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CONTENT

INTRODUCTION…….....…4
BASIC THEORETICAL RESEARCH ON LANDSCAPE OF DONGPO ROAD HISTORIC DISTRICT…….....6
1.1 Definition of Relevant Concepts.....6
1.1.1 Cultural Genes……6
1.1.2 Historic Cultural District……7
1.1.3 Landscape Renewal Design……7
1.2 Research Significance of Cultural Genes and Historic Districts……8
1.2.1 Shifting cultural inheritance from a “static” to a “living” mode.....8
1.2.2 Solving practical pain points in the renewal of historic districts……9
1.2.3 Improving the theoretical framework for historic district renewal……9
1.3 Internal Relationship between Cultural Genes and Landscape Renewal of Historic Districts……10
SECTION II. INVESTIGATION OF CURRENT SITUATION AND ANALYSIS OF CULTURAL GENES OF DONGPO ROAD HISTORIC CULTURAL DISTRICT IN YIXING……11
2.1Basic Overview of Dongpo Road Landscape Historic District……..11
2.1.1 Location Conditions……11
2.1.2 Historical Evolution……12
2.1.3 Spatial and Functional Pattern……14
2.1.4 Status of Material Remains……15
2.2. Identification, Extraction and Typology of Cultural Genes of Dongpo Road Historic District.. ……16
2.2.1 Methods for Identification and Extraction of Cultural Genes……16
2.2.2 Typology of Cultural Genes……17
2.2.3 Hierarchical Determination of Core Cultural Genes……19
2.3. Value Evaluation of Cultural Genes and Their Contemporary Inheritance Value……20
2.3.1 Multi-dimensional Value Evaluation of Cultural Genes……20
2.3.2 Contemporary Inheritance Value of Cultural Genes……22

CHAPTER III. LANDSCAPE CONSERVATION AND RENEWAL STRATEGY OF DONGPO ROAD DISTRICT BASED ON CULTURAL GENES…….23
3.1 Cultural Gene Conservation Strategies……23
3.1.1 Conservation of Material Cultural Genes……24
3.1.2 Conservation of Intangible Cultural Genes……25
3.2 Overall Construction Strategy of District Cultural Space……26
3.2.1 Spatial Structure Optimization……27
3.2.2 Functional Renewal and Integration……28
3.3 Principles of Landscape Renewal Design……28
3.3.1 Authenticity Principle……29
3.3.2 Integrity Principle……29
3.3.3 Innovation Principle……30
3.4 Renewal Design Strategy of Landscape Elements……31
3.4.1 Building Renewal Strategy……31
3.4.2 District Space Renewal Strategy……32
3.4.3 Renewal Strategy of Greening and Supporting Facilities……33

GENERAL CONCLUSIONS.....34
REFERENCES.....37
APPENDIX A. Visual material for the text…….....40
APPENDIX B. Tables, diagrams.....42
APPENDIX C. Project proposal.....44

INTRODUCTION

With the continuous advancement of China's urban renewal initiative, numerous historic cultural districts have ushered in opportunities for renovation and upgrading. Meanwhile, however, contradictions such as homogenized construction and rupture of local cultural context have become increasingly prominent. Historic cultural districts serve as critical physical spatial carriers for preserving collective urban memory and continuing regional cultural context, bearing unique local folk traditions, humanistic stories and spirit of place. Nevertheless, in current landscape renewal practices, many district renovations remain superficial. They simply copy architectural symbols of tradition and follow trending landscape templates, focusing merely on external stylistic packaging while ignoring the exploration of profound cultural essence. Consequently, districts end up with similar appearances and depleted historical connotations. Traditional spatial functions become disconnected from the living demands of contemporary residents, falling into the renewal dilemma of "possessing form yet lacking spirit" . How to break this bottleneck of superficial renovation that prioritizes appearance over connotation, realize both the conservation and adaptive reuse of historic spaces, and achieve the sustainable development goal of "integrating form and spirit"has become an urgent researchtopic in thefield of landscape renewal for historic cultural districts.

Against this background, this paper introduces the cultural gene theory as the core research framework and selects Dongpo Road Historic Cultural District in Yixing as the case study to systematically explore landscape renewal approaches and design strategies applicable to local historic districts. Focusing on the inheritance, variation and activation mechanism of cultural elements, cultural gene theory providestheoreticalsupportfordissectingdistrictculturalresourcesandpreventing the abuse of cultural symbols.

The research adopts a combined methodology of literature review and field investigation. On the one hand, local chronicles, relevant planning documents and existing academic achievements are systematically sorted out to clarify the developmental context of the district. On the other hand, field surveys, spatial recording and stakeholder interviews are conducted to identify, summarize and extract the tangible and intangible cultural gene elements unique to Dongpo Road District in Yixing. From the perspective of inheritance and activation of cultural genes, this paper further discusses how landscape renewal design, as a medium,can awaken dormant local cultural genes and promote the creative transformation and innovative development of traditional cultural resources.

The study further traces thehistorical evolution of Dongpo Road District in Yixing, analyzes the formative environment and evolution of its cultural genes, and interprets its distinctive values in three dimensions: constructing local identity, activating regional economic vitality, and sustaining urban cultural context. Rooted in Dongpo cultural heritage and integrated with the residential characteristics of Jiangnan water towns, Dongpo Road constitutes an irreplaceable segment within Yixing's urban cultural pedigree, and the survival of its space directly affects the sense of belonging of local residents.

Finally, combined with contemporary landscape design concepts, a strategicsystem for historic district landscape renewal oriented by cultural genes is established. The strategies revolve around four dimensions: continuing intact historical context, highlighting irreplicable regional characteristics, adapting to the functional living needs of modern people, and exploring diverse artistic expression techniques. In terms of scheme implementation, the research balances heritage conservation, spatial function reshaping and landscape narrative construction. The reneweddistrict canretainits original historic atmosphere and senseof place while accommodating diverse modern citizen demands including recreation, cultural experienceandsocialinteraction.Itbalancesheritageprotection,livelihood

improvement and cultural-tourism activation, offering referable ideas for renewal practices of similar historic cultural districts in the Jiangnan region.

SECTION I. BASIC THEORETICAL RESEARCH ON LANDSCAPE OF DONGPO ROAD HISTORIC DISTRICT

DefinitionofRelevantConcepts

CulturalGenes

Derived from the metaphor of biological genes and proposed by cultural anthropologists, the theory of cultural genes describes identifiable and translatable fundamentalcultural units accumulated andpassed downacross generationswithin regional communities over long historical evolution. Unlike biological genes, cultural genes are inheritable, mutable and selective rather than static. They may decay, reconstruct or revitalize along with social changes.

Withinthe researchcontextof historic culturaldistricts, cultural genesfall intotwo categories: material cultural genes and intangible cultural genes. Material cultural genes are physical carriers of culture, including street textures, traditional architectural forms, brick and stone pavements, water systems, ancient trees and old wells and other spatial physical relics. Intangible cultural genes are spiritualandbehavioralcarriers,coveringhistoricalallusions,localfolkcustoms,traditional crafts, residents 'lifestyles and regional humanistic spirits. The two are interdependent: physical carriers embody cultural spirits, and intangible connotations endow spaces and places with soul. This study regards Dongpo culture, water-town texture of the Jiangnan region, Yixing purple clay culture and old urban marketplace life as the core cultural genes of the district, and discusses how to realize gene conservation, continuity and innovative translation in the process of landscape renewal.

HistoricCulturalDistrict

The core characteristic of historic cultural districts lies in their living quality. Instead of static museums, they still accommodate residents 'daily life. Conservation targets are not limited to individual historic buildings, but also include street spatial patterns, spatial scales, social life networks and local cultural atmosphere. Compared with cultural relic protection units, the conservation of historic cultural districts places greater emphasis on the integrity of the area, balancing heritage conservation, living environment improvement and cultural activation. The Dongpo Road Historic Cultural District in Yixing is a small-to-medium-sized Jiangnan old-town district themed on celebrity culture. Featuring humanistic relics related to Su Shi, traditional dwellings and marketplace life, it serves as the empirical object of this research.

LandscapeRenewalDesign

Landscape renewal design belongs to the category of urban stock space regeneration, differing from new landscape design. Based on the existing spatial substrate of the district, it repairs declining spaces and improves the quality of living environment through small-scale, progressive landscape transformation, spatial mending, feature renovation and optimization of landscape facilities.

Landscape renewal is not merely visual beautification of greenery, landscape ornaments, street pavements and other elements; it integrates physical space renovation and reshaping of cultural values. In the context of historic districts, landscaperenewaldesignshouldrespecttheoriginalhistoricalpattern,avoidlarge-scale demolition and reconstruction, translate regional cultural elements into landscape language, restore place memory and activate district vitality. The landscape renewal in this study takes cultural genes as the main thread, and integrates the coordinated design of street spaces, building interfaces, green systems, street furniture and cultural narrative nodes.

ResearchSignificanceofCulturalGenesandHistoricDistricts

As the renovation of historic cultural districts has gradually attracted wider public attention, this study extracts the district's cultural genes and inherits regional cultural characteristics and historical memories. It can provide a new research paradigm for academia and enrich the interdisciplinary theoretical system of cultural heritage conservation and landscape design. The research significance of the study on landscape renewal design of historic cultural districts from the perspective of cultural genes mainly includes the following three points:

Shiftingculturalinheritancefroma"static"toa"living"mode

Current conservation of traditional culture often falls into a "static dilemma": although cultural relics in museums and documents in archives can preserve history, they are separated by a "glass barrier". Residents can hardly engage with suchheritage whilegroceryshoppingorstrollingindaily life,andtouristscanonly read stories from texts, turning culture into "memory that can only be admiredfrom afar".

This study takes landscape renewal as a bridge to embed cultural genes into daily life scenarios. For instance, the folk custom square in the lanes is more than a decorative space. Normally, it serves as a rest area paved with bluestones carved with traditional patterns. During the Dragon Boat Festival, exhibition frames canbe set up here, allowing residents and tourists to make zongzi and listen to folk tales together. Cultural details are also embedded in public facilities. In a district known as a hometown of bamboo weaving, seats are engraved with bamboo-weaving textures. Street lamps on Dongpo Road are carved with the poetic line "I will brew new tea with newly-lit fire", and even signboards adopt panels in the earthy tone of purple clay. Every chair and every street lamp along the way acts as a cultural carrier. When tourists touch the textures of seats and take part in folk activities, they can truly "feel" the warmth of culture. Historical culture is nolongerconfinedtomuseums,butbecomesa"livedexperienceinthepresent",

which not only endows the district with greater vitality but also strengthens residents' sense of cultural belonging.

Solvingpracticalpainpointsintherenewalofhistoricdistricts

Many renewed historic districts nowadays are trapped in the awkward predicament of "copy-paste". Chain milk tea shops and internet-famous snack stalls line the streets, andbuilding facades are uniformly finished with greytilesandwhite walls. Visitors may walkthrough three streets without figuring out which city theyare in. The root cause of this "identical streetscape across cities" lies in the failure to identify local cultural genes during renewal. Instead, planners blindly copy trendy "internet-famous templates", erasing all unique memories of the district andleaving nothing but hollow commercial spaces.

By deeply exploring cultural genes, this study helps create a "distinctive identity" for each district. For celebrity-related historic districts, the design solution goes far beyond merely erecting a celebrity statue. Take Dongpo Road in Yixing as an example: the story of Su Dongpo "settling in Yixing and planting tea" is presented on an interactive landscape wall. Relief sculptures recreate the scene of himpicking tea with local villagers, with poems inscribed at the base of the wall, and walkways paved with textures mimicking tea fields. Such design does not rigidly attach cultural labels, but integrates culture into landscape details. When visitors see the landscape wall, they recall the celebrity's story; when they touch the seats, they perceive intangible heritage crafts. Naturally, they can remember the uniqueness of the district and effectively prevent renewal from turning into "soulless spatial transformation".

Improvingthetheoreticalframeworkforhistoricdistrictrenewal

The improved theoretical framework for historic district renewal takes "cultural genes"asthecoreanchor,linkingathree-tierstructureof"theoreticalfoundation

— core logic — practical path". Simplified and integrated into a coherent system,itremediesdeficienciesinexistingframeworkswhileensuringpracticaloperability. The theoretical foundation layer focuses on the integration of "cultural genes + classical theories". It extends the Organic Renewal Theory from physicalrestoration to the prioritized conservation of cultural genes, preventing cultural loss amid building renovation. It translates the Genius Loci Theory from an abstract concept into landscape design centered on the core memory points of the district. Beyond the ecological dimension of the Sustainable Development Theory, it adds requirements for cultural sustainability to sustain cultural genes through living inheritance. Centered on the objectives of "cultural retention, functional adaptation and vitality continuity", the core logic layer integrates keydimensions with cultural genes as the link. The gene anchoring stage defines extraction rules for both material and intangible dimensions, as well as the transformation rules from "genes to landscapes". The spatial coordination stage defines conservation boundariessuch as cultural core zones while introducing modern functions. The living inheritance stage engages residents and inheritors in renewal and matches cultural business forms to avoid homogenization.The practical path layer is simplified intoa "full-cycle closed loop". Preliminary investigations produce a cultural gene map and a problem list. Scheme design covers macro spatial layout and micro landscape transformation. During implementation and operation, a monitoring andadjustment mechanism safeguards vitality. Guided by cultural genes throughoutthe whole process, the framework realizes the connection between theory and practice.

Internal Relationship between Cultural Genes and Landscape Renewal of Historic Districts

Cultural genes and landscape renewal of historic districts support each other and maintain a two-way coupling relationship: cultural genes determine the value core of landscape renewal, while landscape renewal serves as the spatial carrier for the living inheritance of cultural genes.

First, cultural genes are the core basis for landscape renewal of historic districts. The renewal of historic districts cannot rely merely on designers' subjective aesthetic judgment for feature renovation. The unique cultural gene system of the district determines spatial pattern, feature keynote and landscape narrative theme. All landscape renewal strategies and design schemes must be premised on identifying and protecting core cultural genes. Landscape transformation divorced from cultural genes tends to result in stacking of cultural symbols, homogenization of features and damage to historical authenticity. The identification, classification and value evaluation of cultural genes are the prerequisite foundation for carrying out landscape renewal design of Dongpo Road.

Second, landscape renewal is an important way for the inheritance and activationof cultural genes. As abstract cultural information, cultural genes cannot exist independently from physical spaces. Landscape spaces such as streets, buildings, waterfront spaces, landscape ornaments and street scenes are carriers that visualize and materialize cultural genes for experiential perception. Through landscape renewal, carriers of material cultural genes are restored, and places bearing folk customs and humanistic activities are created. Abstract poems and prose of Su Dongpo, purple clay culture and Jiangnan marketplace culture can be translated into perceptible spatial scenes, promoting static cultural heritage to transform into cultural resources with living inheritance.

SECTION II. INVESTIGATION OF CURRENT SITUATION AND ANALYSISOFCULTURALGENESOFDONGPOROADHISTORIC CULTURAL DISTRICT IN YIXING

BasicOverviewofDongpoRoadLandscapeHistoricDistrict

LocationConditions

YixingCityislocatedinthesouthernpartofJiangsuProvince,onthewestern shore of Taihu Lake, in the hinterland of the Shanghai-Nanjing-Hangzhou

metropolitantriangle.It serves asanimportantbirthplace andinheritor of Jiangnan civilization within the Wu-Yue cultural system. Endowed with both mountain and water resources as well as profound regional craftsmanship heritage, the cityenjoysthereputationof“AncientCapitalofPottery,WorldofCaves,OasisofTea, and Ocean of Bamboo”. Purple clay craftsmanship culture, Dongpo literati culture and Jiangnan water-town marketplace culture have long blended and accumulated here, forming Yixing’s unique compound regional cultural background. Dongpo Road Historic Cultural District lies in the core area of old Yixing City, administratively under Yicheng Subdistrict. It is an east-west traditional street that has survived to this day in old Yicheng. The western side of the district connects contiguous traditional residential clusters of the old town, while the eastern side abuts an urban arterial road. Surrounded by basic public service facilities, mature residential communities and convenient commercial outlets of the old town, it is one of the areas within old Yixing that preserve the most concentrated urban humanistic memories and authentic local living atmosphere.

The site of the district features generally flat terrain and dense original water networks, inheriting the spatial foundation of old Jiangnan towns built along water with crisscross alleys. The district is within 1 kilometer from Yixing’s central business district and major public transport hubs, boasting dual locational advantages. On the one hand, it retains the original residential vitality of the old town and maintains intact local living communities. On the other hand, it enjoys convenient external transportation, which facilitates subsequent cultural display andlightweightcultural-tourismactivation.Overall,withinYixing’surbanrenewal system, Dongpo Road Historic Cultural District is a key old-town area with prominent cultural resources, sufficient activation potential, and a need for prudent control of development intensity.

HistoricalEvolution

The cultural origin of Dongpo Road District is deeply tied to Su Shi (Su Dongpo), the great literary master of the Northern Song Dynasty. According to *Yixing LocalChronicles*andlocalhistoricaldocuments,SuShitraveledtoYangxian(the ancient name of Yixing) many times in his lifetime. He had a deep affection forthis landscape and composed the timeless verse “I will buy land in Yangxian to spend my old age, simply for the beauty of streams and mountains”. He once planned to purchase farmland here and retire for the rest of his life. A number of historical relics related to Su Shi still remain in Yixing, including Dongpo Academy,DongpoChinesefloweringcrabappleandthesitewhereSuShiintended to buy land. Dongpo Road gets its name because Su Shi once traveled here, planned his settlement, and held literary gatherings with scholar friends. It servesas the core spatial carrier bearing Yixing’s Dongpo culture.

Thedevelopmentcontextofthedistrictcanbedividedintothreestages.

ThefirststagespansfromtheSongandYuandynastiestotheMingandQing dynasties — the period of cultural foundation and lane pattern formation.
Benefiting from the humanistic influence of Su Dongpo, residential settlements graduallytookshapealongDongpoRoad.Afterhundredsofyearsofdevelopment, the networked lane pattern typical of Jiangnan water towns basically matured inthe Ming and Qing dynasties. Traditional dwellings, branch alleys and water systems jointly constructed the original spatial framework of the district. Literary activities and marketplace life coexisted here, laying the physical and humanistic foundation of the district.

Thesecond stage covers theRepublic of China erato the post-founding period — the strengthening of residential function. The district gradually evolved into the core residential area of old Yixing. Some original commemorative cultural buildingsweredamagedbywarsandurbanconstructionchanges.Alargenumber of modern residential buildings were added along the lanes, continuously reinforcing the residential attribute of the district. Nevertheless, spatial scenes

associated with Dongpo culture faded away, the carriers of cultural narrative gradually weakened, and cultural elements were mostly preserved in residents' oral memories.

The third stage is the contemporary urban renewal period. With the outward expansion of Yixing's built-up area, the old town suffers from aging buildings, inadequate infrastructure such as pipelines, mixed styles of old and new buildings, declining cultural recognizability and other increasingly prominent contradictions. In recent years, Dongpo Road District has been incorporated into the systematic renewal project of old Yixing, officially entering a new stage where heritage conservation, cultural value exploration and district activation are carried out simultaneously.

Spatial and Functional Pattern

Dongpo Road Historic Cultural District generally inherits the traditional three-level spatial structure of "main street – branch alley – courtyard" in Jiangnan. The main street, Dongpo Road, is approximately 6–8 meters wide and runs east-west through the whole district. Multiple north-south branch alleys branch off from both sides of the main street, ranging from 1.5 to 3 meters in width. Traditional courtyards are arranged along these branch alleys, forming an interwoven network of lane texture and retaining the typical spatial characteristics of small scale and dense road network of old Jiangnan towns.

The current land use is dominated by daily residence of indigenous residents, with residential land accounting for more than 60% of the total district area. Scattered convenience shops are distributed on the ground floor along the street, including community convenience stores, local snack bars, barbershops, hardware maintenance shops and so on. These businesses mainly serve local residents instead of forming large-scale cultural tourism commerce, and the district still maintains the original living atmosphere of the old town. Nevertheless, multiple deficiencies exist in the current spatial functions. First, the supply of public space

is insufficient. There is a lack of concentrated venues, pocket green spaces and cultural activity nodes for residents to rest and communicate, and neighborhood interactions can only take place on narrow sidewalks along streets. Second, the functional types are relatively monotonous. Over-reliance on residential functions leads to insufficient vitality of the district, accompanied by a significantly aging population structure and continuous outflow of young people. Third, spatial connectivityisimpaired.Some branchalleysareblockedbyself-builtstructuresof residents, breaking the originally connected lane network. The waterfront boundaries are enclosed by walls and auxiliary buildings, and the water system space is inaccessible to the public, resulting in poor spatial permeability and accessibility of the whole district.

StatusofMaterialRemains

ThematerialrelicsofDongpoRoadDistrictcanbedividedintothreecategories: traditional buildings, lane structures and natural relics. Overall, they are characterized by “surviving relic bodies, severe damage and deterioration, and mixed old-new styles”.

The first category is traditional architectural relics. There are more than 40 traditional Jiangnan dwellings dating back to the late Qing Dynasty and the Republic of China. Most of them adopt brick-timber structures and gable roofs, with grey bricks and white plastered walls on the facades. Typical spatial patterns ofJiangnandwellingssuchaspatiosandcourtyardsarepreservedinside.However, dueto long-termweathering andthe lack of systematicrestoration, they commonly suffer from roof leakage, decay and weathering of wooden components, and wall peeling. When some residents renovate houses on their own, modern materialssuch as ceramic tiles andcolor steel plates are applied to facades,creating conflicts between old and new elevations and damaging the traditional style of the district.

Thesecondcategorycoverslaneandstructuralrelics.Thespatialscaleofthemain street and branch alleys basically retains the human-friendly proportion of

traditionallanes.Oldslabstonepavementremainsinpartialsections,yetmost roadsurfaceshavebeenreplacedbycementorasphaltoverlaysinlaterrenovations, losing the material memory of traditional lanes. Two ancient wells of the Qing Dynasty still exist in the district. They once served as the main domestic water source for residents but are now out of service. The well bodies are covered by sundries without necessary protection or display design. In addition, traditional structures including old courtyard walls and stone revetments are scattered on the site, all suffering from weathering and damage to varying degrees.

Thethirdcategoryreferstonaturalrelics.Threecamphortreeswithan ageofover one hundred years are preserved in the district, serving as living heritage witnessing the historical changes of the block. Nevertheless, the ancient trees are enclosedbybuildingsanddebriswithnosupportingrestspaces,sotheirlandscape and cultural values cannot be realized. Part of the original water system in the district has been filled or covered. The remaining river sections have poor water quality with collapsed and damaged revetments and enclosed waterfront spaces, which continuously weaken the unique natural foundation features of theJiangnan water town.

Identification,ExtractionandTypologyofCulturalGenesofDongpo Road Historic District

MethodsforIdentificationandExtractionofCulturalGenes

This study combines the site characteristics of Dongpo Road District and constructs a four-step working method of literature review, field investigation, residentinterviewandelementcodingtoidentifyandextracttheculturalgenesof the district.

The first step is literature review. Local chronicles of Yixing, monographs on Dongpo culture and local cultural and historical archives are systematically consultedtoexplorehistoricalevents,literatiallusionsandrecordsofregional

culturedirectlyrelatedtoDongpoRoad,andculturalelementsatthedocumentary level are preliminarily screened.

Thesecondstepisfieldsurveyandmapping.On-siteinvestigationsarecarriedout within the district to record physical spatial elements including lane scale, architectural form, ancient trees, ancient wells and water revetments. Image and surveying data are collected to sort out the existing physical relics on the site.

The third step is semi-structured interviews. Interviews are conducted with indigenouslong-termresidentsandlocalcultural-historicalexpertstocollectoral history, folk legends, folk customs and intergenerational living memories, exploring intangible cultural information that cannot be covered by documents.

The fourth step is element coding and classification. All collected tangible and intangibleelementsarecoded,deduplicatedandscreened.Commonelementswith low recognizability and no regional uniqueness are identified and eliminated. Culturalgeneunitsthat canrepresentthecorecultural characteristicsofthedistrict andpossessinheritancevalueareselectedtobuildabasicculturalgenedatabaseof the district, ensuring the pertinence of subsequent research objects.

TypologyofCulturalGenes

According to the differences in carrier forms, the cultural genes of Dongpo Road Historic Cultural District are divided into two major categories: material cultural genes and intangible cultural genes. Subcategories are further subdivided under the majorcategoriestoformawell-structuredandcomprehensiveculturalgenesystem.

(1) MaterialCulturalGenes

Materialculturalgenesserveasphysicalcarriersofthedistrict'scultureandare subdivided into four subcategories.

First,spatialtexturegenes.Theyincludethenetworkedlanepatternof Jiangnan, the spatial hierarchy of "main street – branch alley – courtyard", the spatial

proportion of small-scale lanes, and the waterside settlement layout. This set of genesforms theunderlyingspatialframeworkofthedistrict'sJiangnanwater-town identity and represents the most essential spatial feature distinguishing it from modern urban blocks.

Second, architectural style genes. They cover the sloped roof form of traditional Jiangnandwellings, thematerialandcolorofgreybricksandwhiteplasteredwalls, details of wooden doors and windows, and the spatial organization of patio courtyards for residential use. Collectively, they shape the overall stylistic characteristics of traditional buildings in the district.

Third, natural landscape genes. They comprise the Jiangnan water network and stone revetments, century-old camphor trees, as well as native plant communities such as bamboo, plantain and sweet osmanthus adapted to the Jiangnan climate. Thesearecarriersforcreatingthenaturalartisticconceptionof Jiangnanwithinthe district.

Fourth, landscape structure genes. They include public structures such as traditionalslabstonepavements,ancientwellsoftheQingDynasty,oldstone courtyard walls and traditional lane components, which are tangible physical carriers bearing residents' collective historical memories.

(2) IntangibleCulturalGenes

Intangibleculturalgenesconstitutethespiritualcoreofthedistrict'scultureand are also classified into four subcategories.

First, celebrity cultural genes, namely Dongpo humanistic genes. They embrace poems and essays written by Su Shi in Yixing, the historical allusion of "purchasinglandinYangxian",relevantfolklegends,aswellastheopen-minded, tranquiland farming-studying literati spirit represented by Su Shi. This isthe core identifier that differentiates Dongpo Road from other Jiangnan historic districts and the soul of the district's cultural identity.

Second,regionalcraftsmanshipgenes,namelyYixingpurpleclayculturalgenes. They cover hand-making techniques of purple clay, the aesthetics of purple clay vessel forms and the craft traditions upheld by artisans. As exclusive regional cultural symbols of Yixing, they can provide differentiated cultural materials for landscape design.

Third,folklifegenes.Theyincludetheneighborhoodinteractionmodeoftheold town, traditional Jiangnan folk festivals, local food culture and intergenerational daily living memories of indigenous residents, serving as the core source of the district's vitality.

Fourth,spiritualtemperamentgenes,namelytheliteratitemperamentofJiangnan water towns. They contain elegant and restrained aesthetic orientation, local tradition of valuing education and scholars, and the waterside and livable settlement philosophy. These are the underlying spiritual traits permeating the whole district and subtly influencing spatial construction.

HierarchicalDeterminationofCoreCulturalGenes

Based on the regional uniqueness and influence of cultural genes, the extracted genes are classified into four hierarchical levels. These four levels of genes mutuallysupport,embedandcoexist,jointlyformingthecompleteculturalgene system of Dongpo Road.

Level1:DominantCoreGene—Dongpohumanisticspiritgene.Itrepresentsthe most recognizable cultural trait of the district, determines the cultural theme and spiritual core of the whole district's renewal, and servesas the main thread for all landscape design and cultural narration.

Level2:BasalGene—Jiangnanwater-townlanegene.Asthesharedmaterialand cultural foundation of old Jiangnan districts, it establishes the overall stylistic framework of the district and lays the spatial background of the Jiangnan water town.

Level 3: Characteristic Gene — Yixing purple clay cultural gene.It is an exclusive regionalculturalsymbolofYixing,enrichingthedistrict'sculturalconnotationand creating differentiated recognition that distinguishes this street from other ancient Jiangnan streets in Suzhou and Wuxi.

Level4:LivingGene—old-townmarketplacelifegene.Itisthekeytosustaining the long-term vitality of the district. During conservation and renewal, priority shouldbegiventomaintainingindigenousresidentialcommunitiesandpreserving authentic marketplace vitality.

Value Evaluation of Cultural Genes and Their Contemporary Inheritance Value

Multi-dimensionalValueEvaluationofCulturalGenes

This study conducts a comprehensive evaluation of the core cultural genes of Dongpo Road from four dimensions: historical value, artistic and aesthetic value, social and cultural value, and economic activation value.

(1) HistoricalValue

The cultural genes of Dongpo Road carry nearly a millennium of literati memories and urban development context of Yixing, possessing precious historical research value. The Dongpo humanistic gene witnesses the profound connection betweenSu Shi and Yixing, acting as an important spatial carrier for the study of literati culture in the Song Dynasty and scholar communications in the Wu-Yue region. The genes of Jiangnan lanes and traditional buildings record the construction history of old Yixing since the Ming and Qing dynasties and the evolution of residential culture in Jiangnan water towns, serving as a vivid sample for researching the development of small and medium-sized old towns in Jiangnan. The marketplace life gene preserves the life changes of ordinary Yixing residentsinmoderntimesandholdsirreplaceablesignificanceforsocialhistoryresearch.

Such cultural genes are non-renewable cultural resources and will disappear permanently once damaged.

(2) ArtisticandAesthetic Value

Various cultural genes of Dongpo Road jointly form a distinctive aesthetic system of Jiangnan lanes with outstanding artistic and aesthetic value. The pleasant small-scale spatial proportion of Jiangnan alleys, the material and color of grey bricksand black tiles in traditional dwellings, the exquisite and restrained aesthetics of purple clay craftsmanship, and the literati artistic conception contained inDongpo's poems are integrated to form a compound aesthetic trait interweaving "smallbridgesover flowingwater,refinedliteraticharmandauthentic marketplace vitality". Rooted in local culture, such aesthetic resources cannot be replicated by modern standardized urban design and can continuously provide traditional aesthetic inspiration for contemporary landscape and architectural creation.

(3) SocialandCulturalValue

The cultural genes of Dongpo Road constitute an important symbol of Yixing's urban cultural identity and carry strong social and cultural value. Dongpo culture and purple clay culture represent the collective cultural memory shared by Yixing citizens,bearing the nostalgia and cultural identity of local residents. The old-town marketplace life gene sustainsthe long-established neighborhoodsocial network of indigenous residents and serves as the source of community cohesion. Protecting and inheriting cultural genes can continuously strengthen local residents' sense of cultural belonging, continue Yixing's urban cultural context, and effectively avoid the homogenization dilemma of "identical cities" in the process of urban renewal.

(4) EconomicActivationValue

The cultural genes of Dongpo Road boast unique cultural IP potential and cultural-tourism activation potential, which can support sustainable economic output of the district.AsanationallyrenownedliteratiIP,Dongpoculture,combinedwith

Jiangnan lane style and purple clay experience, can create differentiated cultural tourism appeal to attract cultural tourists. It promotes the development of local cultural and creative industries, characteristic catering and handicraft experience businesses, creates opportunities for indigenous residents to obtain employment and increase income nearby, and builds a virtuous cycle between cultural conservation and economic development. This addresses the common predicament in the conservation of many historic districts, namely “only investment without sustainable returns”.

ContemporaryInheritanceValueofCulturalGenes

Against the backdrop that the renewal of numerous historic districts across Chinaisgenerallyconfrontedwithchallengesincludingstylistichomogenization,cultural hollowing and over-commercialization, the contemporary inheritance value of Dongpo Road′s cultural genes is reflected in three dimensions.

First,it establishes the core cultural basis for the district′s landscape renewal. Through cultural gene identification and value evaluation, the cultural theme and style control boundaries of Dongpo Road′s landscape renewal are clarified. This avoids problems such as groundless pseudo-antique fabrication, simple stacking of cultural symbols and out-of-control style during renewal. It ensures that all landscape design measures revolve around the district′s core cultural traits, enabling the renewed district to preserve its own cultural identity and explore a distinctive renewal path different from other ancient Jiangnan towns.

Second, it provides physical spatial carriers for the living inheritance of historic culture. The inheritance of cultural genes cannot be confined to documentary archiving and static museumdisplays. With the help of landscape renewal, abstract elementssuch as Dongpo′s poems, purple clay craftsmanship and marketplace life are translated into perceptible and experiential physical spatial scenes. Culture isintegratedintopublicspacesuseddailybyresidents,transformingstaticcultural

heritage into living culture rooted in contemporary life and realizing intergenerational continuation and modern activation of traditional culture.

Third, it offers a referable paradigm for the renewal of historic districts in similar small and medium-sized Jiangnan cities. Most existing domestic research and practical cases of historic districts focus on well-known historic blocks in large cities such as Suzhou, Hangzhou and Nanjing. Research on old-town districts centeredoncelebrityculture insmallandmedium-sizedJiangnancitieslikeYixing remains relatively insufficient. The research and practice of conservation and renewal guided by cultural genes in Dongpo Road can provide referable ideas and methods for similar small and medium-sized historic districts nationwide and facilitate the conservation of the overall cultural roots of old Jiangnan towns.

CHAPTER III. LANDSCAPE CONSERVATION AND RENEWAL STRATEGYOFDONGPOROADDISTRICTBASEDONCULTURAL GENES

CulturalGeneConservationStrategies

Cultural genes constitute the core essence that distinguishes Dongpo Road Historic Cultural District from urban blocks elsewhere. They carry Yixing's regional culturalcontextandDongpohumanisticrelics,servingasthefundamentalfoothold for the district's landscape renewal. Cultural genes can be categorized into two major types: material and intangible, which are interdependent and inseparable. Material cultural genes act as physical carriers for the tangible presentation of intangible culture, while intangible cultural genes endow physical spaces such as buildings, lanes and water systems with spiritual connotations. This conservation adopts the strategy of classified measures and hierarchical control, balancing relic preservation and living inheritance. It abandons extensive renovation modes featuring large-scale demolition and uniform, one-size-fits-all transformation. On the premise of safeguarding historical boundaries, flexible space is reserved for district renewal.

ConservationofMaterialCulturalGenes

Material cultural genes are physical carriers sustaining the cultural context of Dongpo Road Historic Cultural District, including lane texture, traditional dwellings, ancient wells, old courtyard walls, water system relics, native ancient trees, traditional brick and stone pavements, etc. A hierarchical and classified conservation strategy is adopted to avoid one-size-fits-all renovation.

First, delineate the core conservation zone and style coordination zone to implement differentiated control requirements. Historical buildings, surviving ancient wells and native ancient trees within the core conservation zone are mainly repaired and reinforced in strict accordance with the principle of “restoring the old as the old”. Original materials, structures and forms shall be retained to the maximum extent, and traditional craftsmanship shall be prioritized for repairing damaged components. Arbitrary demolition and alteration of main structures or replacement of facade materials are prohibited. Regular monitoring and preventive maintenance shall be carried out for defects such as weathered walls, leaking roofs and loose stone rings of ancient wells to slow down the aging of relics. For ordinary old buildings in the style coordination zone, the restoration of ancient architectural forms is not mandatory. Facade renovation and micro-transformation are adopted instead. Building height, color and volume are strictly controlled. Jarring modern outer walls and aluminum alloy facades shall be harmonized to ensure that building appearances match the traditional style of the district.

Second, preserve the original spatial texture of lanes. Maintain the existing scale and orientation of streets and alleys without widening the original lanes, so as to fully retain the small-scale networked lane pattern of Jiangnan. For pavement restorationoflanes,priorityshallbegiventorecoveringoldbrickandstonepaving, preserving weathering traces on road surfaces and reducing large-scalereplacement with asphalt or modern floor tiles. Ecological restoration is implementedforresidualwatersystemsandwaterfrontboundaries,including

dredging partially silted sections, clearing river debris and repairing natural revetments to restore the original style of waterfront spaces. For makeshift structures built later by residents without permission that damage the overall style, progressive demolition and cleaning shall be adopted. Residents' demands shall be fully communicated, and renovation shall be implemented step by step to avoid community conflicts caused by one-off forced demolition.

Meanwhile, establish digital archives for material cultural genes. Technologies such as image acquisition and 3D scanning are applied to systematically record the location, form and existing defects of historical buildings, wooden and stone components, ancient trees and ancient wells, forming a dynamically updated database. The archival results serve as the statutory basis for subsequent landscape renewal, building restoration and style control. The preservation status of various material relics shall be continuously tracked, and decay risks shall be intervened in a timely manner to prevent continuous damage and disappearance of physical carriers and guarantee the stable inheritance of material cultural genes.

ConservationofIntangibleCulturalGenes

The intangible cultural genes of Dongpo Road center on Dongpo humanistic spirit, Yixing purple clay culture, Jiangnan marketplace folk customs and daily living scenes of indigenous residents, featuring remarkable living attributes. This type of culture cannot be preserved independently from human activities. The priority of conservation lies in retaining indigenous residents and original living scenarios in the district, rather than merely relying on documentary and photographic records.

First,sustaintheresidentialfunctionofthedistrictandsafeguardthehousingrights and interests of indigenous residents. By improving basic living conditions and community supporting facilities, the risks of population loss and community hollowingare reduced, preservingthe originalmarketplace vitalityofthe old town, which constitutes the foundation for the survival of intangible cultural genes. The vitalityofhistoricdistrictsdoesnotlieinhollowantiquestagesettings.Residents

who have lived here for generations are cultural carriers themselves. Only by retaining original scenes such as grocery shopping, casual neighborhood chats and domestic life can culture maintain its vitality.

Second, support local cultural activities and craftsmanship inheritance. Small purple clay studios and spaces for painting and calligraphy gatherings are appropriately introduced with controlled scale, so as to prevent large commercial exhibition halls from occupying residential space. Regular cultural activities including recitation of Dongpo poems, painting and calligraphy salons and folk markets are held to revitalize the humanistic stories left by Su Dongpo in Yixing. Supportive policies shall be formulated to encourage local craftsmen to settle for creation and exhibition. Low-cost creation spaces are provided to realize intergenerational inheritance of native craftsmanship.

Third, establish a complete cultural narrative system. Integrate Dongpo allusions and local humanities of Yixing into district tours, signage systems and landscape interpretation. Adopt lightweight display methods such as shallow wall carvings, small interpretation plaques and online audio guides to spread local culture gently. Large-scale staged and commercial performances are rejected to avoid excessive consumption of cultural symbols. Meanwhile, cooperate with local cultural and historical departments to collect oral history. Interviews with long-term indigenous residents are carried out togather oralmemories, folklegends andlocal documents. Folk customs and living memories of the district are sorted and archived to achieve the recording, continuation and revitalization of intangible cultural genes.

OverallConstructionStrategyofDistrictCulturalSpace

On the basis of cultural gene conservation, systematic spatial mending is carried out for the whole district to reconcile spatial conflicts among historical relics, residents' daily life and cultural tourism experience. The spatial order is restructured with cultural narration as the clue, spatial breakpoints are connected, andfunctionallayoutisoptimized.Scatteredandisolatedhistoricsitesarelinked

toform a continuous and complete cultural experience network, so as to realize the coordinated improvement of spatial form and cultural connotation.

SpatialStructureOptimization

Centered on “mending fragmented spaces”, broken spatial sequences are repaired without damaging the original lane framework. The existing conditions of Dongpo Road are characterized by spatial fragmentation, insufficient public nodes and idle marginal spaces. Some alleys are dead-end and enclosed, with courtyards isolated from one another. The district lacks small public spaces for residents to rest and tourists to linger. Negative spaces such as wall corners and abandoned vacant lots remain idle for a long time, resulting in waste of spatial resources.

By opening partial dead-end alleys and improving the slow-traffic network, residential courtyards, waterfront spaces and cultural nodes are connected. Neglected marginal spaces within the district are excavated and transformed into pocket green spaces and small cultural nodes, forming a spatial structure of “main street narration + alley penetration + scattered nodes”. The main street undertakes major functions of cultural display and passage, while alleys extend inward to maintain a quiet residential atmosphere. Scattered micro-nodes serve as cultural stopping points, creating a well-proportioned spatial rhythm.

The linear waterfront space is sorted out, the waterfront interface restored, and debris along the shoreline cleared. Native aquatic plants are configured to build a continuous waterfront slow-traffic corridor. Meanwhile, spatial interfaces are strictly controlled and sight corridors of lanes are protected to prevent new structures from blocking historic views and preserve the small-scale spatial atmosphere of the district. A continuous and complete cultural experience route is constructed, enabling cultural genes to be narrated through spatial sequences. People can gradually perceive the district’s cultural context while wandering along the route.

FunctionalRenewalandIntegration

Adhering to the compound functional concept of residence-oriented and lightweight activation, large-scale commercial replacement of indigenous residents' living space is firmly rejected to prevent the district from turning into a pure tourist commercialstreet.Thecoreresidentialfunctionofthedistrictisretained,and priority is given to improving residents' basic living conditions including kitchen, toilet,drainageandfiresafety,soastoenhancethelivingqualityofindigenous residents.

On this basis, low-interferencecultural supporting functions are appropriatelyintroduced,suchassmallculturalexhibitionspaces,purpleclayexperience workshops,convenientservicepointsandlightculturalandcreative stores.

A mixed functional mode of "residence + cultural experience + convenient service" is established to realize the coexistence of residents' daily life and tourists' cultural experience.Zonedindustrialcontrolisimplemented:commercialscaleandbusiness hours are strictly controlled in core residential alleys, and noisy business types are prohibited; cultural businesses are appropriately arranged along the main street. Traffic routes are rationally planned to separate residents' daily commuting routes from tourist sightseeing routes. Alley entrances and landscape partitions are adoptedtoweakentheintrusionoftouristactivitiesintoresidentialareasandreducethedist urbanceofculturaltourismactivitiestolocalresidents'lives.It balancescommunityvitalityandresidentialtranquility,coordinatespeople's livelihooddemandsandculturaltourismdevelopment,andachievessustainable functional development.

PrinciplesofLandscapeRenewalDesign

The principles of landscape renewal design govern all design work and serve as evaluation criteria for scheme design, construction implementation and post-assessment. All landscape design measures shall be promoted within theframeworkofthefollowingprinciples.Onthepremiseofprotectingthe

authenticity and integrity of the historic district, the contemporary translation of cultural genes can be accomplished.

AuthenticityPrinciple

Theauthenticity principle isthe primaryprinciple for landscaperenewal of historic districts. It emphasizes respect for authentic historical information of the district and opposes the fabrication of pseudo-antiques. On the one hand, preserve the genuine information of physical carriers, retain the original lane scale, building components and site materials. Blind antique imitation and fabrication of fake relics are forbidden, and non-existent historical components shall not be deliberately replicated merely for visual effects. On the other hand, respect the authenticity of cultural connotations, accurately interpret the original essence of Dongpo culture, Jiangnan water-town culture and purple clay culture. One-sided and entertaining appropriation of cultural symbols should be rejected, and trendy, labelled cultural expressions shall not be mechanically applied.

When extracting cultural genes in landscape design, emphasis is placed on the translation of inner spirit rather than simply copying superficial symbols such as patterns and plaques, preventing superficial cultural expression. Meanwhile,respect the authentic living scenarios of indigenous residents. The renewal scheme shall fully investigate residents' demands and consider practical needs including daily passage, clothes drying and rest, so as to maintain the authenticity of living heritage in the district. Residents' living scenes shall not be treated as mere landscape backdrops.

IntegrityPrinciple

The integrity principle regards Dongpo Road as an integrated cultural organismand coordinates the relationships among architecture, lanes, water systems, greening, landscape sketches, business forms and cultural narration. The landscape designofindividualnodesshallnotbeconsideredinisolation.Intermsofstyle

control, the color, materials and landscape language of the district are unified, and the stylistic keynote of landscape sketches, pavements and signage is regulated to avoid disjointed independent designs of separate nodes which lead to disordered district style.

In cultural narration, a coherent and complete story line of Dongpo culture is constructed to systematize scattered landscape nodes. Each node undertakes a corresponding narrative segment and echoes with others. At the spatial level, the style transition among the core conservation zone, style coordination zone and waterfront space is coordinated. A gentle transition from strict conservation to moderate renewal is formed to prevent stylistic discontinuity between zones. Meanwhile, multiple objectives including ecology, society and culture are taken into consideration. Short-term landscape renovation projects and long-term district operation and management are integrated. Balancing landscape effect, residents′ interests and cultural inheritance, the overall coordination of physical space, cultural connotation and social life is realized.

InnovationPrinciple

The innovation principle focuses on modern translation of cultural genes on the basis of the bottom line of authenticity conservation. Innovation does not mean subverting tradition; instead, it interprets the core of traditional culture with contemporary landscape design language. Rather than directly copying ancient paintings and traditional patterns, landscape sketches and signage systems abstract cultural gene elements such as Dongpo calligraphy, water textures and purple clay vessel forms. These elements are simplified and reconstructed to form concise and modern landscape language. New materials and technologies can be appropriately adopted, such as weathering steel and permeable concrete, yet their color and textureshouldharmonizewiththetraditionalstyletoachieveharmonybetweenold and new.

Innovation is also reflected in the utilization of space. Idle negative spaces are revitalized. Abandoned lots and marginal zones are transformed into micro-landscapesandculturalnodesaccessibletomodernpeople, soastotapthevalueof stock space. Cultural experience modes are innovated to create immersive slow-traffic cultural routes. Combined with online guides and scenario-based interpretation,theseroutesmeetmodernpeople'sdemandsforsightseeing,restand cultural perception. In this way, traditional culture is no longer static exhibits on display, but places for personal perception and interactive experience, realizing the rebirth of traditional cultural genes in contemporary contexts.

RenewalDesignStrategyofLandscapeElements

BuildingRenewalStrategy

Ahierarchicalandclassifiedbuildingrenovationstrategyisadoptedforthisdistrict renewal. Buildings are graded according to their historical value, preservation status and impact on the overall style, with differentiated repair and transformation schemes formulated accordingly. This avoids one-size-fits-all renovation and balances the demands of heritage conservation and livelihood improvement.

(1) Cultural relic buildings and traditional dwellings of high historical value: Following the conservation principle of "minimum intervention and restoring the old as the old", the core tasks include structural safety reinforcement and authentic conservation restoration. Traditional components carrying historical information such as original timber frames, old walls, wooden doors and windows, and carved ornaments are fully preserved to retain the original texture of buildings to the greatest extent. Without damaging historic facades and main structures, internal infrastructure is upgraded, including water supply and drainage, strong/weak electricity, fire protection and other systems, to meet contemporary residential standards and reconcile the conservation of traditional building fabric with modern living requirements.

(2) Ordinarydwellingswithtraditionalstyle: Priorityisgiventofacaderenovation. Weathered and peeling wall surfaces are repaired; the style, material and colour of doors and windows are unified. Unauthorized later-built structures that undermine the integrity of facades are demolished. Micro-renewal is applied to building interiors, with refined transformation of kitchens, bathrooms and pipeline systems. Living comfort is improved without large-scale layout alteration to preserve the living scenarios of indigenous residents.

(3) Modern self-built buildings that obviously conflict with the district's overall style: Facade harmonization renovation is carried out. Wall colour, roof shape and eave details are adjusted to weaken jarring modern architectural features and eliminate visual rupture between old and new buildings, integrating them into the overall texture of the district. New auxiliary structures within the district aresubject to strict control over volume, storey height and interface scale.Lightweight andlow-impactconstructionmethodsareprioritizedtobalancefunctionaldemands of new construction and historic environment, achieve harmonious coexistence of oldandnewbuildings, andfulfillthe constructiongoalof "coexistence ofold and new, harmony without uniformity".

DistrictSpaceRenewalStrategy

Taking the slow-traffic system as the core starting point for spatial optimization, thespatialorderoflanesisreconstructedtorestorethepedestrian-orientedattribute of historic streets. The pavement system of lanes is systematically sorted out. Traditional brick and stone pavement texture is restored in core historic alleys. While retaining the historic texture, pavement structure is optimized to satisfy modern engineering requirements such as anti-slip performance and rainwater drainage. Street cross-sections are redistributed to implement the principle of pedestrian priority. Restrictions on motor vehicle passage are imposed through streetdimensioncontrolandtrafficrestrictionmanagementtoachievemoderate

separation of pedestrians and vehicles, ensuring pedestrian safety and quietness within the lanes.

A continuous and complete cultural narrative touring route is built along the main street of the district. Thematic cultural landscape nodes are arranged at key locations including lane intersections, corners and ancient wells to connect humanistic allusions related to Su Dongpo and local historical stories, forming a perceptible and experiential cultural sequence. Simultaneously, environmental renovation of lanes is carried out: disorderly overhead pipelines are tidied up, irregular and unauthorized outdoor billboards are removed, and the street signage and wayfinding system is uniformly designed to purify the visual interface of the lanes.

The grey space resources between courtyards and lanes, such as courtyard outer walls and alley sides, are deeply explored. With the consent of property owners, partial courtyard boundaries are moderately opened to create semi-open micro plazas and stopping spaces within alleys. This breaks the enclosed feeling of the lanes, enhances spatial permeability and opportunities for human interaction, and reshapesthespiritofplaceforthelanesfilledwithmarketplacevitalityandhistoric atmosphere.

RenewalStrategyofGreeningandSupportingFacilities

The greening construction of the district adheres to the principle of prioritizing native species. Native plants adapted to the Jiangnan climate, such as bamboo, hackberry, sweet osmanthus and calamus, are selected. Native plant communities are adopted to shape the natural and elegant artistic conception of Jiangnan alleys, avoidingproblems suchas highmaintenance costs andlackof regional atmosphere caused by blind introduction of exotic rare tree species.

Idle marginal land along alleys, gaps between courtyards and linear waterfront spacesarefullyrevitalized.Scatteredpocketgreeneryandlinearwaterfrontgreen

belts are arranged to add green space wherever possible and make up for the insufficientgreenareasinthedistrict.Anear-naturalecologicalplantconfiguration pattern is adopted for waterfront zones to build multi-layered riparian plant communities, restore the ecological foundation of the waterfront, and balance ornamental value and soil and water conservation capacity so as to improve the ecological resilience of waterfront spaces.

Street supporting facilities include rest benches, landscape lighting, waste collection facilities, wayfinding signs and landscape sketches. Their forms are designed by abstracting and translating elements from local cultural genes such as brush lines in Su Dongpo's calligraphy, Yixing purple clay patterns and Jiangnan water textures. Preference is given to plain-textured materials including weather-resistant and anti-corrosive timber and natural stone to ensure consistency between the texture of facilities and the historic style of the district.

Alltypesof facilitiessatisfybothdailypracticaldemandsoflocalresidentsand the cultural experience needs of visitors. Landscape lighting guarantees safe passage at night while creating alley atmosphere. Landscape sketches adopt implicit and restrained cultural expression, rejecting exaggerated stacking andover-decoration. Cultural connotations are embedded in details, realizing the organic integration of practical functions and cultural expression.

GENERALCONCLUSIONS

Dongpo Road in Yixing carries unique local historical memories. Its landscape renewal is by no means a simple spatial transformation, but a process of conservation and activation of cultural genes. It is necessary to thoroughly explore the cultural core of this historic district and identify its distinctive "cultural genes", including architectural styles, traditional crafts and folk activities. This ensures that local characteristic culture can be effectively preserved and inherited during landscape renewal, preventing the discontinuity and disappearance of historicalheritage.Againstthebackdropofrapidurbandevelopment,the

landscape renewal of Dongpo Road Historic Cultural District faces the core contradictionbetween"tradition and modernity". This paper discusses how to rationally renew and renovate the landscape of historic cultural districts amid modern urban development, so that the district can integrate into the modern urban environment while retaining the uniqueness of traditional culture. Particularly in landscape design, it explores how to strike a balance between innovation and conservation to avoid the loss of cultural genes.

The landscape renewal of Dongpo Road should further aim to upgrade its cultural value,transformingthehistoricdistrictfroma"staticheritagesite"intoa "dynamicculturalexperiencecenter".Ontheonehand,themedexperience scenes can be created based on excavated cultural genes. For example, idle old buildings can be renovated into a Dongpo Culture Exhibition Hall to display SuShi's life trajectory in Yixing and relevant cultural relics. Purple clay pottery experience workshops can be introduced, allowing residents and tourists to participate in pot-making and experience the charm of traditional craftsmanship. On the other hand, it is essential to link surrounding cultural and tourism resources and design a "Dongpo cultural research and study route", connecting the district with attractions such as Yixing Purple Clay Village and Dongpo historical sites to form a cultural tourism industrial chain. This not only provides a carrier of cultural identity for local residents, but also attracts tourists to the city and boosts the development of catering, cultural and creative industries nearby, achieving mutual promotion of cultural value and economic value.

Optimization of spatial layout and functional integration serves as an important support to revitalize Dongpo Road. In terms of spatial planning, priority should be given to improving pedestrian environments, widening walkways in narrow alleys, adding rest benches and green landscapes to create a pleasant slow-traffic atmosphere. For traffic routing, "pedestrian-vehicle separation " shall be implemented,withparkinglotsarrangedoutsidethedistricttoreducedisturbance

of motor vehicles to historic lanes. In functional integration, homogenization of commercial formats should be avoided. While preserving traditional shops such as old teahouses and time-honored grocery stores within the district, modern businesses including cultural and creative bookstores and characteristic cafés can be appropriately introduced. Their storefront decorations must conform to the historic style, for instance by adopting traditional wooden facades and handwritten signboards,to ensureharmoniouscoexistence ofcommercialfunctionsandhistoric features. The primary goal is to improve the overall utilization efficiency and vitality of the district.

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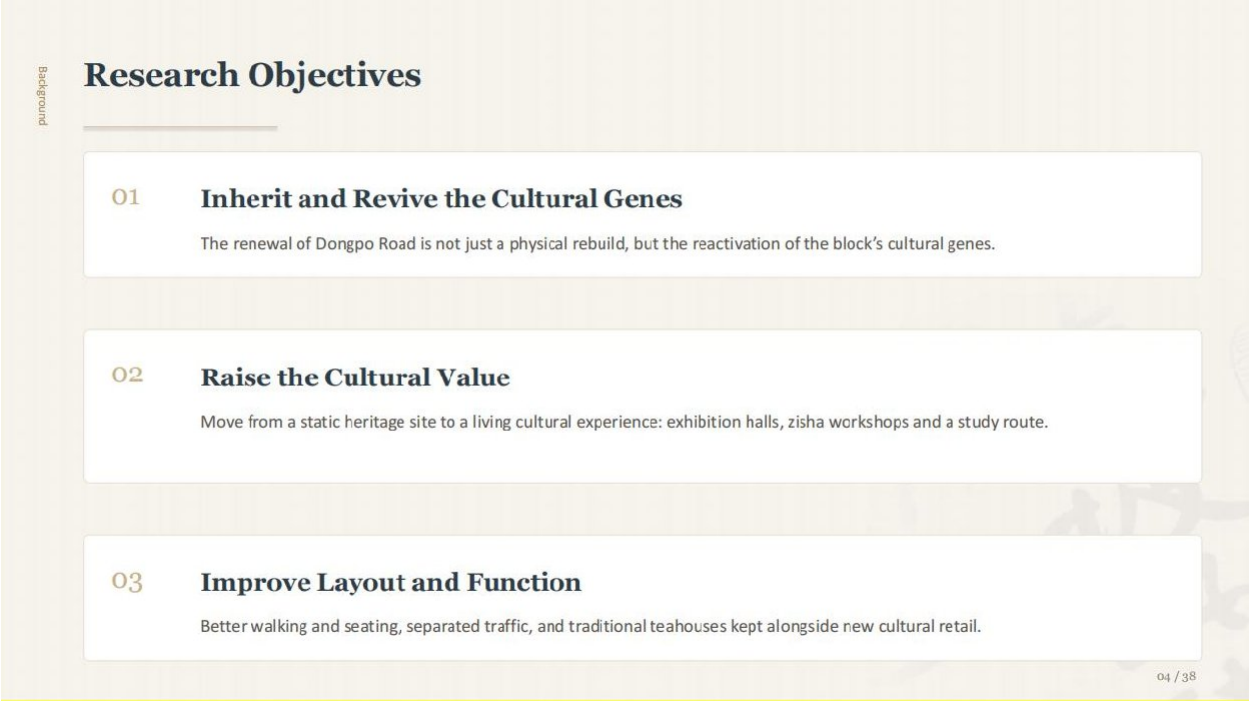
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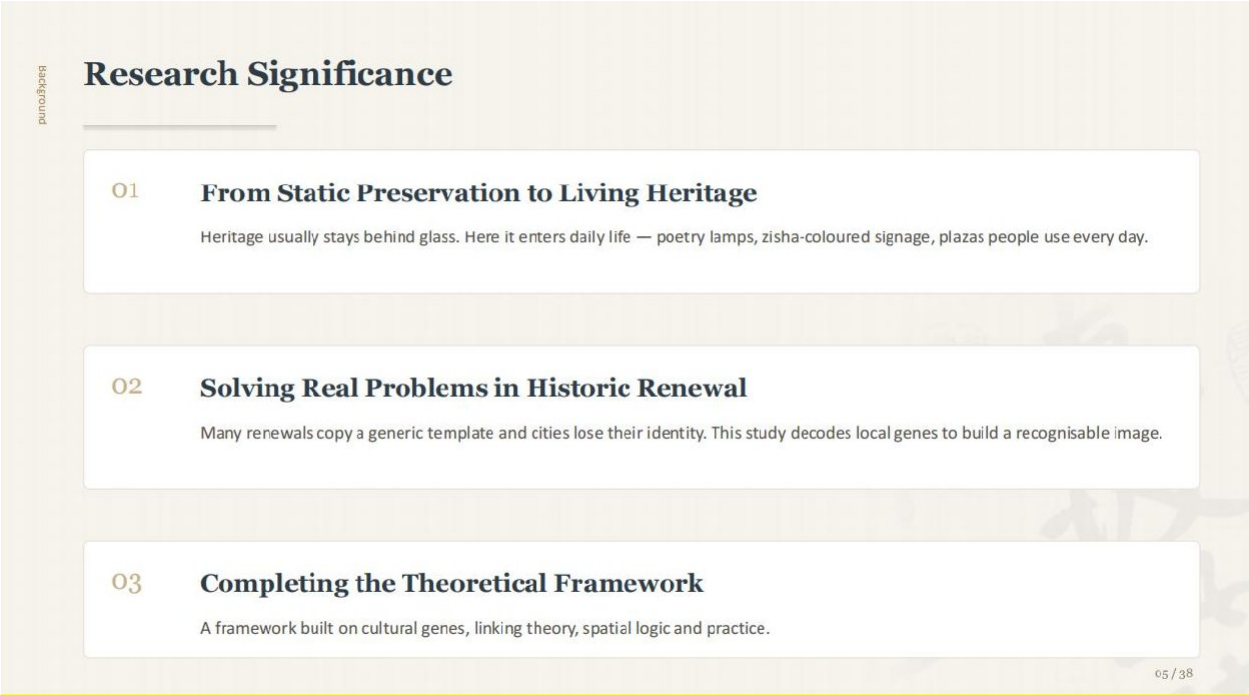
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APPENDIXA.


Background
Research Objectives
01
Inherit and Revive the Cultural Genes
The renewal of Dongpo Road is not just a physical rebuild, but the reactivation of the block's cultural genes.
02
Raise the Cultural Value
Move from a static heritage site to a living cultural experience: exhibition halls, zisha workshops and a study route.
03
Improve Layout and Function
Better walking and seating, separated traffic, and traditional teahouses kept alongside new cultural retail.
04 / 38


Background
Research Significance
01
From Static Preservation to Living Heritage
Heritage usually stays behind glass. Here it enters daily life — poetry lamps, zisha-coloured signage, plazas people use every day.
02
Solving Real Problems in Historic Renewal
Many renewals copy a generic template and cities lose their identity. This study decodes local genes to build a recognisable image.
03
Completing the Theoretical Framework
A framework built on cultural genes, linking theory, spatial logic and practice.
05 / 38

APPENDIXB.

Research Status

Case Study · Yongqingfang, Guangzhou

Yongqingfang on Enning Road is the root of Xiguan culture. Before renewal: dangerous housing, weathered arcades, tangled cables.

The project used “micro-surgery” rather than mass demolition — keeping grey-brick arcade facades, wooden sliding doors and Manchu windows, and repairing broken walls with traditional methods.

What to take from it: keep the grain of the block.





08 / 38

Research Status

Case Study · Goushanli, Hangzhou

Goushanli sits at the corner of Nanshan Road and Hefang Street, beside West Lake. The design follows “the finest returns to the simplest”: new lane walls echo the deep Jiangnan alley.

Republican-era buildings keep their grey brick and tile, repaired one by one; old bricks are reused as landscape features, and bronze details set old against new.

What to take from it: organise old and new through transition.





09 / 38

Research Status

Case Study · King's Cross, London

King's Cross was an industrial transport hub that declined after the Second World War. Renewal began in 1996, when St Pancras became the Eurostar terminal.

The method is "repair and stitch": new roads, two walking routes, and a north-south public space linking the nodes. Historic buildings kept their facades, with new functions behind.

What to take from it: stitch scattered heritage together with public space.





10 / 38

Research Status

Case Study · Clarke Quay, Singapore

Clarke Quay is a waterfront district of five 19th-century warehouse blocks, left derelict when container traffic moved away.

The renewal keeps the original facades and rebuilds the interiors, then uses bold colour — warm red walls with grass-green shutters — and lighting to fuse tradition and modernity.

What to take from it: authentic outside, new inside, colour to bring it back to life.





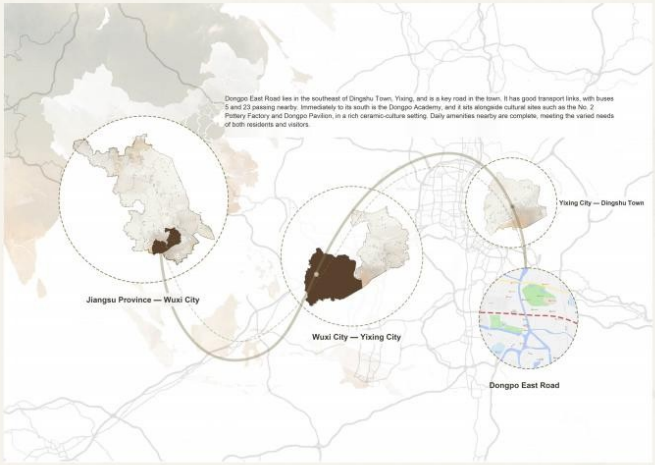
11 / 38

APPENDIXC.

Field Study

Location Analysis

Locating the site step by step — province, city, town, block — places Dongpo East Road in a dense cluster of ceramic-culture resources.

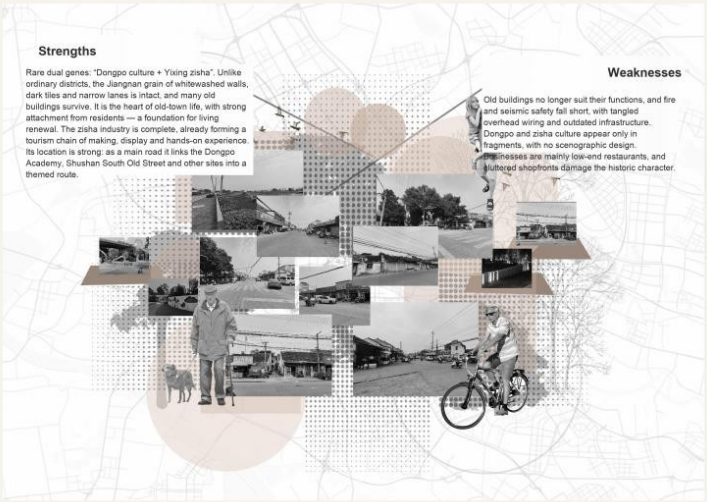


17 / 38

Field Study

Site Analysis

A SWOT reading sets out the strengths to build on and the problems this renewal must answer.

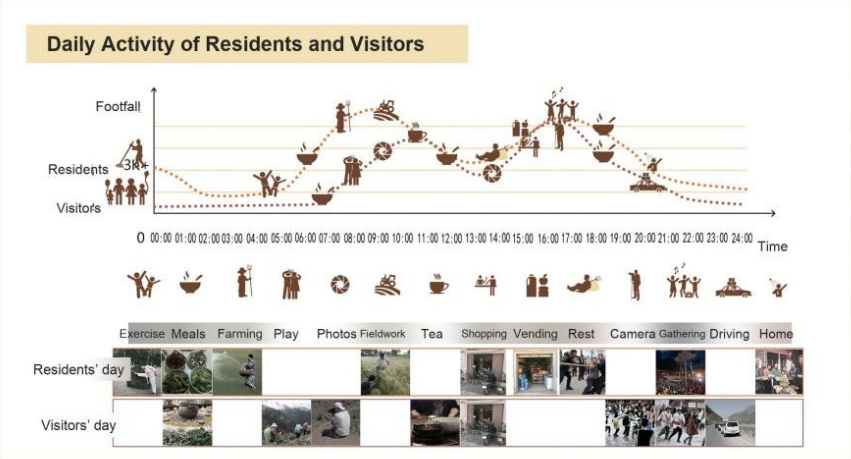


18 / 38

Field Study

User Analysis

How residents and visitors use the site through the day gives the basis for zoning, business mix and facilities.



19 / 38

Historical District





01 Main Entrance · Archway Plaza

Historical District · 1/4

The main entrance to the historic district. A red-brown timber archway marks the gateway, framed by white walls, moon windows and red lanterns; grey stone paving ties the plaza to the old buildings.

24 / 38

Historical District





Site Plan

02 Traditional Street Frontage · Dongpo Lane

Historical District · 2/4

Dongpo Lane, the block's main street. White walls, timber eaves, lattice doors and rows of red lanterns set the rhythm; a linear drain guides the eye into the lane.

Historical District





Site Plan

03 Water Courtyard & Sky Bridge

Historical District · 3/4

A water courtyard crossed by a timber lattice bridge. Ceramic jars along the bank glow from within — turning zisha culture into something you can walk up to.

Historical District





Site Plan

04 Courtyard Retail Garden

Historical District · 4/4

A courtyard retail garden. Red lanterns and stone benches keep the scale of the old street; a grid of rust-red corten planters sets new material against the historic base.

27 / 38

Historical Park





Site Plan

01 Ceramic Culture Plaza

Historical Park · 1/9

The park's central gathering space. A concentric plaza holds a group of potter figures, backed by walls inlaid with broken ceramic and tile.

29 / 38

Historical Park





Site Plan

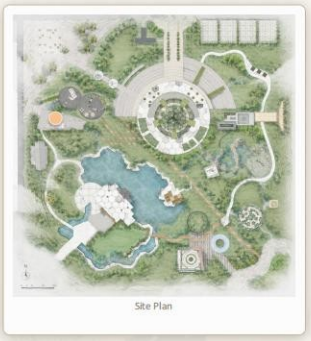
02 Wellness Water Garden · Zen Mist

Historical Park · 2/9

Still water meets lawn. A timber deck and daybed sit in the shallow pool as mist rises; a pavilion and thatched parasols give shade at the edge.

Historical Park





Site Plan

03 Local Craft Market

Historical Park · 3/9

A rammed-earth wall forms the backdrop, set with ceramic jars, bamboo trays and an old bicycle. A giant teapot carved with “ceramics” sits on top.




Site Plan

05 Zen Tea Garden

Historical Park · 5/9

Banners reading “Zen and tea as one” lead in. A large teapot pours toward a single cup, with bamboo seats under the trees.




Site Plan

04 Calligraphy and Seal Carving Garden

Historical Park · 4/9

Interlocking white seal stones rise like opening pages, carved with running-script calligraphy and marked with vermilion seals.

Historical Park





Site Plan

06 Ground Chessboard

Historical Park · 6/9

A raised stone platform becomes a chessboard you can walk on, with more than twenty stone pieces on a grey grid.

Historical Park





Site Plan

07 Waterfront Family Play Area

Historical Park · 7/9

Natural ponds and timber walks. Rope swings, climbing frames and rope nets in warm wood sit on the lawn; a pavilion and deck face the water.





Site Plan

08 Tea Ceremony Terraced Garden

Historical Park · 8/9

A rust-red corten screen is the focus, its cut-out landscape framing the characters for “tea ceremony”. Below, planted terraces step down beside a dry stream.





Site Plan

09 Aerial View

Historical Park · 9/9

The masterplan from above. A central axis runs from the south entrance through a circular tree plaza to the lake, with geometric garden nodes around the water.