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Retraction

Retracted: Research on the Flow Space Planning Model of a Classical Garden Based on an Ant Colony Optimization Algorithm

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

(1) Discrepancies in scope
(2) Discrepancies in the description of the research reported
(3) Discrepancies between the availability of data and the research described
(4) Inappropriate citations
(5) Incoherent, meaningless and/or irrelevant content included in the article
(6) Peer-review manipulation

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

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[1] Y. Tang and Z. Madina, "Research on the Flow Space Planning Model of a Classical Garden Based on an Ant Colony Optimization Algorithm," *Journal of Mathematics*, vol. 2022, Article ID 2001084, 8 pages, 2022.

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Research Article

Research on the Flow Space Planning Model of a Classical Garden Based on an Ant Colony Optimization Algorithm

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The traditional spatial planning model has a large error and poor spatial planning effect, which cannot adapt to the construction of classical gardens. The flow spatial planning model of classical gardens based on an ant colony optimization algorithm is designed. The aim of the study is to perform the following: Analysis of classical garden flow space scale, quantifying the spatial flow scale of classical gardens, modifying classical garden spatial sequence based on the ant colony optimization algorithm, and constructing the flow space planning model of classical garden. By means of a comparison experiment, the error of the new model is small, and the effect of spatial planning is increased, which is of great popularization value.

1. Introduction

Systematic planning of the mutual "relations" existing in garden flow space configuration extends the 2-dimensional or 2.5-dimensional flow design thinking to 3-dimensional or even high-dimensional, providing a guide and reference for designers in the design of space configuration. The modern landscape space is ever-changing, the study and analysis of the relationships among the various landscape flow spatial configurations can better sort out and summarize, and form an accurate and clear understanding in the face of various spatial configurations [1]. It offers a new way of looking at landscape assessment by taking into account the structural relationships between landscape spaces in terms of landscape space arrangement. Traditional research explains the landscape configuration and analysis based on the researchers' result that can be wrong or incomplete. Using a computer to analyze the botanical garden area on a large scale, entering the world of quantitative analysis, and pushing the computer strategy of landscape design.

First of all, Chinese classical gardens are China's precious traditional cultural heritage, which have been repeatedly studied and explored by countless scholars for hundreds of years. However, in the vast majority of research materials, gardens are only the description of superficial phenomena, or the summary and induction of ancient garden literature [2–4]. Although these materials are of great help to our understanding of gardens, they neglect the research and exploration on how to express and inherit the spatial characteristics and design techniques of classical gardens in modern architectural design. Therefore, we should not only understand the garden but also know how to use and develop the garden.

Second, the modernist architectural issue highlights the loss of humanity in a merely logical setting. Humanized space experience, on the other hand, is lavished to the extreme in Chinese classical gardens with hundreds of years of history. Despite the fact that Chinese classical gardens have become historical and cultural landmarks, history does not imply a return to the past [5]. The personal care and inventive design concepts found in Chinese classical gardens, on the other hand, are precisely what the modernist architectural school of thinking lacks. As a result, studying from the ancients and extracting lessons from them is a valuable reflection and inspiration for present architectural design processes.

However, the Chinese classical garden is an inclusive philosophy, history, culture, aesthetics, architecture, and other disciplines of the comprehensive art. All of the disciplines have a myriad of links, the lack of any aspect of the garden cannot be called Chinese classical garden. However, the Chinese classical garden is comprehensive, extensive, and profound, and any knowledge contained therein is worth our long-term study and research [6]. In a book or paper, it seems to be an impossible task to thoroughly consider all aspects of Chinese classical gardens. In fact, there is no senior scholar to do this. So, it is inevitable to choose the content of the garden itself. Therefore, based on the practical and guiding significance of Chinese classical gardens to modern architectural design, the study of Chinese classical gardens should pay more attention to the common points and converge between Chinese classical gardens and modern architectural design [7, 8].

Everything in the world operates according to its own set of laws. Are there inherent laws in landscape phenomena, such as the genetic sequence that controls the emergence of living organisms or the principles of note generation in a musical tune, if we consider landscape to be an art of making space? The most significant fundamental talent of a landscape architect is spatial organization, which is the advanced stage of flowing space. Flow space, with its interpersonal, spatial experience, and ecological efficiency benefit, is moving the heart of every designer in the twentieth century. Even then, no thorough systematic investigation has been done on the flow of "confused a century" space. In this paper, we will examine the flow space subset of classical gardens, comb, conclude, and summarize, and try to quantify, the botanical garden space for digital processing, this concept landscape flow space organization, in order to pursue the essence of the phenomena, find out what is hidden in the order, and reveal the nature of flow space more design methods and rules [9].

2. Design of the Classical Garden Flow Space Planning Model Based on the Ant Colony Optimization Algorithm

2.1. Analysis of the Classical Garden Flow Space Scale. Space is the basic material form of garden, and the size and form of space are determined by the scale of its elements and the proportion between them. Scale and proportion are two concepts about the relationship between quantity. Proportion is to achieve a harmonious relationship between the building itself, while scale is to pursue the relative relationship between the building and people's visual and physical feelings, as well as the harmonious relationship between the building and the surrounding environment. Ultimately, they are all about creating a harmonious visual order. The space of gardens needs to be processed into a realistic material space that is "expected, feasible, accessible, and habitable" through certain artistic means, so as to achieve the perfect integration of artistic realm and real life [10–12]. It is the most important task for gardens to organize abundant and appropriate flow space. We can learn about the configuration of the spatial prototype by studying it in the space above, and we can summarize and evaluate the organizational form and law of the garden flow space by quantifying the size of the spatial prototype. There is a spatial link between the ratio of the distance from the human perspective to the building and the height of the building in the study of the interior space scale [13]. The interior space of the Chinese traditional garden architecture comes in a variety of shapes and sizes, with the height of the interior space determined by the building's roof. Internal height constraints, for example, are formed by the tops of various kinds of structures, such as Ming Chui, Cao Pai, and Xuan ceilings. Even the same type and scale of buildings give people different space feelings. The DH ratio between building distance (depth) and building height ranges from 0 to 4, which can be divided into five types, as shown in Table 1.

As shown in Table 1, $D/H = 1$, the vertical angle of view of people is 45°, although the interior of the building still feels cramped. However, there is some equalization between the building distance and height. The ratio of distance to height of interior buildings is mostly $1 < DH < 2$. Within the range, people's vertical perspective is within the range of 30°–40°, with relatively open and comfortable space scale. When $2 < D/H < 3$, the vertical angle of view is within the range of 20°–25°, and the internal space is relatively open. And so on, when $D/H > 3$, the vertical angle of view is about 15°, the internal space is open and empty, and the sense of space isolation and security is reduced [14].

The size of anything in relation to a reference standard or other things is referred to as scale, which makes it easier for individuals to do different measurements. The size of anything in relation to a reference standard or another item is called scale. A proper or harmonic connection between one component and another part or total is defined as proportion [15]. This link might be about more than just significance; it could also be about quantity and rank. By measuring, we mean the relationship between absolute dimensions and various proportions, which are largely dictated by the relevant functions, particularly the human body's size. The link between the impression and the true size of an item may be determined by investigating the perceived size of the thing as a whole or in pieces. The dimensional scale is the ratio that each component amount affects; it is relative and does not include particular dimensions. Scale, on the other hand, refers to actual measurements and dimensions. The scale refers to the connection between an element's perceived size impression and its genuine size, rather than the element's true size. The fundamental control scale of "shape" and "form" had been well established by the ancients. Shape, often within 100 feet, but non-mustard shape with a 1,000-foot rate, but not too far or too huge potential. The primary control scale of the plane (depth and breadth), elevation (height), and viewing distance of space composition is "one thousand feet is potential, one hundred feet is form" [16]. 100 feet is about 2335 meters, while 1000 feet is approximately 230350 meters. The monomer's form is one hundred feet, which regulates the space enclosing size, and the monomer's far viewing distance is less than one thousand feet.

Table 1: Types of classical garden buildings.

The internal space	Distance D/m	High H/m	D/H	Vertical angle (°)
Mingse house and Hanbishan house	6.35	6.40	D/H = 1	45°
West building of the Quxi building	3.26	2.70	1 < DH < 2	30°–40°
Yuan lake	7.00	2.70	2 < D/H < 3	20°–25°

2.2. Quantifying the Spatial Flow Scale of Classical Gardens. The highest achievement of classical garden space organization, although is a private garden, with a sample of the garden as a traditional garden set. Moreover, because the miller garden is a private garden, not to the verification of the stream of people, so the selection of Roosevelt memorial as a sample of modern flowing gardens. A comparative study of two typical samples was carried out using the configuration space syntax analysis. The reason why space syntax can provide reliable interpretation of landscape phenomena is that space syntax is "system-wide summing up" and exhausts all possibilities [17]. The scope of landscape explains the empirical study which explains the sampling method technique on the rule of basic possibilities as well as hidden rule of relationship with sampling data.

Buildings became a major feature of the classical garden landscape after the Qing Dynasty; thus, the size of architecture has a direct impact on the space arrangement and aesthetic mood of the whole garden. The architectural scale must be decreased to conform to the restricted site area of classical gardens and the tiny scale of landscape, particularly for scenery primarily for viewing; thus, greater attention is devoted to scale design. The use of the perspective concept of close big and distant tiny to reduce architectural scale not only adapts to the restricted site but also expands the depth of field. Suzhou ancient gardens are used as an example in this work, and the spatial flow scale quantification is provided in Table 2.

As can be seen from Table 2, the West building of Quxi building in the Lingering garden is located in the southeast of the central scenic spot. The west building on its north side is slightly backward, with a width of 13.86 meters and a depth of only 3.26 meters. However, there are smaller spaces in front of the Quxi building and at the junction of the West building to form a contrast. In addition, there are several large open windows on the west wall. The whole empty window faces the mountain pool, which is exactly perpendicular to the west corridor of the mountain pool, so there is no feeling of walking through the corridor after entering the Quxi building [18]. Two ends of entrance and exit in the end are clearly showing the wiggle room impact. Crossing the Quxi building and turning right to enter the West building, which is 8.26 meters wide and 5.28 meters deep. Here, the indoor floor level is slightly raised to make the space more amiable due to the low height. At the same time, the vertical space combination of elevation makes the overall scene plump and integrated, forming two floors, one front and one back, one long and one short, one high and one low, with a clear and unified main body, achieving the artistic effect of contrast between virtual and real. The landscape diagram of the lingering garden is shown in Figure 1.

With an area of 257.41 square meters, the Wufeng fairy hall is the largest building group in the eastern part of the garden, while Crane house, Shilin Hut, Jingzhong View, and Jizhou Feng Xuan are smaller buildings on the east side of the Wufeng fairy hall that have formed several small courtyards independently. We get to Shilin Cottage generation one via the large Wufeng Xianguan building, which has a discrete main and secondary area but is interconnected. As a result, Table 2 shows the garden flow quantification table.

As shown in Table 3, the space form of the Lingering garden changes from large to small and from simple to complex, interspersing, and switching with each other to form an artistic effect of integrating inside and outside space.

The opening, depth, and eave heights of the Culbite hill house and Minser house are 12.5 m, 6.35 m, and 3.8 m, respectively, and 5 m, 6.03 m, and 5.25 m, respectively. The external spatial pattern of the Culbite hill house and Minser house is shown in Figure 2.

Figure 2 shows the green mountain room, bright floor and volume as well as height in the stark contrast; it explained about the central scenic area of the space form and new part of the world, WenMuJi sweet in a group of buildings in photograph echo, and the difference can be seen from the data in the center area of architecture. Viewed from the opposite pavilion, it forms an organic whole with the surrounding lakes and forests, which is unique and harmonious. In traditional gardens, the walk is a fascinating and complicated structure. Architecture, scenery, and plant arrangement may be observed in the plane of classical gardens, but it is difficult to clearly define the garden walk since the road is disguised in these aspects [19]. As a result, the notion of a path in the garden encompasses not just outside passable paths but also all routes with traffic functions, implying that architecture is an essential aspect of the garden's complex path system. The true efficiency of the investigation may be assured by quantifying the traditional garden space flow scale.

2.3. Modification of the Classical Garden Spatial Sequence Based on the Ant Colony Optimization Algorithm. From different perspectives, the methods of structural dynamic modification can be roughly classified as follows: according to the classification of model modification objects, they can be divided into matrix and physical parameter methods. According to the scope of structural modification, it can be divided into the integral modification method and partial modification method. The global correction method is to modify the parameters of the whole structure or the whole system matrix, while the local correction method is only to modify the local parameters. In terms of calculation

Table 2: Quantification of building scale in the middle of Liu Yuan.

Building	Room/Side length (m)	Depth (m)	Eaves height (m)	Floor area (m^2)
Green mountain	12.5	6.35	3.8	32.69
Bright building	5	6.03	5.25	24.8
Green shade	5.23	3.55	2.8	18.76
The Quxi floor	13.86	3.26	5.29	40.77
City of putting	2.65	2.65	2.9	7.02
West wing	8.26	5.28	4.5	42
The wind pool pavilion	3.9	5.62	2.8	21.9
Far cui attic	8.4	7	5.9	58.8
Ke pavilion	1.74	—	2.8	7
Smell the sweet clover	5.02	4.89	3.1	24.9

Figure 1: Landscape diagram of Liu Yuan.

Table 3: Scale quantification of Liu Yuan East.

Building	Room/Side length (m)	Depth (m)	Eaves height (m)	Floor area (m^2)
Crane Suo	11.7	2.5	2.8	32.69
The stone forest cabin	3.62	2.53	3.1	8.67
Static medium	3.94	1.74	3.92	9.3
Renewed peak thin	8.13	3.96	3.85	32.14
This text fairy pavilion	20.11	13.16	4.2	257.41

methods, it can be divided into direct method, iterative method, and group method. The direct method is based on a certain mathematical relationship, a calculation to get the revised model. The iterative method means that the modified model can be obtained through several iterations. The grouping method means the combination of the above two methods. It may be split into incomplete space technique and practical full space method based on the completeness of the reference base internal modal space [20]. The measurement mode is only included in the incomplete space technique, but the practical full space method includes both the measurement mode and the comparable higher order theoretical mode. It may be separated into nondiagnostic and diagnostic methods based on the functional categorization. Nondiagnostic approaches can only supply changed models for response analysis later on. The diagnostic approach may be used in structural dynamic design to not only give a repair model but also to detect modeling errors. The dynamic identification approach based on dynamic test data might be dubbed dynamic finite element model modification, depending on the test information utilized in model modification. Static identification method using static test data can also be combined with static and dynamic test data for finite element correction. In order not to change the stiffness in the original spatial sequence and the original properties of the mass matrix, the revised

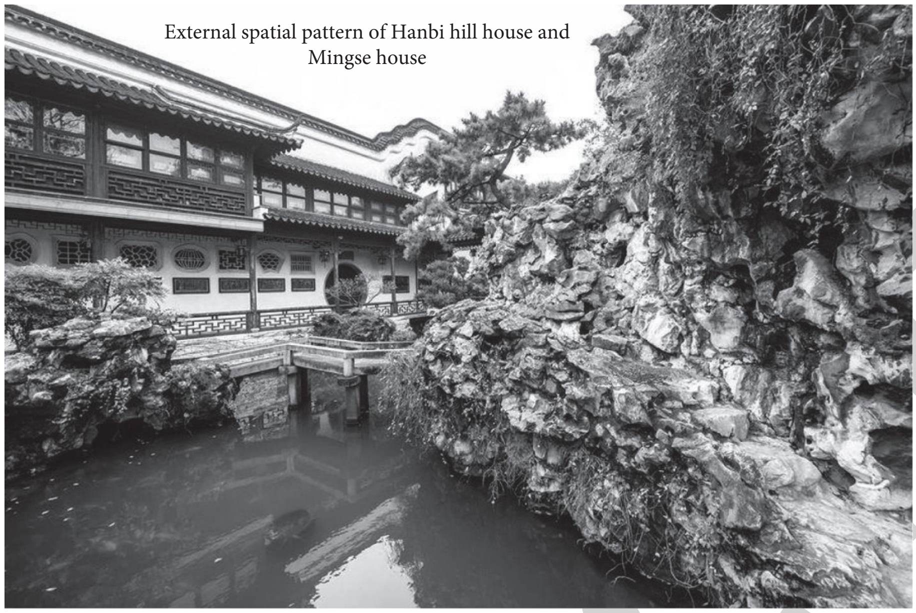

Figure 2: External spatial pattern of the Hanbishan house and Mingse building.

structural stiffness and mass matrix are expressed as follows:

$$K_U = \sum_{i=1}^{n_e} \alpha_i K_{ia}, \tag{1}$$

$$M_U = \sum_{i=1}^{n_e} \beta_i M_{ia}. \tag{2}$$

In formula (1) and (2), K_U and M_U are the structural stiffness and mass matrix of the spatial sequence of the garden in the initial state, respectively. K_{ia} and M_U are the structural stiffness and mass matrix of the i-th spatial sequence in the initial state, respectively. α_i and β_i are the correction coefficients of the structural stiffness and mass matrix of the i-th spatial sequence, respectively. n_e is the number of nodes in the initial spatial sequence. In the actual measurement, the number of sensor points is far less than the number of nodes in the analysis model, assuming that the number of measured points is m and the number of unmeasured points is 1. In order to distinguish measured points from unmeasured points, the dynamic equation of the modified model can be expressed as follows:

$$\left(\begin{bmatrix} K_{mm} & K_{ml} \\ K_{lm} & K_{ll} \end{bmatrix}_U - \lambda_s \begin{bmatrix} M_{mm} & M_{ml} \\ M_{lm} & M_{ll} \end{bmatrix}_U \right) \begin{Bmatrix} \Phi_m \\ \Phi_l \end{Bmatrix} = 0. \tag{3}$$

In formula (3), $\begin{bmatrix} K_{mm} & K_{ml} \\ K_{lm} & K_{ll} \end{bmatrix}_U$ is the U measurement data. $\begin{bmatrix} M_{mm} & M_{ml} \\ M_{lm} & M_{ll} \end{bmatrix}_U$ is the U-th data to be measured. λ_s is the S-th measured eigenvalue. Φ_m and Φ_l the mode components m of the measured points corresponding to the measured eigenvalues λ_s and l of the unmeasured points. K_{mm} is the spatial sequence stiffness of $m \times m$ dimension. K_{ml} is the spatial sequence stiffness of $m \times l$ dimension. K_{lm} is the spatial sequence stiffness of $l \times M$ dimension. K_{ll} is the spatial sequence stiffness of $l \times l$ dimension. M_{mm} is the quality of $m \times m$ dimensional spatial sequence. M_{ml} is the quality of $m \times l$ dimensional spatial sequence. M_{lm} is the spatial sequence quality of $l \times m$ dimension. M_{ll} is the spatial sequence quality of $l \times l$ dimension. Due to the unknown of Φ_m and Φ_l, the test points cannot correspond to the degrees of freedom of the analysis model one by one. Two approaches may be employed to compare the test mode expansion method and analytical condensation method related to the test points and degrees of freedom of analysis in order to directly compare the generated eigenvectors with the tested eigenvectors. The test mode expansion technique, which uses the ant colony algorithm to evaluate the stiffness and mass matrix of a spatial sequence and extract the mode components on the nodes of structural dynamic mode, is briefly described below.

$$\begin{aligned} \{\Phi\} &= \begin{Bmatrix} \Phi_m \\ \Phi_l \end{Bmatrix} = G(\lambda_s)\{\Phi_m\}, \\ G(\lambda_s) &= \begin{bmatrix} I_m \\ -P(\lambda_s)^{-1} Q(\lambda_s) \end{bmatrix}. \end{aligned} \tag{4}$$

In formula (4), I_m is the identity matrix of $m \times m$ dimension and $-P(\lambda_s)^{-1}$ is the inverse matrix of $l \times l$ dimension. $Q(\lambda_s)$ is $l \times m$ dimensional matrix. $P(\lambda_s)^{-1}$ and $Q(\lambda_s)$ can be obtained by the following formula:

$$\begin{aligned} P(\lambda_s)^{-1} &= K_{ll}^{-1} + \lambda_s K_{ll} - 1 M_{ll} K_{ll}^{-1}, \\ Q(\lambda_s) &= K_{lm}^{-1} - \lambda_s M_{lm}. \end{aligned} \tag{5}$$

In formula (5), the mass matrix $m \times m$ dimensions of the stiffness of the reduced analysis model that has been modified are as follows:

$$\begin{aligned} K(\lambda_s)_{UR} &= G(\lambda_s)^T K_U G(\lambda_s), \\ M(\lambda_s)_{UR} &= G(\lambda_s)^T M_U G(\lambda_s). \end{aligned} \tag{6}$$

In formula (6), U, R and T are the test space Xue sequence parameters, respectively. At this point, the mass and stiffness matrices must satisfy the following canonical equation:

$$\begin{aligned} \Phi_m^T K(\lambda_s)_{UR}\Phi_m - \lambda_s &= 0, \\ \Phi_m^T M(\lambda_s)_{UR}\Phi_m - I &= 0. \end{aligned} \tag{7}$$

In formula (7), $\Phi_m^T K(\lambda_s)_{UR}\Phi_m - \lambda_s$ is the measured eigenvalue of dimension and the corresponding measured mode of $t \times t$ dimension, and T is the total order of the measured eigenvalue, I is the vector parameter. Combining equations (1), (6), and (7), the correction coefficient α_i and β_i equation are obtained as follows:

$$\begin{aligned} \Phi^T\left(\sum_{i=1}^{n_e}\alpha_i K_{ia}\right)\Phi - \lambda_s &= 0, \\ \Phi^T\left(\sum_{i=1}^{n_e}\beta_i M_{ia}\right)\Phi - I &= 0. \end{aligned} \tag{8}$$

In formula (8), since the vibration mode Φ and measured eigenvalue λ_s are known, the model correction coefficient α_i and β_i can be obtained by solving formula (7). In actual engineering, the number of unknown α_i and β_i is $2n_e$, far greater than that of formula (7), so there is no unique solution to formula (7). In this paper, the number of objectives is firstly determined, and the minimum objective function α_i and β_i is obtained by using different optimization algorithms such as genetic algorithm to solve the above equation. To ensure maximum correction effect of spatial sequence.

2.4. Constructing the Flow Space Planning Model of Classical Gardens. Buildings and courtyards form the overall landscape pattern. A group of courtyards have the main scenic spots and the best viewing points. The best viewing points are the stopping points, which basically exist in the form of buildings. The space types in gardens are divided into three types: interior space dominated by hall, hall, building, pavilion and porch, gray space dominated by pavilion and gallery structure, and external space dominated by landscape pattern. The gray space often connects internal and external spaces and plays an excessive role. If there is no excessive grey space, the spatial relationship is simple and stiff, which is closely related to its functional nature. The main function of residential houses is living, while the main function of gardens is recreation. Distinct functional requirements need different spatial forms and structures. On the structure, internal, external, and grey space can be used as an art technique in the relationship between black and white ash, as the black and white and grey relation expression object of light and shadow creates a stereo feeling, but only the structure of the relationship between surface and surface, and the internal, external, and grey space is space structure relations between black and white ash, is between 3 d and 3 d dialogue, spatial organization form a complex, rich, and c As a result, the "image outside the scene and the scene outside the scene" impact of garden art is created. The number of measured points, natural frequencies, and modes for big structures are significantly smaller than the model freedom produced by the finite element technique. The data are far from full, even when measured in the same order as the modal vectors. The issue may be solved in two ways: the first is to minimize the free degree of the original analytical model, a process known as model condensation. The alternative option is to increase the measured mode's freedom degree, which is known as modal expansion. The measured mode of each order is the subject of modal extension. Interpolation techniques are used to achieve modal expansion, with the Berman and Farhat iterative interpolation approach and the optimum fitting method being two examples. In addition, for modal expansion, various model condensation techniques may be applied in reverse. As a result, this work uses the hierarchical technique to build the garden flow space planning model, which is displayed in Figure 3.

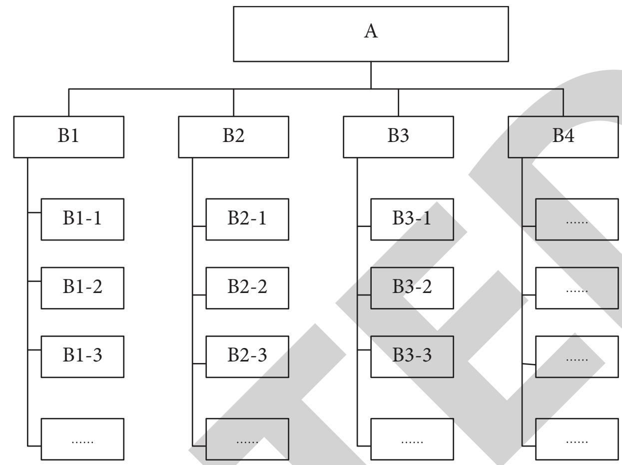

FIGURE 3: Flow space planning model of classical gardens.

As shown in Figure 3, after the flow space planning model of classical gardens is constructed, the elements at the upper and lower levels form a membership relationship. The elements at the A level, $B1$, $B2$,..., Bn have a dominant relationship. Similarly, the elements of $B1$ layer have the same effect on the next layer $B1$-1, $B1$-2... has a dominant relationship. Pair-wise comparison of the same level of indicators can further reduce the error of spatial liquidity parameters and improve the effect of spatial planning.

3. Experimental Test

3.1. Experimental Preparation. The initial worry in the structural model modification problem is the evolution process of the objective function value, since this evolution process can be used to estimate the effectiveness of the adaptive ant colony algorithm and the influence of model modification. Many variables influence the search status of each parameter value in the ant colony optimization method. Figure 4 depicts the development of the worldwide volatility coefficient.

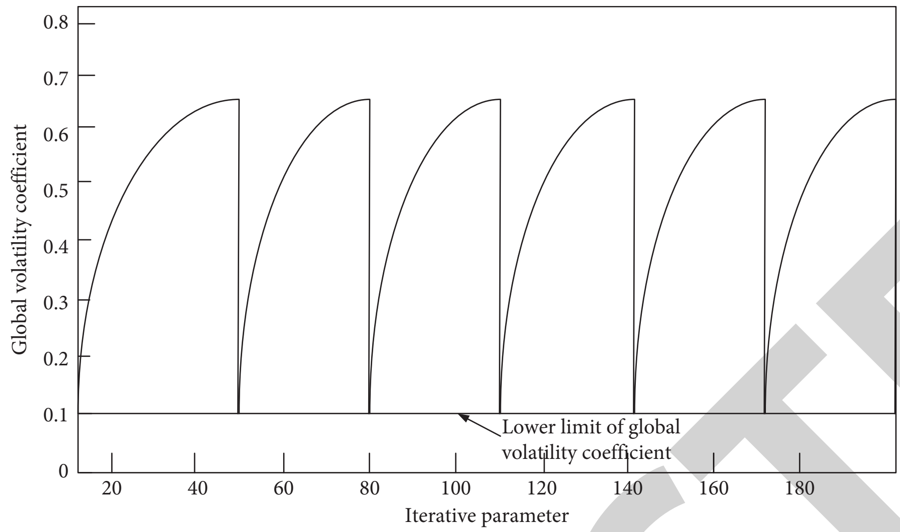

Figure 4: Evolution diagram of global volatilization coefficient.

As shown in Figure 4, in the ant colony system, there are two ways for ants to select paths: probabilistic search and path selection based on prior knowledge. The two search methods have their own advantages and disadvantages: the path selection based on prior knowledge has fast convergence speed, but easy to fall into local optimal. Probabilistic search can avoid falling into local optimum, but usually the convergence speed is slow. Therefore, good ant colony algorithms use some strategies to adjust the selection of search methods to take advantage of the advantages of both search methods. Adjusting the selection of search method and path in this iteration step in a probabilistic way. If the dispersity of garden space is low, it means that the route of ants from one garden space to another is concentrated in a few, and that the information is concentrated in these few pathways, which may easily lead to premature and stalling in the future search for the best solution. As a result, more paths should be chosen in order to diversify solutions. When the dispersity of garden space is greater, the dissemination of information from one garden space to another is more dispersed, making it harder to enhance the optimum information and resulting in a sluggish convergence rate. As a result, a smaller number of better pathways should be chosen with a higher probability in order to increase the positive feedback information.

3.2. Experimental Result. In the above experimental environment, the traditional spatial planning model was compared with the spatial planning model designed in this paper to verify the error effects of flow parameters (Ed, Rd, Ad, Id) of the two models. The results are shown in Table 4.

As shown in Table 4, the flow parameter error of the traditional spatial planning model is large, and the spatial planning effect is poor, which cannot adapt to the construction of classical gardens. The flow parameter error of the spatial planning model designed in this paper is small, and the spatial planning effect increases accordingly. It can adapt to the construction of classical gardens, create conditions for the planning of garden flow space, and meet the research purpose of this paper.

Table 4: Experimental results.

The flow parameters	Flow parameter error effect of traditional spatial programming model	The flow parameter error effect of spatial programming model is designed in this paper
Ed	0.132	0.013
Rd	0.245	0.014
Ad	0.356	0.016
Id	0.428	0.018

4. Conclusion

In the context of the rapid development of the global economy, modern and post-modern design trends are gradually pouring into the traditional design ideas and aesthetic concepts have a violent collision, but in the fast-paced urban life, traditional culture is gradually forgotten and ignored. Contemporary landscape designers are confused about this, whether to blindly pursue the western design concept, or adhere to the tradition, or carry out the eastern design philosophy. How to deal with the relationship between tradition and modern, modern landscape designers need to consider the problem. "Take the essence, discard the dross," absorb the western excellent design concept at the same time to carry out the traditional design methods, to realize the combination of geographical location, talent utilization and cultural deposits, and makes the contemporary landscape design can meet the requirements of the current generation of city life space, and can meet people's traditional aesthetic idea, potential shaping urban landscape with cultural characteristics, that is the shared vision of modern landscape designers.

Data Availability

The data used to support the findings of this study are deposited in a repository.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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