Analysis of Narrative Strategy of Agricultural Science Popularization Short Videos based on Tik Tok Platform

Kangshuo Qi

College of Art, Northeast Agricultural University, Haerbin, China. 2734849755@gg.com

Abstract. In recent years, the short video has gradually become a way for people to obtain information, entertain themselves, and spread their opinions. The number of users of short video platforms such as Tik Tok and Kuaishou shows an increasing trend. With the proposal of a rural revitalization strategy, the spread of agricultural science popularization knowledge also occupies a place in short video platforms such as Tik Tok, which plays an extremely important role in solving the agricultural knowledge problems for the public. Based on the three-dimensional classification of short videos of agricultural science popularization, this paper analyzes the narrative strategies of short videos of agricultural science popularization on the short video platform Tik Tok from three angles: narrative theme, narrative structure, and narrative discourse. This study also summarizes the creation rules of this kind of short video in combination with the team's own experience of creation, so as to promote the wide spread of agricultural science popularization knowledge and make more knowledge about agriculture, the countryside, and farmers enter the lives of ordinary people

Keywords: Agricultural science popularization; short video creation; narrative strategy.

1. Introduction

According to the data of *iiMedia Research*, the number of short video users in China is still growing rapidly, exceeding 700 million in 2020 and expected to increase to 809 million in 2021. Among them, Tik Tok is popular in the global market, and its growth momentum is rapid. The number of active users has increased from 55 million in January 2018 to 490 million in November 2020, and its number of active users has also fallen behind Kuaishou by 130 million to overtake 92 million. [1] The huge user scale of the Tik Tok platform not only shows its increasingly powerful social influence but also provides more possibilities for the spread of agricultural science popularization knowledge. In June 2021, the State Council issued the Outline of the National Science Literacy Action Plan (2021-2035), which pointed out that vigorously developing various forms of science popularization works, such as short videos to realize multi-channel all-media dissemination of science popularization content are important ways to deepen the supply-side reform of science popularization and build a scientific literacy construction system. [2] Due to the lack of knowledge and technical conditions, the past short videos of agricultural science popularization not only lacked the advantages of quantity and scale but also showed the problems of homogenization and inferiority in content level. With the proposal of a national rural revitalization policy, it is the general trend to improve farmers' cultural quality, build characteristic villages and promote agricultural modernization. At present, Tik Tok has become an important tool for people to acquire knowledge and broaden their horizons, and short videos focusing on agricultural science popularization knowledge should be paid more attention to by the public. In this paper, the narrative strategies of short video creation for agricultural science popularization are analyzed from the perspectives of narrative theme, narrative structure, and narrative discourse, which is not only conducive to further promoting the creation of this kind of short video but also conducive to improving the content quality of this kind of short video, so as to further gain public attention.

2. Showing Multi-dimensional Creation with Narrative Subject

2.1 Public Welfare Communication based on Policy Guidance

The iterative upgrading of media technology has given birth to the formation of new modes and patterns of communication. The media ecology led by short videos has become one of the most noticeable social trends at present. However, as a kind of media ecology, short videos of agricultural science popularization are still faced with the problems of insufficient professional creation and low social recognition. China is a huge agricultural country, and the problem of farmers in agriculture and rural areas is the priority of national development. Improving the content of science and technology in agricultural development, developing agricultural modernization, and raising farmers' awareness of agricultural science are important measures to promote China's agricultural development. From the current situation that rural people generally have low cultural quality, backward production concepts, and slow acceptance of agricultural professional knowledge, it is a very effective way to popularize agricultural science and technology knowledge by using the most popular and popular short video platform. Making full use of short video platforms such as Tik Tok and Kuaishou to spread agricultural knowledge will not only help to improve the propaganda of agricultural policies but also cover all social circles.

The rural revitalization strategy is a strategy put forward by General Secretary Xi Jinping in the report of the 19th National Congress of the Communist Party of China on October 18th, 2017. The report of the 19th National Congress of the Communist Party of China pointed out that the problem of agriculture and rural farmers is fundamental to the people's livelihood. The fundamental problem, we must always make agriculture the priority of the Communist Party of China's work and implement the rural revitalization strategy. [3] Since the rural revitalization strategy was put forward, under the guidance of the government, a number of official accounts related to agriculture have settled on the Tik Tok platform, transforming and upgrading some short videos of agricultural science popularization with low quality, rigid content, and lack of professional basis, thus forming a new trend that official accounts guide the dissemination of agricultural specialized knowledge. The official organization refers to the account subject being the government or other enterprises and institutions affiliated with the state. The official organization has settled on the Tik Tok platform, which balances professional-generated content (PGC, henceforth) and user-generated content (UGC, henceforth). Some representative creators of official accounts mainly publish current affairs about agricultural production and disseminate agricultural science and technology works. Most of the contents are the mapping of policies and the dissemination of professional knowledge. The production mode of these professional contents plays an important role in promoting advanced agricultural technology, improving farmers' knowledge level, and infiltrating policies into rural areas. For example, China's Three Rural Issues Release is an official account under the guidance of the Secretariat of the Central Agricultural Office and the Information Office of the Ministry of Agriculture and Rural Affairs, which vividly reflects the importance attached by government agencies to the professionalism, authority, and timeliness of short video content related to "three rural issues".

2.2 Commercial Communication based on Traffic Supremacy

When users enter the Tik Tok platform, they will be attracted by the wonderful speech skills of all kinds of live broadcast hosts. Generally, corporate accounts will attract e-commerce traffic under the beautification of short videos, and so will agricultural short videos. Corporate accounts will make a series of short videos for specific users. Most of these short videos are based on the popularization of agricultural knowledge, which arouses the audience's interest in certain agricultural products while popularizing the science. When the identity of the host is fully constructed, the audience will trust him/her, which will increase the purchasing power of agricultural products. The content foundation of such commercial short videos is the universal audience appeal of short videos. They usually focus on a certain kind of agricultural products and show the whole picture of agricultural production in a

panoramic way by describing and recording its production process and planting methods, so as to obtain a better agricultural communication effect.

Some corporate accounts often add emotional elements to videos to reach emotional resonance with users. For example, the host *golden swallow* combines the love activities of helping the elderly and children in knowledge popularization to attract traffic and then sells goods after getting attention. This kind of communication with science popularization as its external manifestation is a common mode of marketing and promotion of commercial accounts, which greatly increases the probability of short video audiences transforming into agricultural product consumers.

2.3 Personalized Communication based on Self-exposure

In the process of information dissemination in the era of mobile Internet, users are both audiences and content producers. Some self-media accounts with the theme of popularization of agricultural knowledge also emerge. Through the records of the fields, the display of self-experience, and the personalized expression, they vividly depict the various forms of agricultural life.

Generally speaking, the self-media communication mode is based on the UGC mode. This kind of content pays more attention to the creator's personal experience, so the audience is more likely to resonate with the communication content. When the number of fans of individual creators has accumulated to a certain extent, this self-exposure communication will tend to move towards organizational communication. In the small-scale community of organizational communication, creators will get the support of fans as opinion leaders, thus strengthening the credibility and influence of their discourse. The creator exposes him/herself to the camera as an experiencer. When the creator walks in the fields, s/he records and shows the situation of modern agricultural development with the camera. This personalized communication of self-exposure will subtly show the new look of the new countryside, and make the audience know the development speed and level of smart agriculture and modern agriculture in the short video of agricultural science popularization, which is conducive to breaking the audience's stereotype of farmers. In the process of science popularization, the atmosphere of the scene environment will also awaken the audience's local emotion to a certain extent. In the creation process of videos by Li Ziqi, this kind of self-exposure personalized display is particularly obvious. It takes self as the main experiencer and popularizes related knowledge such as planting in real farmland scenes, which has achieved a good communication effect.

3. Presenting Synchronous Agricultural Situation with Narrative theme

3.1 According to Current Affairs Policy

Since the 21st century, the 18th central No.1 document to guide the work of agriculture, rural areas, and farmers *The Opinions of the Central Committee of the Communist Party of China and the State Council on Promoting Rural Revitalization in an All-round Way and Accelerating the Modernization of Agriculture and Rural Areas* pointed out that if the nation wants to rejuvenate, the countryside must be revitalized. We should persist in solving the problems concerning agriculture, rural areas, and farmers as the top priority of the whole party's work, and take comprehensively promoting rural revitalization as a major task to realize the great rejuvenation of the Chinese nation. We should give the whole party and the whole society the strength to speed up the modernization of agriculture and rural areas so that farmers can live better lives. ^[4] The creation of the agricultural science popularization short video is deeply influenced by the rural revitalization strategy, and it is also the best sample to interpret relevant policies.

The mapping of these current affairs policies is mostly set off by the scene atmosphere, while some are directly expressed by language. In the official account PGC content production mode, some current affairs news will be deconstructed and analyzed. For example, the official account of CCTV 17 Report on China's Agriculture, Rural Areas and Farmers is The host speaks about agriculture, rural areas and farmers. The creation content of this account is to set the short video content based on current issues in agriculture. Recently, cutting green wheat for feed in some places has attracted

the attention of all parties. Aiming at the problems of whether green wheat is suitable for feed, the cost performance of green wheat as feed, and what gap led to the use of green wheat as feed originally neglected by farmers this year, as well as the emergency demand of green wheat, the account created short videos in the form of news reports. These videos popularize the emergency demand for silage wheat and agricultural knowledge that silage wheat's feed value is lower than corn's so it will not be widely used for a long time. The content is highly professional, practical, and time-effective, which not only reflects the existing problems but also provides a perspective to solve them, which is helpful to the agricultural production and subtly implements the detailed content of the rural revitalization strategy.

Not only does the official account have the content of mapping current affairs news, but also the corporate account has been vigorously disseminated by means of top hosts. Nowadays, the dissemination of top hosts has surpassed that of many small and medium-sized media. It has become the norm for the publication of platform topics and the listing of new enterprises to use top hosts to spread, and the hot topics caused by top hosts also have great influence. For example, a blogger named Zhang Mofan on Tik Tok shared her experience through videos and successfully put Xinjiang prune on the top of the hot search. The California prune in the whirlpool of public opinion also reflects the obstacles in the current sales of agricultural products similar to the Xinjiang prune. Why there is not a complete sales chain for domestic agricultural products with excellent quality? Zhang Mofan has fully popularized Xinjiang prunes with its influence, and excavated this hidden treasure, opening up a new sales path for it.

The content creation of agricultural science popularization videos reflects the detailed requirements of rural revitalization policies and plays an important role in the analysis of specific agricultural problems, the perspective of problem-solving, and the guidance of hot topics.

3.2 According to Regional Space

The realistic regional space affects the creation of virtual images. Regional space is a natural stage given by nature to short video creators, and short videos presented in different regions are also the most representative symbols of the region. China, with vast territory and abundant resources, has obvious differences in regional styles between the north and the south, which also creates diversified creation styles of short videos of agricultural science popularization in different regions.

Regional space influences the symbols, themes, and styles of short video narratives. From the perspective of symbols, the most representative ones are the crops in the north and south. The southern accounts prefer to describe bamboo shoots, Chinese sauerkraut, and other varieties, while the northern accounts prefer to talk about the planting of crops such as potatoes, eggplants, and tomatoes. In this respect, the symbolic symbols of crops are particularly obvious. From the perspective of styles, the southern accounts prefer to make some planting experience videos. Most of them rely on the beautiful mountain scenery and infiltrate professional planting knowledge through the immersive experience process in this beautiful environment. However, the beauty of videos made by accounts in the north is weaker than that in the south. Generally, science popularization is directly narrated, and real farmland and crop scenes are shown as the background knowledge points. Based on the tone of the creative style, the subjects of the accounts in the north and south are different. Compared with the south, the accounts in the north are more popular in science in the production of short videos. Most of them point out the subject, by asking questions first and then telling them, and paying attention to the output density of agricultural knowledge. The account number in the south completes the output of knowledge in a situational experience, which is closely related to the geographical environment and the humanistic environment. The straightforward character of northerners and the tactful and implicit expression of southerners are also intuitive manifestations of the influence of the geographical environment.

Huanong Brothers, who has more than three million fans on the Tik Tok platform, hide rich regional elements in their short videos, and bamboo shoots are a representative element in the south. In the video creation of how to make delicious dishes with bamboo shoots and sauerkraut, *Huanong*

Brothers show the process of selecting bamboo shoots, breaking them, boiling them, and soaking them until frying them with sauerkraut. In this process, the environment in the video is very idyllic, and raw materials are collected on one side. During the process of teaching the making method, the audience not only feels the fresh pastoral atmosphere among the southern bamboo forests but also learns the method of making delicious dishes in the video, which can be described as killing two birds with one stone. The account Lufeng Biotechnology in the north was created by Shandong Lufeng Biotechnology Institute. Based on the principle of helping farmers solve problems and improve crop quality, the account created a series of videos of crop planting methods, and its dissemination content tended to show the planting methods of some crops in the north of popular science, which is also the planting background of agricultural products given by this regional environment in the north. The creators extracted the planting problems that farmers encountered in their daily planting environment. They answer them one by one in the form of a short video. For example, cucumber, a crop planted in the north, will encounter the problem of the death of cucumber when it is planted. The video analyzed the problem of the death of cucumbers one by one and put forward a detailed solution to help farmers solve their planting problems.

3.3 According to Agricultural Activities

Twenty-four solar terms are the time system for Chinese working people to observe, explore and summarize phenology, meteorology, and astronomy for a long time, which is used to guide agricultural production and arrange farmers' lives. [5] The twenty-four solar terms should be coupled with modern agricultural production, and the guidance of the farming season is of great significance to agricultural production. In the past agricultural production process, most farmers relied on production experience to carry out farming activities, but the development of modern agricultural technology gave birth to a series of new phenomena and problems related to the farming season. Therefore, when the short videos of agricultural science popularization are being produced and disseminated, the bloggers should pay full attention to the impact of the farming season on agricultural production activities, and produce and push different short video content according to different farming seasons. In order to make the content more timely and effective for farmers, the most practical way to create short videos of agricultural science popularization is to keep it close to the farming season. All kinds of short videos can solve the planting problem of farmers' friends by publishing and pushing related content in time, which can give full play to the value of providing timely assistance to farmers.

In the short video creation of the Tik Tok platform, the subjects of crops are different, ranging from solar terms to growth cycles. During spring ploughing in March and April, most of the accounts of agricultural short video science popularization are related to spring ploughing, and most of them are how to solve the epidemic situation in spring ploughing, problems needing attention in spring ploughing, and related solutions to problems. When crops are sown according to the season, the content production of short science popularization videos should also closely fit the farming activities, which has a good reference value for some farmers. It is this time-sensitive content production method that attracts more users' attention.

4. Creating Various Narrative Ways with Narrative Structure

4.1 Storytelling: Arousing the Audience's Interest with the Sense of Plot

According to the *six principles of infectivity*, stories play a very important role in interpersonal communication, and people are more willing to share stories than to share information. ^[6] When people communicate, they not only share information but also are more likely to tell related stories, which are spread like the story of *Trojan horses* for a long time. This is because stories themselves are the blood that spreads morality and revelation. Individual information is scattered and not easy to remember, but the information packaged by stories often has certain uniqueness. When people talk about these stories happily, these stories also spread our thoughts and purposes imperceptibly. To

make the story spread more, it needs the plot. The tortuous and bizarre plot gives the story its unique appeal. Plot sense is the magic weapon to attract audiences in the process of short video creation, and it is also the key factor for the works to win surprisingly.

Plot spread of agricultural science and technology knowledge is often faced with an embarrassing performance dilemma. How to show daily life in a real and unpretentious way is a difficult problem that puzzles many creators. *Shuzhong Taozijie*, who has more than 21 million fans on the Tik Tok platform, naturally places herself into a story and unconsciously conveys her knowledge in the storyline. In one of her videos, *Shuzhong Taozijie* told fans how to make *braised Dongpo pork hock with brown sauce*. At the beginning of the video, she did not start with the usual creation routine like food bloggers. The process of going to her mother's house naturally became the process of preparing ingredients. In the dialogue with other characters, the embarrassment of finding ingredients while telling stories was eliminated. Then, the production of *braised Dongpo pork hock with brown sauce* was started in the dialogue with her husband when she came back from her mother's house. This kind of video production form with story packaging and plot sense is easy to arouse the audience's expectations. From the story, we can see Taozijie's daily life and learn how to make delicious food. There is neither a boring impression nor the audience's feeling that she is deliberately performing, which shows the creator's spreading content.

4.2 Recording: Showing the Real Agricultural Picture with the Artistic Sense

The documentary is an art form of film or television, which takes real life as the creation material, takes real people and real events as the performance object, and makes artistic processing and displays it. It is the essence of showing truth and arousing people's thinking with the truth. This is the official definition of a documentary. Truth is the core essence of the documentary. The same is true of documentary short videos of agricultural science popularization, which are all created on the basis of real records, and the difference lies only in the production process. In recent years, the recorded short video of agricultural science popularization has been very popular with users, and it expresses the spreading content in a form of artistic sense. This kind of lens display of life's beauty is more like a prose poem expressed by the lens, and the creation content with both aesthetic feeling and knowledge attracts the attention of the audience.

Our Roots records the simple life of two reclusive old people in the mountains. This life with the smell of cooking shows the bright future of agricultural development in the mountains and can encourage people living in a fast-paced modern life to calm down and listen carefully to the sound of nature, so as to protect the roots of the old people. In the dialogues between the two old people, the audience is more like being immersed in an ethnographic film. The exquisite composition of the picture, the true restoration of the color and the reasonable use of the long lens all make the recorded science popularization more atmospheric. In such a scene, it is easy to arouse the audience's beautiful expectation of agriculture, and this artistic agricultural picture is also very attractive.

4.3 Immersing: Creating Scene Space Resonance with the Atmosphere

With the development of the short video platform, the wave of immersive experience has swept through. Immersive experience can make the audience resonate with the atmosphere created by the scene space. The concept of scene can be traced back to Golfman's scene doctrine. Then Robert Schober and others predicted that the next 25 years will enter the scene era, and five core elements, such as mobile devices, social media, sensors, big data, and positioning systems, will change people's cognitive style, and behavior habits, and communication patterns. The short videos of modern agricultural science popularization are based on the technical advantages of information adaptation, full interaction, and immersive experience, which upgrades the real scene and virtual scene into a mixed application scene, strengthens the telepresence experience and forms a new mode of information dissemination and social interaction.

The most immersive feeling in Tik Tok is Li Ziqi. The atmosphere created by Li Ziqi's videos is extremely strong, and the immersive food production makes the audience in front of the screen drool.

The main character of Li Ziqi's video is her own image, and the fresh image of a little girl is in line with the image of the traditional rural production mode of small farmers. According to the two concepts of "role model" and "semantic square" put forward by Gremas, the narrative style is a semantic structure similar to that of sentences, and the model of "morphemes" and functions in the narrative are explained according to the model of morphemes and verbs in syntactic analysis. The four stages of its surface structure, that is, generating desire, having thee abilities, achieving goals, and getting rewards, correspond to the content of the short video on agricultural science popularization. This short video reflects the real situation of agricultural production in rural life, and it awakens the memory of rural life in most people's hearts. In the created scene, the audience and creators experience rural life together, learn planting knowledge and appreciate the charm of food. These videos attract the audience's attention with the content of true feelings and close to life, and realize the emotional resonance with the audience through the beauty of the picture, the shaping of characters, and the creation of scene space, so as to arouse the audience's local complex.

5. Creating Symbolic IP Image with Narrative Discourse

5.1 Using Regional Dialects to Enhance the Sense of Humor

Relying on the mass media, dialects gradually move from local to national. The wide space of short video development has opened a new window for dialect communication, and its participation in communication mode and social attributes have helped dialect leave the regional circle, thus taking on the new mission of building regional culture and building rural image. Under the content mode of enlarging the life scene, some hidden rural symbols-dialects have gradually found their way out. Dialects have built a hidden regional image with their regional uniqueness. Short videos of agricultural science popularization, which are dominated by unique dialects, play a potential advantage in exporting humanistic feelings and alternative construction of villages. The uniqueness of dialects also enhances the sense of humor in content output.

The voice of the account *Kangzai farmer* with more than 20 million fans on the Tik Tok platform is a typical Guangxi accent. One of the videos told the story of old cucumber scalding with soft water and then repeatedly pickling until the whole cucumber skin dries up. It is also a classic video in which the old cucumber is boiled with pork. They called the old cucumber *Lagua*, which reflects the regional characteristics. In the interaction between the two people, the unique regional dialect also enhances the sense of humor in the video. This unique short video presentation form created by the advantage of regional language deepens the symbolic characteristics of the IP image and makes the image more vivid as well.

5.2 Using Specific Characters to Enhance User Stickiness

The creation of short videos of agricultural science popularization often shapes characters to promote the diversified presentation of the story content. The characters' labels and typical personalities strengthen the content presentation of short videos, and enhance the intimacy between characters and users. The IP image brought by their personality charm further enhances users' stickiness.

The account of *Li Wenjuan Agricultural Science Popularization* is with a large fan base in Tik Tok. The short videos of this account do not have too much characterization and decoration in the role creation, which is a scene of a scientific researcher telling knowledge in a simple environment. The main character is Li Wenjuan, whose role is a researcher. She gives people a sense of authority and professionalism when telling knowledge. It is advantageous for fixed users to create science popularization videos with this image and identity.

Tik Tok records the daily perceptive image of scientific research personnel, which is very representative. This kind of personnel establishment of scientific research personnel is very convincing, which not only guarantees the professionalism and authority of knowledge but also helps

to enhance users' stickiness by creating IP images with role narrative discourse. This is a model that many creators of agricultural science popularization can learn from and adopt.

5.3 Using Unique Lens to Endow Science Popularization with Vitality

In the production of short video, lens language is an important factor that cannot be ignored. The combination of lens language and montage is an important factor in vividly displaying the knowledge of science popularization in a short time. In order to avoid the monotony of the contents, the creator uses time-lapse photography to show the growth process of crops, employs local close-ups to show wonderful pictures, and enhance the vitality of science popularization content through the rich color presentation.

The use of lens language and montage in *Our Roots* is very accurate, which makes the short video quite beautiful, and the short video clips naturally switches scenes. In the beginning, the picture shows a distant mountain village scene, and then slowly zooms in with the sound. When some specific details are shown, the application of close-ups fits well. The overall color of the film fits the main content of the narration, conforms to the rural lifestyle in the mountains, and creates a beautiful place like "a remote or imaginary utopia" under a light cyan color tone. When the video subject spreads knowledge, it is more like a simple record of life. The atmosphere created by the lens language makes the contents rich and the picture expressive.

6. Analysis of Narrative Strategy based on Team Self-creation

6.1 Narrative Theme: Integrating and Releasing Diverse Agricultural Knowledge

The team relies on the Internet platform to promote the scientific and technological achievements of Northeast Agricultural University and combines the professional advantages of directors to turn obscure agricultural knowledge into vivid and interesting short videos. The content of the short video is based on professional knowledge, which mainly comes from the latest research results of experts and professors at Northeast Agricultural University. In the creation process of the team, various agricultural knowledge, such as rice, potatoes, cucumbers, watermelons, milk, etc., is integrated, and the variety involves a wide range of knowledge, which fully shows the growth status of crops in the north and the current situation of agricultural development, so as to better help farmers solve the production and planting problems.

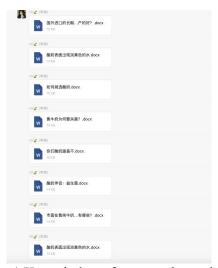


Fig. 1 Knowledge of yogurt short video



Fig. 2 Knowledge of rice short video



Fig. 3 Script design of how to select rice seeds

Through the platform of Tik Tok, this team timely and synchronously report short videos with representative scientific and technological service information, explanation of planting techniques, promotion of high-quality products, etc. For example, in March and April, when farmers start to engage in farming activities related to rice planting, the team uploads videos about rice planting in time, grasps the key farming season so as to better communicate with farmers and effectively solves the problems that farmers encounter in real agricultural production. Through video, some followers can get in touch with the team through private letters or comments, and then the team will contact experts and professors to answer the main questions. Finally, the team will plan a new short video, and then answer the questions in the form of short videos. Therefore, the homogenization of similar science popularization short videos will be avoided during the team's creation process, and the professional knowledge points provided by experts and scholars also avoid the problem of spreading

wrong knowledge to a certain extent. The careful creation of the team and the repeated audits of teachers also avoid the phenomenon of shoddy short videos. On the one hand, it is beneficial to integrate with agricultural production when it is released in a suitable farming season. On the other hand, it can broaden the follow-up creative ideas in interactive communication. This form gives full play to the advantages of the short video platform, creates a channel for agricultural communication with the outside world, enables agricultural scientific and technological knowledge to be practiced in the work of more agricultural practitioners, and better promotes agricultural development in China.



Fig. 4 Replies to fans' messages and comments

6.2 Narrative Structure: Create Coherent Contents by Double Narrative Scheme

In terms of the creation form, the team keeps up with the trend of short video content in new media and strives to show obscure professional knowledge in a humorous way. Whether it is script writing or post-production, it shows a unique design and diversified creative points.

The double narrative scheme mainly refers to external storytelling and internal narration, and the team uses the narrative structure under the shape of a story. The character of storytelling is mainly reflected in the role shaping and plot construction of short videos, and the narration is mainly reflected in the interspersed explanation of professional knowledge. In the story construction, the team has created three fixed characters, one is Mr. Li who represents experts and scholars to popularize

knowledge, the second one is a simple and honest farmer, Mr. Ma, and the third one is Xiaoyu, the daughter of a farmer who always encounters problems. The general narrative structure of the plot is that Mr. Ma and his daughter Xiaoyu encounter agricultural problems, and when they are puzzled, Mr. Li will give an explanation, which adopts the narrative form of a "small classroom". In order to integrate with the outsourced story rhythm, the team usually increases the output density of the content by doubling the speed of the part of "small classroom". Generally speaking, the double-speed broadcast part is the presentation of the narrative part.

Creating sequential coherent content is mainly reflected in the content construction of each series. After the team will show different kinds of crops with many obscure knowledge points, it is difficult to show the knowledge within a video accurately and comprehensively, so we divide it into series of video to create according to the professional content, which not only ensures the comprehensive output of knowledge points but also pays attention to the display of details. In the series of knowledge points on rice, the team collected a lot of professional knowledge about rice, potatoes, and soybeans, such as the basic fertilizer of rice, why it is early-bred, the division of accumulated temperature zone, what should be paid attention to in sedimentation and what is tillering. Why and how to seed the potatoes? Is it better to sow soybeans early or late? How much and how deep should soybeans be sown, and so on? In order to keep the consistency of knowledge points on various topics, the team made a series of videos on rice, potatoes, and soybeans for release. This ensures that the knowledge points of each crop can be involved while maintaining the integrity of the narration.

6.3 Narrative Discourse: Using Humorous Elements to Enhance Readability

In line with the principle of keeping up with the popular elements of the times to show professional knowledge, the team pays great attention to the fun and timeliness of popular elements in the production form of short videos, breaking the stereotype of the original science popularization. The combination of popular elements and some elements that conform to the contents of the video can enhance the overall sense of humor of the video. Based on eliminating the obscurity and boredom of the original short science popularization video, the identification degree of the account is greatly enhanced.

We made a short video *The Kind of Milk* based on the TV series *The Bad Kids*, which was the most popular TV play among the audience at that time, and enhanced the possibility of connecting with the popular elements of the times. The addition of this funny element symbol conforms to the attractive creation principle of the first three seconds of the short video at the beginning. In the rice series *There is nothing wrong with sowing like this*, we added the popular texts on Tik Tok and used them. The addition of funny elements is in line with the audience's expectation of humorous topics. Tik Tok has different types of popular jokes in different periods. Adding these elements to the creation can also show the video content and attract the attention of the audience more easily. In the short video of the corn series *Corn Harvest in Proper Time*, we used bed sheets and instant noodle boxes to create a peasant image observing the sky at night to start the story. The use of exaggeration and persuasion can also enhance the humorous and funny visual effect.

New media platforms such as Tik Tok provide a stage for users to show themselves. At this stage, the production of content is very important. Whether it is PGC mode of official accounts or UGC mode of self-media, we should pay attention to the authenticity of content, the rigor of narration, and the acceptability of the audience. On the basis of correct content orientation and core knowledge dissemination, short videos of agricultural science popularization should give full play to regional advantages, fit the key farming season, skillfully use synchronous agricultural themes, diversified narrative structures, and symbolic narrative discourse, and promote the high-quality creation of short videos of agricultural science popularization. It should also eliminate the problems of low quality and serious homogenization in the creation of short videos of agricultural science popularization, and promote the long-term development and progress of short videos of agricultural science popularization.

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