SUPERSCRIBING SUSTAINABILITY: THE PRODUCTION OF CHINA'S URBAN WATERSCAPES

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HIGHLIGHTS

- Details the emergence of shan-shui aesthetics in early Chinese landscape poetry and its re-emergence in contemporary China's built environment in conjunction with sustainable urbanism.
- Shows links between the production of sustainable urban landscapes, ideas of urban nature, the reproduction of expert claims, and the political economy of place making in China.
- Develops theories of cultural and aesthetic signification by addressing the limits of the superscription of symbols through emprical accounts of state developmental framings and lived experiences of urban space.

ABSTRACT

This paper analyzes the linkages between urban waterscapes, nature aesthetics, and sustainability by delineating the re-emergence of *shan-shui*, translatable as 'mountain-water,' or 'landscape,' within contemporary urban China. I show how this aesthetic concept, originally emerging in third century Chinese landscape poetry, is used to reconfigure and reimagine sustainability and contemporary China's urban landscapes. I draw on original mixed methods fieldwork, including interviews over a two-year period, digital archiving, historical texts and discourse analysis. Through these methods, I detail the emergence of shan-shui aesthetics then draw on the concept of superscription, the historical process of layering symbolic meanings, to understand the contemporary superscription of shan-shui with urban sustainability through the writings of prominent Chinese scientists and urban planning experts. Their productive work generated a new imaginary of teleological urban modernity that superscribes shan-shui with urban sustainability as the "shan-shui city." Through two primary case studies, Tangshan Nanhu Eco-city and Meixi Lake, I show how the production of new sustainable urban waterscapes is linked with place making practices, territorial processes, and localized entrepreneurialism. Finally, I point to the limits of superscription, by highlighting the significant disconnect between the state framing of urban space and the lived experiences of urban residents, which I conceptualize as the osculation of the state. The paper, thus, intervenes in literatures regarding the historical transformations of cultural symbols, aesthetics, urban political ecology, and the political economy of place-making in China.

ARTICLE HISTORY

KEYWORDS

1. INTRODUCTION

While working at the interface of a sustainable cities program in the U.S. and China, I became intrigued by what urban planners in China articulated as a way of approaching sustainable cities that drew on ideas from classical Chinese landscape poetry, nature, and aesthetics. This involved the incorporation of the term *shan-shui*, a word made of the characters for mountains and water translatable as "landscape," which was being used to describe the process of building sustainable cities with *Chinese* characteristics. In this paper, I draw on interviews conducted with two state-run urban planning firms and residents at multiple sites across China over two years, material from urban plans, project descriptions, digital artifacts, historical works and contemporary news media to trace the historical shift in *shan-shui* from its 3rd century C.E. usage in landscape poetry and nature aesthetics, to its more recent association with Sinicized sustainable urbanism from the 1990's onward.

According to normative readings, the characters shan-shui connoted nature and natural processes from their first appearance around 220-C.E., which found aesthetic expression in landscape poetry, and later in landscape-ink paintings, and garden design (Hardie, 1988; Osvald, 1956; Soper, 1967). Now the newly minted "shan-shui city" is taking physical and aesthetic forms through urban redevelopment projects, new city developments, and urban imaginaries that draw on the "*shan-shui city*" as timeless, essentialist Chinese heritage. Abramson (2006) has shown that urban redevelopments and ground-up building projects in urban China are part of common practices found in "cultural heritage preservation," which entail intensive re-imagining of the past. In this paper, I detail the processes of knowledge production stemming from experts in science, architecture, and urban planning whose collective efforts provide an epistemological basis for transformation urban landscapes into new urban waterscapes; what they refer to as the "shan-shui city". Hence, I analyze the emergence of this urban paradigm, albeit fraught with contradictions, that (re)formulates symbolic and physical urban spaces. I draw on Prasenjit Duara's theory of superscription (Duara, 2009) to conceptualize the process whereby this culturally resonant signifier undergoes an historical evolution of symbolic meaning.

Duara (2009) theorizes superscription as an historical process of layering new meanings into symbols. It is a process by which *new* semantic linkages are formed. Superscription occurs through a complex relationship between symbols and meanings, which entails simultaneous elements of continuity and discontinuity (Duara, 2003; Duara 2009, p. 69). Continuity, in this sense, refers to the resonant relation to the cultural symbol, i.e. that which is retained, in this case primarily linkages with ideas of nature and aesthetic content. Discontinuity refers to that which was not previously associated with the symbol i.e. that which is newly ascribed, here urban sustainability and the symbolic capital of modernity. The contemporaneous nature of continuity and discontinuity serve to legitimize converging representations of meaning. Hence, superscription does not erase previous symbolic meanings, but previous iterations come into a new relationship within the interpretive arena. In this work, I show how classical notions of *shan-shui* become supserscribed as sustainable urbanism. Duara's use of superscription displays the highly convertible nature of cultural symbols as well as their efficacy to produce social effects. While recognizing that the evolution of the symbol creates continuity within the discontinuous process of symbolic production, I augment this conceptualization of the fluidity of cultural signification, by advocating greater attention to the limits of superscription. Finally, I consider the political economy of place making surrounding this form of urban imaginary in contemporary China's built environment.

This work responds to scholarship that calls for showing how the "urban" is never separate from nature, is inextricably political, and intimately connected to flows of capital (Gandy, 2002; Gandy 2006;

Heynan et al., 2006; Kiel, 2003; Swyngedouw 2003, p. 96). I adopt an ecological view of cities, which recognizes the inextricability of nature and scientific use of urban space, as well as the necessity to take into account the role of capital and social power in the production of urban space. This entails a political ecological approach to understanding a dialectics of Nature and Society by "studying the processes by which environmental imaginaries are formed, contested, and practiced in the course of specific trajectories of political-economic change" (Peet and Watts, 1996, p. 263; Peet and Watts 2004, p. 19). I show how discursive ecological formations emerge through the reformulation of shan-shui, in the form of the shan-shui city to produce ways of understanding nature, modernity, and transformations of urban space. This informs multiple senses in which the environment is constructed physically and discursively creating both new urban landscapes, as well as distinctly *Chinese* imaginaries of sustainable urbanism.

This urbanism is consistent with futurist urban modeling trends of recent decades within East Asia that mix state entrepreneurialism and 'sustainable' infrastructure to create portable and replicable city branding rubrics (Roy & Ong, 2011) while, in this case also challenging the primacy of Western symbolic capital (Ren, 2008; Ren, 2011), and cohering to widespread trends of 'urban sustainability fixes' (White et al, 2004, p. 551). This departs from previous patterns of soviet-inspired socialist-era urban forms, which were instruments of industrial functionality, instead emphasizing a *Chinese* aesthetic with strong nationalist overtones. The banality of these 'vernacular' forms, flag for individuals their place in the nation (Anderson, 1991; Billig, 1995) informing contested cultural terrain, even if, or perhaps as my interviews with urban residents suggest, *especially* if one remains unconscious of this symbolic interaction wherein banal symbols interpolate with the hegemonic projects of governance. In the case of the shan-shui city, this symbolism serves immediate entrepreneurial and political functions by generating municipal revenues and facilitating *osculation* within the state i.e. the communicative moment in which various branches of the state share a common vision of development. These interventions provide a lens to understand the process of this historic shift in meaning, which generates new understandings of modern urban nature, new urban landscapes, and reveals the limits of cultural signification.

2. EARLY CHINESE NATURE POETRY: *SHAN-SHUI* (LANDSCAPE) AESTHETICS AND REVISIONIST TERRITORIAL READINGS

Scholarship on the emergence of *shan-shui* emphasizes one of two primary themes; one emphasizes ontology and, its emergence from earlier works of metaphysical poetics (*xuanyanshi*) (Yip, 1997, p. 130; Watson, 1971; Cai, 2004, p. 10; Elvin, 2004), the other emphasizes territoriality (Huang, 2010). Both shed light on important aspects of shan-shui, which arose in conjunction with landscape poetry and the writings of poet and statesman Xie Lingyun during the 3rd and 4th centuries C.E. At that time, "shan-shui" began to be used in conjunction with the poetic movement called *shan-shui poetry* (*shanshuishi*). Shan-shui poetic style evoked natural scenery and communicated images of the natural environment including mountain, forests, and other forces of the natural world embodied in imagery of fantastic landscapes, majestic waterfalls, and sanctified mountains. Yip (1976) argues that "the rise of shan-shui poetry in the third and further centuries played a key role in a shift of sensibility that led to the formation of an aesthetic attitude uniquely Chinese" (Yip, 1976, p. 168). The analytic tendencies found in shan-shui poetry's precursory metaphysical poetry (*xuanyanshi*) were tempered to promote realizations of ephemerality, and non-duality. Xie Lingyun is often referred to as the father of shan-shui poetry and normative readings suggest that the shan-shui aesthetic promotes harmony with the natural world and correlates with the reduction of concerns with the individuated self (Watson, 1971;

Frodsham, 1967, p. 86). Landscape descriptions, idealized in poetic form, communicated an ethical and ontological world-view (Frodsham, 1967, p. 88). Elvin (2004) describes this elite landscape aesthetic as:

> ...an attitude toward the landscape that saw it as the exemplification of the deepest workings of the cosmos. As not a momentary, but perpetually present and accessible revelation. The eye endowed with understanding could see in a landscape the self-realizing patterns of the Way, the ever-renewed cycles of the complementary impulses driving the world's changes. It could divine the geomantic fields of force in protective mountains and power-concentrating pools of water. (p. xxi-xxii, p.321)

From the fifth century the term shan-shui began to be used in conjunction with a style of landscape ink-paintings (Osvald, 1956; Soper, 1967) called *shan-shuihua,* which incorporated aesthetic components and later also found expression in garden design. During the Six Dynasties period (222-589 C.E.), garden design changed drastically, reflecting this cosmologically informed aesthetic. This included movement away from utility in favor of symbolic representation, decrease in size, and the construction of artificial hills, lakes, and ponds to symbolize mountains and waters. These aesthetic spaces created through poetry, painting and gardens elicited the viewer to return to their "natural state of being" (Cai, 2004, p. 151-152). Hence, this shan-shui aesthetic, through poetry, paintings, and garden spaces directed the viewer towards the realization of one's essential ontological state (Cai, 2004, p. 140).

Critical scholarship on the emergence of shan-shui poetry and the figure of Xie Lingyun challenges the normative ontological-aesthetic narrative, instead offering an historically rich revisionist account that both de-sacrosanctizes Xie and shan-shui. Huang's (2010) scholarship shifts the focus of shan-shui poetry away from the nature-aesthetic, instead connecting it to the epistemic category of *youlan* (游 览). "This compound is comprised of *you*, a generic verb for excursion, which includes activities such as banquet outings, hunts, sightseeing, and royal tours of inspection, and *lan*, whose basic meaning 'to panoptically behold the surrounds', signifies an entire class of viewing modes, such as surveying land, observing phenomena, making oneself visible as well as to read and intellectually penetrate" (Huang, 2010, p. 3). Through practices of 'excursion' (*youlan*), Huang shows how statesman like Xie Lingyun, created economically productive estates through land surveys. Once land was surveyed it could be claimed by strong clans, such as Xie's via projects of landscaping. The land then became large familial estate gardens. "A landscape, once landscaped, became private property; a frontier was claimed by reclaiming it for regular and profitable use" (Huang, 2010, p. 94). Xie's position as an imperial official allowed him to conduct landscape tours marshaling the great material forces of imperial excursions to create estates, which transformed the natural landscape on a scale with public works. Mountain passes were created, waterways dredged, and paths cut through forests to make territorial claims on land. These excursions for landscape surveillance reflected tensions between powerful clans and the empire over claims of land sovereignty. Hence, Huang's scholarship links shan-shui landscape poetry with the practices of *youlan*, and land survey excursions, showing the interconnection between landscape poetry and territorial politics of prospecting land for development. This revisionist account of shan-shui poetry points to crucially important territorial and economic implications, which accompanied ontological and aesthetic predilections so readily emphasized in normative readings of classical shan-shui landscape aesthetics. I contend that the territorial, economic, ontological, and aesthetic are central in understanding shan-shui's emergence, but are also central within the contemporary moment, given the recent superscription of shan-shui with sustainable urbanism in contemporary China.

3. QIAN XUESEN AS CATALYST FOR THE SHAN-SHUI CITY: SUPERSCRIPTION AND THE HISTORICAL EVOLUTION OF SYMBOLIC MEANING

"Truth is to be understood as a system of ordered procedures for the production, regulation, distribution, circulation, and operation of statements" (Foucault, 1984, p. 74).

Qian Xuesen (1911-2009), the father of China's nuclear armament and space exploration programs, is emblematic of modernism and a central figure in the superscription of *shan-shui* with sustainable urbanism. During the early 1990s, a cohort of urban visionaries carried out a series of letter correspondences with Qian to discuss the future of cities in China. The circulation, publiation, and reproduction of these letters between Qian and architectural and urban planning elites, first published in 1993, formed a textual basis for subsequent dialogue surrounding *shan-shui* in the urban environment. In subsequent publications and media, Qian is heralded as the "father" of the *shan-shui city* (Bao, 1999; Chen, 2010; Fu 2004). His letter correspondences with China's planning elites are reproduced in multiple publications and in innumerable online forums. The reproduction of these letters and the distirubtion of texts repeatedly referencing Qian and the shan-shui city, serve to intimately intertwine the symbolic capital associated with the father of Chinese modernity and *shan-shui* sustainable urban development.

In a July 31, 1990 letter from Qian Xuesen to Tsinghua architect Wu Liangyong, Qian writes about the possibility of building a shan-shui city in which people can "return to nature" lamenting how people have "left nature and are in need of returning to nature again" (*ren likai ziran, you yao fanhui ziran*) through a particular stylized form of urban space (Bao, 1999, p. 47). This letter is the beginning of an exchange in which he advocates for a contemporary shan-shui city where people can live in a modern urban environment while feeling connected to nature. In this letter, Qian highlights the possibility of building shan-shui cities that incorporate Chinese poetry (*shanshuishi)*, landscape ink-painting (*shanshuihua)*, and classical garden design. In so doing, he aimed to create cities that reflect, what he feels, are quintessential Chinese characteristics. In an August 12, 1991 letter, Qian Xuesen writes to architect Bao Shixing addressing the progress of civilization and 'sustainable urbanism' again advocating for building the shan-shui city (ibid. p. 59-62). In the following years Qian exchanged many letters with elite urban planning experts addressing matters ranging from the ministry of construction's need to green (*lühua*) cities to the principles for "city garden building" (Bao, 1999, p. 75). The reproduction and circulation of these letters are essential components of the diffuse creative processes that intimately linked Qian with the idea of the shan-shui city and the shan-shui city with the vision of *Chinese* sustainable urbanism (Chen, 2010).

One of the early events prompting the discussion of this 'new urban style' came during the conference entitled *Shan-shui City - Looking to the Future of China's 21st Century Cities* held on February 27, 1993, which attracted an array of urban designers, architects, sculptors, artists, and literary scholars (Fu, 2004, p. 4). Multiple interpretations of the shan-shui city idea emerged over the following decades and in 2011, the Chinese Society of Landscape Architecture held a conference in Guangzhou in remembrance of Qian Xuesen's 100th birthday. The conference stressed the symbolic aspects of *shan-shui*, as an expression of harmony between the natural and built environment, thus "amplifying a harmony between humans and nature" (*tianrenheyi*) within processes of urban development (Zhang et al., 2011). It also highlighted Qian's contribution to the reintroduction of garden aesthetics in urban landscapes and the development of, what by this time had taken on the name, "shan-shui city theory." This apotheosis of Qian Xuesen is instrumental in formalizing the modernist, yet *traditional*, connotations of the shan-shui city.

3.1   The Shan-shui City and the Telos of Modern Urban Waterscapes

From the 1990's onwards the *shan-shui city* continued to be adapted and utilized to articulate urban developments and transformation. Efforts to utilize *shan-shui* as a culturally resonant symbol within contemporary urban space manifests primarily in two ways; one is through new city developments and the other is through urban redevelopment projects. In multiple forms of media and urban representation, the shan-shui city is used to frame a teleological process of making continual improvements and building urban infrastructure *with* nature.

Figure 1:   Ma Yansong's "Shan-shui City" a Digital Rendering (Ma, 2013). Reproduced
                 with Permission from MAD Architects

The variety of iterations are expansive in scope, yet patterns emerge as many cities begin to either build new shan-shui cities or take steps towards *becoming* a shan-shui city through urban redevelopment. Near the end of 2012, MAD architect's Ma Yansong released the design "Shan-shui City," (see Figure 1). He describes this project, currently slated for construction in Guiyang, as a set of towers built in symbolic pattern like a mountain range, drawing on the aesthetic of shan-shui landscape-ink painting. Ma discusses the design as pursuing connection with nature by 'refashioning' traditional Chinese concepts through modern city design. He describes it as both a reevaluation of the present and a look at the future of city design with an emphasis on blending urban construction with the natural environment. Ma aims to combine human and emotive elements in his version of the 'Shan-shui City', which includes green-spaces, water, and mountain elements, waterfalls and interconnecting terraces that provide "the articulation of feelings" in urban space (Ma, 2013). This is just one ineration of a shan-shui city urban imaginary.

A multitude of sources including urban plans, various publications, and news media communicate a teleology through which a regular city, can transform into a *shan-shui city* by engaging in practices of urban sustainability. These practices include but are not limited to: retrofitting urban infrastructure for increased energy efficiency, improving transportation networks, emissions reduction plans, increasing urban green space, transitioning to a renewable energy infrastructure, building ecological corridors, installing water promenades, creating green belts, promoting walkability, and various forms of cultural preservation (Deng, 2011; Du, 2013; Huang & Cheng, 2011; Huang & Chen, 2010; Jun, 2006; Li, 2011; Li, 2013; Lin, 2012; Ma 2013; Ran, 2013). For each of these practices the shan-shui city is used as both a descriptor for ongoing change and a demarcation of a final stage of attainment wherein a city can become an "advanced shan-shui city" (*gaoji shanshuicheng*) (Bao, 1999; Fu, 2004). Framing urban development as a progressive teleological process in this way draws on resonance with the past and bolsters city imaging, evident in the following two case studies.

3.2   From Peri-urban Villages to Shan-shui City: The Case of Meixi Lake, New City Project

In early 2012, construction for a new city development called *Meixi Lake* began southwest of Changsha near the Xiang Jiang River. The master plan describes Meixi Lake as a city that will "establish a paradigm of man [*sic*] living in balance with nature" through dense mixed-use buildings integrated with mountains, lakes, parks, and canals (von Klemperer et al., 2012). This site will be part of the new Pioneer Zone development region, which so far has razed over a dozen villages in the construction process. The Pioneer Zone is billed as a new center of commerce and is also part of larger national production trends as China relocates many commercial enterprises from the East coast inland. Slated for completion in 2020, Meixi Lake will have a 3.85-kilometer human-made lake, built by diverting local water west of Changsha (Lu, 2012). The new city is designed to house 180,000 residents within 'sustainable neighborhoods.' The urban forms designed and described in the Meixi Lake master plan draw on themes of classical Chinese landscape gardening and the creation of mountain and water (shan-shui) aesthetics, and landscape ink-painting.

The master plan emphasizes Meixi Lake as a 'new model' for Chinese urbanization, which integrates gardens, walkability, advanced environmental engineering methods, and cluster zoning. Central to the thematic composition of the urban design (see Figure 2) is the emphasis on water with an artificial lake as a central feature surrounded by a central business district and mixed-use development from which a series of radial canals extend into eight neighborhood clusters.

Meixi Lake's design has a tiered approach to water treatment with a system of black water processing, which will treat water from the city with wastewater biotechnology and then redistribute the disinfected grey water for irrigation, use in toilets, and road cleaning. Storm water collection systems

consisting of biofiltration planters and bioswales will line sidewalks and medians. These filter rainwater before flowing into the lake, which will employ a circulatory filtration system to ensure water quality. The waste processing system is designed to produce fewer emissions than standard waste disposal systems and generate electricity and thermal energy including systems of pneumatic waste collection that direct waste to an underground sorting area. From there it will convert organic wastes to biogas in an anaerobic digester, which will then be distributed in Meixi Lake (von Klemperer et al., p. 20). The plan boasts localized energy production through four trigeneration plants, in which waste will be used to generate heat, electricity or cooling. Each is intended to generate 500 megawatts of electricity and will connect to the municipal electrical grid. The skyline evokes mountain imagery, mimicking the slope of a mountain continually escalating in height reaching its zenith through a gradual rise up to 400 meters in the very center of the central business district. The design aims to create an experience of being "one with nature, with architecture and human activity merely dotting the landscape as in traditional Chinese landscape paintings" (von Klemperer et al., 2012 p .56). Hence, Meixi Lake draws on aesthetic and thematic elements of the shan-shui city including an emphasis on water through human-made lakes, mountain imagery, and sustainable urban design.

Figure 2:   Meixi Lake Project Digital Design Image, Aerial View (von Klemperer et. al., 2012). Reproduced with Permission from Kohn Pedersen Fox.

3.3   From Brownfield to Shan-shui City: The Case of Tangshan Nanhu Eco-city, Urban Redevelopment Project

Tangshan Nanhu eco-city is an urban redevelopment project in Eastern Hebei province. Urban planners involved in the project actively drew on the shan-shui city idea during the design and building phases of the project (Hu, 2014; Hu, 2012; personal interview, July, 2014). The project aimed to revitalize a largely abandoned brownfield site, which held large amounts of industrial waste. During the construction process, the industrial waste was gathered and reused as construction materials (see Figure 3).

Figure 3:   Tangshan Nanhu Eco-city, Methane Generating Industrial Waste Hill in Early Construction Phase (Hu, 2014). Reproduced with Permission from Tsinghua Urban Planning and Design Institute.

The ground was dredged and converted into a series of artificial lakes through a diversion of local water sources. The lake areas are designed to purify 80,000 tons of reclaimed wastewater from the city through systems of aquatic aeration and purification. The industrial waste was piled together to make a 50-meter hill, which was sealed with low-density polyethylene and covered in soil to form an integral part of the landscape aesthetic.

The embankments of the hill are interwoven waste and botanical materials to prevent erosion and deformation. In addition, infrastructure was added for converting the methane created from the sub-soil industrial waste into energy. However, since its completion in 2009, none of the water purification systems have been connected to the municipal water system, nor has the methane generating rubbish hill been connected to distribute methane gas to the city. Instead, the methane is drained off into the atmosphere, thus showing the difficulties of implementing sustainability-oriented designs within municipalities (personal interview, July, 2012).

Tangshan Nanhu, as well as Meixi Lake, display departures from previous patterns of urban design where urban form was an instrument of industrial functionality. These signify changes toward a techno-centric-sustainability-model of urban planning. This model is helpful in drawing capital into

the space of the city, which is one of the primary goals of urban governance in the entrepreneurial mode (Harvey, 1989; White et al., 2004). Both the urban form and marketability associated with this city place making model reinforce efforts to attract capital into the space of the city through practices of place making.

Figure 4:   Tangshan Nanhu Eco-city Completed Brownfield Redevelopment Project (Hu, 2012). Reproduced with Permission from Tsinghua Urban Planning and Design Institute.

4. POLITICAL ECONOMIES OF URBAN PLACE MAKING

When Tangshan Nanhu Eco-city was completed in 2009, the nation-wide percentage of extra-budgetary revenues generated by municipalities in China through urban construction projects, sub-contracting development, and municipal land use sales was a staggering 85%. This figure stems from the central government increasing the tax burdens on municipalities during the mid-1990's, which redirected the bulk of municipal revenues from locally favored taxation policies of the 1980's that had allowed cities to maintain the bulk of extra-budgetary revenues, towards the central state (Oi, 1999). As a result, urban development came to constitute the core strategy for municipal governments to generate revenues. This policy shift precipitated immense pressure on municipal state actors to exert territorial dominance and extend urban jurisdiction further into areas previously zoned rural. It also extended the roles of municipal governments as city developers, land managers, and statesmen through efforts to generate revenues for the municipality (Hsing, 2010), which intertwined the political economy of demolition and relocation with localized place making.

China's urban political economy is increasingly defined by inter-city and regional competition for investments and financial subsidies from the central state (Wu & Zhang, 2007). Under the 2011 5-year plan, the Chinese central government offered to cover up to 30% of construction costs in subsidies if the project in question includes appropriate combinations of "ecological principles" e.g. if they include energy saving techniques, such as grey water recycling or localized energy generation (van Dijk, 2011).

Cities are thus taking various measures to implement ecological and sustainable design principles via multidisciplinary planning within their city as they compete for these subsidies (He et al., 2012). Hence, China's cities compete to distinguish themselves through various place-making strategies, especially sustainbility-oriented strategies.

High-level urban planners and architects working in state urban design firms emphasized the utility of using the shan-shui city to communicate with municipal government officials. Interviewees described the shan-shui city as a place-making strategy to create new cities and to frame urban redevelopment projects as a means to connect humans and nature. They suggest that the shan-shui city operates as a mechanism for the marketing and place-production of cities, which is useful in securing projects with government power-brokers who have the ability to regulate land development. These urban planners and architects operationalize the shan-shui city as a mechanism for securing design contracts for new city and urban redevelopment projects.

 One vice-director of an urban design firm stated that local officials "*have Chinese traditions in their bones, …utilizing shan-shui incorporates ideas, which are highly ingrained in popularized behavioral norms, in this way when discussing with decision-making government officials it can be used to smooth the process. Using [the shan-shui city] to market a plan has been useful as officials are able to be persuaded through [it's] use…leading to many relatively ideal projects*" (personal interview, July, 2012). Multiple interviewees within the urban design sector suggest that the 'shan-shui city' operates like a type of city branding (*chengshipinpai*) and one of the steps in this process is to work with government officials to "*make the shan-shui city idea become …the government's ideal*" (personal interview, June, 2014). Qiu Baoxing, the Deputy Minister of Urban-Rural Development, suggested in a speech at the China Development Forum's annual conference, that the shan-shui city is firmly planted in the government's ideal of China's urban future stating that, "*through urban design, China's shan-shui city concept can become a reality reflected in contemporary cities*" (Qiu, 2013). For the branches of the state involved in planning China's cities, the shan-shui city reifies notions of teleological development bridging humans and nature in effort to create sustainable urban environments. Operationalizing the shan-shui city is a crucial strategy both in narrating urban development between municipal state authorities with the power to choose regional place-making specificities and within the competitive processes of attracting capital to the city. I conceptualize this process, wherein different wings of the state come together in the communicative realm to narrativize and direct urban development within the aforementioned teleological and culturally specific modalities as state osculation. State osculation, in this form, shows the entrepreneurial and territorial efficacy of superscribing *shan-shui* with sustainable urbanism in contemporary China.

My interviews with residents in Tangshan Nanhu Eco-city, however, suggest that these visions of place production differ from lived experiences of urban space. Interviewees did not make strong connections with the shan-shui city idea, Chinese history, or the teleological notions communicated through urban design plans, government pronouncements, and news media. Instead, interviewees stressed the newness of the contemporary landscape and its historical *discontinuity*. One resident stated, "*this is just another urban development project, it does not have anything to do with Chinese culture; it is a totally new construction*" (personal interview, July, 2014). Interviewees emphasized how this space was just like any other large park in China. Residents of Tangshan Nanhu Eco-city articulated their experiences in ways that show significant disconnect between the environmental narrative of the technocratic state-planning complex and their everyday experiences of these urban spaces. From the lived experiences of these residents inundated with construction projects, the emergence of Tangshan Nanhu in a previously abandoned brownfield reads as banal. In this banality, the mediating veneers of digital imagery, urban plans, and municipal government rhetoric are affectively transparent enough to evade conscious recognition of living in the "shan-shui city."

5. CONCLUSION: STATE OSCULATION AND THE LIMITS OF SUPERSCRIPTION

This paper shows how the superscription of *shan-shui* with sustainable urbanism is intertwined with the reproduction of expert claims, transformations in the built environment, and the political economy of place making. This entails narratives of teleological progression for already existing cities to *become* shan-shui cities and the building of new shan-shui city developments. Both involve municipal actors and state urban design firms framing urban transformation as sustainable, progressive, historically continuous and essentially Chinese. The reproduction of authoritative statements in exchanges between Qian Xuesen and urban planning elites regarding the shan-shui city, apotheosize Qian and initiate the process by which sustainable urbanism is superscribed with the "shan-shui city." The epistemological framework generated through this process reformulates resonant aesthetic symbols from the past for the present. Within this emergent episteme, the production of contemporary urban waterscapes and urban environmental transformations in China more broadly are framed as teleological processes towards heightened integration with nature, while simultaneously underlying territorial processes and urban entrepreneurialism.

Shan-shui city modeling attracts capital into the space of the city generating extra-budgetary revenues, and attracting central-state subsidies slotted for sustainable urban development. Design firms also draw on the shan-shui city in their interactions and bids with potential municipal government clients to secure the opportunity with these state land brokers to plan the urban space under and, at times, beyond their jurisdictions. In this interpretative arena of place making, osculation occurs between branches of the state, wherein municipal government officals and state urban design firms, come together sharing heterogeneous but overlapping understandings of the shan-shui city, via the superscription of shan-shui with sustainable urban development. Osculation occurs as each actor draws on a common language of symbolic meaning in pursuit of shared developmental ends. The contradiction between technocratic visions of urban space and the lived experiences of residents of shan-shui city projects casts light on the political and ideological function that such visions provide, and for whom.

The lack of resonance with everyday residents' urban experience shows the dearth of power to narrativize urban development outside of state circles. This suggests that the shan-shui city is a critical domain for understanding urban nature and transformation within the state and a subliminal text outside of state circles. Significant in this account of the superscription of symbols is how it contrasts with previous theorization (Duara, 2009), which showed how state deployment of superscribed symbols for socio-political ends have had immediate and direct social-behavioral effects. Instead, in this case, we see that residents do not make the symbolic connections connoted through superscription. The urban spaces designed and promoted as the shan-shui city are not recognized as such in the everday lives of residents. So, the superscription of shan-shui with sustainable urban development reveals the imperative of recognizing processes of signification as necessarily delimited. Therefore, we must augment our understanding of the superscription of symbols and the evolution of symbolic meaning as necessarily bounded processes. These delimitations mediate multiple geographies and competing spheres of meaning surrounding China's past, developmental present, and potential urban futures.

ACKNOWLEDGEMENTS

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