of ubiquitous global and cyber culture. This paper suggests a framework for future analysis of a more fully constructed, inhabited, and functioning Songdo.

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