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Military Seal Algorithm: Research on Inverse Interpretation Model of Behavior Trajectory Data and Image Hidden Spatial Information

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***Abstract*—The Military Seal Algorithm is based on a metaheuristic, which takes into account the encryption process of spatial geodata acquisition, distribution processing, and integrated publishing in the process of dynamic target changes and the reverse calculation logic in the process of image space interpretation.,It is the whole of means. Encrypted information not only has the unity of opposites to the encryption target, but also the encryption and decryption of the encrypted information are the result of the unity of opposites. By realizing the balance of goal transformation in the philosophical principle, the inherent contradictory behaviors between the subjective and objective space encryption recording of images and the interpretation of hidden information of the image scene are complementary to effectively search and determine the optimal solution. It can achieve a significant improvement in the ability to match and deduce the spatial mapping of Chinese landscape paintings and remote sensing geographic information data, with fast convergence speed, strong global search ability, and high solution accuracy.**

Keywords—Military Seal Algorithm; image space interpretation; meta-inspired computing; crowd intelligence

I. INTRODUCTION

A. Current status of foreign research

Before the Military Seal Algorithm was proposed, the research on image hiding space existed in the fields of cartography and visual research. The early research on image hiding was closer to the visual image to be expressed through the map, that is, through the impersonal knowledge of the map, it was Personalized as a specific visual image of social spatialization[1]. With the advancement and development of scientific research technology, there have been many reverse inferences and studies of behavioral trajectories based on spatial hidden information. For example, through excavation and space stratigraphy research, through the analysis of different layers of subterranean sediments and remote sensing images, the team of Chris·Clarkson confirmed the behavioral trajectory of humans in northern Australia 65,000 years ago[2]; Michael I. Bird et al. Paleogeographic and nautical models combine the study of imagery and behavioral trajectories to decipher the origins of early human colonization in Australia[3].This paper also combines behavioral trajectory data and image hidden spatial information research, focusing on the field of algorithm research, in order to improve the matching deduction ability of remote sensing geographic data and spatial mapping of Chinese landscape paintings, and deduce certain rules.

B. Thesis framework

This paper proposes a new method of complexity measure for the spatial mapping analysis of landscape paintings in the National Museum of China. By taking the information entropy of the landscape image bit plane as the measure of image complexity[4], the statistical law of the peak height characteristic records of random sequences is studied, and the theoretical derivation is given. , using the statistical law of peak heights of landscape image level planes and the geographic elevation data obtained by remote sensing satellites to conduct random sequences, and quantitatively describe the complexity of the image through the closeness of the statistical law of run distances, and analyze its rationality from the academic point of view of experts in the field, which shows that the complexity of the landscape image bit plane can be used as a performance evaluation index for the hiding of image geographic information, and the complexity of landscape information in the landscape image is closely related to the evolution law of chronological collection and recording specifications.

When interpreting landscape image space in traditional research fields, people generally only pay attention to the changes in the amplitude of image information records, while ignoring the changes in texture, distribution characteristics and scene content in images. The peak signal-to-noise ratio characterizes the amplitude difference of the image, and the image complexity characterizes the difference of the image content. As an important objective index, the image complexity should be combined with the image complexity to make the objective evaluation. The evaluation effect is more reasonable.

The reverse interpretation of information hiding [7]technology can use the visual redundancy of the image to hide the information in the reverse translation of the complex part of the image texture, and realize the processing of the

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visually imperceptible characteristics of image information hiding. Image complexity represents the amount of objective information in an image. The greater the complexity of the image, the greater the amount of objective information contained in the image, and the difficulty of discriminating and analyzing spatial information is also significantly improved. The visual information that people accept does not increase because the amount of hidden information in the image increases, but decreases because the complexity of the image increases. For example, a piece of white paper is an image whose pixel value is all "l". Human eyes can easily recognize and understand the recording rules of image information, but relatively complex images are difficult for people to understand. Images composed of purely random sequences have no meaning to human subjectivity. Information hiding technology can use the visual redundancy of images to hide information into complex parts of image textures.

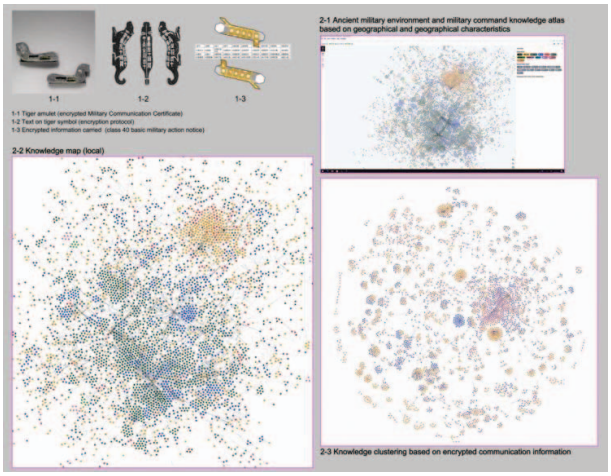

Figure 1. A meta learning approach to image interpretation considering cartography

As shown in Figure 1, the construction of military intelligence interpretation requires the detailed classification of information categories, so as to realize the organization of knowledge map based on the existing ontology construction technology. Among them, the key information is the information transmission characteristics of the "tiger amulet" and the detailed functions and content details of the ancient Chinese military intelligence transmission information.

An ontology usually consists of several elements: classes, slots, axioms, relationships, and instances. A class is an abstraction of a class of concepts with similar properties, and the concepts under the class are the instances, and the instances are the individuals in the class; slots are used to describe the internal structure between classes, classes and instances, or instances and instances, including "properties" and "relationships"; axioms represent the objective relationship between various elements in a domain. The axioms represent the objective associations and constraints between various elements in a domain. The ontology is a three-dimensional and dynamic mesh structure, which can be described by natural language in its logical expression; it is also an open system that can be updated and reused, and these important features make it possible to serve as the underlying framework for knowledge mapping.

Data sources of knowledge graphs are important corpus necessary for generating knowledge graphs, and in general, knowledge graphs In general, there are three kinds of knowledge graphs: unstructured data sources, semi-structured data sources and structured data sources.

1) Unstructured data sources: There are a large number of text resources on the Internet that have not been carefully analyzed, and such text resources usually have no fixed format, i.e., Non-structured Data. It is very difficult to identify the most valuable information from the redundant unstructured, so people usually use computers to understand the semantics of text and extract valuable information from it. In the choice of data processing methods, rule-based methods can be used, statistical methods can be used, or a combination of both.

2) Semi-structured data sources: Semi-structured Data refers to partially structured data, which has a The semantics are uncertain. Compared with unstructured data, semi-structured data has certain structure. In the process of knowledge graph construction, semi-structured data sources are mainly in the form of HTML pages. For this kind of data, it is necessary to divide it into structured and unstructured parts and process them separately, giving priority to the structured data parts that are easy to process, and then consider extracting information from unstructured data.

3) Structured data source: Structured Data is data stored in the database with certain logical and physical structure, which can be logically expressed in a two-dimensional table structure. Structured data type is a user-defined data type, and this data type is divisible. In terms of utilization, structured data can be used both individually and, where appropriate, as a stand-alone unit. Structured data is often stored in relational databases and is therefore suitable for a wide range of typical scenarios.

The increasing collection of floating behavior data (points), GPS trajectory data (lines), and street network data will constitute behavioral trajectory big data containing people's behavioral patterns and activity laws, and hide spatiotemporal clustering patterns with strong spatiotemporal correlations. , and requires a high-performance solution. Behavioral trajectory data is a record of human activity and is closely related to sociology.

After extracting the directory structure and refining the content, I obtained a total of 795 entries, including 203 entries related to "military commander," 312 entries related to "contract attack," and 283 entries related to "joint defense. The author obtained a total of 795 entries, including 203 entries for "military commander," 312 entries for "contract attack," and 283 entries for "joint defense. In order to extract the required core concepts from such a large collection of terms, the author invited experts in the field to provide guidance. With the guidance of the experts, I identified 104 core concepts, including "military force," "military commander," "warfare," and "position. A total of 104 core concepts in the field, some of which are described as follows:

a) Military force: A concept used to describe the military forces that play a central striking role, a supporting synergistic role, and a disruptive role;

b) Military Commander: This concept is used to describe the officer who plays a command role in the different battlefields and who can lead the military forces and direct the campaign;

c) Intelligence: This concept is used to describe information that can guide the conduct of combat and battles, such as enemy and enemy intelligence, geographic conditions, battlefield conditions, weather conditions, and hydrologic conditions;

d) Battle: This concept is used to describe the course of a specific battle and should include details of events before, during, and after the battle;

e) Battle task: This concept is used to describe the total task of the battle, the sub-tasks of the group (team), and the stages of the battle period, etc. The battle task can constitute a guiding role for the concepts of military force and battle behavior;

f) Combat territory: This concept is mainly used to describe the territorial scope of the attack;

g) Battle direction: corresponding to the "battle area", the concept mainly describes the direction of the attack, including the main direction of attack, feint reverse, penetration and detour attack direction and auxiliary attack direction;

h) Combat timing: This concept describes the timing of the attack and defense, and will have an impact on several concepts such as combat behavior and battle tactics;

i) Combat behavior: The concept of describing the specific combat behavior of the individual, can be divided into two parts of the content of the offensive behavior and defensive behavior;

j) Battle requirements: The battle requirements pursued in the course of each local battle;

k) Battle route: The concept includes two connotations of offensive and defensive routes, describing the course of action chosen by the offensive or defensive side during the conduct of the battle;

l) Battle tactics: Used to describe the different military forces based on the different purposes of the chosen method of combat, the description of the content of the core strike force tactics, supporting synergy force tactics, interference force tactics, strong-arm attack and assault;

m)Position: A geographical area in which different military forces choose to be stationed and in which they can rest, adjust, and replenish their supplies;

n) Materiel: Describes the various entities or resources that can support a military force in a campaign, including weapons, food, and defense gear.

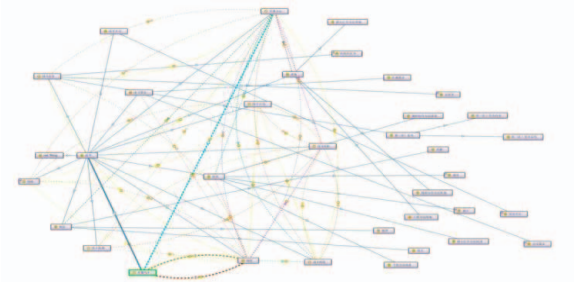

Figure 2.. Complex relationship between military intelligence encryption information

The complex correlation between encrypted messages of military intelligence, as illustrated in Figure 2. Relationship is the core element of ontology. It describes the interaction between concepts and instances in the domain. The relationship directly determines the knowledge richness of ontology knowledge map and the functional scope of other application systems based on knowledge map. In order to extract a more scientific relationship, first of all, reference is made to the relationship labels such as "alliance", "commander in chief", "has principal" and "in use" in the military ontology specification above. Then, according to the description of the summarized core concepts and under the guidance of domain experts, 14 complex relationships between military intelligence are defined by hump nomenclature.

II. INSPIRATION

In this study, by analyzing the spatiotemporal correlation of the behavioral trajectories, and researching the inverse interpretation model of the hidden spatial information of the image, combining the spatiotemporal correlation statistics with spectral clustering,density clustering and other methods, a method considering the spatiotemporal correlation.Mining the hidden laws of image spatial information, obtaining data laws from spatio-temporal clustering patterns (collection point area, data recording standard, collection behavior pattern, data integration pattern, etc.) High-performance solvers. Further combine professional domain knowledge and data model construction to analyze the relationship between behavioral trajectory data and image production (creation standards, applicable scenarios, domain knowledge maps, etc.).The research of this project provides a brand-new computing empowerment for the interdisciplinary research of Chinese art history and science and technology history. Make basic contributions to the development of spatial humanities and sociology,high-performance geographic computing, and spatiotemporal data mining in geographic information science.

A. Sequence calculation model of datum registration between landscape painting space and geographic GIS data.

The chronological geographic traffic reference sequence (Array) with the spatiotemporal continuous attribute can basically meet the integration and implantation of complex heterogeneous information through data complementation, and through the utilization of literature data, matching retrieval standards can be upgraded to achieve multi-period related literature data in the same location. . The coordinated invocation of related literature data from multiple addresses at the same time, combined with the intervention of remote sensing technology and computational models, can not only bring about changes in research methods, but also provide assistance for historical image research, promoting landscape images, ancient maps, and remote sensing images. , archaeological information and other multi-historical data computing applications are possible to achieve dynamic tracking and multi-element comprehensive research.

The cellular self-running machine attribute of the calculation model has the attributes of scalability, wide compatibility, deep mining, strong retrieval, distribution errata, etc. It is the anchor point of the link information, the establishment of the relational database of classics and

documents, and the independent hydrology subsection. The clustering of other data such as the information of the reservoir and administrative area, the village-level place name information, the river management place names (branch division, Guanhe channel, river hall, etc.) and the engineering place names (flood, fort, embankment, etc.) lays a solid foundation.

B. The possibility of multimodal calculation of local fusion data of landscape painting spatial GIS

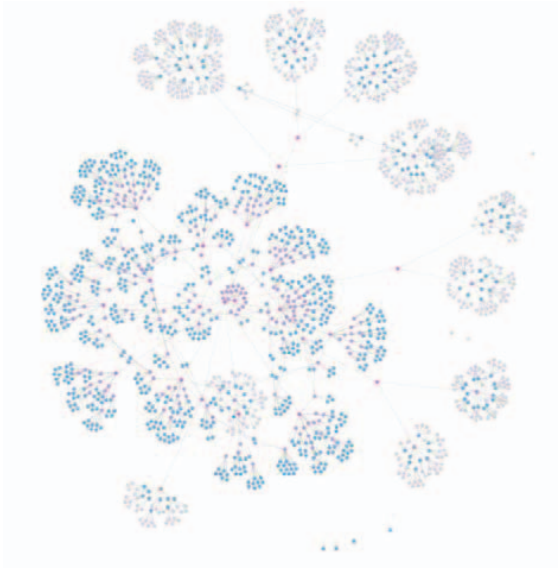

Figure 3.. A meta learning approach to image interpretation considering cartography

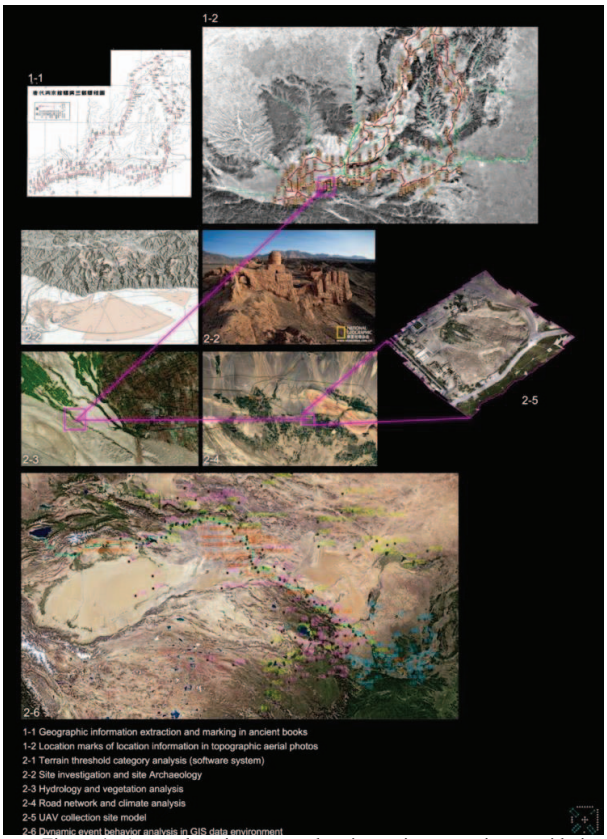

Figure 4.. A meta learning approach to image interpretation considering cartography

As shown in Figure 3, the relationship between the encrypted information of military intelligence and the geographic, hydrological and climatic data, it is not difficult to see that in the intelligence information, in addition to the most critical military information (war situation), the natural elements of the place where the war conflict occurred are also extremely critical information, which has more important value for the implementation of the next command, rescue, expansion of war results and other decisions, of which the effectiveness is particularly important.

As shown in Fig. 4, the relationship between the encrypted information of military intelligence and the local environment, it is not difficult for us to see that in the intelligence information, in addition to the most critical military information (war situation), the natural elements of the place where the war conflict occurred are also extremely critical information, which has more important value for the implementation of the next command, rescue, expansion of war results and other decisions, of which the effectiveness is particularly important. This paper lists the following geographic information data for local research and management: 1-1 geographic information extraction and marking in patient books;1-2 Location marks of location information in topographic aerial photos; 2-1 Terrain threshold category analysis (software system); 2-2 Site investigation and site Archaeology; 2-3 Hydrology and vegetation analysis; 2-4 Road network and climate analysis；2-5 UAV collection site model; 2-6 Dynamic event behavior analysis in GIS data environment.

The comprehensive location superposition of this kind of data is convenient for researchers to complete the deduction of the overall geographical environment as a whole and intuitively. Combining with local characteristics will effectively increase the possibility of research conclusions.

Realize the retrieval and management of the location information of key mountains and water bodies in the image, and the mapping correlation logic with the remote sensing[10] GIS geographic location structure data, use the local topography and landform aerial data analysis and measurement, and realize the local area color migration and automatic measurement[5] based on satellite maps[8] and surveying maps. Defining color migration and stylized color migration can realize digital correction of topography and landforms. With geographic information spatial data, immovable historical geospatial clustering data, and variable quantitative parameter social science data as the basic structure, complete the dynamic labeling of academic research. Standards, implementations, and applicability of applications.

III. ALGORITHM DESCRIPTION

The China Military Seal is an encrypted authorization device in ancient Chinese military command. It is made of stone, jade, horn or metal that is unified and complementary to yin and yang when separated. The characters and graphics are engraved inside, which are encrypted with each other. Military distribution management. It can be considered that the encryption logic: the purpose is the whole of the means, and the encrypted information not only has the unity of opposites to the encryption target, but also its encryption and decryption are the result of the unity of opposites.

This duality is depicted in Chinese philosophy as complementary and interdependent yin and yang extremes, and without encryption, there can be no decryption. In practical applications, the cycle of the Military Seal gradually changing from the encryption target to the decryption target is repeated continuously, so the balance of encryption and decryption realizes the effective transmission of information. Figure 1 shows the picture of the cultural relics of the tiger symbol.

A. Dynamic target adaptive feedback adjustment strategy

In this study, the subjective and objective spatial encryption recording of images and the deciphering of the hidden information of the image scene represent two conflicting behaviors, and the correlation between the spatial data encryption[6] and image spatial interpretation behaviors and the corresponding behaviors is obvious. Therefore, dealing with the proper balance between them is the key to the successful operation of the optimization algorithm.

B. Contradictory and complementary goal strategy

Most meta-heuristics solve optimization problems by simulating a specific phenomenon, behavior, or mechanism. On the contrary, the inherent opposition of the goal to the optimization algorithm is not based on any specific mechanism or physical phenomenon, but attempts to achieve the balance of goal transformation in philosophical principles, so that the subjective and objective space of the image is encrypted. The inherently contradictory behaviors complement each other to efficiently search to determine the optimal solution. This is the basic idea of the Military Seal algorithm design.

IV. The Military Seal Algorithm

In this algorithm, all decision variables are treated in normalized form (between 0 and 1), and fitness is evaluated by appropriately scaling the search radius with the help of variable boundaries.

A. Choice of contradictory goals

The algorithm adopts two point P_1 and P_2, where the point P_1 is designed to focus on the subjective and objective space to encrypt records; while the point P_2 is designed to focus on the variable space of the hidden information of the graph scene. These two points provide the flexibility to establish a balancing relationship between opposing goals and enable desired goals to achieve desired performance.

Point P_1 and point P_2 as the center of the exploration variable space with a radius defined by δ_1 and δ_2. These radii are adaptive so that δ_1 and δ_2 have a periodic decreasing and increasing trend. It should be noted that δ_1 and δ_2 are not user-defined parameters, but rather a preset space that simulates a pair of convergent divergences.

The algorithm consists of two main phases: the breakout phase and the conformity phase. The breaker stage is encountered at each iteration and δ is used to explore a preset space of radius around two points; the coincidence stage occurs at dynamic intervals of iteration (I) and uses a user-defined expansion/contraction factor (α) to update δ_1 and δ_2.

B. Behavior of dimension transformation

The following D is used to represent the problem dimension (the number of decision variables of the problem), and the Military Seal algorithm is described as follows.

The Hofu algorithm starts by randomly generating two points in the domain $[0,1]^D$and evaluating their fitness. One point in the line connecting the two points is recorded as P_1, and the other point is recorded as P_2. Set the defined parameter min I_{min} and max I_{max}, specify the expansion/contraction factor α, and set the value of the sum to 0.5 . The number of archive updates is randomly generated between I_{min} and I_{max} . After this, the iterative loop is started and the fitness of the two points is compared. If P_2 better than P_1, the two points and their corresponding values $\delta$are swapped, ensuring that the iteration starts with point P_1. Both points are stored in the archive, and each point goes into the breaker stage along with its value δ.

1) Breaker Phase:

A P_1 point or P_2 point and its corresponding search radius δ_1 and δ_2 are given in the delimiter stage. Although both points go through the splitting stage, only a single point P and its search radius δ go through the splitting stage at a time. The delimiter stage design should generate new points in the changing direction of the preset space (around point P with radius δ) as much as possible, while maintaining a certain degree of randomness. One of the following two methods can be used to implement the delimiter with equal probability.

a) Single character

In this approach, 2Didentical copies of the replicated point Pare stored as S, which can be viewed as a matrix of size $2D \times D$. In S, one variable at each point is modified using:

$$\begin{aligned} S_j^j &= S^j + r\delta \\ S_{D+j}^j &= S^j - r\delta \quad j = 1,2,3,\cdots,D \end{aligned} \tag{1}$$

Among them, the subscript represents the point number; the superscript represents the decision variable number being modified; r represents a random number from 0 to 1. It should be noted that each modification in S generates a new one, so a total of 2D random numbers are required.

b) Copy character:

In this method, the 2D identical copies of the replicated point P are stored as S, which can be viewed as a matrix of size $2D \times D$. Generate a binary matrix B containing two-dimensional random binary strings of length D such that each binary string is unique. Subsequently, each variable at each point is modified using:

$$\begin{aligned} &S_k^j = S^j + r\left(\frac{\delta}{\sqrt{2}}\right) \quad B_k^j = 1 \\ &S_k^j = S^j - r\left(\frac{\delta}{\sqrt{2}}\right) \\ &k = 1,2,3,\cdots,2D;\ \ j = 1,2,3,\cdots,D \end{aligned} \tag{2}$$

Among them, the subscript represents the number of points (or rows); the superscript represents the number of decision variables (or columns); r represents a random number between 0 and 1. It should be noted that Generate a new r for each variable at each point in S, So a total of $2D \times D$ random numbers are required. A two-dimensional unique integer that can be randomly selected by $0 \sim 2^D - 1$ and convert it into a binary string of length D to generate a binary matrix B.

In the above two methods, any variable outside the constraint range of the scaled variable (less than 0 or greater

than 1) is corrected by assigning it a random value in the (0,1) interval. The 2D new points generated by the two methods are used to re-evaluate their respective fitness, and the best points are used to replace the points that have undergone the breakout phase. It is worth noting that the points obtained through the break-break stage may potentially be lower than the points that go through the break-break stage.

A unique feature of this algorithm is that the number of generated points depends on the problem dimension, generating more points for problems with larger dimensions. This adaptive behavior helps the algorithm deal with problems of different dimensions. Therefore, at the end of the delimiter phase, the two dots P_1 and P_2 and the sum have been replaced. After the specified number of archive updates (I), execute the archive phase, otherwise start the next iteration.

2) Compliance Phase:

The compliance phase starts after the required number of archive updates has been reached, it is important to note that the archive contains points in this phase, corresponding to the two points P_1 and P_2 added at each update before the break phase. If the best point in the file is more suitable than point P_1,it is interchanged with point P_1. Subsequently, if the best point in the archive is more suitable than point P_2, this point P_2 is replaced. It should be noted that if point P_1 has already interacted with a point in the archive, the previous point currently contained in the archive is still considered to be the replacement point P_2.

At the end of the compliance phase, the archive matrix is set to invalid and new values are randomly generated within its specified bounds I_{min} and I_{max} and the number of archive updates (I). The maximum value of δ_2 is limited to 0.75, because very high values of δ_2 may lead to ineffective exploration of the search space. Although a large change in the upper bound of δ_2 (such as a limit of 0.2) necessarily affects the performance of the algorithm.

For example, limiting δ_2 to a low value will hinder the algorithm's ability to explore the entire search space. On the other hand, if δ_2 is unlimited or very high (>1), new solutions generated from points will have a higher propensity to go beyond the limited search space. Therefore, setting the upper limit of δ_2 to a value around 0.75 yields satisfactory performance in all cases.

The archive phase completes, the current iteration ends, and the next iteration begins until the termination criteria provided by the user are met. Therefore, the two-stage hofu algorithm can effectively guide the algorithm to find the optimal solution.

V. Case

The case study selected the famous Chinese painting "Fuchuan Mountain Residence", and manually read the 27 geographical feature points that can be identified and analyzed. Recording, image management, drawing rules. Combined with identifiable traffic routes, local chronicle data, and geological and hydrological data, the effective organization of data is realized and algorithm intervention is implemented.

Since the research foothold of this paper is the understanding of iterative methods [9] for knowledge data production and the role of iterative thinking, through algorithm empowerment, the main features can be summarized as at least the following aspects:

A. Uncertainty of the target

Environmental orientation has become an important external factor affecting the accumulation process of geo-knowledge data. Geo-data itself has strong external interaction, and the process of clarifying goals is usually a process of continuous interaction with the environment. The demand and information itself as input and output variables are relatively uncertain, and need to be identified, judged, converged and explicit. The inputs and outputs of the environment need to be continuously introduced and modified around the goal. At the same time, the result reacts to the target, making the target further clarified.

B. Tentative nature of behavior

The continuous approach of the goal requires continuous attempts, selection, criticism and exclusion. Especially for the old and innovative parts, continuous debugging, inspection and measurement are required. Therefore, the whole behavioral process of solving the problem is also the convergence process of data optimization and exploration acquisition scenarios.

C. Periodicity of the process

The iterative process of landscape painting record specifications is an innovative process, full of leaps from quantitative to qualitative changes. Corresponding to each qualitative change, large and small, the iterative process of knowledge also produces large and small cycles. Each cycle can constitute a cycle, and the nodes between cycles are measurable checkpoints and control points.

VI. Discussion and Outlook

Since the author's research is based on the re-observation of landscape images in the paradigm of social image research, focusing on the analysis of the imperative components of images, it can be intuitively found that landscape paintings include a large number of "non-geographical" attributes in addition to the "geographical" standard records that were subjectively visible to painters of the past dynasties. The accompanying information and the looming geographical environment characteristics. The ontology data of landscape images, which has been ignored by the academic community as a whole, is not equivalent to an objective record, but a subjective mapping process of information integration such as image drawing, labeling and clustering, and data labeling. Looking back, different periods condensed the aesthetic background, survey technology, and the implementation of the purpose of co-painting. Taking into account the encryption process of spatial geodata acquisition, distribution processing, and integrated publishing in the process of dynamic target changes and the reverse computing logic in the process of image spatial interpretation, it is the core element of reading, parsing, and evaluating Chinese landscape maps. The hofu algorithm referred to in this paper includes the whole process of early analysis, design, construction, implementation and delivery of knowledge data production. The characteristics of modern knowledge production and iterative thinking that have been refined through research provide us with an applicable methodology to guide the work of productization. The inverse calculation of looming encryption enabled by this algorithm has the following characteristics:

1) The looming information is uncertain:

Demand can be divided into short-term, medium-term and long-term, as well as explicit demand, implicit demand

and potential demand. Medium- and long-term needs and implicit and potential needs are often uncertain. Data encryption, as a measure of demand satisfaction or service effect, also has considerable uncertainty, including the conditions of demand environment, time and space conditions, and uses. The demand for decryption may also evolve with social development. sex, etc.

2) Decryption deduction has data bearing:

Knowledge as a solidified form needs to be published and expressed with data as the carrier. Neither the expression of explicit knowledge nor the expression of tacit knowledge can achieve the efficiency of data existence, and the process of continuous revision of knowledge data is highly agile.

3) Graph data encryption has a life cycle:

The production of image data has distinct characteristics of the times. Only by starting from the trend of social civilization, keeping pace with the times according to its development law, and continuously improving the decryption goal, can the advanced nature and practicability of inverse calculation be guaranteed. At this stage, although this algorithm is effective in the research of long-term, multi-objective dynamic path planning in the organization of data samples and in deduction of phenomena, it is directly When applied to large-scale, multi-temporal landscape image data, the problem is particularly prominent in the accumulation and analysis of basic data. Therefore, it is necessary to further optimize the algorithm model structure to seek higher model efficiency.

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