

**MINISTRY OF
EDUCATION & TRAINING**

**MINISTRY OF
CONSTRUCTION**

HANOI ARCHITECTURAL UNIVERSITY

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**INTEGRATING TRADITIONAL CULTURE INTO THE SPATIAL
ORGANIZATION OF URBAN PARK IN BAC NINH**

(APPLICATIONS FOR URBAN PARK IN TAY BAC URBAN AREA)

SPECIALISATION IN: REGIONAL AND URBAN PLANNING

CODE: 62.58.01.05

SUMMARY OF DOCTORAL DISSERTATION

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The dissertation was completed at Hanoi Architectural University
Supervisor: **Professor. Dr. Arch. Do Hau**

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This dissertation is being kept at National Library and Library of
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INTRODUCTION

1. The necessity of research

The park is a key component in the urban greenery system. It plays an indispensable role in the culture, education and leisure system. In recent years, the spatial organization of the park is being a hot issue and receiving the attention of the State, the municipalities and the urban inhabitant. Vietnam is a country rich in cultural traditions. Cultural identities of the nation, throughout thousands of years, inherited, followed and preserved through many generations. Exploiting traditional culture factors is an extremely important mission. However, exploiting the traditional culture values in the spatial organization of parks is still limited.

The reason of Selecting Bac Ninh is the research area to integrate the traditional culture factors in the spatial organization of park. Firstly, Bac Ninh is the land which have many outstanding traditional culture values of Bac Bo. Secondly, the traditional culture factors do not almost exploited in the reality of the spatial organization in Bac Ninh parks. Thirdly, in Bac Ninh general planning till 2030 vision of 2050 and Bac Ninh region urban planning till 2030, the vision of 2050 approved by the Prime Minister has identified the objectives and development motivation, which is conservation and promote the value of cultural heritages and historical, gradually build modern Bac Ninh with the characteristic of Kinh Bac culture. Finally, in published scientific works, the integration of traditional cultural elements and proposed spatial organization models in parks have not been fully, deeply and comprehensively researched.

Therefore, selecting the thesis "Integrating traditional culture

factors into the spatial organization of urban park in Bac Ninh" is essential.

2. Research purpose

Proposing solutions of spatial organization multi-function parks based on the selection of traditional culture elements in order to serve the needs of leisure and entertainment and contribute to preserving the traditional culture identity, promoting unique aesthetic elements in Bac Ninh urban planning.

3. Object and scope of research

Object of research

- Identify the traditional culture factors in Bac Ninh.
- Exploiting traditional culture factors in the spatial organization of functional areas Multi-functional parks in Bac Ninh

Scope of reseach

- *Scope of Space:* Researching the orientation of spatial organization of multi function parks in Bac Ninh city according to Bac Ninh master urban planning project approved (including Bac Ninh City, Tien Du District, Tu Son Town and Que Vo district). Application to the park in Tay Bac urban area in Bac Ninh city
- *Scope of time:* According to Bac Ninh urban spatial development planning until 2030, vision to 2050 has been approved.

4. Research methodology

- Method of systematic approach
- Inheritance method
- Method of sociology survey
- Expert method
- Method of integrated analysis and forecasting

5. Scientific and practical significance of the dissertation

- Systematizing theoretical bases of space organization in multipurpose park

- Identify the traditional culture factors in Bac Ninh.
- Contribute to the training and consultancy of multi-function park planning.
- Contribute to preserving the traditional culture identity in Bac Ninh
- Serving the needs of leisure, cultural and spiritual needs for urban residents in Bac Ninh.
- Complete and develop the park system in Bac Ninh urban

6. The new contribution of dissertation

- Identify the traditional culture factors (physical and intangible elements) of Bac Ninh, select specific and suitable elements to integrate into the spatial organization of urban park.
- Proposing a general model of park space structure and 3 models of nuclear structure developed from the general model
- Proposing solutions to exploit traditional culture factors in the spatial organization of park in Bac Ninh

7. Definitions used in dissertation

Multi-function park; spatial organization; traditional cultural

8. Dissertation struction

The thesis consists of 3 parts: Introduction; Content; Conclusions and Recommendations. In particular, the content of the thesis include: chapter 1 (35 pages); Chapter 2 (44 pages); Chapter 3 (64 pages).

CONTENT

CHAPTER 1. OVERVIEW OF EXPLOITING TRADITIONAL CULTURAL FACTORS IN THE SPATIAL ORGANIZATION OF PARK IN BAC NINH

1.1. Overview of the exploitation of traditional culture factors in the spatial organization of park in the world and in Vietnam

Table 1.1. Overview of the exploitation of traditional culture factors in the spatial organization of park in the world

	Function structure	Layout form	Traditional cultural in the spatial organization of park
ANCIENT TIMES	Simple function, mainly in religious space	Simple geometry with symmetrical axis, combining water and greenery. Take advantage of natural topographic conditions	Using architectural details, patterns, materials, design with native style
RENAISSANCE	Entertainment function serving the ruling class	The geometric layout is made up of straight lines and circles. Use single axis symmetry. Overall stable, static, coherent	Use rich image elements (statues, fountains, small architectural building with Renaissance style)
BARROC	Including functions: Rest, sports, culture in order to serve the dominant class.	Multi-axis symmetry, using curves and variations. Overall framework is unstable and complex.	Cultural elements (reflected in the visual art style) clearly exploited in landscape architecture
EARLY MODERN PERIOD	Including functions: Rest, entertainment, culture in order to serve urban resident	Free layout, according to natural conditions.	Using traditional architectural style in functional areas. The form of decoration applicate folk culture
XIX to XX	Complex structure include rest, entertainment, sport, culture and education	The layout is simple and useful with the criteria of taking people as the object and the purpose of service	The art of spatial organizing is simple and useful.
NOW	Multi-function include culture, education, science, sports, entertainment	Research from the whole to the details creates harmony with landscape elements and greenery	The traditional culture factor is one of the issues that are interested in exploiting

Table 1.2. Overview of the exploitation of traditional culture factors in the spatial organization of park in Vietnam

	Function structure	Layout form	Traditional cultural in the spatial organization of park
FEUDALISM	Simple function serve the needs of leisure and entertainment of the dominant class.	Symmetry layout, natural harmony. Principle of pre-post, upper-lower, left-right with buildings symmetry through the divine path, using water surface for functional subdivision	Exploiting traditional culture elements through the application of traditional planning principles

COLONIAL TIMES	Entertainment park serve the needs of the colonial government leisure	The layout is in harmony with natural conditions	The traditional culture element is still unclear (the parks are mainly built to create green lungs and relax).
1954-1975	Functional structure include rest, sports, culture, entertainment	Use the principles of geometric layout combined with natural conditions	there is no clear and specific action strategy
1975-1986	Leisure, entertainment. Serve the minimum needs for people	The radial overall layout, landscape architecture based on natural conditions	The characteristic cultural factor in the spatial organization of park has not made a clear impression
1986-NOW	Abundant functions, diverse: leisure, entertainment, sports, education cultural	The layout is simple and useful, with the criteria of taking people as the object and the purpose of service	The traditional culture element applied in the park space organization has not been uniform, there are no systematic solutions.

1.2. The reality of the park system in Bac Ninh

The system of parks in urban covers an area of about 500ha, dispersed and lacks synchronous investment, in which the area of greenery per capita reaches about 3.03m²/person, much lower than the regulation, does not respond needs of improving the quality of life for residents. Although in recent years, the park system in Bac Ninh has received investment attention, there are still many deficiency in the process of maintaining and managing.

1.3. Identify the characteristic traditional culture factors in Bac Ninh

These are fundamental values for conservation and promotion as well as development orientation in Bac Ninh

Table 1.3. The characteristic traditional culture factors in Bac Ninh

Traditional culture factors	
Physical culture	Intangible cultural
<ul style="list-style-type: none"> • Traditional village • Settling characteristics • Architecture • Historical relics 	<ul style="list-style-type: none"> • Quan ho cultural • Traditional festival • Cultural history • Spiritual culture

1.4. The reality of exploiting traditional culture factors in the spatial organization of park in Bac Ninh

Exploiting traditional cultural elements in the space organization of the park is not really effective. Building form has not been carefully studied. It does not have the cultural imprint of ethnic areas, the system of trees is poor and does not show all the richness and diversity of Bac Ninh's natural ecosystem. Although in Bac Ninh, there are park planning projects that are interested in integrating cultural elements, but these projects are still in the process of implementing

1.5. Relevant research works

Most domestic and foreign thesis related to the topic is only specifically mentioned (planning management method, spatial organization, functional distribution ...) There is no mention of the integration of traditional cultural elements in the park's spatial organization. Especially in the study area- Bac Ninh, there are no specific studies on this issue.

1.6. Remaining problems need to be studied

1.6.1. Remaining problems

Integrating traditional cultural elements into the reality of park's spatial organization in Bac Ninh is not really effective. Traditional cultural activities take place irregularly and unevenly in city parks in. The form as well as the way of organizing space has not really concerned to exploit the traditional culture factors. In previous studies, no research has specifically mentioned the integration of traditional cultural elements in the park's spatial organization in Bac Ninh.

1.6.2. Focused issue of research

- Identify and classify research objects
- Establishing a scientific basis for the proposal
- Proposing solutions to exploit traditional cultural elements in the park's function spatial organization
- Ensure applicability and replication

CHAPTER 2. SCIENTIFIC BASIS EXPLOITING TRADITIONAL CULTURAL FACTORS IN THE SPATIAL ORGANIZATION OF URBAN PARK IN BAC NINH

2.1. The theoretical basis.

2.1.1. Theoretical basis of park space organization.

Types of urban parks: Classified by characteristics.

- **Function:** Single-function park, multi-function park.
- **Features:** Dynamic park, quiet park.
- **Morphology:** The park has a layout in the raft form, a linear form, a point type, depending on the location and surroundings.
- **Object used:** Park for children, park for youth...
- **Management level:** Central park, district park, regional park ...

The hierarchy of urban parks.

- National parks
- City park
- Urban area park
- Ward park
- Open spaces - small parks (residential unit level)

Objects activity in functional areas.

In the structure of park functions, the identification of activities and characteristics of user group will be designed and arranged to organize the suitable functional areas which adaptable the needs of users. In addition, the users, frequent activities and activity time are

also impacts on the organization of park space.

Forms layout of park space

a. Free type

- Take advantage of natural conditions - Nature simulation

b. Geometric type.

- Layout by Region, axis, point. - Create symmetrical axes

- Use convergent, radial - Use regular geometry

c. Mixed type

Park space structure

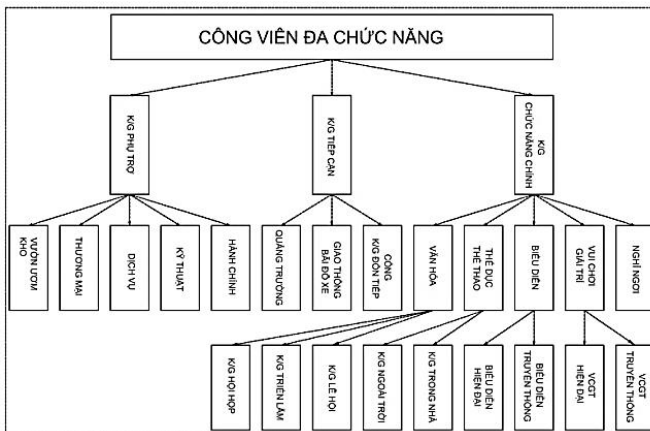


Figure 2.1. *Park structure diagram.*

Traditional culture space

These must be the spaces that can convey the content, thoughts, lifestyles and customs of the community. A space containing valuable traditional culture activities such as traditional festival activities, performing traditional art forms, traditional production activities...

2.1.2. Theoretical basis of traditional culture

- ***Oriental philosophy in the organization of park space***

Table 2.1. Oriental philosophy in the spatial organization of Vietnam park

Viewpoint	- Combining People - Nature - Architecture according to Tam Tai theory: Thien-Dia-Nhan.
Principle	- Apply feng shui theory in landscape design - Choose the layout according to the North-South axis - Yin and Yang theory
Form	- Free layout (taking advantage of nature, natural simulation) - Geometric layout (symmetrical axis) - Create hidden in the space
Elements in Landscape architecture	- Water element: used as a background or perspective for building, creating a poetic of the landscape - Greenery element: a part of nature in "Tam Tai" theory, plants must be appatable the intention, layout, create illusion of perspective and harmonize with building. - Building: using the theory "than tien tam dao" (combining architecture with water surface elements)

- ***The role of traditional culture in the trend of globalization.***

Traditional culture is the spiritual foundation, a goal, driving force, the basis for the socio-economic development process. Promoting the traditional culture, contributing to preserving the identity, lifestyle, customs and beliefs in order to connect and exchange internationally. Therefore, applying the characteristic traditional culture elements in the spatial organization of multifunction park is one of the requirements not out of trend.

- ***The trend of exploiting traditional culture elements in spatial organization park:*** Including: The trend of traditional culture exploitation in the park functional subdivision, in the organization of landscape architecture, in the construction of parks.

2.2. Legal basis

2.2.1. Legal documents

Law documents, decrees, standards on management of park greenery, guiding contents of tasks and detailed planning projects of urban parks and gardens, setting standards for greenery and parks according to each urban type.

2.2.2. Standards

Including standards for park greenery area, minimum land area standards of parks, percentage of land use in parks.

2.2.3. Orienting the park network in Bac Ninh master planning.

- Arrange urban parks in urban areas of Bac Ninh, Tien Du, Tu Son and Nam Son.
- Arrange parks combine with monuments to preserve the relic space and promote tourist activities, recreation of the residents.

2.2.4. Development orientations.

- Cultural development orientation
- Environmental development orientation
- Orientation of park development.

2.3. Practical basis

2.3.1. Result of sociological survey on exploiting traditional cultural into spatial organization of urban park in Bac Ninh

Including: Purpose of using the park; Reason to the park; The demand of creating parks that have traditional culture characterized; The demand of using functional areas in the park.

2.3.2. Factors affecting the exploitation of traditional culture elements in the spatial organization of urban park.

- Natural condition
- Economical factors
- Socio-cultural factor
- Political factors
- Planning factor
- Science and technology elements
- Community involvement

2.4. Practical experiences in exploiting traditional culture in organization of park space

2.4.1. International experiences: Introducing some typical examples in the world to exploit traditional cultural elements in the

organization of the park space: Di Hoa Vien, Edo Wonderland cultural park, Tjapukai Aboriginal Cultural Park, Water Park France miniature

2.4.2. Viet nam experiences : Introducing some typical examples in Vietnam on exploiting traditional cultural elements in the organization of park spaces: Suoi Tien Cultural Park, Hoa Binh Park, Yen So Park, and Van Lang Park- Viet Tri City - Phu Tho.

2.4.3. Lessons learned from world and Vietnam experience.

Applying the traditional culture elements in functional subdivision, the spatial organization in urban park has gradually become a popular trend. In the organization of space, traditional cultural elements are expressed through the organization of green space and water surface, the use of traditional folk architecture forms in building construction; Use harmonious colors; Encourage the use of local materials in architectural design. Organizing cultural events, festivals, cultural programs in the park is also one of the ways to exploit the traditional culture elements effectively.

CHAPTER 3. SOLUTIONS FOR INTEGRATING TRADITIONAL CULTURE INTO THE SPATIAL ORGANIZATION OF URBAN PARK IN BAC NINH.

3.1. Opinions and objectives.

3.1.1. Opinions

- Appreciate the exploitation of typical cultural and historical values
- Complying with the orientation of developing green space system
- Based on the viewpoint of serving the demands and benefits of the community
- Ensure improved living environment
- Reasonable in investment, management

- Attention to the policy of socialization and effective use of social resources.

3.1.2. Objectives

- Preserving and promoting the traditional culture values
- Environmental protection, ecological balance
- Economic development objectives
- Social goals
- Sustainable development, international integration.

3.2. Principles for exploiting traditional culture elements in the spatial organization of urban park in Bac Ninh

- Suitable with the urban planning development strategy in Bac Ninh. Compliance with standards, rules and regulations
- Ensure consistency, harmony, respect and suitability with natural conditions, socio-economic and indigenous culture
- Satisfy the demand of urban inhabitat. Receive community consensus and participation in the process of investment, construction, operation and management
- Determining the exploitation of intangible cultural elements only in the function space, physical culture belongs to aesthetic space and environmental space.

3.3. Proposing the possibility of applying traditional culture elements in Bac Ninh urban parks.

The thesis proposes a system of parks, clearly defining the type, characteristic and scope of service that make the most of the existing greenery park fund and the natural landscape of Bac Ninh. Moreover it must be also suitable with the general urban planning of Bac Ninh and the zoning urban planning projects already implemented. Thereby determining the ability to apply the characteristic traditional

culture elements of Bac Ninh to each type of park.

Table 3.1. Ability to apply traditional culture elements in parks in Bac Ninh

Type of urban park		Specific application	Physical culture				Intangible cultural	
			Traditional village	Architecture	Historical relics	betting characteristics	Quanho culture	Traditional festival
Park type	Characteristic							
Centre park	Cultural	CV Nguyễn Phi Ý Lan		x		x	x	x
	Multi-function	Khu CV Văn Miếu		x	x	x		
Urban area park	Multi-function	CV khu ĐTM Tây Bắc	x	x	x	x	x	x
	Cultural historical	CV khu Phật Tích ven sông Đuống		x	x	x		x
	Recreation	CV trong đô thị Đại học (phân khu ĐT Tiên Du)		x		x		
	Cultural	CV văn hóa đền Đám	x	x	x	x		
	Multi-function	CV khu vực sông Tiêu Tương		x		x		
	Recreation	CV đô thị Từ Sơn		x		x		
	Multi-function	CV Đình Bảng Từ Sơn		x		x		x
District park	Recreation	CV Nguyễn Văn Cừ		x		x		x
	Cultural	CV Hoàng Quốc Việt		x		x		
	Multi-function	CV HĐH Phúc Ninh		x		x		
	Multi-function	CV Hồ điều hòa Vạn An		x		x		
	Science	CV khu nghiên cứu- khu ĐT Nam Sơn		x		x		
Neighbour hood park	Recreation	Lâm viên Thiêm Sơn		x		x		
	Recreation	Lâm Viên Điều Sơn		x		x		
	Recreation	KĐT Nam Võ Cường		x		x		
	Recreation	Khu dân cư Bồ Sơn 1,2,3		x		x		
	Recreation	Khu DC phường Thị Cầu		x		x		
	Recreation	Khu DC phường Vân Dương		x		x		

3.4. Determining the scale and priority of functional areas in the park.

3.4.1. Determining the scale of functional areas in the park.

To determine the scale forecast of functional areas in the park. Firstly, determining the capacity of the park by identifying user needs, frequency of park use. Percentage of functional areas in the

park = (Functional area area in the park / Park area) x100%

Table 3.2. Propose the percentage of each component in the park functional areas that exploit the traditional culture elements

Functional areas	The Component in functional areas	%
Performance area	Quan ho performance area	16
	Traditional festival area	8,0
	Modern art performance area	4,0
Cultural and educational area	Experience area, discovery traditional jobs	8,0
	Exhibition area, displaying miniature models of cultural and historical relics, architectural building typical of Bac Ninh	3,0
	Describe examination area, exam courses, cultural activities	2,0
	The area describe the war of foreign invaders	1,0
Children's area	Area to organize traditional games	10
	Modern game area	4,0
Sports area	Indoor sports area	4,0
	Outdoor sports area	13
Leisure area	Garden walk	25
Administrative area, management	Management and administration area	2,0

3.4.2. Determine the priority between functional areas in the park.

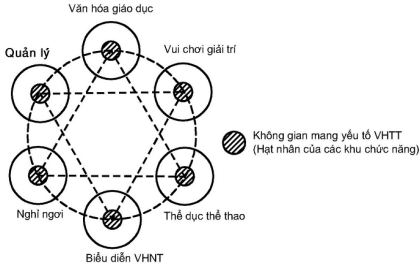
Table 3.3. Proposing the priority based on the need to use between functional areas in the park

The functional areas		Percentage %	Priority	
Cultural and educational area	Experience area, discovery traditional jobs	7,0	13	4
	Exhibition area, displaying miniature models of cultural and historical relics, architectural building typical of Bac Ninh	4,0		
	Describe examination area, exam courses, cultural activities	1,0		
	The area describe the war of foreign invaders	1,0		
Performance area	Quan ho performance area	20	29	1
	Traditional festival area	9,0		
Sports area	Indoor sports area	6,0	15	3
	Outdoor sports area	9,0		
Children's area	Area to organize traditional games	8,0	13	4
	Modern game area	5,0		
Leisure area	Garden walk	28	28	2
Administrative area, management	Management and administration area	2,0	2	5

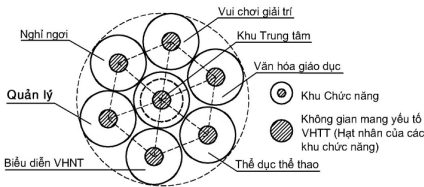
3.5. Pattern of park space structure in Bac Ninh.

General pattern of park space structure: In the general model, the

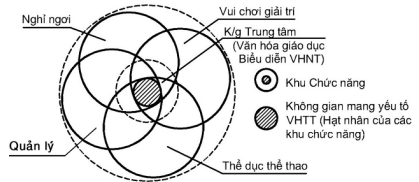
traditional culture factor will be a central element, a key nucleus in the park's functional areas. Space with traditional culture elements will include physical and intangible elements



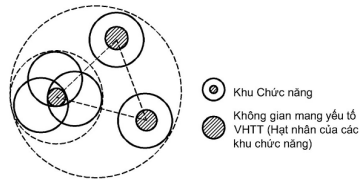
Hình 3.2. Mô hình tổng quát cấu trúc không gian công viên



Hình 3.4. Mô hình cấu trúc hạt nhân phân tán độc lập



Hình 3.3. Mô hình cấu trúc hạt nhân tập trung



Hình 3.5. Mô hình cấu trúc hạt nhân đan xen hỗn hợp

Table 3.4. Proposing types of park structure models in Bac Ninh

Type of models	Characteristic	Shape	Scope of application	Type of park
Centralized nuclei structure	The central nucleus has the task of linking functional spaces in the park	Concentrate	medium and small scale	District park
Independent dispersed nuclear structure	The nucleus of functional areas divide and tends to connect into a network	Dispersal	Large scale	Centre park
Nuclear intertwined structure	Nuclear linkage of functional areas independent of the central nucleus of the group of functional areas similar in characteristic	Combination	Medium large scale	Urban area park, centre park

3.6. The solutions to exploit the traditional culture elements in the spatial organization of urban park in Bac Ninh.

3.6.1. Solution for functional subdivision in the park.

Table 3.5. Integrating traditional culture factors in the functional areas

Yếu tố VHHT		Phân khu CN chính		Nghỉ tĩnh	Vui chơi giải trí	Văn hóa Giáo dục	Thể dục thể thao	Biểu diễn	Quản lý, DV tổng hợp
		Làng nghề TT	Công trình kiến trúc						
VH vật thể	Làng nghề TT					x			
	Công trình kiến trúc	x	x	x	x				x
	Di tích lịch sử					x			
	Đặc điểm quần cư	x	x	x	x		x	x	x
VH phi vật thể	Văn hóa Quan họ			x	x			x	
	Lễ hội truyền thống			x	x		x	x	

Table 3.6. Proposing to exploit the traditional culture element in the functional areas of parks in Bac Ninh

Loại công viên	Phân khu chức năng Đề xuất Áp dụng cụ thể		Văn hóa giáo dục					Vui chơi giải trí			Biểu diễn		TĐTT	Nghỉ tĩnh	Quản lý HC-TH
			Bắc Ninh thu nhỏ	Bắc Ninh truyền thuyết huyện thoại lịch sử	Khu làng nghề truyền thống	Khu dân cư Quan họ	Khu trò chơi truyền thống	VCGT	VCGT hiện đại	Nghệ thuật truyền thống	NT hiện đại				
												Trong nhà			
Công viên trung tâm	Công viên Nguyễn Phi Y Lan						x	x	x	x	x	x	x	x	x
	Khu công viên Văn Miếu			x				x	x	x	x	x	x	x	x
Công viên khu đô thị	Công viên khu ĐTM Tây Bắc		x	x	x	x	x	x	x	x	x	x	x	x	x
	Công viên khu Phật Tích ven sông Đuống			x	x							x	x	x	x
	Công viên trong đô thị Đại học (phần khu ĐT Tiên Du)								x			x	x	x	x
	Công viên văn hóa đền Đám				x		x					x	x	x	x
	Công viên ĐT khu vực sông Tiêu Tương			x					x	x		x	x	x	x
	Công viên đô thị Từ Sơn				x						x	x	x	x	x
	Công viên đô thị khu vực đền Đò Đĩnh Bàng- Từ Sơn			x						x	x	x	x	x	x
Công viên khu vực	Công viên Nguyễn Văn Cừ							x			x		x	x	x
	Công viên Hoàng Quốc Việt							x					x	x	x
	Công viên Hồ điều hòa Phúc Ninh							x					x	x	x
	Công viên Hồ điều hòa Vạn An							x					x	x	x
	Công viên trong khu nghiên cứu- phân khu đô thị Nam Sơn											x	x	x	x

*Khu Bắc Ninh truyền thuyết huyện thoại và lịch sử/từ điển khu vực nơi đặt vị trí công viên/chủ đề khai thác lịch sử sẽ khác nhau, khu làng nghề truyền thống, cũng tùy từng khu vực có thể giới thiệu đầy đủ các làng nghề thủ công truyền thống tại Bắc Ninh hoặc chỉ giới thiệu trung bày, trải nghiệm 1 làng nghề truyền thống nổi trội của khu vực

3.6.2. Solution of the spatial organization park

a. Overall solution

- **Applying traditional culture in the overall space:** creating many open spaces, harmonizing with nature, applying the traditional park

garden style: taking advantage of natural conditions - terrain - simulating nature, taking advantage of natural features

• ***Applying traditional culture in space-creating components:*** proposed based on traditional views, experiences, foundation of Oriental philosophy (Tam Tai theory, Yin and Yang theory of five elements ...)

Table 3.7. Integrating traditional culture into the spatial organization of urban park in Bac Ninh

Components in landscape architecture space	Integrating traditional culture	Form
Terrain element	Use low high lines in natural terrain. Take advantage of natural terrain features in harmony with artificial landscapes to create attractive spaces	Combining artificial landscapes and natural landscapes
Greenery element	Applying Eastern philosophy : using nature, natural simulation, creating hidden in space, illusion of perspective. Using plants with the cultural and religious life, bringing the cultural and historical significance of Bac Ninh	Free layout, Layout in the form of an array, line, point, create a decorative image
Water surface element	Used as a backdrop for architectural buildings, creating special effects for the landscape. Combining water-stone, rockery in the layout of water surface (traditional space organization) shows the theme of historical culture. Use the water surface as a traditional performing arts stage.	In free form according to the natural conditions available, natural simulation, or in geometric form.
Architecture building	Form of traditional architecture (form of roof, layout), using traditional decorative details, traditional materials. Utilities in the park having the form and layout of the cultural spirit	The layout of the work space follows the axis of than dao, according to the thought theme
Technical infrastructure elements	Traffic system: road network according to natural conditions (or used in traditional garden art). Road network in geometric form, main road axis - Than dao axis. The lighting system creates aesthetic emotion, highlighting the theme of traditional cultural. Form of lighting equipment, stylized traditional architecture, traditional materials	Natural form, geometric form, combined form. Lighting access space, functional space, highlight in space.

b. Organization of greenery space:

Table 3.10. Integrating traditional culture into the spatial organization of greenery in Bac Ninh multi-function park

Form	Applying traditional garden	Application	Type
Region	Create region of themed Free layout takes advantage of	Cultural and educational	Băng lăng, phường, Bàng

Lighting for access space, functional spaces, node in space, landscape lighting. Forms of types of lighting equipment: stylized traditional architecture, earthenware materials, pottery, stone, wood, bamboo, natural colors.

3.6.4. Solution to invest in construction, exploiting and managing parks.

- **Construction investment solutions:** Ensuring construction investment balance with operation and maintenance costs. Develop policies to mobilize funds from various sources. Funds for construction investment come from planning and development agreements. Encourage and facilitate social resources.
- **Exploiting solutions:** Ensuring to serve everyone, providing solutions for effective exploitation of spaces, improving service quality to effectively exploit park
- **Management solutions:** Create a safe, secure, healthy environment for all.

3.6.5. Solution the community's role in constructing and managing parks.

- Mobilization, dissemination, training to improve people's qualification and cognitive ability. Attaching responsibilities and community benefit in management planning
- Establish the community representative
- Sociological survey to encourage community to contribute ideas for construction and management.

3.7. Applying patterns and solutions exploiting traditional culture factors into the spatial organization of park in urban area Tay Bac- Bac Ninh.

3.7.1. Location and characteristic of research area:

The park has an area of ~ 77ha, located in Tay Bac urban area - in Hoa Long and Vu Ninh ward, Bac Ninh city. It was determined in the park system of Bac Ninh according to the general urban planning of Bac Ninh to 2030 vision. 2050 approved. The area associated with Thuy to Quan Ho where there are many ancient Quan Ho villages, near the cultural tourist area of Dong Tram - Co Me, Huu Chap village with a tug-of-war game recognized by Unesco as an immaterial cultural heritage

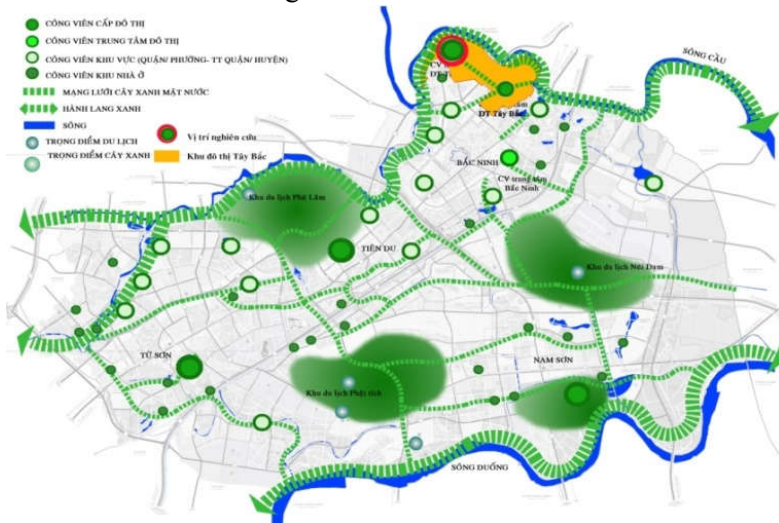


Figure 3.1. Location of the park and Tay Bac urban area in the greenery network- the general planning of Bac Ninh.

3.7.2. Structural model applied for parks in Tay Bac urban area - Bac Ninh city.

Applying model of intertwined nuclear structure, with this model the nucleus (the space with the traditional culture element) of the cultural and educational area will be combined with traditional craft villages area. Nucleus of sports area combined with entertainment areas

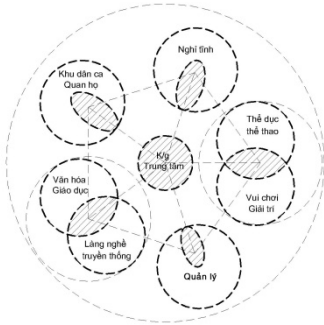


Figure 3.35. Structure model of park in Tay Bac urban area- Bac ninh city

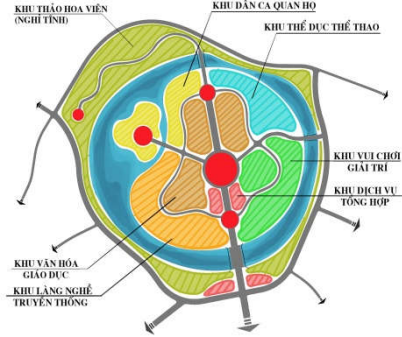


Figure 3.36. Functional structure of park in Tay Bac urban area- Bac ninh city

3.7.3. Solutions applied at the park of Tay Bac urban area- Bac Ninh city

• **Functional subdivision in Tay Bac urban area park**

The proposal consists of 7 main functional areas: entertainment; educational culture; Quan ho folk songs; traditional craft villages; sports area; leisure area; management area

Table 3.8. Proposal functional area in Tay Bac urban area park- Bac Ninh city

TT	Functional areas	Spaces	Portion %	
1	Recreation area	Entertainment for children	5,0	14
		Morden recreation	2,0	
		Folk game	7,0	
2	Cultural education area	Bac Ninh small model	6,5	13
		Bac Ninh legendary and historic	6,5	
3	Quan ho area & Traditional festival area	Performing arts - organizing traditional festivals	9,0	15
		Performance Quan ho area	4,0	
		Galery	2,0	
4	Traditional craft village area	Recreate traditional craft villages	6,5	14
		Exhibition	3,0	
		Try to make traditional crafts	3,0	
		Food area	1,5	
5	Sports area	Indoor sport area	3,0	12
		Outdoor sport area	9,0	
6	Leisure area	Botanical garden	19	30
		Zen garden	3,0	
		Garden of statues	3,0	

		Historical garden	5,0	
7	Management area	Management area	0,5	2
		Administrative area	0,5	
		Service area	1,0	

• **Solutions organization of function area in Tay Bac urban area park- Bac Ninh city**

Applying traditional culture in the overall space, creating many open spaces in harmony with nature (applying the traditional park gardens style). For components that create space (topography, greenery, water surface, architectural, traffic), applying the traditional culture elements based on the Oriental philosophy foundation, specifically in each functional area:

Sports and recreation area:

The folk game area is arranged as a nuclear space connecting the two functional areas of entertainment and sports.

Cultural education area and traditional craft village area:

Exhibition spaces, exhibitions, introduction of typical traditional culture of Bac Ninh as well as experience spaces to serve the needs of cultural research

Quan Ho area: in which Quan

Ho performance space is the main space and the most important. It arranged with many diverse spaces. **Leisure area:** Including many gardens with a variety of topics. Applying the principle of traditional garden layout combined with the principle of taking advantage of



natural conditions. In order to create a lively and attractive landscape with cultural characteristics. **Management area:** administrative and technical building of the park



3.7.4. Solutions to organize the management and exploitation Tay Bac urban area park in Bac Ninh city:

Proposing steps to implement, mechanisms and policies to support investment, orientation of construction planning management and park exploitation with the participation of the community.

3.8. Discussion on research findings:

Ability to exploit traditional culture elements in the spatial organization of urban park in Bac Ninh ; Model of park structure in Bac Ninh; Solution to exploit traditional culture elements in the organization of park space in Bac Ninh; Solutions to investment in construction, exploitation and management of parks; Mobilize community participation in park planning and management

CONCLUSION AND PROPOSAL

1. Conclusion

- Exploiting traditional culture factors in the spatial organization of urban park is becoming a trend. Identifying characteristic traditional culture elements into the organization of park space is one of the issues to be studied
- Proposer 6 points of view, 5 goals and 6 general principles
- Proposing general model, 3 models of nuclear structure
- Proposing solutions to exploit traditional cultural elements into functional subdivision, organization of park space, technical infrastructure, solutions to implement, manage and operation.

2. Proposal

- **State- Ministry of construction:** Promulgate mechanisms, policies and legal documents related to the organization of park spaces and policies to delimit responsibilities in building and managing parks.
- **Provincial People's Committee - Bac Ninh city:** Develop specific strategies, promulgate rules on construction and managing parks
- **Bac Ninh Department of Culture and Sports - Bac Ninh Construction Department:** Develop projects for cultural activities. Building a legal system, standards in the organization of park space. **Consulting unit:** Application of specific traditional culture elements in Bac Ninh has been identified in research into park planning solutions in Bac Ninh. **Investors:** Concern to integrate the traditional culture elements into the organization of park space. **Residential community:** enhance the role in planning process

**LIST OF SCIENTIFIC WORKS PUBLISHED BY AUTHOR
RELATED TO THE DISSERTATION**

International Seminars article.

1. *The quality of Children's playground in Ha Noi under the Impact of Urbanization and Community cooperative Strategy*- 13th International Congress of Asian Planning School Association- Malaysia- 8/2015.
2. *Traditional cultural factor in the sustainable urban development process in Bac Ninh*- International conference of asia pacific planning societies- Taiwan- 8/2016.
3. *Community factor in the spatial organization for city parks*- International conference of asia pacific planning societies- Japan- 8/2017.
4. *The Reality of City Park in Vietnam under the Impact of Urbanization and Community cooperative Strategy*- 14th International Congress of Asian Planning School Association - Beijing- China- 10/2017.
5. *Design policies and management parks system to improve the quality of life in the cities*- International conference of asia pacific planning societies- Vietnam- 8/2018.
6. *Establishing planning principles for urban parks in Viet Nam*- Urban design international confernece- China- 9/2018.

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