

MINISTRY OF EDUCATION AND TRAINING

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**LANDSCAPE ARCHITECTURE SPACE OF VILLAGES
TRADITIONAL QUAN HO ADAPTING TO THE
URBANIZATION PROCESS OF BAC NINH PROVINCE**

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SUMMARY OF DOCTORAL DISSERTATION

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The dissertation can be found at the National Library of Vietnam and the Library of Hanoi Architectural University.

INTRODUCTION

1. The urgency of the topic

When mentioning Bac Ninh, we are reminded of the Quan ho folk songs. Along with urbanization and economic development, traditional Quan ho villages are also changing and transforming. In addition to positive aspects such as infrastructure development and improved quality of life, urbanization also brings about negative impacts on landscape architecture. Faced with these realities, alongside the preservation and recognition of intangible cultural heritage, scientific research analyzing the foundations and proposing directions for organizing space, maintaining and developing the architectural landscape spaces (material objects, physically transformable spaces) that adapt to the impact of urbanization is necessary.

2. Research objectives

* Objective: To find appropriate and adaptive solutions for organizing space in order to maintain and develop the representative architectural landscape spaces of Quan ho villages before urbanization, contributing to the preservation of the cultural space of Bac Ninh's Quan ho.

* Goals: 1. Surveying and analyzing the impact of urbanization on the architectural landscape spaces of Quan ho villages/ 2. Identifying the role of architectural landscape spaces in Quan ho villages in relation to Quan ho folk songs and the need to preserve representative spaces/ 3. Proposing solutions for organizing space to maintain and develop the architectural landscape spaces of Quan ho villages that adapt to urbanization.

3. Research subjects and scope

* Subjects: The research subject of the dissertation is the architectural landscape spaces of Quan ho villages.

* Scope: 44 traditional Quan ho villages in Bac Ninh province that have been recognized by the provincial People's Committee and awarded the original Quan ho village certificate.

* Timeframe: In accordance with the Bac Ninh urban general planning until 2030, vision until 2050 approved by Decision 1560/QD-TTg of the Prime Minister on September 10, 2015, and Decision 728/QD-TTg on June 20, 2023 approving the adjustment of the Bac Ninh urban general planning until 2045.

4. Research methods

The dissertation utilizes the following methods: 1. System approach method/ 2. Current situation survey method/ 3. Sociological survey method/ 4. Synthetic analysis method/ 5. Comparison and structural analysis method based on maps.

5. Research content

- The role of architectural landscape spaces in Quan ho villages in relation to Quan ho folk songs

- Current situation and changes in the architectural landscape spaces of Quan ho villages before the urbanization process of Bac Ninh province, as well as the requirements for preserving representative architectural landscapes.

- The scientific basis for organizing the spatial architecture of Quan ho villages is to adapt to urbanization.

- The appropriate and adaptive spatial organization solutions aim to preserve, maintain, enhance, and develop the typical landscape architecture of the Quan ho village system.

6. Scientific significance of the topic

- The research is applied to urban planning in Bac Ninh province to serve the conservation and development of advanced and culturally rich urban areas.

- The research and proposals of the dissertation contribute to the theory of planning and landscape architecture in Vietnamese villages and rural areas before the ongoing urbanization process nationwide.

7. Results of the dissertation

- This is the first study to systematically survey the spatial architecture of 44 Quan ho villages in Bac Ninh province. The dissertation clearly emphasizes the need to maintain and develop spaces and landscapes that have the potential to be places for performing and practicing Quan ho folk songs in order to preserve and promote Quan ho culture.

- The valuable components of Quan ho village's landscape architecture need to be preserved.

- Proposed adaptive approaches for the spatial architecture of villages from a conservation perspective, urbanization perspective, and professional structural analysis with specific evaluation analysis and adaptation plans.

- Proposed specific spatial organization solutions to maintain and develop the continuity of Quan ho village's landscape architecture, from overall planning to solutions for component spaces.

8. New contributions

- The valuable components of Quan ho village's landscape architecture need to be preserved.

- Proposed 03 adaptive approaches to the urbanization process of landscape architecture from the perspective of village classification.

- Proposed specific spatial organization solutions to maintain and develop the continuity of Quan ho village's landscape architecture.

9. Some concepts and terms used in the dissertation

The dissertation uses 17 concepts and terms, including prominent ones such as Landscape Architecture, Spatial Organization, Adaptation, Urbanization, Preservation, Continuously Development...

10. Dissertation structure

The dissertation consists of 3 parts: Introduction, Content, Conclusion-Recommendations, and 06 Appendices. The research content is presented in 3 chapters following the common structure of architectural dissertations.

CHAPTER 1: OVERVIEW OF THE LANDSCAPE ARCHITECTURE OF QUAN HO VILLAGES DURING THE URBANIZATION PROCESS OF BAC NINH PROVINCE

1.1 An overview of the natural conditions and history of the Kinh Bac region (Bac Ninh) and Quan ho folk songs.

1.1.1 Natural conditions and history

Some notable characteristics of Bac Ninh province have been summarized by historical and cultural researchers: Birthplace of the nation and foundation of Vietnamese civilization; Center for resistance against invasion and assimilation, preserving and developing ethnic culture; Exemplary land of Vietnamese civilization and personality.

1.1.2 Origin and development of Quan ho folk songs

In terms of its ancient origins, it is a form of duet singing between men and women, dating back approximately 3000 years. However, the playing style and singing of Quan ho have continuously evolved over time. Therefore, the system of songs and customs that we recognize today is fundamentally the creative products of later centuries, especially during the independent feudal period.

1.1.3 The intangible cultural elements of Quan ho.

The dissertation summarizes the most prominent intangible cultural elements: Quan ho folk songs - Quan ho culture; Festivals in the Kinh Bac region;

Other intangible cultural values related to Quan ho (costumes, cuisine, customs, communication etiquette).

1.2 The system of Quan ho villages during the urbanization process in Bac Ninh.

1.2.1 The system of Quan ho villages in Bac Ninh.

Bac Ninh currently has 44 original Quan ho villages out of the 49 recognized by UNESCO (the remaining 5 villages are in Bac Giang).

1.2.2 General urban planning for Bac Ninh until 2045.

According to the approved urban master plan by the Government, Bac Ninh will become a first-class urban area and a centrally-governed city by 2030 with the following contents: Bac Ninh will develop as a cluster of multiple urban centers; There will be 12 concentrated industrial zones with a total area of about 4,800 hectares; Focus on building and developing diverse commercial forms, especially large-scale commercial infrastructure.

1.2.3 Characteristics of urbanization in Bac Ninh: The urbanization process goes hand in hand with industrialization.

1.2.4 Evaluation of the system of Quan ho villages in the overall urbanization process of Bac Ninh province.

- The system of 44 Quan ho villages is concentrated near the "intersection" created by the two main urban axes, which are the service urban corridor along National Highway 1A and the industrial urban corridor along National Highway 18.

- The Quan ho villages are included in the general urban planning of Bac Ninh, characterized by multiple poles, multiple centers, and a large proportion of industry and services.

- The Quan ho villages all originated as long-standing residential areas, and the planned village land and surrounding areas are mostly planned for residential, public, and service purposes.

- Industrial zones, industrial clusters, and commercial service centers have been and are being planned and constructed, creating magnetic poles that exert pressure on urbanization. Therefore, the system of traditional villages, including the network of Quan ho villages, is affected in general.

1.3 Classification of Quan ho villages.

1.3.1 Classification of villages based on topography and architectural landscape characteristics.

Including: Riverside villages; Hilltop villages; Villages in the flatlands along major roads.

1.3.2 Classification of villages based on the degree of urbanization.

Including: Fully urbanized villages (8 villages) and Villages not yet fully urbanized (36 villages).

1.3.3 Classification of villages based on occupational structure and socio-economic factors.

Including 3 types of villages, among which the group of paper-making craft villages stands out with the characteristics of craft village - Quan ho village coexistence and different landscapes (due to strong influence from paper-making craft).

1.4 Architectural landscape of Quan ho villages.

The architectural landscape is divided into the following object classes: Overall form and characteristics of village structure; Residential space and courtyards; Ritual and spiritual space; Public community space; Production and livelihood space.

1.5 The impact of urbanization on the architectural landscape of Quan ho villages.

1.5.1 Overall form of village space.

- Impact from renovation, expansion, and new construction of roads.
- Impact from the construction of large-scale projects.
- Impact from urban development expansion projects.

1.5.2 Residential space and courtyards.

Houses are built closely along the main village roads; the loss of valuable ancient houses, the emergence of new functions, new equipment, and new materials...

1.5.3 Ritual and spiritual space.

The communal house now only symbolizes an ancient way of life. Meanwhile, the pagoda, with its foundation in religious belief, is not fundamentally affected by urbanization and still exists quite firmly. This is a practical basis for researchers to find an adaptive model for communal houses as presented in Chapter 3.

1.5.4 Public spaces and community activities

- The transformation of public spaces: village gates, village wells, village markets

- The disappearance of green spaces, bodies of water, open spaces.
- The emergence of new architectural structures: cultural and sports centers (at the commune level); Quan ho houses

1.5.5 Production and livelihood spaces

This is a subject that undergoes significant transformation, with many production spaces disappearing. Agricultural land has become industrial land, urban construction land, transportation land, commercial service land... Villages have turned into residential areas without agricultural land. Farmers have become workers in factories and plants.

1.6 Research related to the dissertation topic

- Comprehensive studies on Quan ho Bac Ninh culture
- Studies on the architectural landscape of villages in the Red River Delta region
- Studies on the architectural landscape of villages in Bac Ninh province

1.7 Overall evaluation of relevant research works and issues that need to be addressed in the dissertation

1.7.1 General evaluation

The cultural space of Quan ho Bac Ninh is undergoing changes along with comprehensive development of the economy, society, infrastructure,... The architectural landscape of Quan ho villages, as a component of the Quan ho cultural space, is also undergoing changes and interacting with other factors. Therefore, research in this aspect is necessary to clarify these transformations and relationships; contributing to the conservation and overall development of the Quan ho Bac Ninh cultural space.

1.7.2 Issues to be addressed

Surveying the current situation and changes in the architectural landscape of 44 Quan ho villages before the urbanization process in Bac Ninh province, as well as the requirements for preserving representative architectural landscapes; Analyzing the necessity of organizing the adaptive architectural landscape of villages in response to urbanization and the scientific basis of this issue; Proposing appropriate and adaptive solutions for organizing the architectural landscape to maintain, enhance, and develop the representative architectural landscapes of the Quan ho village system.

CHAPTER 2: SCIENTIFIC BASIS FOR ORGANIZING THE ARCHITECTURAL LANDSCAPE OF QUAN HO VILLAGES ADAPTING TO THE URBANIZATION PROCESS

2.1 Theoretical foundations

2.1.1 *The theory of place with the development of urban identity*

The dissertation emphasizes four factors influencing urban identity: time, people, activities, management.

2.1.2 *Transforming the dissertation with an adaptable and transformative architectural perspective*

The main idea of this transformation is that architecture is not immutable but a constantly changing and developing phenomenon.

2.1.3 *Theory on organizing the architectural landscape*

Landscape architecture is a human-oriented activity that impacts the artificial environment to balance the interaction between natural and artificial elements.

2.1.4 *Theory on conservation (maintenance) and continuity development*

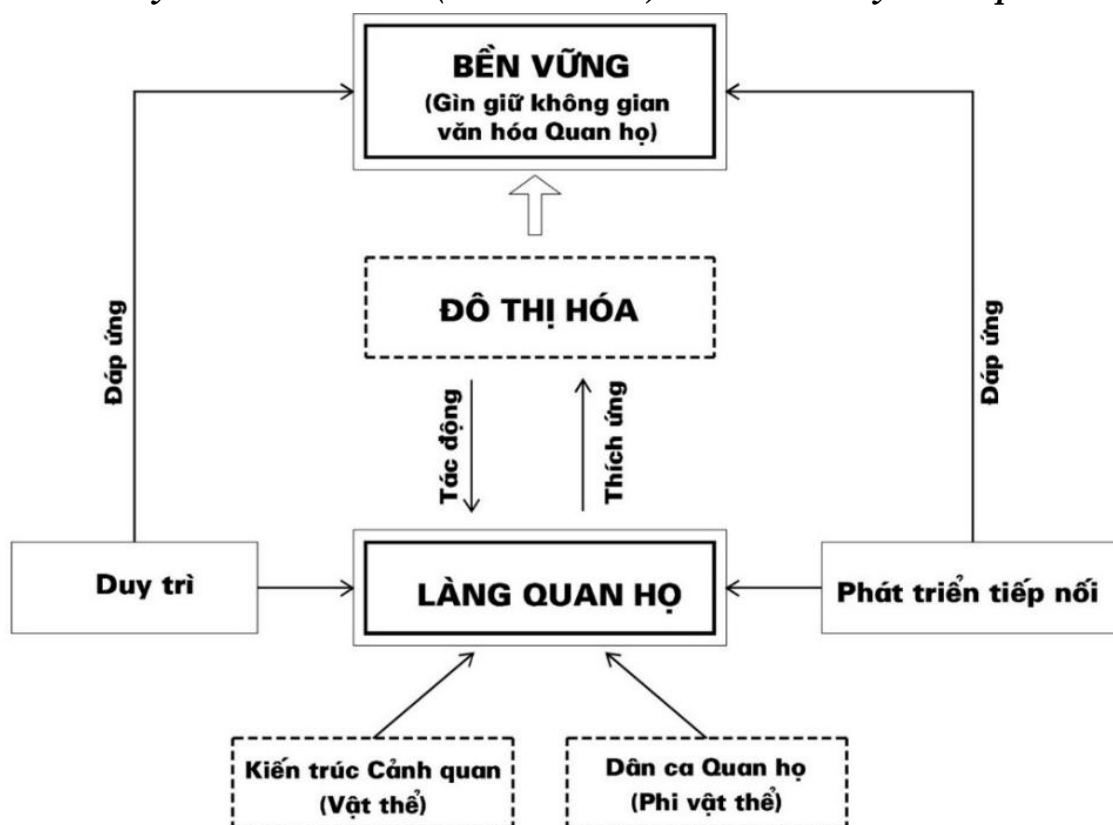


Figure 2.1: Theoretical analysis for maintaining and developing connectivity for Quan ho villages

The dissertation replaces the term "conservation" with "maintenance". The term "maintenance" is used for architectural landscape heritage, and it is softer

than "conservation" for monuments. "Maintenance" includes part of the content of "conservation", but it allows for necessary flexibility in perception, while also opening up feasible solutions for the preservation of heritage structures as normal living environments.

2.1.5 The theory of adaptation to urbanization.

The perspective of adaptation to urbanization is particularly concerned with its application to architectural and landscape spaces that are not heritage sites and are "alive" within the community, capable of transformation during the process of urbanization.

2.1.6 The theory of urban space transformation.

Discusses 5 factors of transformation in the morphological structure of urban areas according to the theory of urban morphology.

2.1.7 Some theories on urban and rural planning.

- The theory of urban and rural planning: The theory of agricultural urbanism; The theory of sustainable rural development.

- The theory of spatial organization in rural settlements: Eco-Village; Sustainable rural settlements.

- The theory of urban villages.

2.2 Legal foundations.

2.2.1 International charters and documents.

- International charter for the conservation and restoration of Venice (1964).

- Convention concerning the protection of the world cultural and natural heritage (1972).

- Burra Charter for the protection of cultural heritage places (1979); revised in 1981, 1988, 1989, 2013.

- Charter for the protection of historic towns and urban areas (1987).

- Nara Document on Authenticity (1994).

- Charter for the conservation of built heritage (1999).

- Charter on cultural tourism (1999).

- ASEAN Declaration on Cultural Heritage signed by the Ministers of Foreign Affairs of Southeast Asian countries on July 25, 2000 in Bangkok.

2.2.2 Legal documents and strategic orientations.

- Resolution of the Central Committee of the Eighth Term on building an advanced culture imbued with national identity (1998); Law on cultural heritage amended in 2013; Vietnam's architectural development orientation until 2030,

vision until 2050 approved by the Prime Minister in Decision 1246/QĐ-TTg on July 19, 2021; National criteria for new rural areas (issued together with Decision 318/QĐ-TTg on March 8, 2022 by the Prime Minister).

2.2.3 Approved planning projects.

- Regional structure: Bac Ninh within the Hanoi capital region.
- General urban planning for Bac Ninh until 2030 with a vision until 2050.
- Bac Ninh core urban area within Bac Ninh province.

2.2.4 Conservation and promotion strategy of Bac Ninh Quan ho folk songs.

Bac Ninh has taken many actions to preserve heritage according to its commitment to UNESCO as well as to expand and elevate the value of Quan ho folk songs.

2.3 Cultural facilities.

2.3.1 Transformation of Quan ho folk songs and culture.

The transformation of Quan ho people has expanded the space of Quan ho cultural heritage, spreading beyond its original area. The transformation includes changes in organization, methods of operation, and performance of Quan ho.

2.3.2 Forms of singing and performance spaces of Quan ho.

There are about 6-7 traditional forms of Quan ho singing with slightly different names, classified into 3 groups by researchers: Night-time singing; Ritual singing; Festival singing.

2.3.3 The current transformation of Quan ho performance spaces.

Table 2.1: Types of Quan ho singing.21

STT (Serial Number)	Quan ho singing genre	Ancient location	Current location Evaluation	Group 1
Group 1	Night-time singing	Singing in the communal house (restoration), family homes, cultural houses, clubs	New community cultural facilities have emerged, thus expanding the space for exchange.	There has been the emergence of new community cultural facilities, thus expanding the space for interaction.
Group 2	Ritual singing (ancestor worship singing, prayer singing, celebration singing)	At the premises (inside and outside the house); village gate, entrance gate; communal houses, temples, pagodas, and other religious structures	At the premises (inside and outside the house); village gate, entrance gate; communal houses, temples, pagodas, and	The basic forms and performance spaces are still maintained. Additional stage performance singing is

			other religious structures	introduced at events.
Group 3	Festival singing	At locations such as communal yards, temple grounds, shrine grounds, riverbanks, public spaces within and outside the village, hills and mountains, lakes and ponds	At locations such as communal yards, temple grounds, shrine grounds, riverbanks, public spaces within and outside the village, hills and mountains, lakes and ponds, stages, pavilions	The basic forms and performance spaces are still maintained. Additional stage performance singing is introduced at festivals and pavilions.

2.3.4 Comparing Quan ho performance spaces with other types of folk singing arts.

Table 2.2: Comparing Quan ho performance spaces with other types of singing.²²

"Quan họ"	"Chèo" singing	"Ca trù" singing	"Hát giao duyên Hà Nam" (Hà Nam dialogic singing)
Singing inside homes, public buildings, religious structures. Singing in outdoor spaces such as open fields, hills and mountains, lakes and ponds, riverbanks.	Singing in traditional theater stages, outdoor stages, modern concert halls. Currently, chèo is a theatrical art form.	Takes place in five main spaces: village communal houses, ancestral temples, craft guild temples, aristocratic residences, and music club venues. Currently, ca trù singing is mainly performed in music clubs.	Singing in outdoor spaces such as open fields, farmland, communal yards. Currently, it is mainly performed as a stage performance.

2.3.5 The role and relationship of the architectural landscape in the village to the cultural space of Quan ho.

The relationship between intangible cultural heritage in Quan ho village and the architectural landscape is a causal relationship. The village culture shapes and creates architectural space, and architecture in turn influences the development of the cultural space in the village.

2.4 The natural, social, and economic factors influence the architectural landscape of Quan ho villages.

Including: Population explosion; Structural shift in industries; Complex climate conditions; Environmental pollution; Limitations in the qualifications of managers and professionals; Public awareness; Financial difficulties.

2.5 The adaptability and continuous development of the architectural landscape of Quan ho villages.

2.5.1 The necessity of adaptive elements in the architectural landscape before the process of urbanization.

The existence of traditional villages is a long-term adaptive process of history. Adapting to climate, terrain, and political fluctuations. And in the face of the next cycles of socio-economic transformations, traditional villages will also have to continue to develop and adapt once again.

2.5.2 Quan ho villages are milestones both physically and spiritually in the process of urban upgrading and expansion.

Traditional Quan ho villages will serve as the soul and milestones both physically and spiritually for design projects as well as administrative management designs when carrying out urban expansion and upgrading.

2.5.3 The characteristics and spatial structure of traditional Quan ho villages are lessons inherited for the work of embellishing, organizing space, and expanding villages during urbanization.

2.6 Sociological survey

Table 2.3: Summary of sociological survey results²³

Question group	Aspect Survey	Key findings
Questions 6, 7, 9	Perspectives and the conservation of landscape architecture objects in the village	High consensus in conservation. Public spaces and religious sites are valued and supported. "Traditional houses" are not considered objects to be conserved. Awareness of productive landscapes is unclear or assumes that losing farmland is natural.
Questions 10, 11, 12	Spaces suitable for Quan họ singing performances	Highly diverse, reflecting the local people's cultural space concept of Quan họ folk songs. Performing on water surfaces is also deeply ingrained in the villagers' minds. However, most people believe that teaching should take place in cultural centers or dedicated venues.
Questions 8, 9 Questions 13, 14	Awareness of the benefits of village landscape architecture	High consensus in developing cultural tourism. Desire for better infrastructure investment. However, few people understand the exact value of landscape.
Questions 15, 16	Concerns and worries	Concerns about stricter management, particularly in terms of difficulties in obtaining construction permits.

2.7 Lessons learned

Table 2.4: Summary of research cases²⁴

Research case	Lessons learned and adaptation
Duong Lam Ancient Village (Vietnam)	The people's inability to adapt to socio-economic life: the disadvantage of the "museumification" approach to village space, the contradiction between conservation and development when the interests of the people are not addressed in village planning and management
Dadun Village (China)	Experience in adaptive treatment of infrastructure and water issues... during urbanization
Greenwich Village (United States)	The flexibility (also a form of adaptation) in urban planning policies at necessary times: The government's correct decision has preserved the spiritual space of artists and become a precious asset of the city.
Hahoe Village (South Korea)	Solutions for organizing adaptable spaces with socio-economic factors: Almost preserving the entire village (similar to Duong Lam village) but thanks to tourism exploitation policies, it has gained the consent of the owners (residents).

CHAPTER 3: SOLUTIONS FOR ORGANIZING THE ARCHITECTURAL LANDSCAPE OF QUAN HO VILLAGES ADAPTING TO URBANIZATION PROCESS

3.1 Viewpoints and principles

3.1.1 Viewpoint

- **Viewpoint 1:** Organizing the architectural landscape must preserve the distinctive spaces for Quan ho performances.

- **Viewpoint 2:** Organizing the architectural landscape must meet the needs of modern society, improving the quality of life for people.

- **Viewpoint 3:** Adapting to urbanization is the maintenance and preservation of immutable values and the development and addition of new values suitable for changing architectural landscape objects.

- **Viewpoint 4:** Adaptation and preservation are two parallel goals.

- **Viewpoint 5:** Adaptation is essential to ensure sustainable development.

3.1.2 Principles

- **Principle 1:** Compliance with legal regulations, development orientation of the State, planning standards for new rural construction, provincial planning, and conservation strategies to promote the cultural value of Quan ho in the province.

- **Principle 2:** Preserve, inherit, and promote historical, cultural, and

traditional values of Quan ho cultural space.

- **Principle 3:** Ensure future development flexibility:
- **Principle 4:** Emphasize the economic benefits of residents.
- **Principle 5:** Reasonable exploitation and use of natural conditions.
- **Principle 6:** Comprehensive consideration, application of

multiple solutions.

3.2 Identify the valuable components of the architectural landscape that need to be preserved.

3.2.1 The ecological-humanistic architectural landscape of the overall village.

This is a combination of tangible components (architectural landscape) with intangible values. The villages are concrete and vivid evidence of the long-standing settlement method of the people of Bac Ninh in general and Quan ho people in particular. Over many generations, artificial structures within the scope of each village (communal houses, houses, streets, gardens, wells...) have blended with natural structures (terrain, rivers, lakes, trees...) and accumulated increasingly rich human values (customs, practices, experiences, language, way of life, folk songs...) to create a unique ecological-humanistic environment.

3.2.2 The typical relics and public works.

The dissertation has compiled that out of 44 Quan ho villages, 38 have historical relics ranked (from provincial level and above). Particularly, there are 13/44 villages with more than 1 ranked relic (from 2-4 relics). This shows that the Quan ho villages hold a significant cultural heritage of the province.

3.2.3 The waterfront landscape is an important element in the cultural space of Quan ho folk songs.

The waterfront element deeply influences various aspects: in the field of architecture, it is the structural form of the village; in terms of history and beliefs, it is the worship rituals; internally, it is reflected in the lifestyle and folk songs of Quan ho. Therefore, it can be affirmed that the waterfront element is an important component in the landscape architecture of Quan ho villages.

3.3 Approaches to adapt to the spatial architecture landscape.

Based on the village classification established in chapter 1, the dissertation proposes approaches to adapt to the spatial architecture landscape according to the classified village system as follows:

3.3.1 Approach from a conservation perspective: Preserve and exploit based on the characteristics and values (typical features) of the spatial architecture landscape.

Based on the results of the scoreboard, the dissertation proposes in this section as follows: choose a group of 03 riverside villages (the group with the highest scores) and 01 mountainous village (the village in the second-highest scoring group) to maintain and exploit the architectural value of the landscape.

3.3.2 Approach from an urbanization perspective.

3.3.2.1 Fully urbanized village: Adaptation to internal urbanization.

3.3.2.2 Unurbanized village: Adaptation to internal urbanization combined with external factors.

Ghi chú:

- 1. Làng truyền thống, duy trì một số cảnh quan đặc thù**
- 2. Khu vực xây dựng Đô thị mới**
- 3. Khu vực xây dựng Khu công nghiệp mới**
- 4. Không gian Công cộng mới- Kết nối**
- 5. Khu vực nghiên cứu**

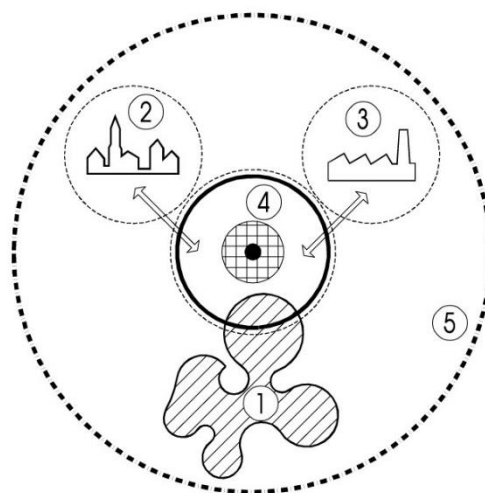


Figure 3.5: Planning model for connecting the old hamlet with the new urban-industrial area.3

For the unurbanized villages, the adaptation model needs to combine internal and external factors. Internal adaptation is presented in the previous section of the dissertation. For external adaptation, the dissertation proposes buffer spaces between traditional villages and new urban/industrial areas to connect and create a transitional spatial structure and balance benefits for both old and new areas. That is the planning model for connecting the old hamlet with the new urban-industrial area.

3.3.3 Approach from the influence of occupational and socio-economic structures.

In this approach, the dissertation focuses on the group of paper-making villages, which is "most negatively influenced" in terms of landscape architecture.

The PhD candidate proposes an adaptation model for this group of craft villages- Quan ho villages with 3 spatial components as follows:

- Current space (applying internal urbanization adaptation).
- Restoration space: Restore the riverside landscape- which is both an urban landscape and a cultural space of Quan ho folk songs; address environmental pollution issues.
- New planning space: Convert suitable agricultural land into industrial spaces, small concentrated industrial areas that adapt to the specific occupational structure of this group of villages; solve instability issues caused by localized production in the current villages.

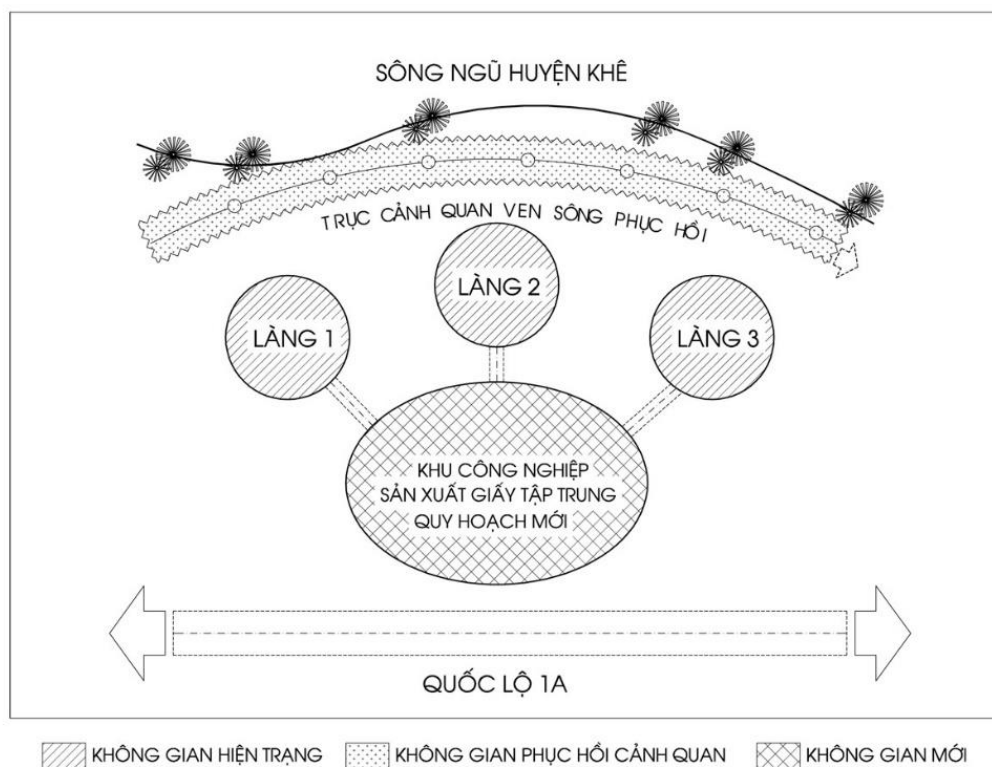


Figure 3.6: Adaptation model of craft villages- Quan ho villages.3

3.4 Solutions to organize the landscape architecture of Quan ho villages in adaptation to the urbanization process.

3.4.1 Overall spatial form: Detailed planning to improve the old hamlet along with developing new functional areas.

3.4.1.1 Supplement functions and land use structure.

- Add positions for constructing public service points, parking lots in the planning and improvement of the old hamlet.
- In various types of functional land, the addition of mixed agricultural-tourism land is proposed.

3.4.1.2 Organizing the space of residential areas and new residential clusters.

The organization of residential space within a group does not pose the same issues as urban group planning, but rather aims to create a traditional structure that enhances the Quan ho folk singing community spaces for interaction and cultural activities (see illustration diagram).

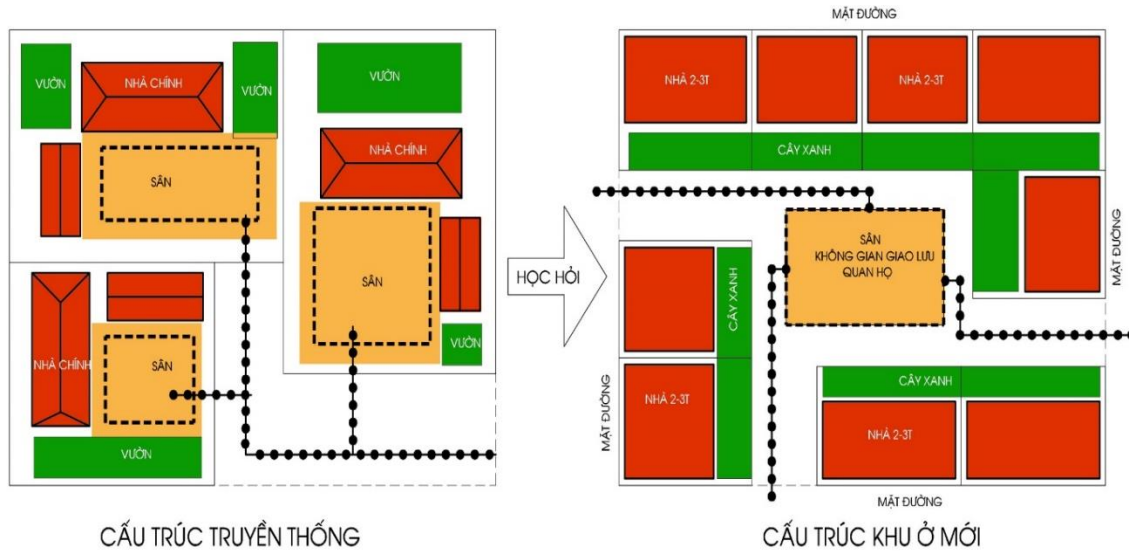


Figure 3.7: Proposed structure of new residential areas inspired by traditional village structures.3

3.4.1.3 Traffic arrangement and infrastructure elements.

Including the following items: road and landscape on both sides of the road; drainage system; electricity supply, communication.



Figure 3.8: Illustrative landscape scene of rural roads.3

3.4.2 Residential space and courtyard:

The proposed residential space and courtyard aim to create housing models that are suitable for the cultural characteristics of Quan ho folk singing, ensuring spaces for communal activities and Quan ho performances with three models as follows:

- Solution for urban-style housing along major roads: These houses are often in the form of row houses. The proposed model suggests the spatial structure of houses as follows: Ground floor for commercial service halls. Floors 2 and 3 for living; rooftop floor for communal activities of the household, combining as a space for Quan ho folk singing interactions.

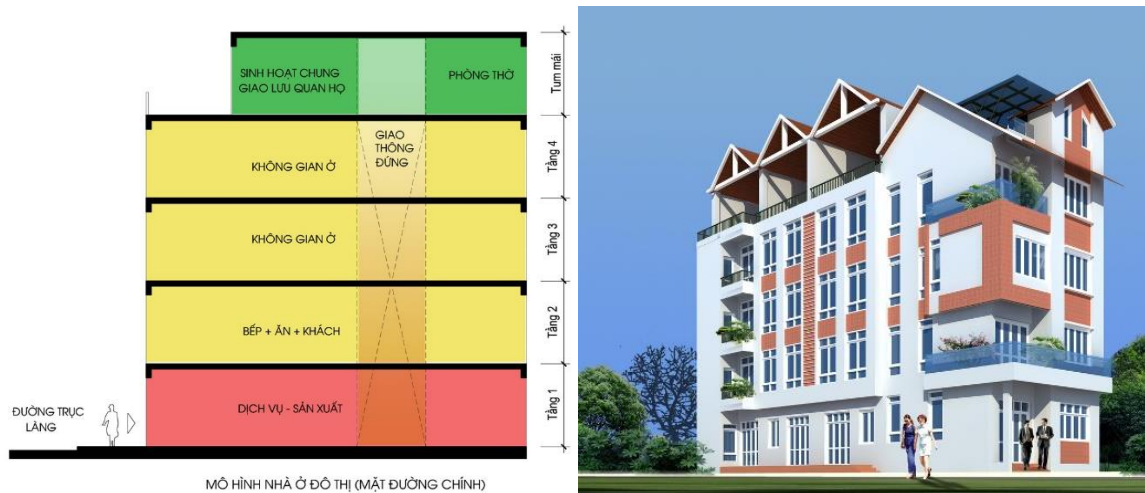


Figure 3.10: Model of urban-style housing along major roads in Quan ho village.3

- Solution for preserving traditional houses in new housing types. For purely residential houses in alleys, positions in the middle of the village: In the organization of traditional house spaces, there is usually one main house (with 3-7 bays), one auxiliary house (kitchen + support), yard, garden... The new model proposes transforming the main house into a temple + communal living space + Quan ho folk singing activities. Depending on the characteristics of the traditional house (quality, historical value...), the new temple can be renovated from the old house or built anew in traditional style. A new house will be constructed at the location of the auxiliary house, expanding the construction area and increasing the height from 1-3 floors to meet the new requirements of living space with modern facilities such as enclosed WC area, air conditioning, etc.

- Solution for housing combining dormitory business: In addition to the model that includes transforming temples into newly constructed houses (which can have multiple floors), remaining garden areas will be used to construct reasonable dormitory buildings with separate entrances.

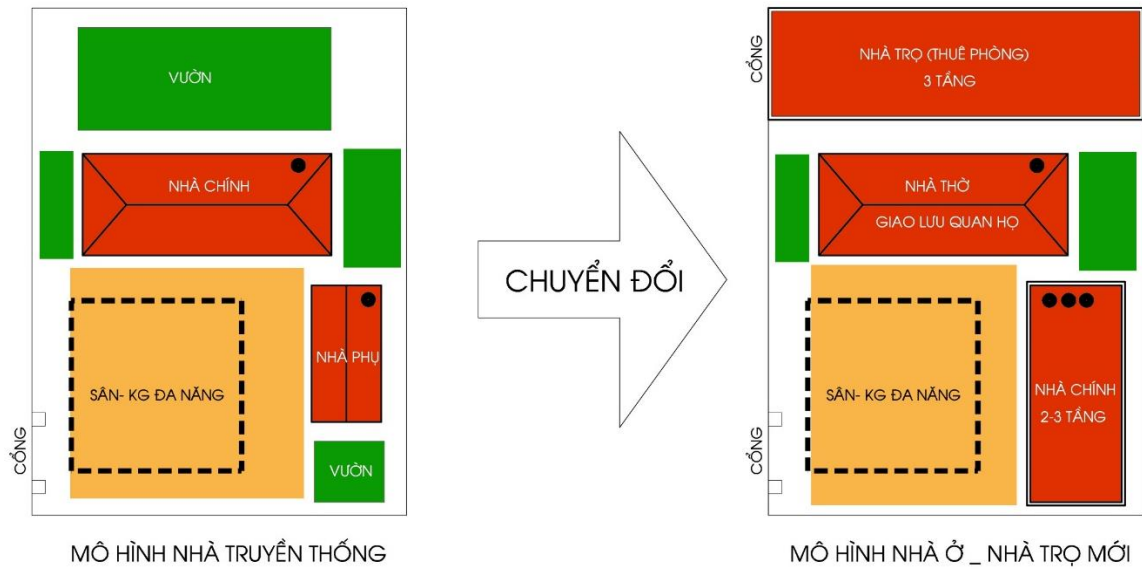


Figure 3.11: Model of preserving traditional houses in new housing types.3

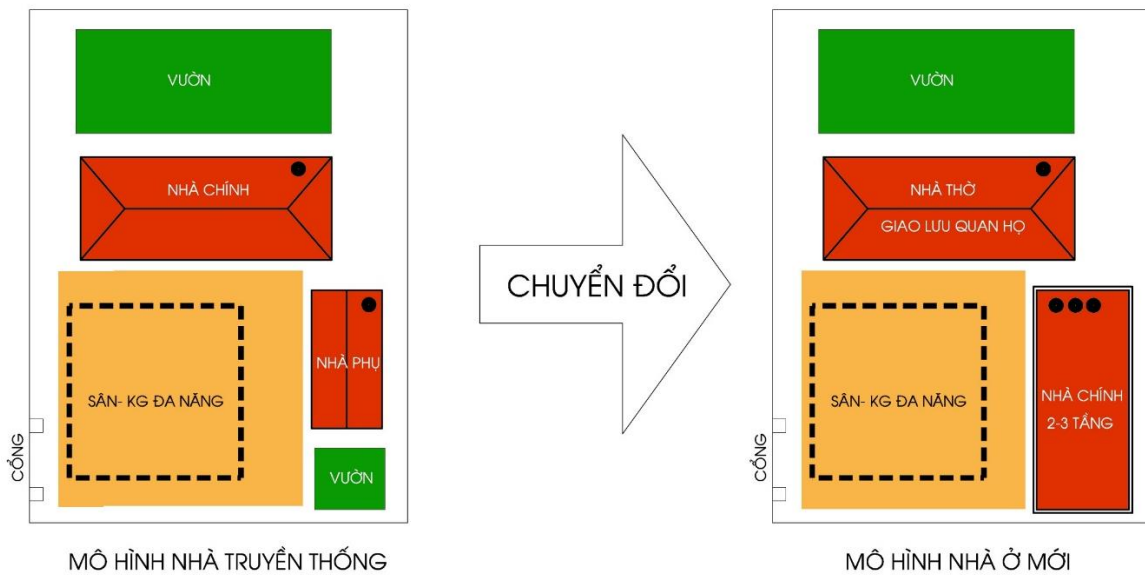


Figure 3.13: Model of housing combining dormitory or homestay business.

3.4.3 Space for religious and spiritual structures.

The communal house is where village gatherings are organized, and village gatherings are an important element in the cultural space of Quan ho folk singing. By clearly defining the value of communal houses in Quan ho festivals, these communal houses will have lasting value and functions to adapt and survive even when their original functions no longer exist. The dissertation proposes solutions to preserve and develop central public space models with communal houses as centers as follows:

- Traditional central public space model with a village having both a communal house and a pagoda that can be interconnected.

- Traditional central public space model with a village having an independent communal house.

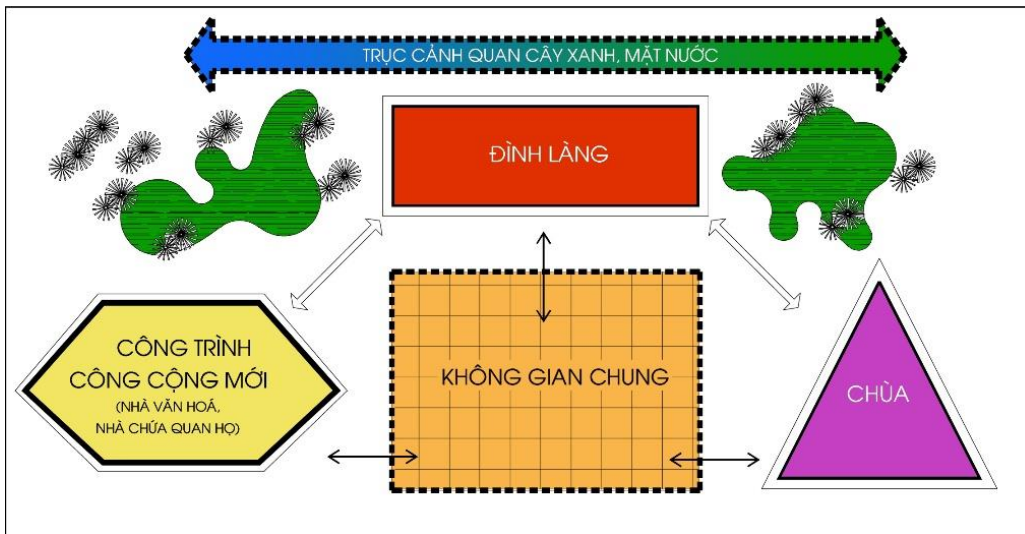


Figure 3.17: Central public space with interconnected communal house and pagoda.3

3.4.4 Public spaces and community activities.

3.4.4.1 Integrate new public facilities (cultural houses, sports fields) into the village's architectural landscape and actively serve the community's artistic activities.

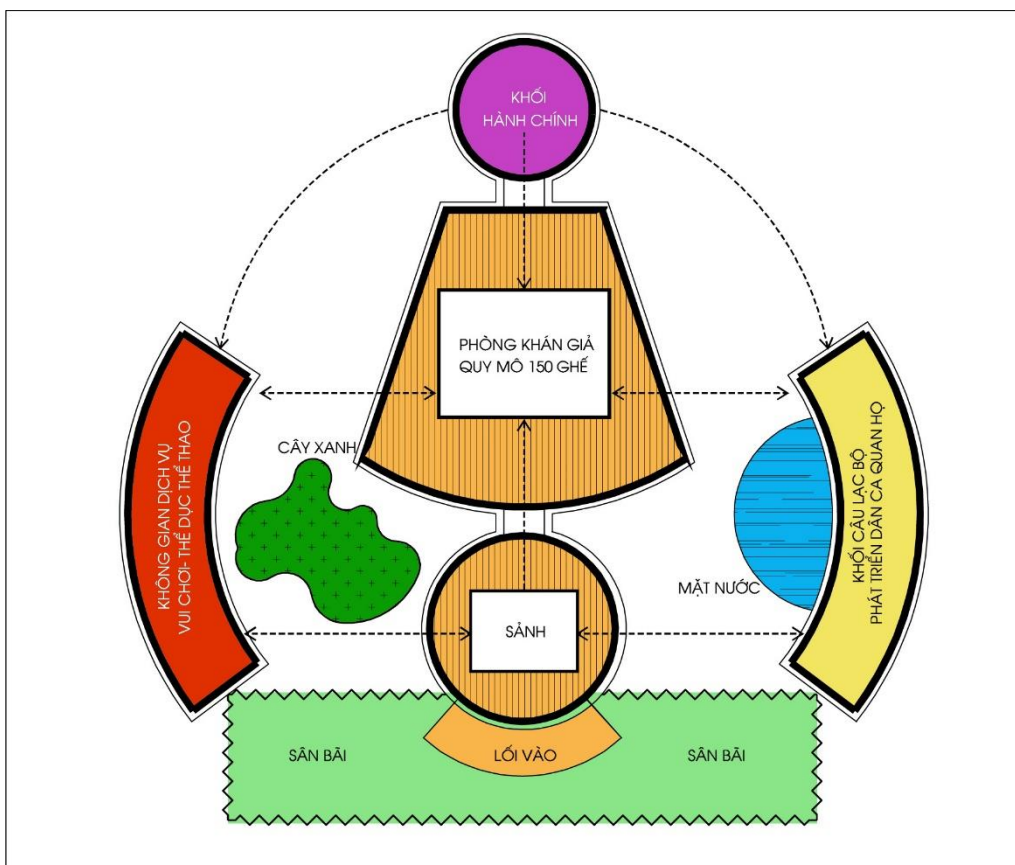


Figure 3.19: General functional diagram of Quan ho village cultural center.

In Quan ho villages, the cultural house, in addition to its existing functions such as other cultural facilities and clubs, needs to be supplemented with spaces for teaching and practicing singing, as well as everyday cultural singing activities. These are spaces for daily activities and close interactions rather than formal academies or classrooms. Older siblings can come here in the evening to exchange and teach each other, introduce new melodies. Therefore, the cultural house in Quan ho villages has a distinctive characteristic, it must be a folk school for the development of Quan ho folk singing within its own space.

3.4.4.2 Village gates: Maintain their iconic nature if possible.

- For the old village gates: Functional agencies and people need to be aware

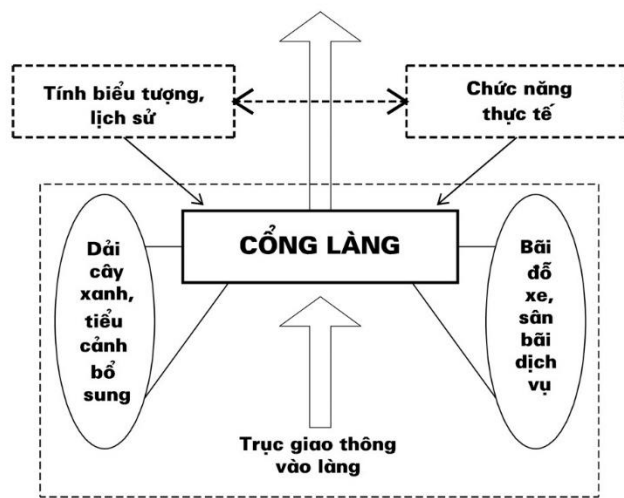


Figure 20: Diagram of village gate organization space³

of the value and role of village gates in the overall space of Quan ho village. Therefore, the village gates should be preserved and renovated as a symbol standing beside the entrance to the village. It is possible to organize a moderately sized public green space around the village gate - although it is no longer a thoroughfare - but still plays a role as an iconic structure (similar to the function of

monuments in urban areas).

- For the 8 rebuilt (or new) village gates: Based on surveys, 7 out of 8 gates meet the requirements of modern times, but they lack trees and complementary landscapes around them. It is recommended to take measures such as planting additional bamboo or banyan trees, landscaping the surrounding area, creating green strips near the gates to enhance the image of the village gate landscape.

3.4.4.3 Open spaces: The "breathing" spaces of urban areas and spaces for adapting to socio-economic factors.

For the courtyard systems, it is proposed to continue maintaining and preserving them during the development planning process for Quan ho villages. With shrinking land resources and increasing population, expanding these

courtyards is not possible. Only effective management and utilization of existing vacant spaces can maximize the value of land resources.



Figure 3.22: Transforming the landscape of Due Dong village well into a useful space.

3.4.4.4 Village wells.

Proposal: Among the remaining wells, Ngoc well in Diem village is more famous and has been classified as a historical relic (Cung Temple - Ngoc Well). For the remaining large wells, protective measures should be taken to prevent damage (Hagiang Village well) or invest in and renovate the landscape to transform

them into useful public spaces (Duedong, Xuan O, Tam Son Village wells). Although there are not many, it can be affirmed that the large wells of the remaining 07 villages are also fortunate and valuable architectural-cultural heritage resources for preservation, promotion, and exploitation.

3.4.4.5 Pond systems, water surfaces, water docks: Landscape value is closely associated with cultural value.

- Rigid embankments should be constructed for ponds and lakes to prevent erosion, pond filling, or encroachment while creating a clean and beautiful landscape for the ponds. Suitable embankment designs (concrete bricks with holes for planting grass) should be chosen to avoid excessive concrete appearance.

- Proper drainage infrastructure should be organized to enable pond systems to function as regulating lakes rather than polluted water reservoirs that detract from the village's aesthetics.

- Construct walking paths around ponds, plant shade trees, and arrange stone benches to transform the area surrounding the ponds into useful park spaces for recreational activities for residents.

3.4.5 Production and livelihood spaces.

- Production spaces are agricultural landscape gardens: In terms of agricultural landscapes, Quan ho villages in Bac Ninh have many strengths that can be developed into ecological tourism landscapes.



Figure 3.24: Proposal for exploiting water channels combined with walking routes for relaxation.3

- Investing in agricultural technical infrastructure is also a form of ecological landscape and serves cultural arts.

3.5 Example of studying Diem Quan ho village (Viem Xa).

3.5.1 Overview of Diem village.

Diem village is the colloquial name for Viem Xa village - an ancient village belonging to Hoa Long commune, Bac Ninh city. The village has a history of thousands of years of tradition in defending the country, protecting and building the homeland.

3.5.2 Characteristics of architectural landscape space.

The overall main village area has a diamond shape with a length of about 650m and a width of 300m - an approximate area of 21ha. The total natural area of the entire village according to the general plan is 900ha, including: 600ha of agricultural land, 200ha of residential land, about 70ha of public land, and 30ha of water surfaces. The main traffic axis runs along the length of the village from west to east, with branching roads resembling fishbones.

3.5.3 The solution to organizing the landscape architecture of Diem village is adaptable to the urbanization process.

The dissertation proposes a detailed organizational structure on the illustrated diagram, dividing it into different areas.

- The central area for public and religious purposes is at the beginning of the village (unique characteristics).

- The village area with residential houses.

- The riverside landscape area, located in the north of the village along with the area outside the Cau River dike, featuring riverfront landscapes, strawberry and flower fields, water wharves (Quan ho wharf); capable of exploiting services and tourism.

- The agricultural production landscape area with vast fields, paddy fields, and riverbanks.

3.6 Discussion

Including the following contents:

- Achieved results.

- Application of research results to other villages in Bac Ninh province.

- Future research directions.

CONCLUSIONS AND RECOMMENDATIONS

I. CONCLUSIONS

The dissertation has achieved the following results:

1. Comprehensive survey of the system of 44 Quan ho villages; examining and analyzing the impacts of urbanization on the architectural landscape space of the village. The dissertation has clarified the need to maintain and continue to develop (adapt) spaces and landscapes that are capable of being the place of performance and practice of Quan ho folk songs to contribute to preserving and promoting the historical, cultural values, and traditional identity of Quan ho culture.

2. Identifying the valuable architectural landscape spaces of Quan ho villages that need to be preserved. It is the humanistic ecological landscape of the overall village structure, the system of relics, typical public works; the importance of the water landscape. The dissertation also pointed out the close relationship between architectural landscape spaces and the intangible values of Quan ho villages,

which is a relationship in pairs of causal categories. If certain architectural landscape spaces cannot be preserved, there will be almost no Quan ho villages.

3. Propose 03 adaptive approaches of landscape architectural space in villages. From a conservation perspective: Evaluate and select villages/groups of villages with outstanding landscape value to preserve and exploit. From the perspective of urbanization: propose a master planning model connecting old villages (maintained, renovated) with new urban and industrial areas (development) through buffer zone spaces. From the characteristics of the occupational structure, it is a typical adaptive model for the Quan ho village - craft villages.

4. Proposing adaptive organizational solutions for the urbanization process to maintain and develop the continuity of the landscape architecture of Quan Ho village, from overall planning to component spaces.

II. RECOMMENDATIONS

1. The proposed organizational solutions for space organization should go hand in hand with urban management activities to ensure the goal of preserving and developing exemplary landscape architecture spaces in Quan Ho village.

2. Synchronize the maintenance and development activities of landscape architecture in villages with cultural tourism management activities./.

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2. Nguyen Dinh Phong (2021), Inheriting Some Architectural and Traditional Cultural Features of Villages and Communes in the Northern Delta in the Planning Design of New Coastal Urban Areas - Architecture & Construction Journal (HAU) No. 40/2021, pp. 70-73, ISSN 1859-350X.
3. Nguyen Dinh Phong (2021), On the preservation of architectural spaces and landscapes of Quan ho villages in the general cultural space of Quan ho Bac Ninh, Polish-Vietnamese experience in preservation and conservation of Architectural Heritage, pp 256-262, Science and Technology Publishing House, ISBN: 9786046721062.
4. Nguyen Dinh Phong (2022), Management and exploitation of landscape architecture of Quan ho Bac Ninh villages for tourism development, TED-2022 Proceedings of the International Conference on Culture, Education & Tourism with Economic Development; pp. 12-15, Finance Publish House, ISBN: 9786047932917.