News propaganda of rural rainfall slope stability and environmental protection based on image reconstruction

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Abstract
Image resolution restoration technology is one of the main researches in the field of image processing. In recent years, image resolution reconstruction algorithms based on convolutional neural networks have attracted widespread attention. However, many modern models and algorithms are not enough to use the image function, and the reconstruction effect is not ideal. In this article, the image resolution restoration algorithm is explored and improved to achieve high-resolution image restoration. In this paper, the typical representative landslide of loess mudstone and typical landslide of accumulation layer are used as the research object. The SEEP/W module, SLOPE module, and FLAC-3D software in GeoStudio are used to analyze the landslide based on the step-by-step coupling path of rainfall infiltration and landslide deformation. Stability trend and deformation failure mechanism under different rainfall conditions. China attaches great importance to the ecological environment, and protecting the environment has become an important task for the country and every citizen. Human behavior will more or less affect the environment. In order to make a good contribution to environmental protection, human cognition must be improved. In addition, in order to raise people's awareness of environmental protection, it is necessary for the country to increase mainstream media propaganda. News media has a wide range of influence and high transparency, which can help promote environmental work. As we all know, the establishment of ecological civilization is inseparable from environmental protection, and environmental protection is inseparable from the support of news and propaganda. Therefore, based on image reconstruction, this article studies the stability of rural rainfall slopes, discusses the importance of news propaganda to environmental protection, and analyzes how to use news propaganda to carry out environmental work.

Keywords Image reconstruction; · Rainfall slope stability; · Environmental protection; · News propaganda

Introduction
With the continuous development of the information age, there are more and more diversified ways of presenting information, such as images, videos, audios, characters, and other objects. As a medium and means of storing and transmitting information, images are also the main source of information for people to acquire knowledge and communicate (Bahrami and Kaiser 2016). Therefore, the reconstruction and restoration of image resolution is a research topic and problem in the field of image processing, and it is usually divided into two methods: performing image SR reconstruction in hardware and software respectively (Cho et al. 2007). From a software perspective, various SR image algorithms can be used to improve image quality (Cowie and Walton 2018). Algorithm-level SR image processing usually includes the following: first establishing an image degradation model, then using previous image information to check the relationship mapping between the LR image and the HR image, and finally reconstructing the LR image of the image (Damjanac et al. 2016). This paper selects two typical landslides for model analysis, reveals the trend of landslide stability changes under different rainfall conditions, reveals the mechanism of damage deformation and critical rainfall that cause landslide deformation and destruction, and analyzes the effects of two types of landslides (David et al. 1999). Different reasons for the sensitivity of rainfall (Ding and Zhang 2014). At the same time,
research and analysis of rainfall-type landslides can help regional governments to prevent natural disasters in the rainy season (Eberhardt et al. 1999). The importance of environmental protection is clear, and it is vital to China’s entire development plan (Frash et al. 2015). There are inevitable obstacles to the development of environmental protection work, and these obstacles restrict the effective development of environmental protection work (Fuji et al. 2007). On the one hand, the masses ignore environmental work due to lack of environmental awareness. Some people do not even cooperate with the environmental protection department or deliberately adopt environmental protection measures in their daily lives, thus hindering the work of the environmental protection department (Güneş Yılmaz et al. 2011). Through environmental news and public media, more people can understand the importance of environmental protection and unknowingly promote environmental issues to people (Hammer 1982). The arduous task of environmental protection has been solved, and the development of environmental work will be smoother (Hofmann et al. 2015a). The masses support the concept of environmental protection, which reduces the possibility of conflicts in environmental work. Life and the ecological environment are inseparable (Hofmann et al. 2015b). This article must use news and propaganda techniques to seek advantages and avoid disadvantages. Environmental protection is very important in China and even the world, and it affects the survival and development of mankind (Hooijkaas et al. 2006). Incorporating news and propaganda into environmental work is an effective means to carry out environmental work. If the role of news propaganda is to promote environmental protection, environmental departments should pay attention to the correct leadership role of news and public opinion in news propaganda, and improve the reliability and timeliness of news (Huang et al. 2020).

Materials and methods

Overview of the study area

The landslide is distributed in a trench about 1200m away from the city, which is located at the mouth of the trench downstream of the village (Lindqvist et al. 2007). The catchment area of the basin flows out from the front edge of the landslide and flows through the channel into the Duba River (Jing 2003).

Research methods

Image reconstruction

Image resolution is an important indicator of image quality, and the image is composed of various frequency components. Low-frequency signals refer to pixels with uniform changes in the grayscale and brightness values of the image, such as the area of continuous color blocks in the image, which describes general image information in a large area. High-frequency signals refer to pixels with large changes in the gray value and brightness of the image, such as the edges and contours of the image, and describe the specific details of each part of the image. The higher the resolution of an image, the more high frequency signals it contains, the more details and information it provides, and the better the image quality. However, due to cost constraints, when capturing, storing, transmitting, and displaying images in real life, it is usually difficult to avoid various conditions and noise interference, resulting in different degrees of degradation of image quality. The SR image reconstruction algorithm aims to enhance and restore the high-frequency information lost in the LR image from the software perspective to obtain the best visual and optical HR images. The image restoration process is to reconstruct the HR image from the LR image, while the image degradation process is the opposite, that is, the HR image is downgraded to the LR image, which can be regarded as the inverse process of the image restoration. Using y and x to represent the corresponding LR image and HR image, the image degradation process can be represented by Eq. 1:

\[ y = H(x, \theta_\eta) \]

Convert from Eq. 1 to a degraded model. As shown in formula 2:

\[ y = H(x) + n = (x \otimes k) \downarrow_s + n \]

The complex degradation process is decoupled to degrade the HR image x by the degradation function H(•) and additive noise n. The degradation function H(•) is described as the convolution between the HR image x and the blur kernel k Operation \( \otimes \) and the cascade operation of downsampling method \( \downarrow_s \) with downsampling coefficient s, noise interference n is represented by additive white Gaussian noise with standard deviation \( \sigma \). The purpose of SR image restoration is to restore the information in the LR image that has been degraded due to degradation factors, and scan the image to the target resolution to achieve HR image restoration. The following describes in detail some SR image algorithms from classic to modern.

Prediction model of rainfall slope

Whether a landslide blocks the river depends on the following key factors: the trigger mechanism of the landslide and the volume of the landslide, the speed and flow of the water, the width of the river bed, and the distance from the foot of the slope to the river channel. The difference between the horizontal movement distance of the landslide that is not blocked
by the river and the landslide that blocks the river is analyzed by referring to the earthquake landslide body horizontal movement distance prediction model, and the river water flow is combined with the width of the main river channel to analyze the landslide area in a certain village. Whether the landslide will block the river, calculate the horizontal movement of the landslide during the earthquake according to formula 3:

\[ L = 0.380 V^{0.202} H^{0.813} \]  

(3)

Assuming that there are no obvious obstacles during the earthquake, calculate the horizontal distance of the landslide movement. Since the horizontal distance of the earthquake landslide without visible obstacles is 1582m, which is much larger than the horizontal distance of 1200m at the actual location, when the water velocity in the valley is low, the river channel will be blocked. Comparing the slopes before and after the earthquake, it was found that the front edge of the landslide before and after the earthquake buried the valley in front of the slope. Therefore, the landslide may have blocked the river during the earthquake. When the soil is saturated, the sediment infiltration process follows certain rules, according to which the permeability is proportional to the hydraulic gradient. When the soil is saturated, its permeability coefficient is constant. When the soil is unsaturated soil, its permeability coefficient depends on the water content and substrate absorption, such as formula 4 and formula 5:

\[ \nu_w = k_w I \]  

(4)

\[ I = \frac{\Delta H}{L} \]  

(5)

In the formula, \( \nu_w \) is the water flow velocity, \( k_w \) is the saturation coefficient of soil permeability, \( I \) is the hydraulic slope, \( \Delta H \) is the head difference, and \( L \) is the cross-sectional distance.

Darcy’s law applies to unsaturated soils and is expressed by Eq. 6.

\[ Q = -k(h) \nabla H \]  

(6)

In the early stage of rainfall, the permeability of the slope is greater than its strength, which is the infiltration stage without pressure. Therefore, at this stage, the permeability of the slope is equal to the rainfall intensity, as shown in Eq. 7.

\[ i = q \alpha \]  

(7)

When the slope bottom plate changes from an unsaturated state to a saturated state, a saturated zone will be formed at the top of the slope. After the formation of the saturated zone, the infiltration rate of the slope gradually slows down due to the infiltration capacity of the soil, as shown in formula 8:

\[ i = k_s \frac{h_1 \cos \alpha + h_2}{h_f} \]  

(8)

Among them, \( k_s \) is the saturated permeability coefficient at the bottom of the slope, \( h_f \) is the depth of the wetting peak perpendicular to the slope surface, and \( h_s \) is the suction of the matrix.

**Experimental design**

Due to the lack of regional rainfall data, the rainstorm formula is used to calculate, and the collected rainfall data is used for comparison and verification. The maximum daily rainfall data of different rainfall frequencies required in the study is supplemented, as shown in Table 1. It can be seen that the calculated rainfall is 33% higher than the actual rainfall. The rainfall frequency is 20%, 23%, 12%, and 20%, and the average value of the asymmetry coefficient is 22%. Therefore, the calculated maximum daily rainfall is adjusted to 82%, depending on the actual maximum daily rainfall. Due to the relatively high daily rainfall in a certain area selected in this study, the low rainfall in the area should be considered when studying the impact of different rainfall on the slope infiltration field, groundwater level, and pore water pressure. The procedure is as follows:

- The rainfall intensity is the same, but the duration is different.
- The rainfall intensity is the same, but the duration is different.
- The total amount of rainfall is the same, but its intensity and duration are different.

Use the engineering analogy method to determine the groundwater head difference. The head is marked on both sides of the model, and the channel on the right is the channel. Therefore, the water pressure height of the channel surface in the model is set to 0, the left side is the water pressure drop, and the height below the water line is the zero flow limit. Since the lower part of the model is a relatively thick layer of moderately weathered siltstone, it is defined as an impermeable interface. For the free boundary of the model surface, the velocity is determined by the rainfall intensity and the permeability coefficient. When the rainfall rate is less than the permeability coefficient, the value represents the rainfall rate, and

| Table 1 | Comparison table of maximum rainfall for different frequency rainfall days |
|---------|-----------------------------|
| Rain Frequency | 20% | 10% | 5% | 2% | 1% |
| Peak Flow (m³/s) | 113.11 | 143.27 | 129.36 | 210.79 | 239.52 |
| Calculate Rainfall (mm) | 201.35 | 257.97 | 314.25 | 388.33 | 444.21 |
| Actual Rainfall (mm) | 157 | 2058 | 279 | 323.4 |
| Rainfall (mm) | 165 | 212 | 258 | 318 | 364 |
| Rain Time (years) | 2009 | 2013 | 2008 | 1977 |
when the value is greater than the permeability coefficient, it is the permeability coefficient, as shown in Table 2.

The model is simplified on the basis of the landslide model shown in Fig. 1. The material parameters are based on engineering analogy experience: the saturated water content in the gravel soil in the accumulation layer is 40%, and the saturated water content in the highly weathered siltstone is 40%. According to these hydraulic parameters, the total permeability curve and the water volume curve are drawn according to the Fredlund&xing SEEP/W model, as shown in Fig. 1.

The correct initial conditions can ensure the accuracy of the simulation results. Therefore, it is necessary to evaluate and adjust the initial simulation conditions according to the actual situation. Set: the pore water pressure above the water level line is negative, the pore water pressure at the water level line is zero, and the water level the pore water pressure below the line is the same as the actual value. When calculating the slope distance, transient analysis can be used to obtain different rainfall times. Using the distribution of water pressure and water content, the changes in the infiltration field of downslope affected by atmospheric rainfall are analyzed.

### Results

#### Results of steady-state prediction of rainfall slope

The correct initial conditions can ensure the accuracy of the simulation results. Therefore, it is necessary to evaluate and adjust the initial simulation conditions according to the actual situation. When calculating the distance, the slope is different, and the rainfall time can be obtained through transient analysis. Using the distribution of water pressure and water content, the changes in the infiltration field of downslope affected by atmospheric rainfall are analyzed. Use the static permeability model of the SEEP/W module to model the slope pore pressure distribution at the baseline, and the result is shown in Fig. 2.

#### Transient prediction results of rainfall slope

It can be seen from the figure that in the initial state, the maximum value of the initial pore water pressure is 1600kPa, the distribution position is at the lower end of the slope, and the maximum negative value is -3200kPa at the top. When there is a slope, the overall linear growth from top to bottom will increase, and the trend is and basically parallel to the groundwater level, as shown in Fig. 3.

By comparing the topography of a certain village in 2018 and 2020, it can be clearly seen that the gully in front of the landslide body is a process of gradual deepening and expansion, and combined with the findings in this article to analyze: this is caused by undercut erosion. Because the water velocity is higher than the critical speed and no small particles (such as sand and gravel) are cleaned at the bottom of the valley bed, the root erosion of the valley bed occurs. The side erosion of the gully bank is due to the removal of fine particles at the foot of the front slope. The surface of the landslide increased. Under the action of gravity, the top rock and soil collapsed into the valley. As a result, the front edge continued to recede, and the valley's river bed continued to expand and formed lateral ravine erosion.

According to the characteristics of erosion, three main types of erosion are distinguished: in the absence of rainfall, insufficient erosion of the tap water on the channel erosion and lateral erosion of the channel; under rainy conditions, runoff erosion on the slope, inhibiting channel erosion; confluence of rainy weather causes erosion of river channels and side channels.

Front edge erosion is mainly bottom erosion caused by valley bottom water and water collection, and lateral erosion of ravines. Direct calculation of the degree of erosion requires higher accuracy of field data, while collecting data is more difficult, so indirect calculation is chosen.

Analyzed from Fig. 4: due to errors in the slope corrosion calculation, the leading edge corrosion results obtained by this indirect calculation method are not accurate. However, the comprehensive comparison of topographical changes in recent years shows that the topographical changes of a certain village are mainly concentrated before the occurrence of the landslide. The runoff erosion of the slope is very small, and the slope erosion error can be ignored.

According to the rainfall plan that has been made, the rainfall intensity is 15 mm/h, and the duration is 24 h, 48 h, 72 h, and 96 h. Comparing the total amount of material change with

| Rain strong | Duration | Rain strong | Duration | Rain strong |
|-------------|----------|-------------|----------|-------------|
| 15          | 24       | 24          | 2        | 24          |
| 48          | 18       | 6           | 15       | 12          |
| 72          | 60       | 6           | 30       |              |
| 96          |          |             |          |             |
the total amount of material washed away by the mud flow can well reflect whether the calculation result matches the material in the table, and the total amount of change is greater than the quality washed out by the mud flow. The main reasons for the analysis are the following two aspects: If the mud flow did not form in the previous period, the erosion caused by the water flow during this period is transferred to the Duba River and eliminated. After the mud flow is formed, the mud flow will also form on the side of the valley. Therefore, a reasonable approach is that the total amount of changed materials should be the total amount of materials carried by the mud flow. The simulation results are shown in Fig. 5.

The model is simplified based on the landslide model (see Fig. 6). The material parameters are based on the experience of engineering analogy: the saturated water content in the gravel soil in the accumulation layer is 40%, and the saturated water in the highly weathered siltstone in the middle layer the content is 5%, the saturated water content in the weathered layer is 25%, the siltstone is 25%, and the bottom layer is 20%. According to these hydraulic parameters, the total permeability coefficient curve and volumetric water content curve are constructed according to the model in this paper.

**Results of rainfall slope stability**

Based on the actual amount of erosion that has occurred since 2018, calculation conditions have been formulated. On this basis, three design conditions have been formulated, which may appear in 2021. The sources of corrosion under these three design conditions all come from cutting-edge corrosion design models. The situation is shown in Table 3.

Taking into account the hydrostatic pressure and load capacity in the natural state, materials are selected according to the parameters in the natural state, and the hydrostatic pressure is adjusted according to the pore pressure distribution in the natural state. The rainfall conditions are classified according to the degree of rainfall infiltration. According to research and seepage research, for rainfall \( \geq 300 \text{mm} \), the pore water pressure should be set according to the graph and the parameters should be set according to the saturation state. \( 300 \text{mm} > \text{rainfall} \geq 144 \text{mm} \), the pore water pressure should be set according
to the pattern and surface, and the parameters should be set according to the saturation state.

The physical and mechanical parameters are mainly combined with the Institute of Geotechnical Engineering to select values, as shown in Table 4.

The distribution of pore water pressure in the natural state is shown in Fig. 7. The pore water pressure ranges from -3500 to 1700kPa, which is similar to the actual pore water pressure in the simulation of penetration -3200 to 1600kPa. Therefore, the stability of the landslide is obtained by calculating the hydrostatic pressure based on the distribution of water pore pressure. Shear strain increment distribution characteristics: most landslide failures occur at the place where the shear strain is the largest in the slope stress field. The figure shows that there are two regions with the largest increase in shear strain, and the location of the distribution is violated. At the junction of stony soil and highly weathered stratum, there are certain differences in the physical and mechanical parameters of these two places, and the topography of these two places has increasingly steeper slopes, and conclusions are drawn in both cases: the slope affects the stability of the regional landslide. This figure has nothing to do with the area of the extension increment or the area of the slope surface, indicating that the landslide body in the natural state has no potential sliding surface, and the landslide body is in a stable state. Maximum unbalanced force change characteristics: the maximum unbalanced force is the energy source in FLAC3D simulation. The trend of changing its value can not only reflect the changes in the modeling process, but also reflect the results of modeling calculations. When its value is less than 500 calculation time steps, its value will fluctuate in the waveform. In the subsequent calculation steps, its value continues to decrease, and finally tends to 0, which means that under the influence of its own weight, the slope gradually becomes stable, which is consistent with the actual changes in slope stability.

Distribution characteristics of the maximum principal stress: the maximum principal stress is expressed as compressive stress. In the natural state, the maximum distribution of principal stress mainly depends on the stress field of its own weight. The distribution of the maximum principal stress in the figure. Figure 8 shows the characteristics of a gradual

Fig. 3 Distribution of pore water pressure with a rainfall intensity of 15mm/h and a duration of 24h

Fig. 4 Pore water pressure distribution with a rainfall intensity of 15mm/h and duration of 48h
increase from the surface of the slope to the inside of the slope, and the overall impression is relatively smooth, but near the interface between the rock and the ground. The maximum principal stress appears at the bottom of the slope, with a value of 12400 kPa. In the toe area, there are two compressive stress concentration areas, which indicate that the landslide body is in a natural state and the front slope toe is compressed.

Discussion

Stability analysis of rainfall slope

This paper analyzes the impact of atmospheric rainfall infiltration on the seepage field of landslides, analyzes the characteristics of slope erosion and factors affecting slope erosion, summarizes the calculation model of slope erosion, and proposes the following research results: the pore pressure of water in the natural state is parallel to the groundwater surface and linearly distributed (Jing and Hudson 2002). The maximum distribution of pore water pressure in the lower part of the slope is 1600 kPa, and the minimum distribution of pore water pressure in the upper part of the slope is -3200 kPa. If the rainfall intensity is 15 mm/h, the more the groundwater level rises, the longer the rainfall time from 24 to 96 h, and the higher the daily water level, the higher the water level within 48 h. The water level is about 1.25 m, which is in the saturation zone. On slopes, the duration of rainfall increases. With continuous expansion, the saturation zone in the main slope of the slope moves further down and enters the groundwater under the action of gravity (Kamali-Asl et al. 2018). If the rainfall continues at the same time, the more the groundwater level rises, the greater its intensity (Kolditz et al. 2012). If the rainfall intensity exceeds 2 mm/h, the slope begins to appear. If the rainfall intensity exceeds 6 mm/h, a temporary saturation zone will appear on the slope (Kranz 1983). If the total amount of rainfall is 360 mm, negative pore pressure will appear on the slope of the sediment, with the shortest duration and the highest intensity (Lambert and Coll 2014). This shows that the pore water pressure is more uniform, the longer the rainfall duration, the lower the intensity, and the better the infiltration effect. The area decreases with the decrease of the rainfall...
duration, and the groundwater level increases with the decrease of the duration (Li et al. 2018). Front edge erosion is divided into two types: undercut erosion and side channel erosion. According to the data of a certain village in the past few years, the factors that affect the erosion of the front edge are: the structural characteristics of the rock and soil, the grain grade, the peak value of the canal basin, the flow rate and the rainfall. According to the ratio of erosion to rainfall, peak flow, time interval, etc., a variety of methods can be used to create a frontal erosion calculation model to evaluate the stability of a landslide, such as limit equilibrium method, numerical analysis, artificial intelligence and other methods. Among many elasticity evaluation methods, the limit equilibrium method is the earliest method used for landslide elasticity analysis, and it is also the most experienced method. However, one method has its limitations. In addition to the complexity of the slope, a single analysis method that is insufficient to assess the stability of the slope was used. Considering that the principle of the limit equilibrium method is to establish the balance of force or moment, while ignoring the influence of elongation, this paper uses the limit equilibrium method and numerical model to comprehensively evaluate the stability of a certain village landslide.

**Necessity analysis of environmental protection news publicity**

Improve public awareness of environmental protection. At this stage, the state attaches great importance to environmental protection and has formulated a solid environmental protection strategy. However, it is not ideal to carry out environmental protection activities in the country. One of the reasons for this status quo is that the public has no channels to understand the country’s environmental policies and concepts, nor the importance of environmental work. Publishing environmental work and policies through the media can help more people understand the current environmental concepts and enable more people to participate in environmental work. By reporting some of the most cutting-edge environmental protection cases, the media can also promote the importance of environmental protection to the public, and help change their ideology of environmental protection work, thereby enhancing their environmental awareness. The main force behind environmental journalism and public relations is to make employees assume important social responsibilities. First, environmental journalism and advertising personnel should improve their manuscript review skills, carefully check journalists’ manuscripts, and publish and spread more positive news. Environmental news advocates must also learn to deal with the proportional relationship between positive and negative news and the impact of negative environmental news on the environmental performance of the entire society. Secondly, environmental news promoters should pay attention to the choice of environmental news and promotional materials, and strive to integrate environmental science with some scientific news.

**Analysis of the dilemma of environmental protection news propaganda**

The huge changes in news dissemination methods in the new media era have created a certain degree of technical convenience and broad space for news dissemination. In the environment of environmental news propaganda in the new media,

| Material strength | Natural state | Saturation state |
|------------------|---------------|-----------------|
|                  | YKN/m | CKPa | ψ° | EMPa | V | YKN/m | CKPa | ψ° | EMPa | V |
| Surface layer    | 22.8 | 9.6 | 39 | 21 | 0.3 | 23.2 | 6.8 | 35 | 18.5 | 0.22 |
| Mezzanine        | 24.4 | 45 | 33 | 1500 | 0.2 | 24.6 | 40 | 31 | 1320 | 0.23 |
| Bottom layer     | 25.7 | 1900 | 40 | 5000 | 0.17 | 25.9 | 1500 | 38 | 5000 | 0.18 |

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Table 3: Corresponding erosion amount of different frequency of rainfall in 2021

| Rain frequency | 20% | 10% | 5%  | 2%  | 1%  |
|----------------|-----|-----|-----|-----|-----|
| Erosion (x10^4m^3) | 4.1 | 6.6 | 7.3 | 14.6 | 19  |

Table 4: Values of physical and mechanical parameters in the simulation

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Fig. 7 Pore pressure distribution in natural state
era, the new network on the Internet has become the most important platform for disseminating information. At the same time, traditional media is moving in the direction of integration with new media. In the process of integrating media and changing information dissemination methods, the development of environmental advocacy for environmental journalism also faces some practical challenges. Secondly, when collecting and writing environmental news, it is necessary to have a close understanding of environmental news, and carefully excavate a large amount of environmental materials and related news materials in order to fully receive and understand news information; secondly, carry out the study of this course. In order to obtain complete information more accurately and truthfully. In addition, environmental news needs to be re-examined and employees’ ability to find environmental news needs to be enhanced. News is time-related, and environmental news is updated and changed every day. Therefore, it is more important for employees to spread news about the environment in real time. Under normal environmental conditions, every reporter should consider how to make people interested in watching and avoid creating boring news. This requires thinking in many ways. For example, if you organize activities such as “the most beautiful environmentalists” in your daily work to find the most beautiful environmentalists at the grassroots level, you can record the work of environmentalists in 1 day and use graphics, short films, animations, etc. to improve the public’s awareness of the ecological environment and increase people’s interest in reading news.

**Environmental protection news promotion strategy**

Despite the continuous improvement and development of new media, there is still a shortage of professionals who are not familiar with the working principles of new media platforms and keep pace with the times. Nowadays, new media has developed into a widely accepted communication media, which also means that the operation of this new type of media puts more stringent requirements on news and propaganda personnel. The use of new media not only needs to lay a solid foundation for propaganda staff’s writing, photography, political thought, and theoretical knowledge, but also requires environmental reporters and professional knowledge related to the environment. However, in the current situation, there are few such complex talents. Therefore, it is necessary to strengthen the cohesion of environmental journalism professionals and encourage the innovative development of advocacy methods to improve the advocacy level of environmental journalism. In the context of the combination of the development of the new media era and the existing problems in the ecological environment, it is necessary to improve new media, strengthen ideas and renewal of ideas, and promote journalism in practice by combining the actual use of new media.

Correspondingly modify the traditional concept of environmental news, actively solve the emerging environmental problems, and appropriately maintain news sensitivity. At present, according to the analysis of environmental journalism advocacy, environmental journalism is faces with the problems of small news coverage, slow response, and low work execution efficiency, and it has contributed to the innovative development of environmental advocacy. In order to meet these challenges, environmental journalists must first be trained to understand and understand basic environmental content, improve their practical environmental journalism skills, and stimulate sharp thinking.

**Conclusion**

In the information age, images have become an indispensable means of conveying information in life. Therefore, people have put forward higher and higher requirements on the quality of the resulting images. SR image reconstruction technology aims to restore high-quality images and clear visual effects programmatically. In recent years, SR image reconstruction technology has been widely used in many fields such as medical care, finance, and security, and with the development of artificial intelligence, more research and improvement are ongoing. Finally, in terms of subjective and objective evaluation indicators, the algorithm proposed in this paper is compared with a large number of classic algorithms. It is confirmed that the algorithm proposed in this paper effectively improves the quality and appearance of the reconstructed image and the image, and the restoration effect is satisfactory. The goal of this work is to analyze the main characteristics of the earthquake landslide in a certain village by collecting meteorological and hydrological data, geotechnical survey, drilling and other engineering data of a certain village. The research results are as follows, the influence of two influencing factors of instability resurrection mechanism, rain-fall, and front erosion on stability, the use of limit equilibrium method and FLAC3D numerical simulation to comprehensively...
evaluate the stability of the landslide. The continuous development of information networks has improved the efficiency of news and propaganda work, and news propaganda itself has both advantages and disadvantages. In order to promote the smooth development of work on the environment and the environment, it is necessary to fully consider the role of mainstream media in public relations, monitoring and dissemination of knowledge, and promote the promotion of enterprises and citizens through the promotion and popularization of ecological environmental protection work, methods, and laws and regulations. At the same time, it can deter environmental damage through monitoring and exposure, and ensure the effective implementation of various measures.

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Declarations

Conflict of interest The author declares no competing interests.

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