THE RELATIONSHIP BETWEEN SOUNDSCAPE AND CHINESE CULTURE -- A CASE STUDY OF THE WEST LAKE SCENIC AREA

J. Ge¹*, M. Guo², Y. H. Zhu³, J. Jia⁴, Y. Zhang⁵

ABSTRACT: Soundscape is a new interdisciplinary field of landscape and acoustics. This paper is intended to study the relationship between soundscape and culture. That is, the Chinese culture's pursuit of acoustic beauty from three aspects as poetries, writings and drawings. It is demonstrated by the case study of soundscape in West Lake scenic area, with particular emphasis on humane attribute. The study has approached by three steps as classification - case study - promotion to region. The major attractions of West Lake scenic area is divided into natural and artificial categories, and the typical cases selected are "Orioles Singing in the Willows" and "Evening Bell Ringing at Nanping hill." The two cases are analyzed from two aspects as the cultural background and humanities artistic conception, in order to prove the subject. And the importance of soundscape culture research to the construction of West Lake scenic area is declared further.

Keywords: Soundscape; Humanity; West Lake scenic area; Landscape

INTRODUCTION

Soundscape research

The term "soundscape," a compound word of "sound" and the root "-scape," was coined by Canadian composer R. Murray Schafer at the end of 1960s. Compared to landscape, soundscape denotes "landscape of auditory perception," that is: admirable and memorable sounds in urban and rural environment or in nature from the perspectives of aesthetics and cultures.

As opposed to the long-term process of people merely emphasizing on visual elements and practical functions in architecture and landscape design, this theory suggests "sound" as a vital part of landscape design, and improves the compatibility of acoustic environment to the integrated landscape for comprehensive soundscape design.

Humanism of Soundscape

Soundscape is a supplement and improvement to traditional landscape visual design pattern. According to

the definition of soundscape, it involves three elements: sound, environment, and human (Qin Youguo, 2005).

The term "human" as it is applied here means: cultural background and humanities artistic conception contained in the scenery, mainly history or culture. For example: poems, legends and traditions. It makes people an inherent impression on which sound should appear in particular scenery. So is the subjective evaluation of the landscape affected. For instance, the names of West Lake scenic spots "Orioles Singing in the Willows," "Evening Bell Ringing at Nanping Hill" can enlighten people how to appreciate and affects evaluation.

International, the influences of culture on soundscape cause attention gradually. Many countries have studied on the relationship between the soundscapes and their local cultures (Ge and Guo, 2012). In the management of the soundscape of US National Parks, the conflict between the natural sound experience and traditional sound-making human activities was researched, in order to preserve the natural soundscape and manage the park soundscape (Miller, 2008). On the 25th June 2002, the European Parliament and Council adopted Directive 2002/49/EC, also known as the "END" relating to the

¹ Ge Jian, Dept. of Architecture, Zi Jin Gang Campus, Zhejiang University, Hang Zhou, 310058, CHINA, & semitropical Archi-Science national key laboratory, South China University of Technology, Guangzhou, 510640, CHINA, gejian1@zju.edu.cn

² Guo Min, Dept. of Architecture, Zi Jin Gang Campus, Zhejiang University, Hang Zhou, 310058, CHINA, & semitropical Archi-Science national key laboratory, South China University of Technology, Guangzhou, 510640, CHINA, guominmonica@126.com 3 Zhu Yuheng, Dept. of Architecture, Zi Jin Gang Campus, Zhejiang University, Hang Zhou, 310058, CHINA, zyh701215@sina.com

⁴ Jia Jing, Dept. of Architecture, Zi Jin Gang Campus, Zhejiang University, Hang Zhou, 310058, CHINA, 156144189@qq.com 5 Zhang Yun, Dept. of Architecture, Zi Jin Gang Campus, Zhejiang University, Hang Zhou, 310058, CHINA, <u>35136794@qq.com</u> *Note:* Discussion on this paper is open until June 2013

assessment and management of environmental noise. EU Noise Directive values the subjective evaluation of the public, and has a goal of "informing and consulting the public." When addressing local noise issues, the directive gives enough respect to the local competent authorities by setting no limit value or prescribing no measures to be used in the action plans (European Commission, 2012). In 1996 the Ministry of Environment of Japan openly recruited people throughout the country concerned with the importance of local characteristics to compile a list of soundscapes deserving preservation. By the examination and selection of Japanese soundscape review seminar, one hundred significant soundscapes with particularly cultural meanings were identified from those suggested by the public (Wikipedia, 2012).

In China, there are already some researches on the relationship between soundscape and Chinese culture. Guo and Ge (2012) put forward the concept of sound expectation, and made "human" one of the three basic influencing elements for sound expectation. The soundscapes of scenic spots with profound cultural background in the West Lake Scenic Area were studied, and the Jingci Temple and Qianwang Temple were studied as cases (Yue Miao, 2012). Yuan Xiaomei (2009) studied the soundscape thought of Chinese classical garden with the traditional Chinese aesthetic ideology.

ACOUSTIC AESTHETICS IN CHINESE CULTURE

Historically landscape system can be divided into two categories as eastern and western landscape perspectives. Classical gardens in China and Japan, typically representing the eastern landscape, emphasize on artistic conception, and are the expression of introspection and eagerness to the nature.

Chinese Classical Gardens constitutionally values the experience of "human," which provide a poetic imagery and symbolized the ancient spiritual pursuit. This endows the gardens with strong cultural significance and immortality. Therefore, soundscape research on Chinese class gardens could be conducted focusing on this perspective of "human."

Chinese aesthetic ideas stress on unity and take harmony as beauty. Eyes, ears, nose, tongue, and body are all accesses to perceive beauty. Sound by ears, though invisible, is an indispensible part of one's aesthetic feeling. Chinese traditional aesthetic ideas are influenced not only by the hermit thought of Taoism to admire sounds of nature, but also the ritual thought of Confucianism to admire music of artificial instrument. There are continuous pursuits of acoustic aesthetics in Chinese history, including numerous works with acoustic descriptions and expressions and several scenic and historic spots named by onomatopoeia.

Acoustic Aesthetics in Literature

Poetry

< A Fair Maiden >, one of the earliest existing Chinese poems, is written by an anonymous author," Guan! Guan! Cry the fish hawks/ on sandbars in the river" (Song Yuanren, 1988). The poem <Zhao yin> written by Zuo Si in Jin Dynasty directly expresses the attraction of natural sounds for Chinese traditional aesthetics," no need for stringed or woodwind instruments/ the landscape can play."

In Tang Dynasty when Chinese poems reached the peak, there are many soundscape portraits, such as <At dawn in spring> by Meng Haoran "the wind and rain troubled my dream last night/ I think of all those petals swept to the ground.," <To Scholar Pei Di while living in Wangchuan mountain> by Wang Wei "I lean on the wooden doorpost in the breeze/ listening to cicadas chirring at dusk.," <Seven words to a line poem> by Du Fu "two yellow orioles in the tender green willow/ a line of herons crosses the blue sky.," <An old fisherman> by Liu Zongyuan, "the rising sun sets back the mist while the fisherman departures/ the creaks of his oar are heard in the greenness of mountain and river.." The poems above attempt to voice emotions or express desire by natural sounds changes. Furthermore, for instrumental music, in the <Song of the Lute> by Bai Juyi, it describes "The large strings hummed like rain, the small strings whispered like a secret, hummed, whispered, were intermingled like a pouring of large and small pearls into a plate of jade/ We heard an oriole, liquid, hidden among flowers, and we heard a brook bitterly sob along a bank of sand," depicting a "visual" portrait of the female lute player with her excellent accomplishments.

Song Ci is originally written to be sung to a tune with certain rhythm, rhyme, and tempo. As Yu Wenbao (1958) in Song Dynasty concludes, "Liu Yong's Ci, 'the riverside is strewn with willow trees while the morning breeze wafts with a waning moon', romantically was prepared for an adolescent girl to perform with red sandalwood allegro; while Su Shi's, 'East flows the mighty river / sweeping away the heroes of time past', was a song for a stout man with copper lute." There are many good phrases about sound, as <Yu Lin Ling> by Liu Yong, "mournfully chirr the cicadas," <Ta Sha Xing> by Qin Guan, "Sun set amid the moaning of cuckoos." The <Yu Mei Ren> by Jiang Jie reveals the unpredictability of life by different descriptions of feelings of rain, "when I was young, listening to the rain in courtesan pavilions, faint light of the red candles shined on the canopy/ when I was middle-aged, listening to the rain in a wanderer's boat, the clouds were low and the river was wide, the stray geese crying in the westerly wind/ now I'm listening to the rain in a monastery, with white hair at the temples."

This cultural tradition is handed down to Qing Dynasty, when there were 12 Cies with description of sounds: wind soughing, leaves rustling, drum beating, musical stone smacking, flute piping, dog barking, bird twittering, cattle lowing, insect chirping, mouse squawking, door creaking, baby sucking the breast and crying, loom clashing, jade pendants clinking, tea bubbling, temple belling, etc. (Lu Yitian, Qing Dynasty). These works prove the high sensibility of sound in Chinese traditional poetry and the preference for natural sounds and harmonious temperament of music.

Prose

<A Letter to Zhu Yuansi> written by Wu Jun in Liang of the Southern Dynasties describes the satisfaction of nature sound, "The stream embraces pebbles and makes ring-bell sounds; beautiful birds sing to each other in chirpy melody; cicada and apes sound Continuously." Ji Cheng in Ming Dynasty (1988) wrote," a temple is neighborhood to conferment the Buddha music.... In purple and cyan clouds, cranes' callings come into dreams; Beside the white duckweed and red polygonum, egrets group on the jetty... in a rainy evening, raindrops hit the leaves of Japanese banana like mermaids' sobbing... lights of the half moon reflect in the rippling autumn lake; rustling breeze disturbs guqin and books in the quiet cot." By meticulous scenery descriptions, these words show the formation of acoustic artistic conception, which declare that the design of soundscape has already existed and developed in Chinese landscape architecture history. <The discourse of realms>, the 12th chapter of the corpus <You Meng Ying> in Qing Dynasty (Zhang Chao, 2001) writes, "Such things as the color of mountains, the sound of water, the light of the moon, the fragrance of flowers, the charm of poets and the deportment of beautiful women can't be put into words, yet they have a power to captivate one's soul and linger in one's memories and dreams." While <The discourse of sounds>, the 15th chapter writes, "One does not live in vain to have heard the bird songs in spring, the cicada's song in summer, the insects' chirp in autumn and the sound of crunching snow in winter, furthermore, to have heard the sound of chess in daytime, the sound of flute in moonlight, the sound of winds whistling through the pines in the mountains, and the sound of rowing oars

from across the water." On the whole, it is portraiture of ancient Chinese literati, who desired the aesthetics of sound according to different seasons, moments and locations. Also <Flute playing at Convex Pavilion provokes melancholy; linking verses at Concave Pavilion betrays loneliness>, the 76th Chapter of <The Story of the Stone> in Qing Dynasty depicts the Jia family's Moon Festival banquet in Grand View Garden, with the music of a single flute far from groves of sweet osmanthus. "It seems that there are some special designs in this garden." This sentence said by lady Shi is the evidence of ancient Chinese's understandings of soundscape in landscaping and full consideration of acoustic environment while designing (Cao Xueqin, 1982).

Wang Guowei (1955) in the late Qing Dynasty said, "All landscape whisper emotional words." All literary outputs about sounds are close related with the authors' mood. Sound is a vital element in Chinese gardens. Without it in the landscape depictions listed above the glamour of natural beauty will be greatly weaken.

Acoustic Aesthetics in Painting

How to express the invisible sounds by the traditional Chinese paintings? Ancient Chinese artists were accustomed to make the spectators imagines by the visible action "listen." There are many paintings that hint at sound, from natural sounds to music of artificial instrument.

<Wind of pines on gullies> by Ju Ran (2011) in Song Dynasty (Fig.1) was one of the best paintings of natural



Fig. 1 <Wind of pines on gullies> and <Listening to the Guqin>



Fig. 2 <Listening to spring in bamboo groves>

sounds. In it, there are towering peaks, indistinct far mountains and floating clouds. Pine forest and a few cottages are in the mountain. Through the swaying pine trees by winds, it looks as if the soughing of Pines could be heard. An audible painting is like a poem.

<Listening to spring in bamboo groves> by Sheng Zongqian (2011) in Qing Dynasty (Fig.2) is another example for nature sounds. In it, bamboo groves and a stream surround a thatched cottage. In the cottage, a man sits by the window, seeming like listening to the wind and water. He looks so contented that the spectators can feel his quiet, uneventful interior.

Instrumental music is another object expressed in Chinese traditional painting. For instance, <Listening to the Guqin> by Zhao Ji (2011) in Southern Song Dynasty (Fig.1) In this painting, a sage dressed in Taoist clothes sits in the middle, with a ritual nod and dressing he begins to play the guqin. Two men in the foreground are seated against each other and smile understandingly, beside whom sits a lad, enjoying the music as well. The scene surrounded with pines, cypresses, bamboos and light smoke curling up, looking as if the hovering music entering the spectators' ears.

Acoustic Aesthetics in Scenery

As a tradition in Chinese history, sightseeing while admiring music had been circulating since ancient times. At the same time, many historic scenic spots were named after natural or artificial sounds.

Natural Scenery

"Wave sound of the Jin Jiang River" is one of the most popular attractions of the ancient Dan Xia. The Jin Jiang River trickles around the massif of the Dan Xia Mountain. With the ups and downs, the water sings beautiful songs.

"Stone Bell Mountain" is named for sound. < Recognition of Stone Bell Mountain> by Li Bo in Tang Dynasty records, "the mountain is above an unfathomable pool, in which breeze raises waves; water and rocks collide each other, producing sound of bell. Li Yuan thought it is the reason of the mountain's name." <Exploring of Stone Bell Mountain> by Su Shi in Song Dynasty textual researches on the denomination of this mountain "...in middle of the river there is a huge rock capable of holding a hundred people, which has breeze and streams passing in and out its numerous hollows, producing tapping sound of Bells and Drums, responding to the rumble before, like holding a musical performance..." Although the two judgments are different, the two authors both explained the scenery in the views of soundscape.

Traditional landscape with mountains and water always has wood-cutters' and fishermen's songs as a kind of original soundscape, represented by "woodcutters' song of Xiang Shan Mountain" and "Fishermen's Song of Li Wan bend" in the eight views of Guangzhou and "Fishermen's Song of Xian Jiang River" in Watertown of Zhouzhuang. As <On Yueyang Tower> by Fan Zhongyan in Northern Song Dynasty praised," the fishermen are singing, answering each other. How incomparably joyous they are!"

Ancient Garden

The concept of soundscape, though not explicitly introduced, was never neglected in pursuit of acoustic aesthetic in Chinese traditional landscape architecture. As it is expressed in <Preface to the Orchid Pavilion Collection> by Wang Xizhi in Eastern Jin Dynasty, "Truly enjoyable it is sit to watch the immense universe above and the myriad things below, traveling over the entire landscape with our eyes and allowing our sentiments to roam about at will, thus exhausting the pleasures of the eyes and the ears." Landscape in Chinese gardening, despite the image of plants and rockeries, has acoustic elements such as wind, raindrops, streams and animals.

Ancient Chinese gardens of humanities with mountain and water often have a focus on the acoustic environment, such as Rain Falls Listening Pavilion and Pine Wind Listening Place in the Humble Administrator's Garden, Suzhou connoting the owner's hope to stand aloof from worldly affairs and regard nature. Other examples include: Musical Stream in Ji Chang Garden, Wuxi, expressing one's affection for sound of natural water; Jade Exquisite Study of Surging Waves Pavilion, Suzhou, set off by tall bamboos of the north, surrounded by groves appearing playing a royal music concert when wind blows - as the couplet in it says, "bamboo soughing sounds as flute playing; stream flowing rings like Guqin performing."

HUMANITIES ANALYSIS ON SOUNDSCAPE OF THE WEST LAKE SCENIC AREA

Introduction to the West Lake Scenic Area

The West Lake Scenic Area, Hangzhou, China, is a famous national scenic resort and historic sites. It takes the West Lake as the center, with mountains ringed on three sides. The West-Lake-centered scenic area covers an area of 60 square kilometers with the lake surface of 5.68 square kilometers. It contains more than ninety parks and scenic spots. No matter what season and weather it is, the view is unique and colorful.

With a long history, West Lake Scenic Area is full of cultural atmosphere. In it, there are important cultural relic sites, 5 under national protection, 35 under provincial protection and 25 under municipal protection. In 2011, the West Lake Scenic Area has been declared world cultural heritage site.

West Lake is also known as Qiantang Lake. "Top Eight views of Qiantang Lake" appeared in Yuan Dynasty. The most popular version as "Ten views of West Lake" has come out since Southern Song Dynasty (Fig.3).

<Inscription for the spring lake> by Bai Juyi in Tang Dynasty poetizes, "I linger on and forget to return from Hangzhou, half due to the Lake." Every year, millions of tourists all around the world arrive here out of admiration. Because though the West Lake Scenic Area has been developed for ages to become a well-known garden, it still retains the natural beauty with less artificial polish.

Culture and Humanism in Artistic Conception of Soundscape in the West Lake Scenic Area

Apart from hypostatic sceneries the landscape contains, acoustic elements and artistic conception have not been disregarded in the area. Myriad types of sound in nature can't be imitated at large. In West Lake Scenic Area, the design methods of scenery borrowing or reproducing are used.

Culture and Humanism in History

The long history of the ten views of the West Lake Scenic Area has produced many artifacts relating to soundscape, including: poetry, prose, paintings and landscapes.

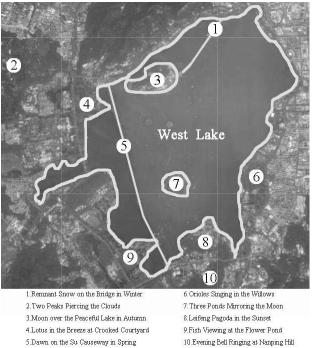


Fig. 3 The West Lake scenic area and ten views of West Lake

In the spots "Orioles Singing in the Willows" and "Evening Bell Ringing at Nanping Hill," sounds, whether they are nature or man-made, perform a vital role as one of environmental elements, and even be written in the name of the spots.

"Dawn on the Su Causeway in Spring" describes green willow trees on causeway, implying the birds' chirps at dawn. Just as the poem <The withy of West Lake> by Tian Shu in Qing Dynasty writes, "long and short willow branches sway in breeze on dikes of different lengths, orioles twitter 'cha-cha' in them/ Curtain of greenery and silks of smoke shelter the birds, but their song still can be heard in the west of the arched bridge."

"Lotus in the Breeze at Crooked Courtyard" is the vantage spot for viewing a tract of lotus. Each season in different weathers has its unique feature and poetic imagery: in summer, tourists may listen to raindrops hitting lotus leaves, enjoying a bit of tranquility in coolness; in autumn and winter, may also heed raindrops falling on wilted lotus, experiencing the sense of antiquity or vicissitudes.

"Two Peaks piercing the Clouds" is high on the mountains. Ci-poem <Song of Magnolia: Two Peaks Piercing the Clouds > by Zhou Mi in Southern Song Dynasty describes its sensation, "Right between the heaven and earth, rise bickers in picturesque lake and nature sounds from exuberated mountains, and winds frolic in bamboo grove."

Other spots like "Wood-Cutters' Song of Lingshi Mountain" and "Apes squealing in Cold Spring" of "Top



Fig. 4 Artificial sounds of the West Lake scenic area

Eight views of Qiantang Lake," "Sounds reverberated in the Empty Ravine" and "Water Music Cave" are all scenic spots named by peculiar sounds.

Culture and Humanism in Contemporary

Culture and Humanism in Artistic Conception of the West Lake scenic area also takes modern perceptions and thoughts as carriers.

Modern artistic conception in landscape has been given birth by new sound sources mostly influenced by time. With the development of technology, facilities and equipments are brought into service. Gradually, artificial



Boating on weekdays

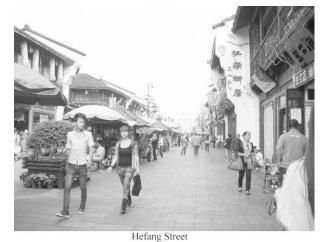


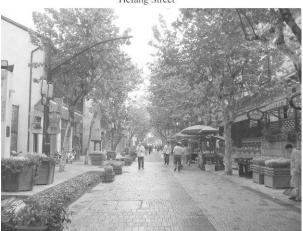
Fig. 5 Boating on the West Lake

sounds including background sounds, media sounds, and landmark sounds (Fig.4). The background music of public-address system spread in the area environmentally friendly absolute music. Media indicators draw people's attention by vivid music with transparent rhythm and limpid tone such as music of Chinese Zither and lute, ensuring the dissemination of information. The music fountain in "the New Lakeside Park," as landmark sounds, plays briskly in everyday at a fixed time, supporting music especially <A Dream Heaven>, the city song of Hangzhou. The melodrama <West Lake Impression> takes the west lake as natural background, which has become a symbol of contemporary art.

To the same lake scenery, modern literati generate new-born artistic conceptions. There are compliments of sound of oars and songs in <Literary Notes of the West Lake> "the water is calm as mirror with boats sliding on the surface, only the sound of the oars as a foil to the peaceful lake." and "On Sunday, tourists are boating on the lake, full of smiles and songs. The character of the lake also contains energetic and vivacious."(Fig.5) The elegant West Lake with both lively and quiet character is presented to readers (Zong Pu, 1981). <The west lake> write "The wind blows in sunny day, flute melody up... The temple bell is ringing at the edge of forest in evening rain." It draws out thick Buddhist meaning (Li Shutong, 1998).

Furthermore, peddleries which were used to be "vulgar," is respected gradually by people. Five rhythmical peddleries, as a special soundscape in daily life of old Hangzhou city, are mentioned: huckstering of "grasshopper" when summer turning to autumn, of snails, of mature ducks, of goldfishes and of tortoises, interlacing with one another as sound memory (Zhang Shengxian, 2009). To inherit this tradition, the government conducted reconstructions of historic district as Hefang Street and Imperial Street of Southern Song Dynasty etc (Fig.6). Traditional stuffs such as tea house, peep show, clay figure molding reappear and old merchants including peddlers and craftsmen are absorbed to these historical sites. By this, the traditional peddleries are preserved.





Imperial Street of Southern Song Dynasty Fig. 6 Reconstructions of the historic districts

Case study Methods of the West Lake Scenic Area

Classification

The area absorbs large amounts of spots with various acoustic environments, which correspond to different human affections as well as different artistic conceptions. According to their characteristics, this paper bracketed them into two categories: one is natural, and the other



Fig. 7 The entrance of Orioles Singing in the Willows

artificial. Natural attractions are purely shaped by nature, while artificial attractions are formed by man-made landscape or a combination of the two. Further, artificial attraction can be separated to Urban Cultural Landscape and Urban Open Space due to its space attribute and humanistic connotation (Table 1).

An example of each type will be analyzed concretely due to feasibility and facility in research.

Methods of Case Study

The case study includes cultural background and humanities artistic conception. Cultural background information collection, or humanities materials of the locations, consists of landscape condition, formation cause, historic data, and current situation and so on. Humanities artistic conception is mainly explained by its linked literary works and folk customs and traditions. An artistic image of the landscape can be drawn which will be integrated with other available data to obtain the approach of expression of humanities artistic conception.

NATURAL ATTRACTION: ORIOLES SINGING IN THE WILLOWS

"Orioles Singing in the Willows" is recognized as

Classification		Ten Views of West Lake
Natural attractions		Fish Viewing at the Flower Pond,
		Orioles Singing in the Willows,
		Lotus in the Breeze at Crooked Courtyard,
		Moon over the Peaceful Lake in Autumn,
		Two Peaks Piercing the Clouds
Artificial	Cultural	Leifeng Pagoda in the Sunset,
attractions	attractions	Evening Bell Ringing at Nanping Hill,
		Remnant Snow on the Bridge in Winter,
		Three Ponds Mirroring the Moon
	Open space	Dawn on the Su Causeway in Spring

Table 1 Classification of attractions in West Lake Scenic Area

one of the "Ten Views of West Lake." As its name, it is a large scale garden with plenty willows and orioles (Fig.7). Though once an imperial garden in Song Dynasty, it is one of the most favorite parks for citizens now. Its poetic name which is formed in Song Dynasty is a perfect combination of soundscape and landscape.

As a typical natural attraction, the park is selected as a case to study.

Cultural Background

Landscape Characteristic

The park is located northeast of the lake, covering an area of 17 hectares. Luxuriant willows are along miles of bank and main roads in the park: weeping willow, "intoxicated" willow, lion-head willow, Xizi Willow, and so on. Orioles lark among the willows, and competitively show their magic voice.

It is worthy of note that different from some long-life species as camphor trees and pines, the willows in the park can hardly live beyond fifty years, whose lives are extended by persistent gardeners generation after generation. This hard-working based on landscape designing aims to maintain the artistic conception for the well-know name. The effort is also a perfect cooperation between human and nature.

Origin of Name

The poetic name can be traced back to the poem <Walking by Qiantang Lake> by Bai Juyi in Tang Dynasty, "somewhere the early orioles are disputing for sunny trees, somewhere the young swallows are pecking in the spring mud....I love to stroll along the east of the lake forever, on that white-sand embankment shaded by green willows." This was the recreation of the spring lake with "orioles" and "willows," an early form of the artistic conception, implying the name of the garden.

The exact name was officially formed in Song Dynasty. Tian Rucheng (1998) in Ming Dynasty recorded, "Since there are Scholar Bridge and Liulang Bridge put on record in Song Dynasty, no wonder 'Orioles Singing in the Willows' is one of the 'ten views of the West Lake'." It can be inferred that Liulang Bridge had already existed during Song Dynasty. The scholars labeled the park a vivid name, from the sight of willows arose in folds and orioles singing one after another.

History

During Southern Song Dynasty, the lake park has already been set aside for people to enjoy and recreate, which was along the 2.5 kilometers' bank extending from Qingbo Gate to Qiantang Gate, on which willows were planted in order. The park covered Liuzhou Pavilion, Jujing Garden, Qianwang Temple, Scholar Bridge, and Liulang Bridge, also including several islets such as Liuzhou Islet and Shuixinsiji Islet (former name of Lesser Yingzhou). Jujing Garden, featured in pavilions, terraces and open halls, was the most famous one among them. It served as the Imperial Garden in Southern Song Dynasty and was gradually desolated after the dynastic change.

In Yuan Dynasty, the south of Jujing Garden was substituted by cemetery for the Ancient Muslim immigrants with the Mongolian Army to Hangzhou, which was called Muslim Grave. The middle part of the garden was silted up to marsh, and the splendid Ganoderma Temple and Epiphany Taoist Temple in the north totally vanished.

Till the middle period of Ming Dynasty, there have been only Liulang Bridge and Huaguang Pavilion surviving in the park. To the early Qing Dynasty, a miserable picture of the park is described in the ci-poem <Young Adventurer> by Xu Fengji in Qing Dynasty, "snakes coil by the parched well, wild cats inhabit on the split mounds, and the road for emperor's carriage can't be distinguished. Spring swallows pass the nonblossoming peach trees, witnessing years of decadency."

Later, when Emperor Kang Xi made an inspection trip to the South in the middle Qing Dynasty, the park had a renascence. Then because of the years of wars and chaos in modern times, it waned again. In 1949, "Orioles Singing in the Willows" was called "a nest of cemetery," only with existences of the stele of park's title, the Stone Memorial Arch, Ruins of Qianwang Temple, the Stone Pavilion and the Old Hackberry.

Current Situation

The present "Orioles Singing in the Willows" was reconstructed in West Lake South Line Integration Project in 2002. The natural vegetation is dominated by willows, collocating with plants like shearer phoebe, cedar, southern magnolia, flowering peach, Chinese flowering crabapple and Chinese Rose. The park is zoned into four gardens: "Wenying," "Youyi," "Jujing," "Nanyuan," with a great amount of artistic creations. "Wenying" House is newly built in the central area "the willow wood" of the park, with the stone stele pavilion inscribed by Emperor Kang Xi for the landscape. The east lawn and dense trees formed "Youyi" Garden Scenic Area, in which is the Monument of "No War between China and Japan." The previous Qianwang Temple in the north is made an alteration to a Private Garden of Southern Yangtze styles, with the original name "Jujing Garden" still existing. And in the south

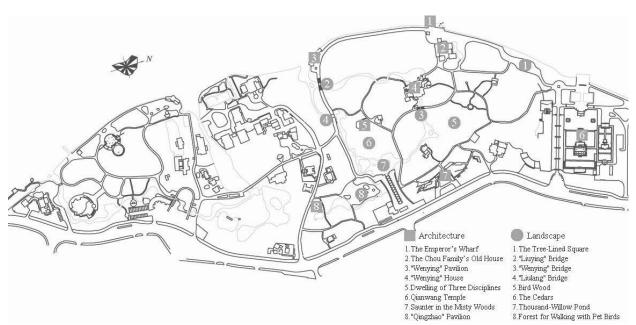


Fig. 8 The plan of Orioles Singing in the Willows

well-arranged high-forest is put in, borrowing scenery of the West Lake (Fig.8).

Nowadays, the park is not only an attraction for worldwide tourists, but also a paradise for the local residents: exercise in the morning, recreation on the holiday and cool-enjoyment in hot seasons. Every year, a variety of irregularly scheduled flower shows and lantern festivals are held to enrich people's life. Here happiness knows no bounds all year round.

Culture and Humanism in Artistic Conception of Orioles Singing in the Willows

Natural Beauty

"Orioles Singing in the Willows," as one of the Ten Views of West Lake, is especially distinguished by its both attractive visual and auditory landscapes, which had gained lots of praise from various local chronicles in ancient times. Fu Wanglu (1878) in Qing Dynasty describes, "the willow branches hunker down on the ground, and the breeze blow over arousing green waves against the sky. In spring, the orioles chant a melody in their mellifluous and crystal tones, responding to music and singing in barges." <Mini records of Qingbo> in Qing Dynasty recorded, "Orioles Singing in the Willows' is one of the ten views of the West Lake...Every year in late spring, crowds flocked to the park, accompanied by the singing orioles. The tourists who are sitting down for a long time still won't stop enjoying the delight of the natural charm." (Xu Fengji, 1936)

The park has various elements of natural sounds, such as soughing of the wind in the cedars, chirping of

the insects in summer and the sounds of "the wind and the chill and the rain," etc. What attract tourists mostly are wind in willows and singing by orioles, which can be concluded from the title enhancing the artistic conception of "Orioles Singing in the Willows." In addition, the names of other landscapes in the park are also named to enhance artistic conception, for instance, the pond is called "Thousand-Willow Pond"; the forest is named "Forest for Walking with Pet Birds"; the lawn is entitled "Bird Wood"; and the islet is known as "Bird Islet," and so on. By this, tourists will involuntarily pay attention to the willows and orioles to gain the "double enjoyment" visually and acoustically.

Historical writers and painters employed "Orioles Singing in the Willows" as subject of poetry. There are many poems named <Orioles Singing in the Willows>. The first one by Wang Wei in Song Dynasty, in which the natural chirps of orioles are anthropomorphic with sorrow, "the orioles sing on the highest branches like reeds playing, buds appear on the willows like silk reeling/ the carriage of the emperor is absent in every spring, the song can only be heard by dropping flowers." The second by Zhang Ning in Ming Dynasty one expressed the landscape rich in poetic and pictorial splendour, "rest in the lake bend with a crutch, the breeze is warm and the green is growing/ Surprise to hear two birds chatting, such as just inside my barge." The third poem by Zhang Dai in Ming Dynasty does a contrast of bird chirps and orchestra blare to express the poetry of natural sound, "the orioles are singing in the depth of willows, whose clear and melodious voice entered the bluish-green sky/it is so poetic and inspiring, other from the blare of Chinese orchestra." Also, in ci-



"Wenying" House "Wenying" Pavilion Fig. 9 Opuscule buildings of Orioles Singing in the Willows

the Chou Family's Old House

poem <Nan Xiangzi: Orioles Singing in the Willows>by Ma Hong in Ming Dynasty, natural oriole singings are compared to artificial instrument music, which is full of interests, "the green jade waves rush forth layer upon layer, and thousands of trees and weeping willows sway in breeze of the sunny and cloudless morning. Two orioles are just pleased by themselves and sing in harmony like playing a flute and a sheng."

Artificial Beauty

Artificial factors play an important role apart from the unsurpassed natural landscape. The public address system, for example, is evenly distributed to every part of the scenic area, broadcasting music with moderate loudness, which has the function of noise screening and also will not affect the natural soundscape. Soft absolute music and the natural birds chirping are enchanting, and reinforce each other.

At the same time, indirect installations are employed to promote the soundscape.

First of all, spaces for tourists are set apart where beauties can be caught. These spaces with artistic creations, which have an old-fashioned and antique flavor or naturally formed, blend with the surroundings pretty well. There are opuscule buildings in the park such as "Wenying" House in the willow wood, "Wenying" Pavilion on the lake shore, and the Chou Family's Old House of the tree-lined square (Fig.9). Open-air sightseeing platform inside the buildings and squares outside are the other attractions for people to taste tea or engage in chitchat while surrounded by absolutely beautiful nature. The places "Saunter in the Misty Woods" close to the Nanshan Road, and "Dwelling of Three Disciplines" in cedar forest are the best choices for experiencing breezes flowing through billowing pines, and listening to musical instruments while enjoying tea fragrance in the cup. "Qingzhao" Pavilion, which in a sparsely forest of wetland was set up in memory of the female Song Dynasty Ci-poet Li Qingzhao, with her famous Ci-poem <Sheng Shengman> inscribed on a stone tablet. Sound of wind, voice of birds and also the murmur of the streams nearby are jointly creating the tranquil and graceful environment for ones to sit still with a peaceful mind (Fig.10).

Secondly, the names of artificial views assist to intensify the artistic conception of soundscape in people's mind. None of the above "Wenying" House, "Wenying" Pavilion, which means listening to orioles singing, and "Saunter in the Misty Woods" exclude touching landscape artistic. Even for the bridges in the park are referred to as "Liuying" Bridge which means willow and oriole, "Liulang" Bridge which means willow wave, and "Wenying" Bridge etc., constantly remind tourists to "keep their ears sensitive."

However, to natural landscape, the artificial one is only playing an additional role. For instance, "Heaven of Birds" once close to "Wenying" House was a failure, in which a huge "cage" was applied to bring up hundreds of birds, to cater the meaning of "Orioles Singing in the Willows." Besides the high cost and hard captivity, the



Saunter in the Misty Woods Dwelling of Three Disciplines Fig. 10 Platforms and squares of Orioles Singing in the Willows

"Qingzhao" Pavilion

reticular cage with long bar is distasteful and do eclipsed people's sight. Because of poor management, it was finally removed and also as a wise decision, replaced by elaborately decorated plants and landscape facilities now, bringing in countless birds. What a rustic charm and connotation it gains now!

ARTIFICIAL ATTRACTION: EVENING BELL RINGING AT NANPING HILL

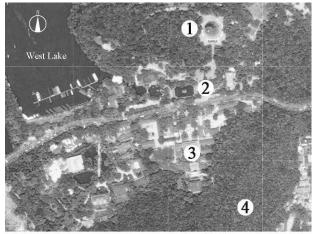
"Evening Bell Ringing at Nanping Hill" is one of the "Ten Views of West Lake" with a long history and great reputation worldwide, the origin of which can date back to Later Zhou Dynasty during the Five Dynasties and Ten Kingdoms period (A.D.907-960). This view is for appreciating the bell peals of the temple in landscape. Therefore, tough seldom, the phrase "Bell Ringing" appears in the name. It could be regarded as a historic model of sound-in-landscape, and consequently is selected as the study case.

Cultural Background

Nanping Hill and Jingci Temple

<Local History of Lin'an> in the Reign Title "Chunyou" in Southern Song Dynasty shows that Nanpin Hill lies along the south bank of the West Lake, and explains the reason of the hill's name, "Nanping Hill is behind 'Xingjiao' Temple', on which terrace houses are situated among odd-shaped rocks and pretty flourishing pines and in which a cave has been cut through the erect and rugged cliff. Therefore, the hill featured in the screen-like cliff is called Nanping" (Shi E, 1988).

On the north foot of Nanping Hill is Jingci Temple. It was first built in 954 A.D. by Qian Hongji, the king of



1. Leifeng Pagoda 2.Free Life Pond 3. Jingei Temple 4. Nanping Hill Fig. 11 Nanping Hill and Jingei Temple

Wuyue State, for a famous Buddhist monk Yong Ming. Jingci Temple was initially called "Huiri Yongming Temple." In South Song Dynasty, its name was changed to Jingci Buddhist Temple, which was one of the "Four Temples of the West Lake" (Fig.11).

Origin

"Evening Bell Ringing at Nanping Hill" actually refers to the bell ringing from Jingci Temple. The enduring ringing sounds carry far and can be heard even everywhere on the surface of the lake. Two explanations should be taken into account.

Firstly, Fu Wanglu (1878) in Qing Dynasty describes, "Nanping Hill bulges and contains lots of caves and cavities, so the propagation of sound will be loud and far and soar to the sky." Formed of limestone with lots of cavities, the shape of the hill is just like a painted screen. Therefore, when the bell is rung in the evening, its sonorous sound echoes through the caves and cavities, which is enhanced by resonance effect.

Secondly, the ringing transmits on the surface of the lake, and reached as far as Ge Hill located in Precious Stone Hill on the other shore of the West Lake. And then the Ge Hill formed of effusive rock sends back a big echo over the lake. These echoes cross and form strong reverberations.

History

The name "Evening Bell Ringing at Nanping Hill" may originally trace back to the paintings, as they were mentioned by Zhai Hao and Zhai Han (1875) in Qing Dynasty, "the painters Chen Qingbo and Zhang Zeduan in Song Dynasty and the painter Dai Jin in Ming Dynasty, all had their exclusive paintings called 'Evening Bell Ringing at Nanping Hill'." Zhu Mu (2003) in Southern Song Dynasty described that the West Lake is peace and prosperity in Song Dynasty, and someone had carried out ten topics of scenery which are the "Ten Views of West Lake" now. One of them is the "Evening Bell Ringing at Nanping Hill." In Qing Dynasty, on the sixteenth year of 'Qian Long' Region (A.D.1751), in inspection tour of the south, the Emperor inscribed a poem for "Ten View of the West Lake" in the stele pavilion.

A bell tower was born together with Jingci Temple. Shi Dahe (2006) in Ming Dynasty stated, "in the eleventh year of Emperor 'Hong wu' of Ming Dynasty (A.D.1378), the abbot Yi Jian rebuilt the tower, and replaced the old bell with a huge one, which was casted by more than ten thousand kilograms collected bronze. It was hung high and had the West Lake resound with the sonorous ringing." Then in Qing Dynasty, on the fortyfourth year of "Kang xi" Region (A.D.1705), the



Fig. 12 The bell tower and the present bell

manager of Imperial Silk Manufactory who named Sun Wencheng, recoined the bronze bell.

Current Situation

"Evening Bell Ringing at Nanping Hill" suffered warfare in the beginning of the last century, existing in name only. In 1984, the Japanese Buddhist circles donated money to recast the bell, hung in a two-floor reconstructed tower with three overhangs of the roof. Two years later in 1986, the stele pavilion was renewed. In the same year, at ten o'clock on 21th November, the 108 peals of the temple bell announced that "Evening Bell Ringing at Nanping Hill" was reborn.

The present bell is 3.6 meters high, more than 10 thousand kilograms weight, with the diameter 2.3 meters. Elegant with classic simplicity, the body was carved with 68 thousand characters of <Lotus Sutra of Mahayana Buddhism> (Fig.12). Once the bell is rung, the lingering sound lasts as long as 2 minutes.

Now the bell is struck twice a day as the routine, for the morning and the evening recitation. Besides, during the daily opening, tourists may donate money to strike the bell praying for good luck. Every Chinese New Year's Eve, in the celebration, the 108 peals of the bell welcome the new year sweeping away the old and starting afresh, which symbolizes peace, happiness, stability and unity, bring the old bell the connotative meaning.

The definition of "Evening Bell Ringing at Nanping Hill" covers a wider ranging area today. In the scenic area, overlapping ancient bell sounds have composed abundant soundscape "sights" on the West Lake.

Culture and Humanism in Artistic Conception of Evening Bell Ringing at Nanping Hill

"Evening Bell Ringing at Nanping Hill" has a long historical standing, whose cultural background and artistic conception are embodied in basic landscape value and unique religious background.

Landscape Value

"Evening Bell Ringing at Nanping Hill" is the rare scenery of soundscape. The beauty of bell peals could be concluded as three essentials.

The first essential is that sound and view embrace closely. "Evening Bell Ringing at Nanping Hill" is behind "Leifeng" Pagoda, and leans against "Nanping" Hill, facing to the West Lake in the North. Landscape and soundscape form a delightful contrast and a perfect combination. <Song of Magnolia: Evening Bell Ringing at Nanping Hill> by Zhou Mi in Southern Song Dynasty renders a vivid picture of autumn dusk, "the distant temple bell is resonant in the twilight, and the trees in the distance are deep and serene." The poem <Evening Bell Ringing at Nanping Hill> by Zhang Dai in Ming Dynasty gives expression to the delicate relationship between the soundscape and waterscape as "it seems that the bell ringing is delivered across the lake, from the heavens." Later, in the poem <Bell Ringing at Nanping Hill in Snow> by Lin Yunhan in Ming Dynasty leads people to an eternal tranquility circumstance of snowy night, "After the 108 peals, the antique lamp of Leifeng Pagoda is lit up."

The second essential is that sound serves as a foil to quiet surroundings, which is "silence in loudness." In dusk, the ringing could be heard faintly from the temple, providing a contrast to the peaceful and secluded environment. The way is commonly seen in Chinese Traditional Garden, as well as in poetry. For instance, the poem <Evening Bell Ringing at Nanping Hill> by Yin Tinggao in Yuan Dynasty describes the sense of stupor and loneliness by peals, "the clouds wafting in the air encircle Leifeng Pagoda, and wind carries the bell ringing to the windows of quiet dwellings/ The crowd evaporates in the misty willows and flowers, in concert with the sight that a monk struck the bell in the moonlight." Just like the antithetical couplet in the temple writes, "the shade of the bell tower shelters the monks in peace; the ringing pierces the sky of sunset." "Peace" would be the reason of "pierce" the sky, while the echoes caused by "pierce" in contrast emphasized "peace."

The third essential is that sound in landscape causes trains of thought. Famous writers valued spiritual enjoyment, especially this kind of artistic conception, and handed down numerous famous chapters. The cipoem <Qitianle: Evening Bell Ringing at Nanping Hill> by Chen Yunping in Song Dynasty is with no expression as "bell ringing" in it, but it convinces people that the ringing is everywhere. "The thought and pursuit of Old Su Shi exist in landscape, and once in the Cuiwei Mansion, I guess who would lean on rail and gaze at the moon. The scenic garden has watched the people hurrying to and fro, but now it's never been the same. The mansions have fallen to rack and ruin, choked with weeds... A bitter wind evokes plaintive sadness." <Evening Bell Ringing at Nanping Hill> by Nie Danian in Ming Dynasty speaks out the emotion changes caused by the intermittent rings, "above the faint flowers and misty willows is the evening cloud, and one or two indistinct rings just come through between earth and sky/ Couches have been startled while the monk is still in meditation, and the tourists in open windows begin to appreciate and linger on." The great reputation also arrested Emperor "Qian Long" in Qing Dynasty to inscribe the poem < Inscription of Ten Views of West Lake Evening Bell Ringing at Nanping Hill>, "the Temple 'Jingci' veiled by trees confronts Nanping Hill, and the bell rings are on-and-off in the night/ It recalls the time when mooring outside 'Gusu' City, the bell of midnight from Hanshan Temple chimed at my ship." The bell of Jingci temple reminds people of that of Hanshan temple, ringing in one's memory.

Buddhistic Background

"Evening Bell Ringing at Nanping Hill" can't be world-famous without the profound local Buddhism background. Since ancient times, temples and pagodas began to take root in Hangzhou. It has the reputation of "South East Buddhist Kingdom," and is acknowledged to be one of the ancestral homes for Buddhism. It locates on the southeast coast and due to its geographic advantage, exchanges with overseas Buddhism are frequent, as recorded by Sun Zhi (2006) in Qing Dynasty, "twenty one of the twenty four sects in Japanese Zen Buddhism are occupied by Rinzai, which was taught by Fohai Buddhist Monk Huiyuan in Linyin Temple to a Japanese monk Juea Assistant, then circulated to Japan."

The success of "Evening Bell Ringing at Nanping Hill" also attributes to the awareness of Jingci Temple. Buddhism in Hangzhou can be altogether separated into two temple groups: North Hill and South Hill. And Jingci Temple of "Huiri" Peak is the center of South Hill which is called the "Hills of Buddha Land."

Buddhism accomplishes "Evening Bell Ringing at Nanping Hill," while the attraction strengthens the religious faith. Every time the bell rings, the waters of the whole West Lake is overspread with the Buddhist tune, which imparts certain zen-sensation to the city. Jingci Temple holds a privileged position in people's heart. Usually, residents in Hangzhou visit the temple to practice abstinence from meat, pray for good luck, and listen attentively to the evensong accompanied by sonorous rings; at the New Year's Eve swarm inside and outside the bell tower, praying for good health in the 108 peals. Tourists who have respects for the name also won't miss it. Some of them may donate and strike the legendary bell by themselves. It is fortunate that the bell can constantly ring and spread Buddhist tunes everywhere with their hands.

The Buddhism implication involved in the tourist spot has been recorded in many ancient books, such as <New Bell Casting Inscription on Jingci Temple> by Song Lian in Ming Dynasty, "on the Nanping hill, is a Buddhist temple. A new bell is casted, peals shaking the universe. Sound spreads, like Buddha appears for salvation" (Shi Dahe, 2006). So are the couplets, "Who could be with me keeping still and in deep meditation, accepting the teachings of the Buddha to raise the faith joyfully, discussing Zen Buddhism in one's fate, and finally being fortunate to see the 32- Buddha appearances/ only this place is such a paradise with beautiful sceneries, you may invite recluses with no fixed abode or occupation to listen to 108 peals of Huiri bell." And "The will of Buddha stays on hills, the mind of Buddha is cleansed by peals." The classical description of Buddhist charm of peals never changed. The famous Songwriter Chen Dieyi wrote a song titled <Evening Bell Ringing at Nanping Hill>, "the bell ringing wafts to my ears with wind, waking me up from the lovesick dream." It tells a story of a girl suffering from lovesickness. She wakes to reality by bell ringing and breaks the shackle to wonderful life. The song's original singer is Xu Xiaofeng, and is later covered by many stars, still popular today.

Even now, people who are wandering by the lake couldn't figure out from which temple the bell rings come. Like a symbol, "Evening Bell Ringing at Nanping Hill" connotes all touching peals that worth appreciating in people's heart.

CONCLUSION

76% people randomly surveyed in the West Lake scenic area believe that sound gives impact to the environment when they are receiving aesthetic enjoyment. It is perceived that soundscape is an indispensable part to landscape, while culture and humanism is one of the three attributions in soundscape. Through research it is found that in China soundscape often imply profound cultural artistic conceptions. In the long Chinese history, soundscape has been valued in terms of estheticism very early. The more cultural sediments a spot holds, the better reputation it gains.

Cultural background covers many aspects. In broad sense it contains historic background of the spot, literature portray, and folk allegory, while in narrow sense, individual impressions on the spot should also be classified to background.

So, how is the cultural background expressed? It is mainly by artistic conception transmission. The metaphysical landscape artistic conception should be realized and expressed by the physical specific According research, approaches. to reinforcing characteristics of natural soundscape, creating the artificial soundscape to support the natural ones, coordinating all parts by background music, making and embellishing spot names, and even actively introducing conformed cultural background, are all feasible methods. But what should be noticed is the suitability of the artificial alteration to the natural condition, and the harmony between them. Excess exploitation should be avoided.

The West Lake scenic area has a long history, and is known far and wide. With many famous scenic sites, it is a representative of Chinese sceneries. It contains abundant cultural background and potential humanities artistic conception, both in great value of research. Although the paper only selects two spots for analysis, the methodology and significance could be promoted and extended to the whole region. Thus a new way is opened up to study the soundscape of the West Lake at the perspective of culture and humanism.

ACKNOWLEDGEMENTS

This paper is one of the achievements of the research project supported by Foundation for Open Projects of Semitropical Archi-Science National Key Laboratory; and National Natural Science Foundation of China (51078325).

REFERENCE

- Cao Xueqin. (1982). The Story of the Stone. People's Literature Publishing House, Beijing: 1081-1096.
- European Commission. (2001). Noise: The Environmental Noise Directive. Environment. Available from http://ec.europa.eu/environment/noise/directive.htm [Accessed on June 4, 2012].
- Fu Wanglu. (1878). Records of the West Lake. Zhejiang Book Company, Hangzhou: 3(14b, 26b).
- Guo Min, Ge Jian. (2012). Three Elements Structure and Sound Expectation Concept in Soundscape -- A Case Study of the New Lakeside Park, Hang Zhou. LOWLAND TECHNOLOGY INTERNATIONAL, 14(1):31-44.

- Ge Jian, Guo Min, Yue miao. (2012). Research on the Soundscape of West Lake Scenic Area with Profound Cultural Background -- A Case Study of Evening Bell Ringing in Jingci Temple. Journal of Zhejiang University - SCIENCE A (Applied Physics & Engineering), in press.
- Ju Ran. (Song Dynasty). Wind of pines on gullys. http://www.cadal.zju.edu.cn/PaintingDetail.action?pa intingNO=41. July 21, 2011.
- Ji Cheng. (1988). Garden edification. China Architecture & Building Press, Beijing: 51.
- Lu Yitian. (1984). Leng Lu Za Shi. Zhonghua Book Company, Beijing: 220.
- Li Shutong. (1998). Buddha Lamp and Dream Shadow. The Eastern Publishing Co., Ltd, Beijing: 1.
- Miller, N.P. (2008). US National Parks and management of park soundscapes: A review. Applied Acoustics, 69(2):77-92.
- Qin Youguo. (2005). The category of Soundscape study. Architectural Journal, 2005(01): 45-46.
- Sheng Zongqian. (Qing Dynasty). Listening to spring in bamboo groves. http://www.cadal.zju.edu.cn/PaintingDetail.action?pa intingNO=651. July 21, 2011.
- Song Yuanren. (1988). Four Books and the Five Classics. Tianjin Book Distribution Agency of Xinhua Bookstore, Tianjin, Volume □: 1.
- Shi E. (1988). Wanwei Special Collection. Jiangsu Ancient Books Press, Nanjing, Volume 45: 194.
- Shi Dahe. (2006). A Record of Jingci Temple in Nanping Hill. Hangzhou Publishing House, Hangzhou: 56.
- Sun Zhi. (2006). A Record of Lingyin Temple. Hangzhou Publishing House, Hangzhou: 43-44.
- Tian Rucheng. (1998). Tour Notes on the West Lake. Shanghai Ancient Books Press, Shanghai: 27.
- Wang Guowei. (1955). Jen-chien Tz'u-hua. Zhonghua Book Company, Beijing: 47.
- Wikipedia. (1996). 100 Soundscapes of Japan. Wikipedia Foundation. Available from http://en.wikipedia.org/wiki/100_Soundscapes_of_Ja pan [Accessed on June 4, 2012].
- Xu Fengji. (1936). Mini records of Qingbo and Its Sequel. The Commercial Press, Beijing: 10.
- Yu Wenbao. (1958). Complete Chuijian xulu. Classical Literature Press, Shanghai: 38.
- Yuan Xiaomei. (2009). The Formation and Evolvement of Soundscape Thought of Chinese Classical Garden. Chinese Landscape, 2009(7):32-38.
- Yue Miao. (2012). Research on the Soundscape Form and Evaluation of Scenic Spots with Profound Cultural Background in the West Lake Scenic Area,

Hangzhou. MS Thesis, Zhejiang Univ. Hangzhou, China.

Zhao Ji. (Southern Song Dynasty). Listening to the Guqin.

http://www.cadal.zju.edu.cn/PaintingDetail.action?pa intingNO=1421. July 21, 2011.

- Zhai Hao, Zhai Han. (1875). Overview of Hills and Lakes. Huai Yin Tang, edition of Wang, Volume 4: 19a.
- Zong Pu. (1981). Novels and Prose Selection of Zong Pu. Beijing Publishing House, Beijing: 220-221.
- Zhang Chao. (2001). You Meng Ying. Central Party Literature Press, Beijing: 130, 147.
- Zhu Mu. (2003). Overview of wonderful Scenery in Geography. Zhonghua Book Company, Beijing: 7.
- Zhang Shengxian. (2009). Sounds of the West Lake. Landscape and Historic Sites, 2009(1): 69.